

SNAKE VALLEY AQUIFER

ADVISORY COUNCIL

October 13, 2009

PUBLIC COMMENTS

COMPILED FOR THE SNAKE VALLEY AQUIFER ADVISORY COUNCIL

Enclosed in this binder are the public comments concerning the draft agreement between the states of Utah and Nevada. These comments have been categorized as follows to aid the council in digesting the range of public concerns and comments.

- 1. General Comments For or Against the Agreement**
 - a. This category includes letters from citizens for or against the agreement without specific concerns.
- 2. Hydrological and Water Rights Concerns**
 - a. This category includes comments from citizens concerned the aquifer does not have enough water to support the terms of the agreement, and that the agreement does not properly account for the whole range of factors affecting the available water in the aquifer. Specific concerns include: Not properly accounting for the hydrological connection between the aquifer and surrounding water sources, not properly accounting for federal reserve water rights that may exist, and concerns that the agreement is not an equitable division of an interstate water source.
- 3. Environmental Concerns Including Air Quality**
 - a. This category includes comments from citizens concerned that the agreement will have greater environmental consequences. Specific concerns include: The effect the agreement will have on air quality in Utah, the impact the agreement will have on wildlife habitat, and the effects the agreement will have on ecology of the Great Basin.
- 4. Detailed Concerns Regarding the Agreement and/or Mitigation Plan**
 - a. This category includes comments from citizens concerned about specific detail of the agreement and/or mitigation plan. Specific comments include: Concerns that the monitoring in the mitigation plan are insufficient to protect the rights of existing users of the aquifer, issues about specific elements of the agreement or mitigation plan, and concerns about specific language used in the agreement or mitigation plan.
- 5. Concerns Regarding the Secrecy and Timing of the Agreement**
 - a. This category includes comments from citizens concerned about the way this agreement was created and concerns about whether the agreement is necessary at this time.
- 6. Compiled Comments from Public Meetings**
- 7. Comments of Governmental and Special Interest Organizations**
 - a. This category includes comments from Counties, Cities, Water Districts, and Non-governmental Organizations. These comments are generally detailed and encompass a broad range of issues.
- 8. Miscellaneous Comments**

Print View

From: Edward Hickey
To: snakevalley@utah.gov
Date: Tuesday - September 29, 2009 3:58 PM
Subject: I support Utah signing the Snake Valley Agreement

I support Utah signing the Snake Valley Agreement. Utah is better protected with the monitoring and data gathering period, language for mitigating environmental damage, and groundwater resources allocation and management contained in the agreement.

Definition 2.6 says it all: Nevada recharges the aquifer, Utah consumes the water. Without an agreement, Nevada could conceivably capture the majority of recharge and make it unavailable to Utah water rights holders. Losing a legal challenge if Nevada prevails could be a pending future environmental disaster. Set emotional factors aside. An equitable apportionment of groundwater resources based on science makes more sense.

Ed Hickey
Professional Geologist
8185 S. Maio Drive
Sandy, UT 84093

Print View

From: "MRoberts" <haymaker@altazip.com>
To: <snakevalley@utah.gov>
Date: Sunday - August 16, 2009 6:53 AM
Subject: comments

The water in the arid State of Utah is our very lifeblood. Without it, we are unable to sustain life and to fight for it is the only sane and equitable way to look forward to another day for who comes after. History will record this event with clarity and to not make every effort to prevent Las Vegas from piping the water in Snake Valley would be catastrophic in my opinion. I believe water is the qualifier for growth. Simple - basic common sense. NO WATER, NO GROWTH. Las Vegas doesn't have water, then Las Vegas does not continue to grow. Perhaps, sewer water can be treated and reclaimed for potable water. Who knows, but hands off Utah water.

We are watching, hoping, praying our elected officials are not asleep at the wheel on this one.

Cindy Roberts
PO Box 570081
Sigurd, UT 84657

September 29, 2009

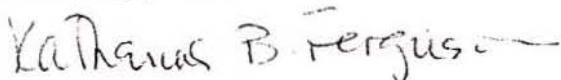
Snake Valley Agreement
c/o Utah Department of Natural Resources, Division of Water Rights
1594 West North Temple Suite 220
Salt Lake City, UT 84114

To Who it Concerns,

I write to you as a citizen of Salt Lake City to urge you to oppose the Snake Valley Water Agreement with Las Vegas. While I applaud your efforts to at least ask for more review time, it is short sighted to allow this to happen. Las Vegas is a thirsty town and a message must be sent now to let them know that their growth is unsustainable, and water is the limiting resource to that growth.

I am watching the Ken Burns PBS series on the United States National Parks. Teddy Roosevelt had foresight and power to affect change and was able to create a lasting legacy for generations to come by securing many of our National Parks. Now is your chance to step up to that plate and hit a home run for the environment. By allowing the aquifer to be drained is unconscionable and will undoubtedly set a precedent for future planning. It's not natural to drain aquifers, and we can't tell what the long term effect will be, but for sure it won't be good. Don't let that be your legacy to your and my children.

Sincerely yours,



Katherine Ferguson
1023 S 1500 E
Salt Lake City, UT 84105

RECEIVED

OCT 01 2009 4A

WATER RIGHTS
SALT LAKE

Fr. James Peter Rogers, O.P.
St. Catherine of Siena Newman Center

170 University St.
Salt Lake City, UT 84102

Tel: (801) 359-6066
Fax: (801) 359-4547

Snake Valley Agreement
c/o Utah Department of Natural Resources
Division of Water Rights
1594 West North Temple, Suite 220
Salt Lake City, Utah 84114

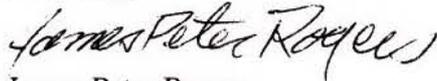
September 29, 2009

Governor Gary Herbert;

I am strongly opposed to allowing Nevada pump water from the Snake Valley aquifer and pipe it to Las Vegas. Having visited that city, I am appalled at the decadence allowed casinos in creating lakes, rivers, and waterfalls that are nothing but wasteful, considering that the city has outstripped available water. The hotel casinos should be rationed water according to the needs of the guests, and be forced to fill their lakes and rivers with desert landscaping, fitting to the natural environment.

Why should Utah farmers have to suffer financial ruin, and our Utah nature be forever negatively altered due to the wastefulness of a city that would have sufficient water if it did not waste so much. Let Utah and the nation see how Las Vegas will take its own steps of water conservation before coming to its neighbors to beg for more water to fill its artificial hotel lakes and rivers.

Sincerely,



James Peter Rogers

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OCT 01 2009 AA

WATER RIGHTS
SALT LAKE

SNAKE VALLEY WATER

Some time ago; back in the 90's, we were in Mesquite, Nevada. There was a huge promotion about buying condos in Mesquite. Being a little curious, and also retired, we thought we would take the time to look at their promotion and offers. The sales-lady we happened to come in contact with was telling us about all the good benefits of buying now, since Mesquite was going to grow, and we would be in on the ground floor of the growth. She predicted huge growth for the area. (Mesquite did grow buy the way.)

My question to her at the time was; since Mesquite is in the desert, where is all the water going to come from to support this projected growth, as the Virgin River that flows through Mesquite has a limited flow of water?

Her answer was that there is a huge, huge aquifer underground in the area that had an unlimited amount of water. I don't know if this was true or just a sales pitch. I didn't investigate. If this was true, why does Las Vegas want to build a 300 mile long pipeline from the Snake Valley, when they could tap into the Mesquite aquifer and build a pipeline of 80 to 100 miles long at a lot less expense than from the Snake Valley aquifer?

Leave the ranchers in both states alone, so they can grow more beef for the Vegas appetite, instead of turning the area into a dust bowl. We don't need more fantastic fountains and water displays in Vegas.

Just an interested citizen.

Dale Hand
Dale Hand
Sandy, Utah
414 East 8400 South
Sept 29, 2009

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OCT 01 2009 AA
WATER RIGHTS
SALT LAKE

September 10, 2009

Dear Governor Herbert,

Please stop the Agreement on
the Allocation and Management on the
Allocation of the Snake Valley Aquifer.
Keep Utah's water in Utah. Water is
priceless

- 1 Carnell Peterson
- 2 Phyllis Salisbury
- 3 Ruth J. Pepton
- 4 Marion Palmer
- 5 Janice Pope
- 6 Marilyn Farmer
- 7 Virginia Blackherst
- 8 Marjorie Fowler
- 9 Donna P. Taylor
- 10 Barbara Jean Fernley
- 11 Georgin K. Evans
- 12 Joyce Lloyd

SEP 28 2009

Dear Governor Herbert,

Please stop the agreement being made with Nevada to give some of our underground water. Utah needs all the water it has. The south west part of Utah would be devastated. Even if the estimates that say we don't need the water were accurate, we need to consider many years ahead.

Cleo Crockett

DeRay Crockett

Cami Stapley

Ben Stapley

JAMES G. COYNER

KEITH SWENSON

Julie Swenson

Adamson

Donette Brown

Earl & Mara

Thomas Brown

Ann Shaugnessy

Alison Rette

Sharon Henderson

Ray B. Jones

Benita Reault

Beverly P. Powell

George E. Rogers

Marilyn Lee

Calvin Larson

Brent A. Robinson

James Pan

Bruce Allred

Scott Clark

Walter

John
John

William B. Godfrey
Melanie J. Cottam M.D.
Venice S. Cottam M.D.
Ryan K. Fernald
Melanie S. Beer

9-29-09

To Whom It May Concern,
I agree that the Gov.
Cary Hubert wants to delay
signing off on Snake Valley
Water.

I hope he has the
insight to never, never,
allow our water to
be given away, no matter
what money is involved.

Thank you
Tony

RECEIVED

SEP 30 2009

WATER RIGHTS
SALT LAKE

Box 23
Grouse Creek UT-USA 84313

E-mail: rangifer@windstream.net

2009 Sept 21

Ms. Patricia Malroy, General Manager
Las Vegas Water District
Southern Nevada Water Authority
1001 South Valley View Blvd
Las Vegas NV-USA 89153

Tele: 1.800.870.2011

✓ Snake Valley Agreement
c/o: **Utah Natural Resources**
Water Rights Division
1594 West Temple
Suite 220
Salt Lake City UT-USA 84114

Re: Snake Valley Agreement and Las Vegas Water Use

Your (Ms. Malroy) position to acquire and develop water from the Snake Valley Aquifer to supply the wants for the growth and development of Las Vegas and southern Nevada is well understood. You have been tasked with the difficult responsibility for finding and delivering one of the more critical essential resources in a desert environment - water - to an unprecedented perpetually growing social/economic paradigm! And, to deliver that water by the most politically expedient and economically viable and practical means. This could be seen as virtually an impossible task; since, only the Pacific Ocean will provide a sustainable solution - and, even the Pacific Ocean is not infinite.

Infinite growth is impossible within the context of a finite environment, even for a cancer cell. Infinite growth is not sustainable when based on the availability of finite resources, and, water, including the water underlying the Snake Valley, is a finite resource. There is only so much, and, no more! All of the water underlying the Snake Valley could be delivered to Las Vegas and surrounding area, and, given the current political climate in wanting to avoid rectifying the basic fundamental issue, the Las Vegas area would still eventually come back asking for even more.

RECEIVED

SEP 24 2009

WATER RIGHTS
SALT LAKE

Las Vegas and southern Nevada cannot, and will not, grow forever, even if all of the world pipelines feed into the city and area. Eventually, the inevitable conclusion will be realized; and, the question is not one of "if", but, more correctly "when". You are being charged with only finding a temporary reprieve for a continued problem in growth. The Snake Valley Agreement is only a very expensive band-aide solution for a growing problem, with the potential for important side-effects and social/ecological/economic impacts upon the greater environment and other communities, businesses and resources. The Snake Valley Aquifer and Agreement will not provide a cure; but, may provide a temporary solution until you retire or move on from the office, and, then it will all be someone else's problem. The fundamental issue that most people, including you, want to ignore is how to best limit growth, when few people want to recognize the existence of limits.

The answer to Las Vegas area water problems will be in limiting growth in relationship to available resources. Someone has to decide just exactly how much growth can be afforded in a sustainable manner. Infinite growth is not an option. Limits do exist, and, far better to objectively define and build to accommodate those limits in a purely rational and practical manner while still having time and resources to spare than allowing growth to continue until collapse is the only inevitable result. Las Vegas only needs people and leaders with the vision, common sense and courage to say "No, what we have is not sustainable, and, allowing what we have to continue will only make the problems worse, and, even more expensive and difficult for someone else to resolve in the future." People need to understand that infinite growth only leads to a dead-end; and, when limits are exceeded, economies and populations will suffer in many ways and extremes that most sensible people would prefer to avoid.

Las Vegas does not need Snake Valley water; and, the Agreement is no solution for the problem. The Agreement will only promote the problem to continue to fester and cause problems for many other ranchers/farmers and people in other communities. Las Vegas and associated environs, much like a spoiled child, is only living beyond its means, while expecting others to sacrifice their means for Las Vegas's self-serving benefit. Neither the people, Nation or World can afford such luxuries. The lesson here is for all people, not only the people of Las Vegas, to learn - and fully comprehend. A correlated question a concern how much needs to be sacrificed before people are prepared to learn the lessons of reality, or do we simply wander in a perpetual state of ignorance.

You have probably read or heard all of this before. Perhaps, the time is long past to finally start listening. The people of eastern Nevada and southwestern Utah have every just reason to be skeptical of, and object to,

the Agreement. Water is one of the few absolutely critical necessities for life to exist; and, people should be reluctant to trade their birthrights for the glittering lust for gold beckoning on a distant horizon. Glitz and gold has ruined more lives and livelihoods than have ever been saved.

Sincerely,

A handwritten signature in black ink, appearing to be 'Stu Luttich', written over the printed name.

Stu Luttich

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SEP 24 2009
WATER RIGHTS
SALT LAKE

September 20, 2009

Subject: Snake Valley Water Agreement

To whom it may concern,

We have many questions regarding the Agreement for Management of the Snake Valley Groundwater System. As many of them have been voiced numerous times, we won't list all of them here. Among our many concerns, our first and foremost question is:

- If there is any water out there that is unallocated, where is it going today? Where did it go last year? Where did it go for the last 10 years? Where did it go for the last 100 years?

Second: What is the hurry to sign an agreement?

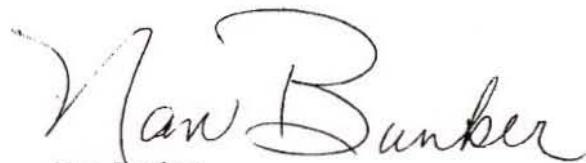
Third: Why would the people of Utah believe that they would have any chance of recovering any money when it appears that they have been harmed by the project?

Fourth: Why is the BLM not a participant in the issue? Are they not charged with oversight for the public land that may be affected?

Thank you for your consideration,



Clyde Bunker



Nan Bunker

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SEP 22 2009
WATER RIGHTS
SALT LAKE

Snake Valley Comments

9-21-09
DeKTe, UT

Division of Natural Resources

Division of Water Rights

1594 N. North Temple Suite 220

Salt Lake City, UT. 84114

I have been a Rancher all my Productive
Life in UT. & NV. White Pine County. Now 81 Yrs.

Have owned 2 irrigation wells & learned
many years back well water is not cheap.
Every time the wells needs work because
of wear & tear or water table going down it
cost many thousand of Dollars to get back
in Production.

With the cost of energy keeps going up the
cost of irrigation water become more expensive.

It would appear to me the contract
with NV. needs Provision that they
SNWA be responsible for extra energy &
equipment needed to lift ~~the~~ the
water, because they will lower the water table.

SNWA should be responsible for
stabilization of spring flow & wet
lands & all native vegetation.

Please consider the above.

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SEP 22 2009

WATER RIGHTS
SALT LAKE

Grant Nielson

GRANT NIELSON

Print View

From: Russell Hadley
To: snakevalley@utah.gov
Date: Monday - August 17, 2009 1:25 PM
Subject: Question on the Snake Valley issue!

Does the Utah State Engineer (Kent Jones) under the direct mamangement of the DNR Director (Mike Styler)...or is the State Engineer appointed by the governor?

I'm curious because it seems like Mike is the one answering all the questions on this issue...but it seems like it would be the State Engineer's jurisdiction to answer the questions and discussing the plan for water right legal issues.

cc: Boyo C.

From: Betty Barela
To: Kaelyn Anfinen
Date: 9/15/2009 1:34 PM
Subject: Fwd: Re:Inquiry from Stephen Shuput

Could you please get someone to respond directly to the constituent in the e-mail below referred by the Governor's Office. Make sure I get a copy of the response. Thanks!

Betty T. Barela
Utah Department of Natural Resources
801-538-7201
bettytbarela@utah.gov

Utah Department of Natural Resources' hours are 7:00 a.m. to 6:00 p.m.,
Monday thru Thursday and closed Friday, state and federal holidays.

>>> Constituent Services <constituentservices@utah.gov> 9/15/2009 10:07 AM >>>

Below is an inquiry which was received by the Governor's Office of Constituent Services on 09/15/2009. Please respond directly to the constituent and reply to this email with a copy of your response by 9/29/2009.

Stephen R Shuput
690 North Caring Cove
Salt Lake City UT 84103

Office Phone:801-408-3200
Cell Phone: 801-694-5439

Email Address:sshuput@hotmail.com

SUBJECT:

Dear Gov. Herbert,

The agreement to let Nevada drain water from the aquifer in our west desert is ill conceived and dangerous and not needed. Las Vegas must learn to conserve and grow, if they insist on growing, within the confines of their current water availability. The scientific evidence is overwhelming that the desert would dry out further, creating a dust bowl, killing all economic activity in the region, causing dust storms full of pollutants to travel from the west desert to Salt Lake and adjoining cities. We have much more to lose than gain here. Please put a stop to this!

Stephen R ShuputMD

Print View

From: Scott A Lee <slee@moog.com>
To: <snakevalley@utah.gov>
CC: <scottandmonicalee@wirelessbeehive.com>
Date: Tuesday - August 18, 2009 11:39 AM
Subject: Snake Valley Water

Hello,

I ask the following in response to ground water being transferred from Snake valley to southern Nevada.

1. Should the people in the Snake valley area that have been there for generations sacrifice their livelihood's over poor development planning in Las Vegas?
2. Does anyone believe that the \$15B pipe will be turned off if the ground water drops in snake valley?
3. Does any person (geologist, water engineer, USGS) or any other "expert" really know what will happen when 132,000 acre feet is pulled every year from the snake valley area? Including environmental problems?
4. Is the welfare of the mass population of Las Vegas more important than a few ranchers and the environment of Snake valley?

We all know that the answer is NO to all of the above.

Come on! We are Utah's. Let's protect our folks and the precious jewel known as the "West Desert".

NO TO THE PIPELINE

Thanks for the opportunity to comment,

Scott Lee
435-882-6008

September 6 ,2009

Dear Utah Division of Natural Resources,

Please do not sell Snake Valley water to Los Vegas. Utah is under constant drought conditions. Many of us have pulled up our lawns and put in xeri-scaping while Los Vegas flaunts it's fancy fountains spraying water away. Selling water to Nevada is a wrong turn to take. Once Nevada becomes dependent on our water, there may come a time when Utah will need it but will be unable to reclaim it. I say no. Gold is worth nothing, but water is priceless and sustains life. Nevada needs to learn to live within it's means. And we should not sell ourselves short. Prostituting one's natural resources is something they do in Nevada but we do not behave that way here in Utah. Gambling with our future snow pack, environment and water tables is something that Nevada can do, but we do not gamble in Utah. We should not share water with our frivolous neighbors until we know for a fact that future Utah families will have enough water to support our own growing populations.

Thank you for your time,

Sincerely,



Lori Shields
1445 South 1600 East
Salt lake City, Utah 84015

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SEP 09 2009 AA

WATER RIGHTS
SALT LAKE

P.S. Sorry my printer is so wierd.

August 31, 2009



Snake Valley Agreement
c/o Utah Department of Natural Resources
Division of Water Rights
1594 West North Temple, Suite 220
Salt Lake City, UT 84114

To Whom It May Concern:

I am writing to express my concerns about the draft Agreement for Management of the Snake Valley Groundwater System. My concerns stem from my long involvement with the region and its people. I spent over five years photographically documenting the West Desert area of Utah and eastern Nevada and interviewing the people who live there. That work became an exhibit at the Utah Museum of Natural History and a book, *People of the West Desert*, published by Utah State University Press.

I'd like to offer a perspective that you might not have heard yet based on my experience.

One of the things I came to know over the five years I worked on this project is to trust the residents of Snake Valley in what they know of the land. Living and working on the land for decades has given Snake Valley denizens a unique insight. I offer the MX Missile history as example.

Originally, residents of Snake Valley supported the idea of a missile system that would be a deterrent to Soviet nuclear threats. But when they learned that the missile was to be sited in Utah's West Desert and move on railroad tracks through desert valleys and into tunnels carved into mountainsides, they became alarmed. Even though they were told by Department of Defense experts that the engineering had been researched and tested and that it would work, Snake Valley folks knew otherwise. They were intimately involved with the land. They understood its soils because they had tried to grow grains and alfalfa for years with only marginal success. Eventually, they were able to coax life from the soil, but it was only by trial and error. So, once they realized that the Department of Defense didn't have its facts, they turned against the MX siting proposal. Not because they weren't patriotic, but because their experience told them the scheme couldn't work as promoted. The soils wouldn't allow it. That knowledge, now, is invaluable.

The lesson here for Snake Valley Aquifer management is that the state should listen quite carefully to the residents of Snake Valley and trust their observations and judgments, especially at a time when neither Utah nor Nevada has all the necessary information. Until hydrological and soils research is finished, the state should be erring on the side of landed experience.

Department of Communication
255 S. Central Campus Dr. Rm 2400
Salt Lake City, Utah 84112
(801) 581-6888
FAX (801) 585-6255

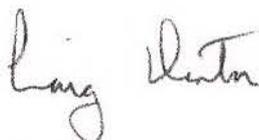
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SEP 08 2009 AA

WATER RIGHTS
SALT LAKE

If people of Snake Valley say there isn't enough water, that springs already are drying up and that taking the amount of water out of the aquifer that is being proposed in the agreement will lead to desertification, I believe them. Don't assume that they are simply trying to protect their livelihoods. Take their pleas to heart and slow down this process until all the data are in, even slower than proposed in the draft agreement. I suspect that once the data are in, Snake Valley residents will be vindicated. I just don't want it to be too late. Once the pipeline is started and Las Vegas develops around that water, no amount of trigger shut-offs will ever stop the process.

Sincerely,

A handwritten signature in cursive script that reads "Craig Denton".

Craig Denton
Professor of Communication

RECEIVED

SEP 08 2009

AA
WATER RIGHTS
SALT LAKE

Print View

From: "bonnie lee" <heavenlyhiker@xmission.com>
 To: <snakevalley@utah.gov>
 CC: <snakevallley@water.nv.gov>
 Date: Tuesday - August 18, 2009 12:52 PM
 Subject: A Billion\$WATERpipeline?

Possession is still 9/10 of the law...no matter which of distant mountains is or is not a point of origin. The water, in other words, belongs to the folks/ranchers upon whose lands the water IS! (Or IS under).

The REAL point of origin of this ridiculous scheme to waste the taxpayer's monies; appears to be

surplus DOI agents. Surplus BOR agents, a case in point:

George W. planned to eliminate the BOR in Utah for the obvious reason; we do not have any SURPLUS residential waterfront properties in this desert state. Typically, these properties are:

"kept in families and do not go to market." The words of MAI waterfront appraiser, who prefers to remain

anonymous, who in response to an

inquiry about "replacement" property,

one of "your rights when the government wants YOUR property"

that you are not likely to easily receive

in Utah; responded with "there are none."

In gross and flagrant abuses of eminent domain; BOR agents, in collusion with

Central Utah Water Conservancy District; in an attempted full taking of

the

entire Crescent Lake Estates Subdiv.,

consisting of 106 lots, Sand Wash

Reservoir, Duchesne County, Utah;

hope to emerge Guardians of the Wildlife they have displaced with no

thought whatever for Displaced Property Owners. They appear to have

been on a rampage during the entire course of the Bush Administration

"taking" all of Utah's waterfront properties in any/every county that has

allowed them access. (All they have to do is falsely allege the

waterfront property owners have suddenly become a "threat to the water supply.")

There's a "threat to the water supply"

alright, but it isn't coming from the

waterfront property owners.

16+ years later and yet to receive any of

our rights or Constitutional rights to just compensation; much less "you

have the right to a 2nd appraisal" after their BOR

residential appraiser failed to even get the zoning distinctions correct.

Meanwhile, BOR/CUP agents have already divided up their ill gotten gains;

65% - 35%.

Residential waterfront properties, for those of you who remain clueless;

started @\$3200. per front/linear foot in

2004. They have since appreciated to

\$3500. per front foot in 2009. In Florida, they are about ten times

higher, while on Lake of the Ozarks, (in 2004),

the range was \$1,000. - \$3,000. per front foot. (National Standards for

MAI

approved Waterfront Appraisals.)
With fully two thirds of Utah's 82,144 recorded square miles in BLM,
Fish & Wildlife and Indian Lands, (only
20% in Duchesne County); buffer zones are maintained; (i.e.; waterfront
property
owners); to PREVENT gross and flagrant federal and state over reach.
We attribute the subject point of origin
to be: surplus federal agents; attempting to steal the wealth and the
effort of Utah's waterfront property owners who now qualify for the
Endangered Species Act.
And, we attribute surplus DOI agents in Utah to the Affects of 3rd world
birth rate in 1st world country, (i.e.; #1 Mortgage Fraud Capitol of the
Nation) with surplus federal agents being a major underlying cause of
Utah's dubious title. In celebration of China's
new Mormon Ambassador to China; China has lifted its ban on one child per
couple. Get ready for the
Resource Wars!
Wake up Middle Class property owners of Utah! Your private property
rights,
the very foundation of the American
Dream, (no pun intended), are under
siege by lawless, parasitic and adversarial federal and state agents
who are stealing the wealth and the effort of Utah's waterfront property
owners for their singular purpose of maintaining their addictions to the
taxpayer's pocketbook. They are
dangerous! You need to support guys like Cecil Garland, Rancher, as these
guys no whereof they speak.
Thanks for letting me share. It seems we still have our First Amendment
"rights" to Free Speech.
Bonnie Lee Reynolds,
Displaced Waterfront Property Owner

Zion National Park

Viewing above a patch of Engelman pinyon-juniper above the magnificent Westwood strata guard at the south entrance to Zion Canyon, reaching 2,555 feet above the canyon floor. Photographer - John P. George



MR STYLEN,

PLEASE THINK VERY DEEPLY ABOUT THE DECISIONS YOU ARE ABOUT TO MAKE. DO YOU REALLY WANT TO BE REMEMBERED AS THE MAN WHO DESTROYED THE GREAT BASIN OF THE UNITED STATES? REMEMBER YOUR LATEEN-DAY SAINT FONDLEMEMEN, AND THE RESPECT THEY HELD FOR THE CAMP GOO GOVE THEM. DO NOT THROW THIS GIFT AWAY!

61985
Impact
THIS AREA FOR OFFICIAL POSTAL USE ONLY
LOVE YOUR NATIVES, DON'T BLEED THEM TO DEATH.
EARL ROBERT NORMAN-COWSTICK

EARL ROBERT
NORMAN COWSTICK
1980 RICHMONDS ST.
SALT LAKE CITY, UTAH

DIRECTION STYLEN /
UTAH DIVISION OF NATURAL RESOURCES
168 N. 1950 WEST
SALT LAKE CITY, UTAH



From: Betty Barela
To: Kaelyn Anfinsen
Date: 8/19/2009 10:36 AM
Subject: Fwd: Re:Inquiry from Chris Christensen

Could you please get someone to respond to the constituent below referred by the Governor's Office. Make sure I get a copy of the response. Thanks!

Betty T. Barela
Utah Department of Natural Resources
801-538-7201
bettytbarela@utah.gov

Utah Department of Natural Resources' hours are 7:00 a.m. to 6:00 p.m.,
Monday thru Thursday and closed Friday, state and federal holidays.

>>> Constituent Services <constituentservices@utah.gov> 8/19/2009 10:32 AM >>>

Below is an inquiry which was received by the Governor's Office of Constituent Services on 08/19/2009. Please respond directly to the constituent and reply to this email with a copy of your response by 9/2/2009.

Chris Christensen

UT

Email [Address:christen1sq@beyondbb.com](mailto:christen1sq@beyondbb.com)

SUBJECT:
Dear Governor,

I have absolutely no connection to the Snake River Valley water issue other than my experience of "what happens in Vegas" is always at the expense of others.

When deciding on the water issue, please, PLEASE reflect on what happened in California's Owens River Valley. This area was once a wonderful growing area. Now, it is only dust and weeds. The plan was to use the water wisely and not jeopardize the the growth there. It is now all sand.

Las Vegas, I lived there for over 30 years, will continue to drain any and all water sources dry in an effort to satisfy its own needs without concern for its impact anyone or thing.

I have seen how unnoticed loopholes affect their advantages - when it is too late to do anything. Las Vegas keeps reminding its citizens to not waste water, encourages them to use less, promotes the reduction in green yards. Did I mention that all the golf courses and walkways have their own "rules?" I remember, when we were under a water usage advisory driving to dinner and noticing that at two golf courses we passed, the sprinklers were just spraying away - in bright sunlight.

Las Vegas wasn't built on winners...Please don't be duped by what you may be "sold." We love living in Utah and are so glad we made the move. I guess I've become protective of Utah's beauty and extremely wise management of land usage.

Thank you for allowing me to voice my opinion,

Chris Christensen
St. George

Print View

From: <jackrbt@aol.com>
To: <snakevalley@utah.gov>
Date: Wednesday - August 19, 2009 7:48 AM
Subject: don't trust Nevada

Regarding the sorry state of Nevada, the rule of law does not apply there (personal experience) the casino's and crooked lawyers, Nevada Bar and lax law enforcement run the show. They will lie cheat and steal to get their hands on that water and for what the current recession will keep people from dropping their dwindling net worth in their evermore stingy casino's when the casino;s close the jobs and the people will flee, .the extravagant demands for more water will evaporate.
?? ?The Skull Valley will be left with a depleted water table fissures rather than prairie?,dust storms devastated wildlife and for what Nevada like the ungrateful whore that she is will laugh and say you F@%&\$d up...YOU TRUSTED US.

Jack Grainger

1498N500E

Centerville,Utah 84014

(801) 292-0079

Print View

From: "Mildred Russell" <mruss6@jcpenny.com>
To: <snakevalley@utah.gov>
Date: Thursday - August 20, 2009 7:38 AM
Subject: Snake Valley Water

I am in opposition to the water in Snake Valley being pumped to Las Vegas. The water should be used for agriculture in the area that it is in.

Water in the desert is a commodity that is worth more than gold. The existing ranches need the water to make a living.

Regards,

Mildred Russell

227 North Hale Street

Grantsville, Utah 84029

435-884-0148

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Steven Summers

August 7, 2009

1150 Wilson Ave

Salt Lake City, Utah 84105

Dear Mr. Styler,

Please do not sell Utah's water. The effect on our state will be irreversible.

Sincerely,

Steven Summers

A handwritten signature in black ink, appearing to read "S.S. R.N.", is written over the typed name "Steven Summers".

Print View

From: Jen & Dru Whitlock <thepowdershredders@yahoo.com>
To: <snakevalley@utah.gov>
Date: Monday - August 24, 2009 10:29 AM
Subject: Oppose Snake Valley water sharing agreement

Dear Department of Natural Resources,
I am writing to oppose the proposed Snake Valley water sharing agreement. The proposed agreement will dry up the already diminishing water resources in Snake Valley, putting Utah ranchers, wildlife, and the environment at risk. The agreement could result in increased dust storms along the Wasatch Front, diminishing our already precarious air quality. Furthermore, the agreement encourages further irresponsible growth in the Las Vegas region. Dry western states cannot continue to encourage growth in places where there are limited and diminishing resources. Resisting the agreement may result in a protracted legal battle, but such legal proceedings would encourage Las Vegas to focus on conservation and smart growth, and would demonstrate that the State of Utah is first and foremost concerned with Utah's well-being, not the well-being of Las Vegas.
Sincerely, Jennifer Whitlock 892 Northcliffe Drive Salt Lake City, UT 84103

Print View

From: SANDRA WILLIAMS <slwill4416@msn.com>
To: <snakevalley@utah.gov>
Date: Tuesday - August 25, 2009 6:41 PM
Subject: water proposal

Dear Governor Herbert:

Concerning the Snake Valley Water proposal, I am definitely opposed to SVWA plans. I have been a cattle and sheep rancher on Utah's West Desert for 40 years and deeply understand the fragile ecosystem of Utah's outback. I fully agree with rancher, Mr. Cecil Garland. If Nevada starts pumping the Snake Valley aquifer, the pumps will never be shut down. They will out-lawyer us and take it. I fully agree with Cecil - to hell with 'em, fight 'em all the way.

Sincerely,

Morgan K. Larsen

Print View

From: Sue Madsen <peteandsue_rocknm@yahoo.com>
To: <snakevalley@utah.gov>
Date: Monday - August 31, 2009 7:44 AM
Subject: snake valley comments

To all:

SNWA's unsatiabile appetite for water will never be satisfied!

Their's is a want, not a need!

Their's is for frivolous intertainment! Our's is for LIFE!

Please don't let them have our water!

Susan Madsen

Print View

From: Jackie Schenck <jlgschenck@yahoo.com>
To: <snakevalley@utah.gov>
Date: Wednesday - September 2, 2009 1:05 PM
Subject: Snake Valley Water

I am definitely opposed to the agreement to allow Nevada to have one-half of the Snake Valley water rights. The livelihood of the residents of Millard county and others is directly dependent on water. The aquifiers could be drained so much that Utah counties could turn into even a more arid place and the citizens could no longer farm or raise cattle, or otherwise use the land to survive.

Please do not take this water away from Utah. It would be a huge mistake. It would negatively impact our state forever. We must stop this now!!

Jackie Schenck
former resident of Millard County

Print View

From: "Stephanie Crusselle" <slc@sitez.com>
To: <snakevalley@utah.gov>
Date: Wednesday - September 2, 2009 4:21 PM
Subject: Opposition to allowing Nevada to have half of Utah's Snake Valley Water Rights

To Whom It May Concern:

I would like to be recognized as being in opposition to allowing Nevada half of Utah's Snake Valley Water Rights. This can only be detrimental to the people of Millard County, especially the farmers. As water is becoming so scarce and hard to come by, it's time for Nevada to put building moratoriums into place until other sources of water can be found.

Although I don't live in Millard County at the present time, I grew up in Millard County and my Mom still owns property there. We are still very concerned about what actions will take place regarding this matter.

Thank you,

Stephanie Crusselle
19 Sunnyside Road
Southwick, MA 01077

Print View

From: Nick Burns <nick@vanburns.com>
To: <snakevalley@utah.gov>
Date: Monday - October 5, 2009 6:12 PM
Subject: snake valley water

Hello --

No water deal w/NV until the full impacts for the residents of Utah are known to all and understood by all -- the ranchers, the people along the Wasatch Front, the farmers, everyone.

Any water deal must not negatively impact Utahans' health, not negatively impact Utah's beauty, and not negatively impact Utah's animals and plants.

Thank you --
from a voting and concerned citizen

Nick Burns
187 E Dorchester Dr
SLC 84103

Print View

From: Roland Goyette <subderground@yahoo.com>
To: <snakevalley@utah.gov>
Date: Saturday - September 5, 2009 8:37 PM
Subject: Water

To whom it may concern:

I recently read about Utah's proposal to sign an agreement to permit the Southern Nevada Water Authority to pump 36,000 acre feet of water per year from Utah's Snake Valley to Las Vegas. This deal could devastate area ranching, wildlife and recreation, and turn this West Desert valley into a dust bowl affecting the air quality and snowpack of the Wasatch Front. I am writing to state that I am firmly against this proposal and I truly hope that it does not manifest. Thank you for your time!

Sincerely,

Roland Goyette
782 E 9990 S
Sandy UT 84094

Print View

From: "Margaret H. Christensen" <path2peg@yahoo.com>
To: <snakevalley@utah.gov>
Date: Sunday - September 6, 2009 7:32 AM
Subject: underground water

Re: Snake River Aquifer near Utah/Nevada border

Please don't squander this precious asset on trivial uses. Underground water is basically nonrenewable due to limited surface water that can penetrate. The mantra needs to be conserve, conserve, CONSERVE! Where are the conservatives when we need them?

Margaret H. Christensen
266 Fourth Ave. #108
Salt Lake City, Utah 84103

Print View

From: T Holdeman <thold@wasatchmedia.com>
To: <snakevalley@utah.gov>
Date: Monday - September 7, 2009 10:40 PM
Subject: Comment on water

All one needs to do is look to the north of Las Vegas and all other areas the city has access to their water. If they are allowed to take even one drop of water I believe it is the end of the Snakevalley/Great Basin region. let them do away with the fountains and gardens, let them manage water as a desert region and not an Oasis in the desert.

They say history repeats itself, the ghost town of Metropolis NV for example, Alamo, and that entire valley has suffered from the loss of water.

I for one and against it and want to know what I can do to prevent the acquisition of water by Nevada. I am a former resident of Las Vegas, a former casino executive. I have family in Vegas, still, I would never approve of them taking water from the Northern regions of Utah or Nevada.

Terrence Holdeman
Wendover.

Print View

From: Alan Hayes <abh_slcut@yahoo.com>
To: <snakevalley@utah.gov>
Date: Thursday - October 1, 2009 2:18 PM
Subject: Snake Valley water pipeline

I would like to go on record as opposing the Snake Valley water pipeline to Las Vegas. I believe this scheme will have deleterious effects on the aquifer, both anticipated and unanticipated. I oppose the plan and urge that it be halted entirely.

Alan B. Hayes, Ph.D
2340 S. Oneida Street
Salt Lake City, UT 84109

Print View

From: <matthappe@comcast.net>
To: <snakevalley@utah.gov>
Date: Wednesday - September 30, 2009 6:24 PM
Subject: The curent snake valley proposal is terrible..

Do not allow this to pass.. The curent draft is completely unfair the the
citizens of this state.

Matt Happe
SlC, UT
801-205-0865

Print View

From: Dangerfield Linda <linda.dangerfield@mac.com>
To: <snakevalley@utah.gov>
Date: Wednesday - September 30, 2009 6:08 PM
Subject: snake river

We strongly oppose the Snake River Water Plan because it is taking water away from a non-renewable water source. Las Vegas growth is out of control. Taking water from Utah, to water golf courses, fountains, and sustain the city of Las Vegas which is in the middle of a desert is unconscionable. Las Vegas needs to start with a long term water conservation plan which includes limiting growth and better conservation. Las Vegas should not be allowed to developing reliance on a water source that took thousands of years to establish. No water should be taken from the Snake Valley Aquifer!!

Sincerely,
Linda and Stephen Dangerfield

Print View

From: "Matthew Loel T. Hepworth" <matt@midiassist.com>
To: <snakevalley@utah.gov>
Date: Wednesday - September 30, 2009 3:51 PM
Subject: Snake Valley Agreement

To Whom it May Concern,

As I'm sure you're aware, Utah is the 2nd driest state in the country. Water is as dear to Utahns as gold. But it is also true that not all that glitters is gold. Diverting our precious water to a glittering monument to excess and the textbook example unsustainability is wrong.

I've lived in Utah all my life and have worked very hard to be a good steward of the water. I understand that it is a finite resource. To squander it is a crime. To treat it with contempt is inexcusable. To trade it like a simple commodity is to declare one's own ignorance of its importance. We as Utahns have always worked diligently to conserve. Even Sandy City with its explosion of population and growth has continually reduced its water usage year after year. If Sandy City can do it, so can Las Vegas.

But alas, Las Vegas continues to flush it way, dump it on golf courses, and fill manmade fountains, streams, lakes and rivers with it. Bellagio has a grotesque dancing water display that shoots into the air as if to give it's neighbors to the Northeast a gigantic middle finger salute. To Las Vegas, water is a mere window dressing used to entice consumers into their den of monstrous overindulgence, bankrupt morality and vacant cultural contribution.

Therefore, we should treat our state's water with the thoughtful respect that it deserves. They're not making any more of it. We're truly on our own...and we'll die without it. Don't sell it to people who only care about it AFTER they've gambled it all away.

Sincerely,

Matthew Loel T. Hepworth
1343 Ashwood Cir.
Salt Lake City, UT 84121-1901

Print View

From: "nelle" <nelle@ubtanet.com>
To: <snakevalley@utah.gov>
Date: Wednesday - September 30, 2009 3:34 PM
Subject: water agreement

Although we live in Vernal, we feel this issue concerns the entire state of Utah. We definitely think this agreement talk should be STOPPED now. Don't enter into something as important to the state as water. It should be kept in its entirety in Snake Valley. Listen to the farmers etc., who have lived there for decades. We have been following this issue closely & also in the past runs on Utah by Las Vegas. Perhaps they wouldn't need so much water if they shut off all the fountains etc., Also, they have Lake Mead close by.

Leonard & Nelle Heeney
P O Box 126
Vernal, UT 84078

Print View

From: Clifford Vogt <cliff_vogt@hotmail.com>
To: <snakevalley@utah.gov>
Date: Wednesday - September 30, 2009 2:43 PM
Subject: Snake Valley Water

This is a case of very poor management - to let this go through would be a disservice to us and future generations. This must be stopped. The risks are too great for the benefit of golf courses and swimming pools.

Please use some sense and stop this before it is too late.

Cliff Vogt 8672 Aspen Way
Sandy UT 84093

Print View

From: "Edgette, Ashley" <Ashley.Edgette@slcgov.com>
To: <snakevalley@utah.gov>
Date: Wednesday - September 30, 2009 2:42 PM
Subject: Snake Valley Pipeline

To whom it may concern,

I would like to voice my opposition to the proposed pipeline as a Utah citizen, a University of Utah student and as an active community member. I believe this pipeline to be unsustainable in the long term span of time as well as completely detrimental to the wetlands around the area and surrounding habitats. It puts Utah citizens in a horribly compromised water situation in which Las Vegas will eventually suck our aquifer dry and leave us with a compromised landscape and depleted water resource.

Thank you for your time,

Ashley Victoria Edgette

Print View

From: "Ken Anderson" <pahtempe@infowest.com>
To: <snakevalley@utah.gov>
Date: Wednesday - September 30, 2009 1:24 PM
Subject: water crises

Dear Utah and Nevada.

Redistributing massive quantities of water from one region to another is wrong and shortsighted. Everone suffers. Las Vegas already is out of ballance and eventually will become uninhabitable. The source areas likewise. Think about the future rather than short term profits. Let's concentrate on solving the gigantic climate change challenges , not create new ones. Hopefully sound judgement and intelligence will prevail Most sincerely Ken Anderson.

Print View

From: Betty Dortsch <kapsgram@yahoo.com>
To: <snakevalley@utah.gov>
Date: Wednesday - September 30, 2009 1:03 PM
Subject: NO to Snake Valley water proposal

The Southern Valley Nevada Water Authority's proposal to pipe water needs to be studied closely. The delicate balance of the ecosystem, if destroyed, would have serious repercussions that cannot be ignored. Not only would the natural environment be potentially devastated, but the livelihood of ranchers and others could be as well.

This proposal needs significant time to study, and rejected if the outcome will be as dismal as it now appears it would be.

Sincerely,

Betty Lou Dortsch

Print View

From: "james adamson" <james@ics-sales.com>
To: <snakevalley@utah.gov>
Date: Monday - September 28, 2009 11:29 PM
Subject: water aquifer, utah west desert

Gov, Herbert, please use all influence possible to stall any future commitment of the aquifer, or 's under the State of Utah. as of yet we do not know how wide or far this aquifer extends. Also whether It is presently in decline now, is not understood. The damage possible, for acting too soon or with out complete understanding can not be undone. Please act with caution

James Adamson
Salt Lake City, Utah .

Print View

From: "Margo Chapman" <mchapman62@comcast.net>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 9:47 AM
Subject: Pumping water to Las Vegas

I am in opposition to the water in Snake Valley being pumped to Las Vegas. The water should be used for agriculture in the area that it is in.

Water in the desert is a commodity that is worth more than gold. The existing ranches need the water to make a living.
Sincerely, Margo Chapman
Riverton, Utah

Print View

From: <JHearty@iasishealthcare.com>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 10:00 AM
Subject: Snake Valley

I've spent some time in the Snake Valley and a friend of mine ranches there. To strip it of it's water merely to ship it on down the line to Vegas would be a shame. The old saying "a lack of planning on your part does not constitute an emergency on my part" should hold true. The water in the Snake Valley should stay where it belongs. Personal opinion. Thanks for lending an ear and I appreciate the work you guys do up on the hill.

Most respectfully,

Jeff Hearty
HR Recruiter
Jordan Valley Medical Center
Pioneer Valley Hospital
Office: 801-601-2364
Mobile: 801-502-3427
Fax: 801-601-2610

Print View

From: "Mark C. Burton" <MBurton@WarnerTC.com>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 10:34 AM
Subject: Keep the water in Utah.

Mark Burton

Warner Truck Center

(O) 801-886-4965

(C) 801-381-7093

Print View

From: Gail Wiebke <wiebke007@live.com>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 10:46 AM
Subject: Utah water to Nevada

Hello,

I think it is irresponsible as guardians to encourage someone, in this a city, to live beyond their means. Las Vegas will have to budget their current supply of water the same way they have to budget their money. I vote NO WAY on sending water from the Snake Valley to Las Vegas.

Sincerely,

Gail Wiebke

Registered Voter

2648 E Promenade Cir

Cottonwood Heights

Bingâ,ç brings you maps, menus, and reviews organized in one place. Try it now.

http://www.bing.com/search?q=restaurants&form=MLOGEN&publ=WLHMTAG&crea=TEXT_MLOGEN_Core_tagline_local_1x1

Print View

From: "Jason Smith" <Jason@financecapital.us>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 11:04 AM
Subject: STOP!

When are we as a state going to say NO?

Keep our natural recourses here!

Financing the World's Equipment

Jason R. Smith

6443 N. Business Park Loop Rd., Suite 9

Park City, Utah 84098

Phone: 435-214-0400 Ext. 101

Fax: 435-649-4731

Email: jason@financecapital.us <mailto:jason@financecapital.us>

www.financecapital.us <http://www.financecapital.us/>

Print View

From: "Tom Duncan" <tduncan@WarnerTC.com>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 11:40 AM
Subject: West Desert Aquifer

Another example of bad government.

How can we as citizens of Utah justify depleting the West Desert Aquifer?

Stop this madness now ! Do not allow the Southern Nevada Water Authority to rip-off the citizens

of Utah and our fragile aquifer.

Tom Duncan

Office 801-978-8000 x 4705

Cell 801-808-1714

Fax 801-978-8010

<<http://www.warnertc.com/>>

Print View

From: Jon <lavaroll@yahoo.com>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 11:53 AM
Subject: Don't dustbowl the Wasatch Front.

To whom it may concern,
To sell out our (SLC) citizen's rights to breathe clean air for the further development of a city that resides in the middle of a hot, hot desert that wastes its water on lavish fountains and sprawl, sprawl, sprawl out growth would be a travesty of a high order. As well as an abdication of your responsibilities to protect our most precious natural resource, water. Now I know that the Wasatch Front is also far from ideal with our own wasteful water tendencies and our own polluting of our valley's air, but what we need to do is do everything we can to improve it. Selling out the rights to drain the snake valley basin at amounts that are questionable at best and outright fabrication at worst in regards to what is a sustainable amount would do just the opposite. Utah doesn't need its own "Owen's Valley" for any reason, but especially for the benefit of place not even in Utah. Please, please, please do the right thing here for not only the citizens of the Wasatch Front and the ranchers of Snake Valley, but the right thing for the desert environment. Do not let Nevada and Las Vegas take this water. We are counting on you.

-Jon Pinegar
Salt Lake City resident and voter.

Print View

From: "Bob England" <BobE@crengland.com>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 12:04 PM

Why are we looking out for the best interest of Nevada? When are we going to take care of ourselves first? I sure hope we have some safe measures installed that will control the flow of water of them and not allow them to abuse the system. I see nothing but bad things ahead if this goes through. I would hate to say "I told you so"!! A concerned Utahan

Print View

From: Chris Yoakam <cyoakam@hotmail.com>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 12:34 PM
Subject: Snake Valley Proposal

To whom it may concern:

The proposal to pump water from the Snake Valley aquifer must be reviewed with the highest levels of skepticism. This decision will impact generations and may negatively impact a large portion of the state. The Great Basin is a delicate desert environment. I find it difficult to believe that Las Vegas can pump significant amounts of water from the aquifer without impacting the environment. It just doesn't make sense.

Please reconsider this proposal and do everything to ensure that our precious resources are protected. Once the pumping starts and Las Vegas becomes dependent on the water, the pumping will never stop! The west desert will surely dry up and be lost forever.

Hotmail® has ever-growing storage! Don't worry about storage limits.
http://windowslive.com/Tutorial/Hotmail/Storage?ocid=TXT_TAGLM_WL_HM_Tutorial_Storage_062009

Print View

From: Aaron Littlefield <aplittlefield@yahoo.com>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 12:41 PM
Subject: water aquifer

This agreement is just one step further towards feeding the unsustainable fountain water oasis in the middle of the desert. We should not even consider tapping any of our water resources to feed this monster. If we do, they should pay the same rates we do in Salt Lake City for our water. Use that money to fund our schools. This is a typical closed door agreement designed to make profits for the contractors and deplete our precious natural resources.

Environmental impacts have NOT been adequately addressed!

I along with many others will fight this movement with everything we have.

Mike Styler, you do not have the public's interest in mind. I trust very little of what you do (always behind closed doors). Be careful, we have our eyes on you. You run a public institution and the people can request new leadership. Untouchables can make enough bad moves to become replaceable.

Thank you,

Aaron Littlefield
935 S. McClelland St.
Salt Lake City, UT 84105
(801) 364-3053

Print View

From: Teresa Tate <Teresa.Tate@wvc-ut.gov>
To: "snakevalley@utah.gov" <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 1:19 PM
Subject: Snake valley water

After reading several articles regarding the proposed Snake Valley water "deal", I believe it is not in the best interest of the citizens of Utah, either now or in the future. We cannot turn southern Utah into a dust bowl, and further corrupt the air quality in northern Utah. We cannot continue to destroy the local agricultural economy and the respiratory health of Utahns. And, I agree with many others who have commented that, once the pipeline is turned on it will never be turned off. The groundwater will be drained completely.

Teresa Tate

Print View

From: "Marden Spencer" <Mspencer@WarnerTC.com>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 1:44 PM

I have great concerns over water going to Nevada. We are on rationing of water

And yet you are sending water out of state. As a Resident of Utah for All my life

I hope are governing body is smarter than that

My name is Marden Spencer and I have been working with the Government all

My life. It never fails that if the people do not want something the government

Seem to pass it whether you like it or not

I hope you do not send water to Nevada when we need it

Sincerely

Marden Spencer

Print View

From: randy simmons <randyjsimmons@yahoo.com>
To: <snakevalley@utah.gov>
Date: Wednesday - September 30, 2009 10:54 AM
Subject: pipeline to Las Vegas

To Whom it may Concern: I am opposed to sending any water that may be part of the State of Utahs water system to Las Vegas.

Print View

From: "Cindy G Christensen" <CGChristensen@slco.org>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 2:06 PM
Subject: objection to agreement

I strongly oppose what Nevada is proposing to do regarding the Snake Valley water. It is naive to think that allowing Las Vegas to take millions of gallons of water from the aquifer won't affect the whole state of Utah. I think Governor Herbert should take a stand against this. I have no faith that Nevada gives a rip about the citizens of Utah but I do have faith that Gov. Herbert does. Please do the right thing and oppose the agreement and the taking of the water in any form.

Print View

From: Mira Roper <amroper@rocketmail.com>
To: <snakevalley@utah.gov>
CC: <snakevalley@water.nv.gov>
Date: Wednesday - September 30, 2009 10:28 AM
Subject: Water Protest

I am very much opposed to removing any water from the Snake Valley to enable further growth in Las Vegas.

Steve Dutson

Print View

From: "Joni" <jonid@xmission.com>
To: <snakevalley@utah.gov>
Date: Wednesday - September 30, 2009 10:23 AM
Subject: comment

Hello:

As I have been following the story of Snake Valley for the past couple of years, several things keep crossing my mind:

- 1.. in Utah, we make efforts at water conservation
 - 2.. the state of Nevada has limited water sources but that does not seem to warrant water conservation efforts in the resort city of Las Vegas
 - 3.. from my point of view, ranchers and farmers in Snake Valley, though small in size, should be able to depend on the natural resources in the region
 - 4.. as a lifelong resident of Utah, I oppose the Southern Nevada Water Authority piping water from the aquifer in Snake Valley
- Please take the thoughtful comments of citizens when you make this important decision. Ultimately, it affects all of us in Utah.

Thank you,

Joan Dykstra
1403 E. Harrison Ave.
SLC, UT 84015

Print View

From: Mira Roper <amroper@rocketmail.com>
To: <snakevalley@utah.gov>
Date: Wednesday - September 30, 2009 10:05 AM
Subject: Protest of Water Being Taken From the Snake Valley

I am very much opposed to any water being taken from the Snake Valley Water Basin. I believe this will be detrimental to the entire state of Utah. Millard county should be the sole party agreeing or disagreeing to any proposal. Millard county is the only protester.

I believe western Utah and Millard county farmers and ranchers will be irreparably harmed if this proposal goes through. Please do not give in to the money & power grab that is going on.

Alan Roper
Delta, Utah

Print View

From: "Strech, Maxine (Cont)" <MStrech@EGGinc.com>
To: "'snakevalley@utah.gov'" <snakevalley@utah.gov>
Date: Wednesday - September 30, 2009 9:56 AM
Subject: PLEASE DO NOT LET THIS HAPPEN

I had heard some about the contriverty about Las Vegas wanting the water and did not like what I was hearing but was not move to speak out however that has changed.

Two weeks ago our family traveled from Tooele Utah to Baker Nevada to visit Lehman Caves. The caves are spectacular! Has any one studied what effect the lowering of the water table might do to the cave if Las Vegas get the water?

During the trip I began to realize how big the Snake Valley is ! I also realized how little above ground water there is. No matter how much water the area might be sitting on I do not feel that it can be enough to keep the farms and ranches going and Las Vegas too. If I were a gambler I would not bet on the farms and ranches surviving.

American can little afford the loss of more "little" ranches and farmers. America needs the product from these ranches and farms to help us stay less dependant on other countries, just as surely as we need our own supply of oil and gas rather than be increasingly dependant on other countries.

The farms and ranches in these areas are productive and have conserved their precious water for a hundred years ensuring their life style. These ranchers and farmers understand how precious water is. They understand what less water means to them and the land. If they loose the water we all loose. Once farm land looses water it dries up and blows away. There goes our air quality along with the food. It would take years to bring the soil back to life and productivity if water became unavailable.

We can see a good example of this when we look at the agreements that were made with California on the Colorado River project. California is guaranteed a certain amount of water every year. No matter how much water is or is not available California gets the set amount. On our frequent trips to California to see family we do not see dry-scaped front yards but nice green lawns. Only this year has California started enforcing fines for over watering. California orchards have been allowed to go dormant because they don't have water but the residential lawns are green. Their priorities are not in the right places.

Where are our priorities if we choose Las Vegas growth over farms and ranches?

Las Vegas is working on reclaiming their waste water but they need to limit their growth until they can support the city's growth with the water they already have.

Whether the water is on the Nevada or Utah side of the Snake Valley it is more precious to the farmers and ranchers that have shown that they know how to conserve the water and put it to the best use than to Las Vegas.

Once Utah signs over any of the rights to the water in Snake Valley it is gone. Utah is getting dryer! If this water is taken away and used up there won't be more to replenish what is taken to Las Vegas. The water for Las Vegas will have to be given first and if there is nothing left because of a lowering water table then the farmers and ranchers are out of luck. There will not be renegotiations, just like California now gets their water from the Colorado River first.

Utah and Nevada are making decisions on this water that will affect our food supply, our air quality, and life styles for future generations. I do not feel that Utah and Nevada farmers and ranchers should loose their water. What make Las Vegas growth more important that the little farmer and rancher? If they can grow crops because of lack of water their land will be worth nothing. They loose the income and their land. Will Las Vegas buy the ranchers and farmers worthless land when they can't grown anything?

That water should be kept where it is as a supply for the current farmers and ranchers that know how to conserve and use it wisely. This should be a reserve for the future, it is water in the bank so to speak.

This should be a no brainer. Vote NO!

Print View

From: Jim Jenkin <jim.jenkin@hsc.utah.edu>
To: <snakevalley@utah.gov>
Date: Wednesday - September 30, 2009 9:42 AM
Subject: Public Comment

Committing water outside the State before it is absolutely necessary is taking a risk with Utah and Utahns' future.

James C. Jenkin
212 5th Ave.
Salt Lake City, 84103

Print View

From: Floyd Jensen <floydandtammy@hotmail.com>
To: <snakevalley@utah.gov>
Date: Wednesday - September 30, 2009 8:09 AM

To whom it may concern-which is probably everyone in the Salt Lake Valley, our family is united in our opposition to this proposal. Water is a God given resource and should be carefully and gratefully used. I suppose that means no support for the gambling industry and their water features though that may now be a small part of their needs? Originally people gathered to live where there was some water including those who came to the Salt Lake Valley. I am not saying everyone in Las Vegas shouldn't have settled there in the first place, but to expect to take water from surrounding states to fuel growth in an absolute desert does not square with our family. Growth is being fueled here also but at least there are some natural resources to rely on though utmost conservation will be the only answer in the future. Tammy Jensen

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http://windowslive.com/Tutorial/Hotmail/Storage?ocid=TXT_TAGLM_WL_HM_Tutorial_Storage_062009

Print View

From: Veronica Egan <ronni@greatoldbroads.org>
To: <snakevalley@utah.gov>
Date: Wednesday - September 30, 2009 7:45 AM
Subject: Snake Valley waterplan

In the face of increased desertification in the American Southwest due to global warming, the mining of groundwater in the Snake Valley to facilitate further expansion of an already dangerously over built city 300 miles distant is foolhardy. We cannot simply shuffle our precious freshwater resources around to satisfy unsustainable development, especially in our extremely arid environment. We urge rejection of this dangerous plan by all parties.

Thank you for the opportunity to comment.

Veronica Egan, Executive Director
Great Old Broads for Wilderness
P O Box 2924
Durango, CO 81302
970-385-9577
Fax 970-385-8550
www.greatoldbroads.org

It's time to donate to the 5th Annual Wild for Wilderness On-Line Auction!
Go to <http://www.greatoldbroads.org/nadf.php> to donate.
Or to <http://auction.greatoldbroads.org> to browse this year's listings.

"What if we really took seriously the idea that the world is sacred,
really."
Kathleen Dean Moore

Print View

From: "Scharlow, Tom" <tscharlow@lhm.com>
To: "SNAKEVALLEY@UTAH.GOV" <SNAKEVALLEY@UTAH.GOV>
Date: Tuesday - September 29, 2009 4:54 PM
Subject: LAS VEGAS WATER GRAB

DEAR ELECTED OFFICIALS,

PLEASE DEFEAT ANY EFFORT BY LAS VEGAS AND SOUTHERN NEVADA TO ACCESS ANY WATER FROM THE SNAKE VALLEY AQUIFER. THE PEOPLE AND GOVERNMENT OF LAS VEGAS HAVE TO REALIZE THEY CANNOT HAVE UNBRIDLED GROWTH FOREVER. THE PEOPLE OF SNAKE VALLEY ARE GENUINE STEWARDS OF THE LAND.

THANK YOU,
TOM SCHARLOW

Print View

From: <GWESLEYHALE@aol.com>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 5:36 PM
Subject: Water

I do not trust Nevada with the Utah's water. I Vote no.

George Hale

Print View

From: JARROD KEAR <jarrodkear@msn.com>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 6:09 PM
Subject: Water to Nevada

To who it may concern:

I stand opposed to the idea of selling off water to Nevada.
The reason I take a stand opposed, is because I believe that environmental impacts have yet to be been adequately addressed.
There is much more at stake here when water is taken from its natural way.
I do believe, as do many others this effort is not in the best interests of Utahans & we will fight this movement.
Furthermore I believe Mike Styler, does not have public's best interest in mind.

Jarrold Kear
2887 McClelland
Salt Lake City, Utah 84106

Print View

From: <DHHALE@aol.com>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 6:22 PM
Subject: Water

Utah should make Nevada stop trying to take Utah's water.

Dixie Hale

Print View

From: Bob Brister <bbrister@greens.org>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 6:30 PM
Subject: no to pipeline

Just say no to Las Vegas taking Snake Valley water.
Bob Brister
1102 S 800 E #A
SLC, UT 84105

Print View

From: Doris Chandler <jchan5000@yahoo.com>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 7:39 PM
Subject: Water Rights

We should never give away our water rights. Especially to support bigger and fancier casinos and thus more need for water. Most areas who have given up their shares of water have ended up parched and dried out and deeply regretting it. This situation should be studied very, very, very carefully. Let the committee do their study. Please remember we need food from our farmers far more than more entertainment. SAY NO! DO NOT SIGN THAT AGREEMENT.
Jim and Doris Chandler
Kaysville, Utah

Print View

From: <MarkShepard05@comcast.net>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 9:08 PM
Subject: Snake Valley Water

Dear Gov. Gary Herbert,

After reading the article in the paper and looking over the draft documents I'm very concerned about the state of our natural resources. If I knew the water was going to be used wisely in Nevada for crops and drinking water it might be different, but all I can think of is all those fountains, golf courses, and swimming pools. Maybe Nevada should look at preserving the water resources they already take from other states instead of finding ways to access more. I am against the Snake Valley Water Project and hope that our elected and appointed officials don't agree to this proposal and short sale our resources. Thank you for taking the time to listen to your Utah residents on the issue.

Mark & Debora Shepard

Kaysville, Utah

From: Ms. Pamela E. Hanrahan
Home Phone: 801 277 9688
Email Address:hammerslc@netzero.com

(From Gov's voicemail)

Pam telephoned to tell the Governor she just returned from Las Vegas and reported way too much water waste down there. She doesn't want the Governor to sign the agreement on the Snake Valley Aquifer.

**Abigail C. Johnson
P.O. Box 183
Baker, Nevada 89311**

September 17, 2009

Allen Biaggi
Snake Valley Agreement
Nevada Department of Conservation and Natural Resources
Suite 5001
901 S. Stewart St.
Carson City, NV 89701

RE: Comments on Nevada/Utah Bi-State Agreement Regarding Snake Valley Groundwater

Dear Allen:

Please consider the following comments when revising the Nevada/Utah Agreement regarding the division of the waters beneath the Snake Valley. I am a property owner, homeowner, and part time resident of Baker, Nevada. Overall I am skeptical that this agreement will provide the promised protection to water users in Snake Valley, and I believe that the division of the groundwater in Snake Valley facilitates the Las Vegas pipeline project which threatens not only the future of Snake Valley, but most of rural Nevada.

General Comments

1. I do not believe there are 132,000 af of water available, and I think it is a mistake to use that number to base decisions for the future of Snake Valley.
2. Both states should provide adequate review time and formal public hearings on the draft agreement. The two week extension of comment time to September 30 is welcome, but inadequate for the complexity and detail of an agreement forged in secret over a four year period. Both states should hold formal public hearings to gather testimony and provide additional forums for discussion of the provisions.
3. Both states should provide the public the opportunity to review and comment on the revised draft after comments on the first draft have been considered and addressed.

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4. The Governors of Nevada and Utah should hold bi-state hearings in Snake Valley on the revised draft agreement before deciding whether to sign the document. It should be the Governors who sign rather than their designees.
5. Additional studies are needed. BARCASS 2 is needed. The studies should be conducted by an independent third party, peer reviewed and quality controlled. If the State Engineer directs SNWA to pay USGS to do the studies and data collection, the quality and accuracy of the data will be ensured. Studies should not be piecemealed, which is why BARCASS 2 is needed.
6. Implicit in this agreement is the assumption that the current set of conditions will exist in the future. While Nevada's current administration and State Engineer may be open to considering the concerns of Snake Valley, it is likely that in the future, those posts could be controlled by the same people who want to drain rural Nevada. The agreement needs to incorporate language that commitments made in the future are incorporated into the agreement and approved by both states. The agreement also needs language to bind the successors of Southern Nevada Water Authority as well as other private and public entities who provide water or build pipelines under contract , lease or other arrangement.
7. I also reference and adopt the comments of the Great Basin Water Network.

Specific comments

Page 1, 1.1 a. The term "demonstrated" should be further defined.

Page 2, 1.4 "beneficial use" does not include the use of water by wildlife. Is this intentional? Why are wildlife not protected? Is it not the responsibility of the state to protect wildlife?

Page 2, 2.0 Findings: At a minimum, the findings section should provide a statement that Nevada water rights holders may seek redress from the Nevada State Engineer under existing Nevada water law. It is my understanding that the team felt it was unnecessary to state that. However, the agreement leaves the impression that only Utah residents in Snake Valley have recourse for the adverse effects of pumping by SNWA.

Page 3, 2.4 How does the acknowledgement that the existing information is insufficient reconcile with the Table 1 division of the waters? This statement, which is true, should also appear on page 4 as an additional sentence under 3.2

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Page 3, 2.5 Instead of "sophistication" use "complexity."

Page 4, 3.2 The use of 132,000 af requires additional explanation and a citation of the study from which this was derived. Suggested rewrite: "The States and other parties acknowledge that existing information is insufficient to determine with precision the Available Groundwater Supply. However, based on the best currently available data (insert citation here) the States agree that the Available Groundwater Supply as of the date of this Agreement is 132,000 af." However, I am very uncomfortable basing this agreement on one study, rather than taking that study into consideration with the other studies that have been done. I also think that if 49,000 af flows from Spring Valley into Snake Valley, as postulated in the USGS BARCASS study, that the water is being counted twice. There should also be an explanation of why Pleasant Valley and Hamlin Valley are considered to be part of Snake Valley for this purpose.

Page 4, Table 1 The explanation should state that vested water rights are taken into consideration in the Allocated block. There was some confusion among the Nevada team about that, and it needs to be clear where vested rights are accounted for in Table 1.

Page 6, 5.3 It is my understanding that this provision is designed to provide each State Engineer with veto power, but it is not clear in the language of this provision.

Page 9, 6.4 This requirement is written in the passive voice, as if SNWA were not responsible for the \$3 million. Instead, for the last sentence; "In no event will SNWA allow the balance of the mitigation fund to be reduced below \$3 million while SNWA (or its potential partners or successors in interest) maintains groundwater development and withdrawal facilities in Snake Valley." The details of the mitigation fund should be more explicit. The fund should not be SNWA's but should be under the jurisdiction of the State Engineers. Who issues the checks? Who controls the money? What are the consequences if SNWA does not maintain the mitigation fund at \$3 million or above?

Thank you for considering my comments. To the extent that the agreement protects water users in the Snake Valley, both Nevadans and Utahans, from the adverse impacts of pumping, I support it. However, the best protection for water users in the Snake Valley is not to build the water pipeline and not to allow pumping of the Snake Valley, which is in balance. It is not clear that SNWA can be trusted to meet the terms of the monitoring agreement. Ultimately, this agreement, if signed, will depend on the resources of the State of Utah and the court system to protect users of water in the Snake Valley. The example of Owens Valley is instructive in this

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regard. Therefore, to the extent that this agreement facilitates the Las Vegas Water Grab and the destruction of Snake Valley, I oppose it. Furthermore, as stated earlier, I do not believe there are 132,000 af of water available, and I think it is a mistake to use that number to base decisions for the future of Snake Valley.

Sincerely,



Abigail C. Johnson

cc: Governor Jim Gibbons
Utah Department of Natural Resources ✓
Dean Baker
Great Basin Water Network
Nevada Department of Wildlife

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Print View

From: Mark Handy <mahandy@comcast.net>
To: <snakevalley@utah.gov>
CC: <snakevalley@water.nv.gov>
Date: Tuesday - August 18, 2009 12:01 PM
Subject: Snake River Valley Water

I am totally against selling of any of the Snake River Valley Water. there alot of assumptions being made as to how much water there really is and that there will be enough not to impact the Farmers that already have RIGHTS to that water. By doing this deed what in fact we are insuring is the death of a beautiful Valley. Not to mention the death of the Farmers who now make their living their. the answer is not the reallocation of water but the control of growth. Once this is gone it is gone. Once we hit a drier spell than we are no experiencing it will take years and maybe decades to replenish that water. Leave it alone. Protect those that already are using it. We all know that once 15 billion is spent on that pipeline that they will have total controll. I say no to this. Las Vegas is a desert, Let them act like one.....

Mark D Handy GRI,CRS,CRB
Custom Realty Inc.
3930 So Walker Haven Cir
Salt Lake City, Utah 84124

Cell 801-599-5077
Fax 801-277-7581

Print View

From: Mark Handy <mahandy@comcast.net>
To: <snakevalley@utah.gov>
CC: <snakevalley@water.nv.gov>
Date: Tuesday - August 18, 2009 12:01 PM
Subject: Snake River Valley Water

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Mark D Handy GRI,CRS,CRB
Custom Realty Inc.
3930 So Walker Haven Cir
Salt Lake City, Utah 84124

Cell 801-599-5077
Fax 801-277-7581

From: Betty Barela
To: Kaelyn Anfinen
Date: 9/1/2009 10:05 AM
Subject: Fwd: Re: Inquiry from Cecil Garland

Could you please get someone to respond directly to the constituent in the e-mail below referred by the Governor's Office. Make sure I get a copy of the response. Thanks!

Betty T. Barela
Utah Department of Natural Resources
801-538-7201
bettybarela@utah.gov

Utah Department of Natural Resources' hours are 7:00 a.m. to 6:00 p.m.,
Monday thru Thursday and closed Friday, state and federal holidays.

>>> Constituent Services <constituentservices@utah.gov> 9/1/2009 7:59 AM >>>
Hi Betty,

This is for Mike Styler. Thanks, Gloria

Below is an inquiry which was received by the Governor's Office of Constituent Services on 09/01/2009. Please respond directly to the constituent and reply to this email with a copy of your response by 9/15/2009.

Cecil C Garland
P O Box 225 Or Callao 225
Pony Express Road
Wendover UT 84083

Email Address:

SUBJECT:
Email to LG Herbert and Mike Styler:

Director Styler ~ please see attached commentary from Cecil Garland (someone with whom I'm sure you're well acquainted) His arguments make sense to me, and I would appreciate your reaction.
Thanks
Margaret

----- Forwarded Message -----
From: "Annette Garland"
To: ltmdm@comcast.net
Sent: Thursday, August 20, 2009 8:33:46 AM GMT -07:00 US/Canada Mountain
Subject: Cecil's thoughts about the Utah-Nevada Agreement

I've got this feeling that we are going to get the agreement between Utah and Nevada before too long. However, after giving some careful consideration to the subject, here are a few thoughts:

The agreement is certainly no cure-all panacea that it is held up to be. While at the same time there are some possibilities. In ten years, I'll be 93. While I've retained most of my mental facilities and can run at nearly full speed from the front door to the outhouse, still I can't help but wonder who'll be around to take our place. The agreement establishes for all time that Nevada is entitled to 50% of Snake Valley water. And that ain't so. It might be so if it were 150 years ago, and if Nevada had as much farm ground as Utah, and if the land area in both states were equal, and the people of both states went about clearing the land and using the water at the pace and rate. Then you could say that both states are entitled to equal shares of the water. That is certainly not the way it happened. Yet, Utah and Nevada are willing to sign an agreement to the effect that Nevada is entitled to half the water because some of the water runs out of the mountains of Nevada. What is ignored here is that 90% of the farming use of this water is in Utah and therefore that is where the long-established water rights are legally and rightfully located. The Utah-Nevada Agreement seems to recognize this fact only in a very casual and off-hand manner. While I consider this of the utmost importance. As sure as God made little green apples, as soon as SNWATER starts pumping, the water table will start falling and it won't be the farmers in Nevada who will be hurt because there are very few of them- if any. It will be the senior water rights holders who will

lose their ranches and farms in Utah and I have to go "hat-in-hand" to SNWATER for compensation- of course at their discretion. This puts SNWATER in the "cat-bird" seat to dictate to the people of Northern Nevada and Utah.

In the meantime SNWATER will have held on to their well applications for a period of 30 years and since no one is sufficiently clairvoyant enough to predict what it will be like in the next ten years, Nevada will still have all of its options open and Utah will be asking, "What happened?"

Then there is the very likely probability that water comes from Lake Valley to Steptoe Valley to Spring Valley and then to Snake Valley (the lowest valley in the system) as part of the natural geological and hydrological interbasin flow. Does Nevada have the right to go upstream after 150 years of established water rights used by farming and ranching and take water that was destined to flow into Snake Valley?

Then there is the matter of Fish Springs whose water is in all probability not part of the Snake Valley aquifer. There is on the east side of the Fish Range a highly visible earthquake fault. This fault is visible in the late afternoon as the sun creates a shadow to accentuate the existence of the fault. This fault along the Fish Springs Range dives underneath the Great Salt Lake Desert. The exceedingly fine silt of the Salt Lake bed forces the water to the surface. Some of the springs are hot enough to scald a chicken. This water, which is ancient water, is obviously not part of the Snake Valley water system, yet it is included in our overall water allotment.

Cecil Garland

--

Cecil C. and Annette H. Garland
Rafter Lazy C Ranch
Callao 225 Pony Express Road
Callao, Utah via Wendover 84083
435-693-3132

Print View

From: Ken Hill <kenhill184083@gmail.com>
To: <snakevalley@utah.gov>
Date: Wednesday - August 19, 2009 7:32 AM
Subject: interbasin flow from Spring Valley

Even if SNWA (or anyone else) does not pump in Snake Valley, they still intend to pump in Spring Valley. That likely will cause diminished interbasin flow into Snake Valley. The agreement needs to address this possibility.

Ken Hill
550 HC 61
Wendover, UT 84083-9604
435 693 3120

--

\o/ \o/

Let everything that has breath praise the Lord - Psalm 150:6

\o/ \o/

Gentlemen,

Last night I attended a meeting in Delta that was supposed to let the people that are vulnerable to excess water use in the Snake Valley know what they were in for. I left the meeting feeling that there were several areas that either need refining or changed or eliminated.

The first area that has a problem is the quantity of water supposedly available after recharge in the valley. There were several studies done with the quantity of water estimated to be available ranging from 105,000 Acre feet to 132,000. The majority of the studies showed the quantity ranging from 105,000 to 111,000. The proposed plan jumped on the 132,000 level. If pumping started assuming there was 132,000 acre feet available, Utah would lose many free flowing springs. I was told that a mitigation would be implemented but unfortunately once a spring stops flowing it seldom starts again once the water is restored. The reason for this is the path the water once flowed is dried and settled thereby blocking the path of the former water flow. All the wild animals, ranchers and farmers that rely on the springs would cease to exist. The only real mitigation would be for SNWA to drill solar powered wells to replace the springs that went dry. That could be a bit pricey.

The second area is based on the accuracy of the forecast of the received water as being what it has been for the last few years. The potential for an extension of the drought is an almost sure thing. This would make the quantity of water available to be potentially radically inaccurate. This would have an extreme environmental impact on the area.

The third thing is the ambiguity of several of the statements in the agreement. This may not be a problem now but in the future when new or different people are involved could result in different scenarios being implemented. This could also devastate the area.

The fourth thing is trusting the SNWA. With the loads of money they have they are pretty well unrestricted in doing what ever they want. A fine wouldn't deter them from getting what they want. Because they would own the wells and the pipeline they would be the ultimate controllers of the water flow.

The fifth thing is the number of monitors and their placements. The necessary number of monitor wells would raise the cost of the agreement more than a trifling amount.

A final comment that seems to make the most sense to me that wouldn't be environmentally unsafe. This would be a pipe line to the Gulf of Baja where there would be a desalination plant potentially powered by a small nuclear power plant. As a drought progressed there would always be water that would have no negative aspects to the planet. The length of the pipe line wouldn't be much longer than it would be getting the water from the Snake Valley. When I was in the military we set up a reverse osmosis plant on the coast of Saudi Arabia and pumped the water into the interior about a hundred miles. We maintained the water for close to two years and we ultimately raised the water table in the Riyadh by almost 8 feet. In the long run this would be the best scenario for everyone involved.

James Kallin

bigilchief@frontiernet.net

4315 W. 2500 N.

Sutherland, Utah, 84624

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Print View

From: "John B. Free" <theyurt@wirelessbeehive.com>
To: <snakevalley@utah.gov>, <snakvalley@nv.gov>
CC: "Terry Marasco" <tmarasco@sbcglobal.net>
Date: Wednesday - August 19, 2009 8:24 AM
Subject: comment period

Please extend comment period to 90 days.

The science behind this plan is seriously lacking to make these type of agreements and may endanger wildlife and the ecosystem for generations to come if done without a great deal of care.

By approving the "dividing up" and taking of ground water out of the Basin in Snake Valley may have untold consequences for the future.

What would happen if Utah and Nevada just agreed to leave Snake Valley alone as it has been. Is this an option? To leave things be. Is that possible or is greed the main motivation in both states??

Thanks for listening.
John B. Woodyard II
Baker, NV

Paxton Mineral Corporation
Frank Paxton, President
P.O. Box 922
Salem, Utah 84653-0922
8/20/09

Snake Valley Comments
Utah Division of Natural Resources
Division of Water Rights

Division of Water Rights:

Paxton Mineral is a Utah corporation which owns and leases mineral rights in Utah and Colorado. We are interested in holding, protecting, and developing our mineral rights. Our mineral interests are in gas, oil, hydrocarbons, geothermal sources, and other minerals. We have significant mineral interests in Millard and Beaver Counties; and we believe that great geothermal potential exists in many of the areas where we hold these mineral rights.

The stockholders, board of directors, and officers of Paxton Mineral Corporation believe that the pumping and piping of water from the Snake Valley, or any area of Nevada just across the Utah/Nevada state line from Millard and Beaver Counties, by the Southern Nevada Water Authority would adversely impact our geothermal rights. We believe that the aquifers of the Great Basin are interconnected and that the removal of huge amounts of water from the Great Salt Lake Groundwater Flow System in a transbasin water diversion from this area to Las Vegas would have a tremendous adverse effect

on our geothermal rights.

I personally own geothermal rights in Millard County; and I, like Paxton Mineral Corporation, believe that, though geothermal rights are mineral rights and not water rights, water is essential to the production of geothermal energy.

We have geothermal production in the Milford/Minniswille area. Provo City has produced geothermal energy at Sulphurdale near the Millard/Beaver County line in Northern Beaver County. We have geothermal production in Big Smoky Valley in Nevada. There is great geothermal potential in the Fallon/Reno/Coebut area. Much of Western South Central Utah and North Eastern Nevada has geothermal potential. The Milford Hot Wildfire gave indication of what would happen to this great natural resource area if it were allowed to dry up (reminiscent of the Owens Valley in California) and blow North to the Salt Lake City/Provo area. Let us not pump and pipe the water from the Great Basin, one of the driest areas on Earth, to Las Vegas. Let us all have a clean, fresh, clear water; blue sky; clean, green energy future, in Utah and Northern Nevada. Let Las Vegas pump and pipe their water from the Pacific Ocean; it is more abundant there than it is in the Great Basin.

Respectfully,
 Frank Paxton
 President, Paxton Mineral Corporation

Print View

From: Chip Haskell <chaskell@crowelladv.com>
To: <snakevalley@utah.gov>, <snakevalley@water.nv.gov>
CC: <phenetz@sltrib.com>, <erickson.stevel@comcast.net>, Kirk Robinson
<lynx@xmission.com>, <robynpearson@utah.gov>, <marionklaus@comcast.net>
Date: Wednesday - August 19, 2009 9:02 AM
Subject: Snake Valley Water Agreement Comment

To those in charge of altering the language of the Agreement prior to the Agreement being finalized....

According to both Utah and Nevada officials (hereafter referred to as "The Panel"), following a baseline study on the Snake Valley -- regarding issues of water volume, water quality, air quality, soil saturation, wildlife populations, etc -- The Panel will define what conditions are ACCEPTABLE and UNACCEPTABLE for water removal from the Snake Valley.

Mike Styler and Allen Biaggi have both said that if conditions are, at any time, found to be UNacceptable, the engineers MAY make an executive decision to discontinue water removal.

My suggestion is to alter the language in the Agreement to state that if conditions are, at any time, found to be unacceptable, the engineers WILL make an executive decision to discontinue water removal.

It is only with the addition of this language to the Agreement that the public and The Panel can be certain that agreed-upon standards of ACCEPTABILITY and UNACCEPTABILITY are defined, recorded, and adhered to by those who would be in charge of water removal in the future.

Sincerely,

Chip Haskell

Frank J. Paxton
Kanosh, Utah
8/19/09

Snake Valley Comments
Utah Division of Natural Resources
Division of Water Rights

Division of Water Rights:

I do not want to see Southern Nevada Water Authority pumping and piping water out of the Snake Valley, the Spring Valley, or anywhere else in Northern Nevada. As a concerned resident of Millard County, Utah and a former resident of Eureka County, Nevada who has ranched in Millard, Beaver, Sevier, Piute, and Grand counties in Utah and in Eureka and Elko Counties in Nevada, I would advise Southern Nevada water authority to get their water out of the Pacific Ocean, as opposed to the Great Basin, one of the driest areas on Earth. Resorts in the Cayman Islands get their water out of the ocean; why not Las Vegas? The technology to process and use ocean water has been used by this country since before World War II (Marshall Island). I do not want to see the springs, wild meadows, and range lands that I love dry up and blow North onto the Wreatch I don't making it impossible for those people to make a living. Because they proposed such a scheme, Southern Nevada Water Authority is not to be trusted.

RECEIVED

AUG 24 2009
WATER RIGHTS
SALT LAKE

(2)

I do not know how we would have gotten Lechman Cave in Great
Cain National Park without water; and I do not know how we will
preserve it without water.

I personally own geothermal rights in Millard County. I am the
president of a mineral company, Ruston Mineral, which owns some
32,000 acres of geothermal rights in and around Millard County.
Though steam is a mineral (U.S. Supreme Court), I am not sure
how we could get it without water. West Central Utah and
North East Central Nevada are great potential geothermal resources.
We need sustainable clean, green, long term, dependable
renewable energy production in both Utah and Nevada.
We have geothermal production near Minersville and
Milford in Western Beaver County, Utah; and we have
great and proven geothermal resources at Sulphurdale and
Cove Fort on the Millard/Beaver County line. Do we
stake our future to guarantee the less than risky future
of broke and failed Las Vegas?

Please protect our ranches, range, and farm lands; our
national parks and scenic wonders; our homes, businesses,
factories, farms, home gardens, and transportation systems
from dry dusty winds blowing from and through parched
lands.

We need our property, water, and mineral rights protected
so we might have a green, clean, sustainable future.

Sincerely,
Ivan Ruston

RECEIVED

AUG 24 2009

WATER RIGHTS
SALT LAKE

P. 2.

There is production and great potential for geothermal resources in Big and Little Truckee Valleys in Northern Nevada. We should allow Southern Utah and Northern Nevada to develop and use their own natural resources. We should allow the Wasatch Front a clean air particulate free future. Southern Nevada Water Authority should be allowed to advance no further with their plans to pipe water out of Northern Nevada to Las Vegas.

- J. P.

RECEIVED

AUG 24 2009

WATER RIGHTS
SALT LAKE

August 17, 2009

Hello,

My Name is Delaine Spilsbury. Some time ago, the Ely Shoshone Tribe appointed me their representative to the Tribal Pah Group. The Group is comprised of the Ely Shoshone Tribe, the Confederated Tribes of Goshute, Duckwater Shoshone Tribe, Wells Band of Shoshone and the Elko Band of Shoshone. We are all members of The Inter-Tribal Council of Nevada, comprised of 27 Nevada Tribes. Both the ITC and the Tribal Pah Group are opposed to all exportation of water from Tribal lands. Neither group has succeeded in establishing standing for the State Engineer's hearings. Tribes have been completely deprived of defending themselves and their way of life.

Nevada Water Law prime directive "FIRST IN USE, FIRST IN RIGHT" has certainly not been applied to this Southern Nevada Water Authority project the locals call "the Water Grab".

Nevada Tribal Ancestors, Great Basin Native Peoples, were using Nevada's water thousands of years before Nevada water law was written. That makes Nevada Tribes "FIRST IN USE". Indian Reservations have Federal implied water rights from the date the reservation was established. (Winters vs United States - 1908.) However, Tribes and Reservations are not recognized and have no standing in the Nevada State Water Hearings. Where's the "FIRST IN RIGHT" ?

Until arrangements have been made to "reserve water for future use in an amount necessary to fulfill the purposes of all Nevada's Reservations" as dictated by the Federal Government, both the Nevada and the Utah State Engineers should reject the Utah-Nevada water sharing agreement.

Thank You, Delaine Spilsbury, member Ely Shoshone Tribe.

mssquaw @ hot mail . com

Print View

From: "Robb, Gaylord (IHS/PHX)" <gaylord.robb@ihs.gov>
To: <snakevalley@utah.gov>
Date: Thursday - August 27, 2009 4:38 PM
Subject: Transporting water out of the basin

Allowing the SNWA to transport water from the Snake Valley out of that water basin seems to set a dangerous precedent which will allow other trans basin pipelines to move water all over the state and even out of state. This seems to be contrary to Utah policy on basin to basin transfer of water.

The Paiute Indians have an interest in water in that basin and were not given sufficient information to adequately address the issue. This agreement infringes on the aboriginal water rights of the Tribe. Until the rights of the Tribe are protected SNWA cannot pump any water from the Snake Valley.

Thank you,

Gaylord Robb

Economic Development Director/

Trust Resource Administrator

Paiute Indian Tribe of Utah

440 N. Paiute Drive

Cedar City, UT 84721

435 586 1112

435 559 3687 cell

<<http://www.utahpaiutes.org/>> <http://www.utahpaiutes.org>

Print View

From: "ms. Squaw" <mssquaw@hotmail.com>
 To: <snakevalley@utah.gov>, <snakevalley@water.nv.gov>
 Date: Sunday - August 30, 2009 6:16 PM
 Subject: Comment on Agreement

August 24, 2009

snakevalley@utah.gov
 snakevalley@water.nv.gov

REF: Comment on Agreement
 for Management

of the Snake
 Valley Groundwater System

Nowhere in this agreement are Tribal and Reservation water rights addressed. The Federal Government dictates that arrangements be made to "reserve water for future use in an amount necessary to fulfill the purposes of Reservations".

Winters vs United States, 1908, awards Indian Reservations Federally implied water rights from the date the Reservation was established.

Also, Nevada Water Law prime directive "FIRST IN USE, FIRST IN RIGHT" has certainly not been applied to Tribes for the Southern Nevada Water Authority project the locals call "the Water Grab".

Nevada Tribal Ancestors, Great Basin Native Peoples, were using Nevada's water thousands of years before Nevada water law was written. That makes Nevada Tribes "FIRST IN USE". However, Tribes and Reservations are not recognized and have no standing in the Nevada State Water Hearings. Where's the "FIRST IN RIGHT"?

The Inter-Tribal Council of Nevada is comprised of 27 Nevada Tribes. Both the ITC and the Tribal Pah Group are opposed to all exportation of water from Tribal lands.

In 1989 the Las Vegas Valley Water District (SNWA's, predecessor-in-interest) filed the Snake Valley water application. Nevada Tribes should have the same predecessor-in-interest standing. Those rights were established in 1908. Instead Tribes have been completely deprived of the right to defend themselves and their way of life.

Thank You, Delaine
Spilsbury
Ely
Shoshone Tribal Representative to the Tribal Pah Group

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Print View

From: Beth Anderson <bethbanderson@hotmail.com>
To: <snakevalley@utah.gov>
Date: Wednesday - September 30, 2009 10:31 PM
Subject: UT-NV Agreement

Utah/Nevada Agreement for shared Aquifer

Beth B. Anderson, Callao,
UT

General Concerns and comments:

I am concerned at the starting amount of available water in the aquifer. Does this amount take into consideration the amount of water used by plants and animals? Wouldn't it be better to go with a smaller amount, an average of the years of study, rather than to assume that the aquifer really has that larger amount of 132,000 af? Wet lands, springs, and flowing wells need to be addressed even if there are no connections to the "least chub" or "spotted frogs". My father and grandfather drilled 17 flowing wells. Today only three of the wells still flow. Our meadows are dry that used to be irrigated by the flowing wells. The springs are large holes and where there used to be water at the ground level, now three feet down is black mud. A vehicle can now be driven over most of the meadows where you wouldn't have been able to ride a horse or walk across. The water quality has already changed in the 50 years I have lived in the Callao area of Snake Valley. When I was a child the water from our springs and wells were "soft" water, now in the last 20 years the water is now very "hard" and full of many minerals. Luckily it still is very palatable. Is the water quality addressed in this agreement? Why is the first step to go to SNWA when an "adverse impact" happens? It seems like there needs to be more monetary responsibility placed on SNWA for all of the monitoring, reporting, tracking of "adverse impacts" and less responsibility of SNWA to say whether they accept the monitoring, reporting and tracking. The agreement seems to say that "you as a water right holder are responsible to do and pay for the monitoring, reporting and tracking of the adverse impacts. When you discover an "adverse impact" contact SNWA, wait 10 days for them to say "it wasn't SNWA". Then start the complaint process again with the states interim committees. Meanwhile still having losses and "adverse impacts" that are getting worse on a daily basis. Like the cartoon of

the fox watching the
hen houseâ€;not smart.The ten years is a good amount of time to get some
good data. Will that also limit
when a claim can be filed against SNWA?Will this agreement help to
protect Snake Valley
when there is a draw down from SNWA pumping in Spring
Valley? Dye has
already been put into the waters of Spring Valley and shown up in the
springs around Garrison,
UT. The valleys are connected and impacts in
Spring Valley will affect Snake
Valley.What protections are in the agreement for the Grandfather
water rights and Diligence water rights?
Will the â€œadverse impactsâ€ be spelled out
specifically so that SNWA will be forced to abide by them? What loop
holes are in the agreement
that SNWA will be able to weasel their way out of any responsibility?
It would benefit both states if
definitions of terms used in the agreement are very clear so all can
understand them. Not leaving any
terms to be defined by lawyers and courts.I also agree that we have
been given a short time to
review a lot of information. If no
extension is made to make comments, at least have another comment
period
after any changes have been made to the draft of the agreement
document. Why isnâ€™t it called what it is â€œwater miningâ€ , since
NONE of the water taken from the Snake Valley
will be used for recharge of the aquifer.

Insert movie times and more without leaving Hotmail!â€.

http://windowslive.com/Tutorial/Hotmail/QuickAdd?ocid=TXT_TAGLM_WL_HM_Tutorial_QuickAdd_062009

Print View

From: <vernalpool@riseup.net>
To: <snakevalley@utah.gov>
Date: Wednesday - September 16, 2009 12:55 PM
Subject: Comment on Snake Valley Utah-Nevada Agreement

Comment on Snake Valley Utah-Nevada Agreement for aquifer protection;

It is difficult for me to directly comment on the Snake Valley Utah-Nevada Agreement as there are many questions unable to be answered as to the potential outcome of this agreement. From a scientific perspective with the goal of protecting ecological integrity of the Snake Valley aquifers, springs and marsh complexes, there is no certain outcome based upon the distribution of allocated and unallocated water. However, it is very clear to me and many others who have begun researching this aquifer complex that ANY excessive withdrawals by either state would spell disaster for the Snake Valley aquifer and related wetlands ecosystem. This comment will focus primarily on the proposal by SNWA to construct a pipeline capable of extracting large amounts of aquifer water to be transported to Las Vegas region.

The Snake Valley aquifer complex requires long term protection for the benefit of the ecosystem and also the region's human communities that rely upon this aquifer's water for their survival. Significant risks to the Snake Valley aquifer complex would occur by allowing the SNWA's 300 mile water pipeline to Las Vegas to be constructed. One of the primary risks is from aquifer cavern collapse as the overburden of eroded gravel sediments accumulated above the aquifer will no longer be supported by the water underneath. Aquifer caverns in this region are primarily composed of slightly metamorphosed limestone, and a brief visit to the crumbled rubble of Lehman Cave's Talus Room would show the potential of crumbled aquifers following years of overdraft by the SNWA pipeline.

The limestone caverns found at Great Basin National Park's Talus Room were formed and enlarged over the long term wet season years of rainwater percolating downwards and becoming carbonic acid, eating away at the limestone material. According to geological history, the Talus Room's rubble was formed during an interim dry season when the water table dropped several hundreds of meters, resulting in the excessive weight of overburden forcing collapse of the former aquifer's ceiling structure. The ability of the aquifer caverns filled to capacity with water were able to support the overburden's weight under gravity, though loss of the water and replacement with air proved to be insufficient to support such a tremendous burden. It is probable that future drops in the same region's water table due to excessive extractions and transport outside of the region by SNWA's pipeline would result in aquifer caverns becoming empty of water and thus stressed by the gravel overburden's weight, resulting in eventual cavern collapse.

According to studies and research on other aquifers, anytime an aquifer is overdrawn and the cavern partially collapses from weight of overburden without water to support the aquifer's ceiling, the result is compaction

of sediments and land subsidence visible from the surface. The land subsidence occurs as the empty space of the aquifer cavern is filled with overburden, and the actual elevation of the ground then drops as the overburden fills the empty space of what once was an aquifer. This process has already been documented in several locations, including the permanent loss of the Midwest's Ogallala aquifer, the San Joaquin aquifer's subsidence of nearly twenty feet and sinkholes regularly appearing throughout Florida as their limestone aquifers are overdrawn to the point of ceiling collapse. In every case thus far, once an aquifer is overdrawn to the point of cavern ceiling collapse and surface level land subsidence, there can be no possible returns to the original storage capacity of the aquifer prior to collapse.

Another risk of excessive extraction from the SNWA pipeline would be to the ecosystem's food pyramid by preventing natural spring formation at intersections between the water table and above ground openings. Springs in this region occur when the water table is high enough to spill out onto the surface, resulting in unique isolated ecosystems capable of supporting their own endemic biota found nowhere else. The biota found here includes several species of plants, algae and other primary producers that photosynthesize sunlight into energy available for animal consumption. The next level of the food pyramid above the primary producer plants are primary consumers; insects, mollusks and other small organisms that feed directly upon the plants. Above them are secondary consumers; fish, birds and mammals that eat the primary consumers. This entire food pyramid ecosystem is depending upon a regular supply of spring water appearing at this same location every year.

One of the focus species of the primary consumer category are spring snails, many considered either threatened and/or endangered because they are unable to travel to other springs and have become their own separate species due to the isolating conditions of the springs located far apart from one another. Each species of spring snail shows physical and physiological traits uniquely evolved in adaptation to their surroundings, usually determined by specific chemical, water and temperature conditions found only in their spring.

One example of the genetic isolation found in spring snail species is the Sub-globose Snake Pyrg (*Pyrgulopsis saxatilis*), found only in Gandy Warm Springs. Other spring snails endemic to the Snake Valley include the Longitudinal Gland Pyrg (*Pyrgulopsis anguina*) and the Bifid Duct Pyrg (*Pyrgulopsis peculiaris*). These spring snails have adapted to specific water conditions in the springs where they and their ancestors have lived for thousands of years.

This entire ecosystem can become non-existent by a long term drop in the water table resulting from excessive extraction by the SNWA's proposed pipeline. Once the spring snail's habitat becomes unlivable, there is a likely potential that the spring snail will be unable to reproduce and survive the loss of spring water. The outcome of this long term human induced drought would be extinction of each unique species of spring snail with no possible returns.

In addition to the spring snails are other secondary consumers that would include the snails at some stage of their life cycle as part of their regular food source. One of these is the least chub (*Iotichthys phlegethontis*), as mentioned in Appendix 4 of the Utah-Nevada Agreement. Here it states that Snake Valley springs and marshes (Leland Harris Springs, Gandy Marsh and Bishop Springs) play an important role in habitat for the remaining wild populations of the least chub, and without a

regular water supply fed by a stable water table the least chub could be extirpated from this crucial habitat. Other threatened fish that depend upon regular surface water supplies from Snake Valley springs include the Bonneville cutthroat trout (*Oncorhynchus clarkii utah*). Provided that the Snake Valley ecosystem is protected and fish populations are able to increase, these larger native trout species also represent a fisheries resource for humans.

Long term protections are needed for the Snake Valley region's springs and their unique ecosystem inhabitants for several reasons. As conscious beings, we humans recognize that water tables can drop from reasons outside our control, such as long term drought and climate change. We also recognize that our actions independent of climactic processes can also result in the drop of the water table, and this is under our control. We can prevent extinctions of the spring snails and all the other animals that depend upon them simply by maintaining the water table to the levels required for the springs to emerge at their surface locations. To maintain the water table levels we only need to be careful monitoring and allocating water from these springs.

Current human uses of the Snake Valley aquifer water that would alter the water table levels and spring formation include ranching and limited residential uses. The ranching uses of aquifer water remains in the same region, and eventually percolates downwards and recharges the same aquifer, thus maintaining some neutrality between losses from extractions and gains from recharges to the same water table. However, this would not be the case for the SNWA pipeline, where the aquifer water extracted from the Snake Valley complex would never be recharged to the same location, instead would be lost to the Colorado River system and eventually enter the ocean at the Gulf of California. While this may be good news for the beleaguered and overly saline waters of the Gulf of California, it is certainly a death sentence for the spring snails' food pyramid ecosystems that depend upon Snake Valley aquifer water emerging aboveground at the spring locations.

The good news is that with minimal interference the spring snails' food pyramid ecosystem will function normally provided that monitoring of the water table occurs on a regular basis. It would be far more logical and effective to monitor the local ranchers and residential water uses than to further complicate the equation of aquifer extractions and recharge by introducing the SNWA's proposed pipeline capable of extracting far greater quantities with no possible recharge to the original aquifer. Similar to overdrawn then collapsed aquifer caverns and extinction of endemic species, the chance of no possible returns is best avoided. We need to collectively protect the Snake Valley aquifers, springs and all their inhabitants and dependents by preventing the construction of the SNWA's proposed pipeline.

In conclusion, by focusing mostly on divisions between allocations the Snake Valley Utah-Nevada Agreement is not adequate to assess the complexity of the aquifer, spring and marsh ecosystems and the diversity of biota that depends upon regular supplies of water. The Snake Valley aquifer complex is not confined to human imposed state boundaries and needs to be treated as a single ecological entity across both sides of the border. Successful conservation of least chub, spring snails, spotted frogs and other endemic inhabitants of the Snake Valley aquifer complex depends upon maintaining the water table at levels required for regular discharge at surface spring flows. A good rule of thumb for a sustainable water distribution agreement would be "Water that comes from Snake Valley stays in Snake Valley." Since the Snake Valley covers both Utah and

Nevada, the distribution of water to residents and ranches can be fairly even across both states.

The reason for keeping Snake Valley aquifer's extracted water allocations in the same original valley basin is to balance the extractions with constant recycling by percolating recharge water back into the same aquifer. This is the same process that Las Vegas implements with Lake Mead's water; all treated wastewater is recycled back into their original supply at Lake Mead. Geological history reminds us that the full capacity of the Snake Valley aquifer was attained only after thousands of years of rainfall during much wetter climates than our current weather pattern. This indicates that steady exports of aquifer water outside of the original basin (i.e., to Las Vegas and the Colorado River) will result in faster rates of depletion and drawdown of the aquifer than by using and recycling the water for recharge into the original Snake Valley basin.

Thank you for your consideration,

Mark Miller
P.O. Box 1864
Elko, NV 89803

Print View

From: Stephen Shuput <sshuput@hotmail.com>
 To: <snakevalley@utah.gov>
 CC: <sshuput@hotmail.com>
 Date: Thursday - September 17, 2009 4:06 PM
 Subject: Snake Valley Water Agreement

Dear Mr. Styler,
 I have sent an email with my views to the Governor. I would like to add to them with the following points:

- 1) To my knowledge, there is no example anywhere on earth, of water diversion on this scale without devastating consequences to the environment. There are however many examples of horrible failures such as Owens Valley, California and the Aral Sea in Uzbekistan. The local environments and peoples were devastated.
- 2) An Aquifer is not a "source" of water, it is a reservoir of water. Aquifers take thousands of years to fill and would take thousands of years to replenish. Therefore, the use of water from an Aquifer is only temporary, and when it is either shut off, (which I am not and you should not be naive enough to believe will ever happen, despite an "ironclad" agreement,) due to signs of desertification, or the water runs out, people in Las Vegas will suddenly be without water they have come to depend on. This is not fair to the people of Nevada either. To pay billions of dollars for a temporary fix is just absurd!
- 3) I asked deputy State Engineer Boyd Clayton "what is in this agreement for Utah?" He could not think of any benefit to us. I can't either. But someone would benefit, and it is only the developers who will build and sell homes in Las Vegas, based on this agreement, leaving the people of Utah and Nevada with the debts, a worthless pipeline to an empty aquifer and a devastated environment.
- 4) Growth, in Las Vegas or Utah is not necessary. We need to focus on taking care of the resources we have for the people who already live here, including the beauty of the environment. More people, more homes, more jobs, even more tax revenue do not mean better living conditions.
- 5) If the scientists are correct, that pumping the aquifer will mean drying in the Snake Valley, leading to more particulate matter on the Wasatch Front, leading to even one more death in Utah (because Nevada soil is full of toxic waste, is it worth it? How will you feel if that happens? I would not want to have a part in a decision that leads to that outcome.

Sincerely, Stephen R Shuput MD
 690 North Caring Cove
 Salt Lake City, Utah

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Print View

From: "tom brown" <twobuck@frontiernet.net>
To: <snakevalley@utah.gov>, <snakevalley@water.nv.gov>
Date: Friday - September 18, 2009 11:01 AM
Subject: desalting the ocean Tucson, Az. - Google Search

Dear Sirs,

THIS IS 1, OF 2 ARTICLES, ON SEA WATER DESALTING.

I am sending you an alternative to the sucking dry Snake Valley aquifer. This happened to Owens Valley, California in the Bishop area, by pumping all the water to Los Angeles. It is very well known what happened to all the water in Owens Valley.

It is about 230 miles to the Pacific Ocean in California from Las Vegas, Nevada. About 280 miles to Snake Valley. I do not think you could drain the Pacific Ocean, but they will drain Snake Valley, if you let them take the water from there.

This would solve all the water problems Las Vegas has, plus they would have extra water for all the other dry areas. There is no excuse not to use the water from the Pacific Ocean with today's technology.

If they can stop the irrigation water to the farmers in Central California, because of a small fish, I think they should be able to stop the draining of the water from Skull Valley, because of the environmental damage it would cause for ever, in that area.

Sincerely yours,
Thomas R. Brown twobuck@frontiernet.net
Delta, Utah

http://www.google.com/search?hl=en&rlz=1T4DKUS_enUS248US249&ei=EbezSqGsN8SBtgfN0eC4Dg&sa=X&oi=spell&resnum=0&ct=result&cd=1&q=desalting

Print View

From: "tom brown" <twobuck@frontiernet.net>
To: <snakevalley@utah.gov>, <snakevalley@water.nv.gov>
Date: Friday - September 18, 2009 11:04 AM
Subject: desalting the ocean - Google Search

ARTICLE 2 OF 2 FOR THE DESALTING OF THE SEA WATER.

http://www.google.com/search?sourceid=navclient&aq=0h&oq=infowars&ie=UTF-8&rlz=1T4DKUS_enUS248US249&q=desalting+the+ocean

Sincerely,

Thomas R. Brown
Delta, Utah

Print View

From: "Nancy Hanson" <nch_akh@msn.com>
To: <snakevalley@utah.gov>
Date: Wednesday - September 30, 2009 4:18 PM
Subject: Snake Valley water agreement

I am writing to express opposition to the draft Snake Valley water agreement, in which Nevada is allocated half of the water rights.

I find it incredible that any agreements would be negotiated prior to thorough studies of the Snake Valley aquifer and consequences of diverting water from it, now and in future years when climate change could alter issues significantly. The urgency for negotiating such an agreement is not critical, and much could be lost in acting prematurely.

Rather than simply looking afar for sources of water for Las Vegas, better water management and planning efforts need to be utilized within all desert cities. We can look to history regarding the Owens Valley after a thirsty Las Angeles diverted water from it to realize much is at stake. I believe the aquifer should be utilized for the ecosystems it serves directly, rather than risking it to further urban growth.

I encourage you to reject this agreement. Water is a commodity that is too precious to take action without thorough study.

Nancy Hanson
Sandy, Utah

Comment 1

1.a-b. “*adverse impact*” and “*substantially similar*” are not self-defining, particularly in light of the recitals in the Monitoring and Management Agreement with SNWA. Recital J says that “*Parties acknowledge that not all effects caused by the development of groundwater in Snake Valley are unreasonable.*” Unless these terms are more clearly defined, litigation may have to do the defining in this agreement. Also, this says “*caused by ...junior, permitted Groundwater right*” – not specifically to the massive pumping by SNWA. This provides a ready-made loophole for SNWA and puts the burden of proof on other water right holders. The assumption needs to be that adverse impacts are caused by SNWA’s pumping.

FIX: Clearly state what an adverse impact is using the terms described in 1a & b, but remove “substantially similar” OR define both terms more clearly so all parties have a clear understanding of it. Add a clause that states the adverse impact will be assumed to be the fault of the interbasin water transfer, unless there is clear and undisputed evidence to the contrary – e.g., a power surge that causes a pump malfunction.

Comment 2

1.5 “*Consumptive Use*” means amount of water permanently removed from the Snake Valley groundwater Basin... In the current consumptive use, the water removed from the Snake Valley aquifer still provides some benefit, either through soaking back into the ground, or by adding moisture to the air and clouds and aiding in precipitation. Water removed from the basin (i.e., Las Vegas) is removed from aquifer, air, and soil and gives no further benefit to us.

FIX: This total removal of water needs to be differentiated from water removed within the basin and needs to have an added burden affixed to it, protecting in-basin water users, whether junior or senior.

Comment 3

2.4 “*the States acknowledge that such information [regarding the Snake Valley aquifer system] is insufficient to determine with precision the available groundwater supply.*”

3.1-2 *Based on the best currently available data, the States agree that the Available Groundwater Supply as of the date of this Agreement is 132,000 afy.*

Section 2.4 outlines the problem of establishing a figure for the available groundwater supply. Yet in 3.1-2, the agreement determines 132,000 af/y based on BARCASS 1. BARCASS is not the best study, nor does the agreement make use of all studies available. It used the highest possible figure, even though that figure is not supported by other studies. The BARCAS study is recognized as flawed both in the recharge and discharge components. Just a 0.1” error in ET over thousands of acres adds up to a whopping 24,000 acre foot water error. The USGS is in the process of doing a study to rectify the errors of the first study. This alone is a good reason for NOT using the 132,000 af/y figure in the agreement.

Another problem with using the BARCASS figure in this agreement is that it uses it for available groundwater, but dismisses the other component – interbasin flow. BARCASS also predicts that there is 33,000 af/y flowing into Snake Valley from Spring Valley on the southern end and 16,000 af/y flowing from Spring Valley into Snake Valley on the northern end for a total of 49,000 af/y inflow. This inflow is jeopardized by Spring Valley pumping, thereby reducing the amount of water in Snake Valley. However, the agreement chooses not to address this part of BARCASS. Selecting some science and ignoring other science makes it hard to believe that science was actually a factor in forming this agreement. And if this is an example of how future studies will be factored into the managing the groundwater, it is difficult to imagine the agreement being responsive to protecting water holders or the environment.

FIX: Consider all the available studies and use a median or mean figure for the total amount of groundwater. Then use only a conservative portion of that number for allocation. Doing this will prevent the same mistake we have been making for over 100 years - over-allocation of a limited resource.

Comment 4

2.5 Evaluating the Available Groundwater Supply ... with certainty depends upon the evolving trends in data collection regarding precipitation, and recharge...

The available science and current understanding of aquifer has not been the basis for determining availability of water or a reasonable allocation of the water in the basin. What guarantees does this agreement give us that the agreement will give greater weight to science in the future than it has done in the initial agreement? This is a political division of water and is not based in science.

FIX: We need a clear statement that ensures data collection will be used to make decisions. Nowhere does the agreement state unequivocally that the groundwater made available to Nevada will be reduced based on new and better information of the aquifer. This needs to be a strong statement.

Comment 5

2.6 Recharge...occurs primarily within Nevada. This finding is irrelevant while relevant issues have been ignored. In a 1984 Supreme Court ruling in *Colorado vs. New Mexico*, the court concluded, “*The equitable apportionment of appropriated rights should turn on the benefits, harms, and efficiencies of competing uses, and the source of the Vermejo River’s waters should be essentially irrelevant to the adjudication of these sovereigns’ competing claims.*”

FIX: delete this statement from the agreement and add a statement which delineates the factors used to determine a fair division of the water.

Print View

From: Gretchen Baker <c_g_baker@yahoo.com>
To: <snakevalley@utah.gov>, <snakevalley@water.nv.gov>
Date: Wednesday - September 30, 2009 3:55 PM
Subject: comments

Comments on UT-NV draft agreement

1. Sections 2.8 and 2.9 should be either deleted or changed to reflect the doctrine of prior appropriation that is the foundation of both states water law. In the draft SNWA;s priority date of October 1989 is strictly expressed as senior to any that came after. During the public meeting in Baker when questioned about SNWA's priority date members of the negotiating committee stated several times "First in time. First in right." Confirming that under the doctrine of prior appropriation SNWA's permits would be treated as senior rights to those with later priority dates. In section 2.8 the last sentence reads "Such appropriations necessarily impact the existing hydrologic system and captures discharge available to phreatophytes, streams, and natural lakes.

Some amount of the water used by phreatophytes is on private land in sub-irrigated meadows. While this water may not have been diverted by humans it has been appropriated and put to the beneficial uses listed in the draft agreement. The streams and natural lakes referred to in section 2.8 have been appropriated by humans for beneficial uses prior to SNWA's applications in most cases by more than a century. The agreement should clearly state that these rights are Senior water rights to SNWA's permits.

Section 2.9 should state that much phreatophytes use occurs in sub-irrigated meadows and that these rights will be recognized as senior water rights that will be protected as they were in the NV State Engineers Ruling on SNWA's Spring Valley applications Where four of the applications were denied because of their proximity to meadow springs

and sub-irrigated meadow. It was deemed likely that they would cause adverse impact to senior water rights.

Sections 2.8 and 2.9 should be deleted or changed to clear up the apparent disparity between the draft agreement's treatment of SNWA's priority date versus how senior water rights will be treated.

2. The draft agreement should be broadened to include any other entities that may develop water

for interbasin transfer. It should not be limited to SNWA permits. The wording in the Lincoln County Lands act to an agreement before inter basin transfers, not just SNWA transfers.

3. The mitigation fund is very small compared to the likely cost in the long term. Owens valley mitigation costs are near a billion dollars.

4. Section 6 . Identification and Mitigation of Adverse Impacts to existing permitted uses.

In the event of an Adverse impact of an Existing permitted use, the burden of proof should be on SNWA to prove that their pumping was not the cause.

5. The 132,000 afy yield number is not realistic. The data was gathered in 2005-2006. Snowpack in 2005 was almost 300% of normal. The only years with precipitation and runoff in the Snake valley record are 1952 and 1983-84. Using data from a 30-50 year flood event is unlikely to give realistic estimates.

The transpiration data from greasewoods would not be representative of the average. The greasewood were almost completely green in 2005-06. They barely turned green at all in the previous 6 years. It's my understanding that this measurement can change the discharge by tens of thousand of acre-feet. The agreement should better reflect the uncertainty of the BARCASS numbers.

6. The agreement should take into consideration the inflow from Spring Valley that may have already been permitted in Spring valley as it did the outflow to Fish springs as required by the the wording in the Lincoln County Lands act that calls for an

agreement on the "inter basin flow system" .

Thank you

Craig Baker , Snake Valley resident

Print View

From: Boyd Clayton
 To: SNAKEVALLEY@utah.gov
 Date: Monday - September 21, 2009 9:15 AM
 Subject: Re: Cecil's "Agreement"

>>> Annette Garland <annette.garland@gmail.com> 09/18/09 8:37 AM >>>
 After having attended 5 meetings concerning the Snake Valley Draft Agreement between Utah and Nevada, my wife and I witnessed an almost total rejection of that agreement by the citizens of Utah who attended these meetings.

This

agreement is to divide the water in Snake Valley between Utah and Nevada and was proffered by the Department of Natural Resources. This issue is of paramount importance to my wife and I, and we wondered if we could not write a better agreement.

We wanted to make the proposal brief, understandable, and without any ambiguities that could come to haunt us later. This issue is of the utmost

concern to us as citizen-ranchers of Callao, Utah. We want desperately to protect the water resources as necessary to our way of life and to follow the Lincoln County Land Act -which mandates "to allow for the maximum sustainable, beneficial use of the resources and to protect the existing water rights".

Sincerely,

Cecil and Annette Garland

*
 *

Joint Management Agreement of the Snake Valley Aquifer by the Sovereign States of Utah and Nevada

This agreement recognizes that the Snake Valley aquifer is finite. All available water is being used by prior water rights holders or is water that is necessary to sustain the integrity of the basin as a whole.

It shall be the intent and purpose of this agreement to "allow for the maximum sustainable beneficial use of the resources and protect the existing water rights" of Snake Valley in the Great Basin. This mandate is from the Lincoln County Land Act 108-424 section 301-(e) (3).

It is intended that this agreement shall obey and abide by this law passed by the United States Congress and signed by the President of the United States. This direct order by Congress to maintain sustainability and water

rights is hereby recognized as not mutually exclusive to the best interests of both states. Sustainability is defined to mean: "to hold up or support; maintain; keep; nourish; bear; endure; and strengthen." from Webster's Approved Dictionary.

Due to the following circumstances and verification by citizens of Snake Valley and numerous scientific studies and inquiries, it has been determined that the Snake Valley groundwater table is dropping. Many or most of the springs and seeps here on the valley floor and in the foothills of the Snake Range are greatly reduced in flow from their previous volumes or do not flow at all. Most of the water-dependent biota is under severe stress with large areas of the key species, greasewood, either dead or dying.

It becomes the duty and obligation of this agreement to recognize the causes of the water deficit in Snake Valley. No action to increase the decline of the water resources shall occur. This agreement is intended to state clearly that within the confines of Snake Valley:

1. No inter-basin transfer of water shall occur.
2. No applications for large capacity-wells shall be approved regardless of which state the applications may be submitted.
3. Small applications for culinary-water use may be considered and approved by both states within reasonable limits and where the water withdrawal for this purpose will not further cause adverse effects on the underground water table.

This agreement between the two states shall endure for a period of 10 years.

Both states have a right in the interim to collect, digest, and share all scientific and empirical information, and are encouraged to do so.

Be it further understood, that the Lincoln County Land Act does not mandate that any water be removed from one state to the other. The Act does not mandate a deadline for this agreement to be reached or that, in fact, any agreement must occur.

This agreement is enter into by the sovereign states of Utah and Nevada freely and is done so in an effort to jointly protect the sustainability and the water rights in the Snake Valley Basin for the benefit the citizens of Snake Valley in both states.

This agreement shall be enter into in good faith and friendship and shall be signed by the governors of both states.

--

Cecil C.and Annette H.Garland
Rafter Lazy C Ranch
Callao 225 Pony Express Road
Callao, Utah via Wendover 84083
435-693-3132



September 30, 2009

Snake Valley Agreement
c/o Utah Department of Natural Resources
Division of Water Rights
1594 West North Temple, Suite 220
Salt Lake City, Utah 84114

RE: Snake Valley

Thank you for the opportunity to comment on the Snake Valley Groundwater Draft Agreement. These comments are submitted on behalf of Joel Ban and Ban Law Office PC, a private public interest environmental law office.

Facts:

- The drafting of this agreement is based on a Congressional statute, the 2004 Lincoln County Land Act, which calls for a bi-state agreement that divides up the water of an interstate groundwater flow system in the Snake Valley. In other words, the diversion of water from the Snake Valley to Las Vegas is contingent upon an agreement between the two states.
- The impetus for the agreement is based on the Southern Nevada Water Authority's (SNWA) request to divert between 25,000-50,000 acre feet of water per year so that it can be piped 285 miles south to the Las Vegas Valley.
- Eighty four percent of the land in Snake Valley depends on groundwater for agriculture, springs, pasture, grazing, desert vegetation and wildlife is in Utah. SNWA's project could drop Snake Valley water tables so low that the aquifer would be permanently depleted and destabilized, and destabilizing soils while producing devastating dust storms that could send increased air pollution across the Wasatch Front.
- Negotiating teams from Utah and Nevada have been collaborating for several years and recently they released a draft agreement that is said to not approve any diversion of water from the Snake Valley, but merely constitutes a framework for the anticipated diversion to Las Vegas.
- The agreement is subject to public comment and must be approved by the governors of both states. The allocation is divided between allocated and unallocated water. The

allocated water, or water that is already been appropriated in the Snake Valley favors Utah by a margin of 55,000 acre feet to 12,000 acre feet.

- So called unallocated water favors Nevada 36,000 acre feet to 5,000 acre feet. The agreement also provides for continuous monitoring to determine what adverse effects would incur upon pumping from the Snake Valley aquifer. The 41,000 acre feet unallocated portion is the so called “extra water” that exists in the Snake Valley.
- Eighty four percent or roughly five times the acreage of present and future potential Snake Valley irrigable and groundwater-dependent land is in Utah, and roughly three times the relative historical use of groundwater has been in Utah.
- The agreement also establishes a review and appeal process where anticipated adverse effects can be addressed through mitigation or compensation. Injured parties can pursue a claim with the SNWA that can either immediately offer mitigation or the claim can be appealed to a bi-state commission.
- Nevada would agree to address adverse impacts to Utah water right holders through Nevada Water Law and its state engineer. Alternatively, an injured water right holder could pursue a remedy through an alternate route, presumably in some type of court. A mitigation and compensation fund would also be established for injured water right holders.

State Law

Of foremost concern to any proposed water export should be the Utah State Water Code, and specifically the chapter on water exports. Utah Code Ann. §73-3a. This chapter applies to the proposed diversion since it explicitly states that:

“[t]his chapter governs application procedures and criteria for the approval of applications for: (1) the appropriation of water from sources within the state of Utah for use outside the state”. Utah Code Ann. §73-3a-103.

The appropriation of Utah groundwater clearly falls within the scope of this chapter. Explicit policy statements of this chapter are to ensure for the welfare of its citizens, conserve scarce water resources, provide adequate water supplies, and control water in a way that is in the public interest. Although in this case it appears the states have attempted to comply with the mandates of the U.S. Congress's Lincoln County Land Act it is unclear if the states have or will comply with the requirements of this chapter of state law. As stated above the provisions of this chapter clearly apply to groundwater apportionments, and therefore application procedures are triggered whereby an applicant must apply with the Utah State Water Engineer. Utah Code Ann. §73-3a-106. Certain outlined notices must be filed as well in compliance with Utah Code Ann. §73-3a-107. Under this application process the state engineer can approve it if he/she finds that the application is consistent with Utah's water conservation policies and is not contrary to the public welfare. Utah Code Ann. §73-3a-108(1).

Additionally the state engineer must consider the availability of water in Utah, the current and reasonably foreseeable demands for water in Utah, whether there are current and reasonably foreseeable shortages of water in Utah, and whether the water that is the subject of the application could be used to fulfill the current or anticipated water shortages in Utah. Id(2). If the application fails on any of these counts then the application must be rejected. Additionally, if the water use is approved then “[t]he state engineer may condition any approval to ensure that the use of the water in another state: (a) is subject to the same laws, rules, and controls that may be imposed upon water use within the state of Utah”. Id(4).

Based on the above its certain that Nevada's request to divert water from Snake Valley must be rejected since we already currently suffer from water shortages within the state. Evidence of this is testimony from Utah ranchers like Cecil Garland who's springs are either greatly reduced or don't exist compared to water levels in the recent past. The water shortage will be much worse upon diversion since the Agreement acknowledges that adverse impacts will result, and will likely be severe since the hydrologically connected Spring Valley in Nevada will also be pumped. This will as explained above destabilize the ecology of the entire Great Basin since surface flows and ground flows are connected. This would dry up springs such as Fish Springs and destabilize aquifer dependent vegetation causing irreversible air quality impacts to the Wasatch Front.

Federal Law

Although its clear that the intent of this agreement is to avoid litigation at least between the two states its unclear that the proposed apportionment could be justified based on U.S. Supreme Court rulings on interstate water apportionments. These decisions that mostly relate to surface water disputes can provide guidance on the current groundwater situation. First on the question of whether Utah water law is relevant to the above situation we know that it is since Justice Holmes ruled in 1911 that “enforced priorities on an interstate stream on the theory that when all states through which it flowed had adopted the same system of water law, they estopped themselves from asserting the power to ignore out of state priorities”. Bean v Morris, 221 U.S. 485 (1911). This holding is critical since it means that since both states recognize fundamental tenets of Western Water Law and prior appropriation Nevada is not unable to ignore Utah Water Law.

Other important holdings that relate to the current situation include that equitable apportionment will protect only those rights to water that are “reasonably required and applied”. Wyoming v. Colorado, 259 U.S. 419, 484 (1922). “Especially in those Western States where water is scarce, “[t]here must be no wasteof the 'treasure' of a river. Only diligence and good faith will keep the privilege alive.” Washington v. Oregon, 297 U.S. 517, 527 (1936). In Wyoming v. Colorado the states had a duty to employ “financially and physically feasible” measures “adapted to conserving and equalizing the natural flow”. 259 U.S. At 484. “We think that doctrine lays on each of these states a duty to exercise her right reasonably and in a manner calculated to conserve the common supply”. Id. Justice Marshall in, Colorado v. New Mexico stated “[w]e conclude that it is entirely appropriate to consider the extent to which reasonable conservation

measures by New Mexico might offset the proposed Colorado diversion and thereby minimize any injury to New Mexico users.”

The SNWA would likely argue that the circumstances of the economic situation in Nevada dictate that it would be equitable to divert the water to Southern Nevada since they are the major economic engine of the state. The Supreme Court also considered that there may be countervailing equities that support the diversion of water across state lines where there would be support for diversion in one state that would cause detrimental water loss in another state. Again in Colorado v. New Mexico an example was given that would perhaps justify such a diversion, but in doing so, the state seeking the diversion would need to demonstrate with **clear and convincing** evidence that the benefits of the diversion **substantially** outweigh the harm that may result.

The anticipated harm is likely to be substantial in terms of loss of livelihoods in the ranching industry, significant damage to the entire ecology of the Great Basin—including Great Basin National Park and other ecological gems, potential dust storms that could cause greatly reduced air quality, as well as potential radiological pollution along the Wasatch Front. See UPHE comments. The benefit, if any, would be short term profit for developers and more insidious growth in the Las Vegas Valley.

Indian Water Rights and Federally Critical Lands

One area of discussion that has as yet received little to no attention is how this diversion may affect the Goshute Indian Tribe. This tribe's reservation is located proximate to the Snake Valley in the southern third of the Deep Creek Mountain Range. Although much of its water is supplied by surface flows originating from the Deep Creeks water is supplemented by area springs and groundwater that is also likely to be hydrologically connected to area surface flows. In Winters v. United States, 207 U.S. 564 (1908), the U.S. Supreme Court held that when the U.S. sets aside an Indian Reservation it impliedly reserves sufficient water to fulfill the purposes of the reservation. There was no indication from this agreement whether the Goshutes would be able to meet their water needs based on the agreed allocation of water between Utah and Nevada. For instance, if reduced flows impact the reservation and its water supply there is no mechanism within the agreement to either mitigate, compensate, or otherwise ensure that the reservation has sufficient water to meet its needs. Its entirely unclear how pumping at the levels proposed could impact springs and underground water flows within the near-by Goshute Indian Reservation.

The same principle applies to critical federal lands such as Great Basin National Park, an area that is of tremendous importance, and one that is heavily reliant on groundwater fed springs. Although there was some consideration of the wildlife reserve at Fish Springs the same consideration does not seem to have been given to Great Basin NP. Its entirely possible that pumping out of both Spring Valley and Snake Valley could impact this Park and the reservation, and so to only focus on the two states ignores the fact that there are superseding water rights holders. For all these areas of concern the devastation to be caused by the proposed aquifer pumping will only be identified as an adverse effect long after the damage has been done. This

is because it takes time after pumping has occurred for the damage to become obvious. That is to say that once the problem has been identified then it will already be far too late to correct the problem. The agreement seems to acknowledge that ecological damage will not be remedied through shutting off the pumps, since instead, some type of mitigation or compensation will be offered to the injured party. Although it should go without saying that once Las Vegas development is built based on Great Basin water its obvious that this remote yet ecologically vital area will suffer long before any Las Vegas developments do.

On a personal level I am an individual who recreates in the west desert including Great Basin National Park and believe that this agreement and associated water diversion could not be any more short sighted and ill-conceived. We are talking about an ancient aquifer that straddles the border of the two driest states in the entire Country. Nevada is the driest followed by Utah as the second driest. Regardless of one's position of whether Las Vegas should grow even more than it already has to resort to a proposal that will undoubtedly decimate an entire ecosystem, many livelihoods, and potentially inflict harm to millions of individuals along the Wasatch Front due to reduced air quality is not an idea that should be endorsed. To divert huge quantities of water to the Las Vegas Valley may economically benefit the few individuals that invest in Las Vegas real estate or golf courses, but these benefits weighed against the guaranteed harm that will result to the thousands perhaps millions of individuals is indefensible.

I ask that the state of Utah not sign this agreement for the reasons articulated above. The agreement is not in conformance with Utah Law, precedent from the U.S. Supreme Court, and does not even consider the interests of critical and superseding autonomous parties such as sovereign tribal nations or National Parks. In short, this agreement does not even come close to serving the public interest. Therefore state leaders including the Governor of Utah should not be a party to this agreement.

Sincerely,

/s/ Joel Ban

To: Mr. Styler & Mr. Biaggi
From: Kathy Hill, Snake Valley resident
Set 3 of comments relating to Draft Agreement
Sept. 24, 2009

2.9 Groundwater appropriation with Nevada ...has been premised upon the capture of Groundwater naturally discharged as phreatophytic evapotranspiration.

These findings are ambiguously worded and undermine the purpose of this agreement which is to "... provide protections for existing water rights and the health of the aquifer." How does a "reasonable" drawdown and a premise that encourages the destruction of phreatophytes protect Snake Valley? These findings rather give permission to the State of Nevada to destroy the phreatophytes by a reasonable drawdown. How does this translate to an "adverse impact"?

FIX: These findings are either irrelevant to the agreement and need to be deleted, or they need to be defined in concrete terms. What is a reasonable drawdown and exactly how much phreatophytic vegetation can be destroyed without causing adverse impacts? A enforceable trigger also needs to be in place in case water withdrawals exceed the limits placed by this agreement.

2.10 maximum sustainable Beneficial Use of water resources... another ambiguous term left to be defined by the individual state.

FIX: a definition of the term acceptable by both Utah and Nevada.

3.1 – 3.2 Available Groundwater Supply is not based on sound science. Apparently Nevada believes that the joint resolution by Utah's legislature to wait for the BARCASS 1 study to be completed was a mandate to use BARCASS 1. That is a deliberate misapplication of the resolution. All studies are to be evaluated and used in determining as accurate a figure as possible. Contrary to what this agreement says, BARCASS is not the best currently available data. Misapplications of science to reach a political decision is evident in several places in this agreement (including this example) and adds skepticism to claims that in the future, good science will be used to manage the aquifer.

FIX: For the time being, leave out a fixed amount of water available for pumping. Perhaps a panel of unbiased hydrologists should look at all the data and determine an amount. The amount should be a conservative amount.

4.0 Allocation and Management of Available Groundwater Supply

4.1 & 4.2 – Table 1 – another political decision lacking supporting reasons for decisions. Allocated - Utah is listed as having 55,000 afy of allocated water. This includes 20,000 afy of water at Fish Springs, which is not part of the Snake Valley Groundwater system and excludes an additional 4500 af/y of water rights granted in Utah after 1989. The

figure is a political figure and is capricious in what it chooses to count and what it chooses to exclude.

Unallocated – Utah is listed as having 5,000 af/y of unallocated water. In fact, 4500 afy of this water is allocated to Utah water rights holders and should be listed as such. This only leaves 500 afy of water to be developed in Utah, essentially shutting down all future growth. Nevada is listed as having 36,000 af/y of water to be developed. These figures are political and are not based on historical use or sound science. Laws of nature will not allow Nevada to take this much water from the aquifer without destroying Utah. To give Nevada more water than they can safely remove from the aquifer is irresponsible and threatens the livelihoods of everyone living in Snake Valley. The determination of equitable apportionment was not applied here – historical use, greatest area of land supported by the water, where most impacts will occur, etc.

Reserved – supposedly this reduces the inaccurate figure of 132,000 af/y to a more realistic figure of 108,000 af/y of water and thereby puts some caution into an otherwise outrageous amount. I commend the negotiators for the caution but it is too little, too late. This reserved amount does not rectify the errors of over-estimating the aquifer in the first place or over-allocating the remaining water.

FIX: Using a variety of measures (origin is irrelevant), re-determine the equitable apportionment of the aquifer, ensuring that each state has an equitable amount for future development and that the amount of withdrawal **will not cause adverse impacts** to either state. Provide supporting evidence for the apportionment.

4.3 ...*State Engineers are vested with the exclusive jurisdiction to administer the terms of this Agreement...* Nevada virtually loses nothing by overpumping, while Utah, the downstream state, will experience all the adverse impacts. There is nothing in the agreement that holds Nevada accountable.

FIX: There needs to be a trigger here that will shut down pumping if a dispute between the two states cannot be resolved within a short specified time. As Supreme Court is the only enforcement of this agreement upon Nevada and that process takes time, continued pumping could cause irreversible harm before any pressure is brought to bear upon Nevada for not respecting the agreement.

4.4 – 4.8 This has no teeth! The State Engineers identify areas of concern, they collect monitoring data, they make the data public and hold public meetings, they meter large groundwater withdrawals, and work together cooperatively (???). Nevada can prevent any action from being taken.

FIX: a detailed explanation of the process of how the State Engineers will deal with information and how they will work cooperatively to ensure that Utah, the downstream state, will receive adequate protection. Again, Utah needs a switch to shut down pumping if Nevada does not respond promptly to concerns.

5.0 Categories of Available Groundwater Supply

5.1 Allocated water is water allocated before October 17, 1989. This reduces the further the amount of water available for future development in Snake Valley since wells have been approved since 1989. This date is set because that is when SNWA applied for water

permits and should have no bearing on Utah water development. Snake Valley has been held hostage to SNWA for 20 years and this just adds insult to the future of Snake Valley. At the least, allocated water should include all current water rights holders in the valley. **FIX:** Use realistic numbers of 35,000 and 4500 af/y for a total of 39,500 af/y of allocated water. The 20,000 af/y going to Fish Springs should be subtracted from the available groundwater supply for the basin.

5.2 Unallocated water – includes Utah citizens who have met every requirement of the state of Utah and have received rights to their water. These rights are now being withdrawn because of this agreement. This agreement makes Utah go back on its word, withdrawing rights given to Utah citizens. Further, the 36,000 af/y from Table 1 shown as Nevada's share of the water is an unsustainable figure. We know that "capturing" that much water from the aquifer from a pumping station in the south end of the basin is impossible without causing reverse flow.

FIX: The unallocated figure for water allowed to Utah needs to be an accurate figure. The unallocated water allowed to Nevada needs to be supported by good hydrology and needs to be an amount that does not allow for adverse impacts. Hoping that monitoring and mitigation will prevent removal of water is not a responsible way of "protecting existing water rights."

5.4 "*Maximization of sustainable Beneficial Use ...*" is a vague term open to interpretation.

"...*mining of overdrafting of Groundwater*" not well defined since it deals with groundwater reaching an equilibrium after a time. The timeframe should be limited to a short time – e.g. 25 years. If it hasn't reached an equilibrium in that timeframe, it should be considered as groundwater mining.

"...*the diminishment of the physical integrity of the Groundwater basin.*" no defined mutual understanding of what this is.

The States agree to ...adopt such measures as may be agreed upon to redetermine the Available Groundwater Supply The State Engineers are to take action to reduce withdrawals by priority... Presumption should be that SNWA is the culprit and those pumping rights outside the basin should first be eliminated – especially if this agreement does not protect those Utah water right holders who have legitimate water rights granted after 1989, and whose livelihood and existence is dependent upon having water.

FIX: use clear and mutually acceptable language to define terms. Have preset conditions to determine when and how the groundwater supply will be redetermined. When withdrawals need to be reduced, it should be reduced by water used outside the basin - not shutting down people whose existence depends upon the water rights granted to them by Utah, albeit after 1989.

6.0 Identification and Mitigation of Adverse Impacts to Existing Permitted Uses

This is an agreement between the states of Utah and Nevada. SNWA should not be a signatory of this agreement, although they may be a signatory under Nevada's direction. As it is, the agreement is limited to mitigation with SNWA only, ignoring other possible large water withdrawals that compromise the aquifer. The State of Nevada needs to be

responsible for the mitigation, monitoring, and maintaining of the aquifer. If Nevada wants to pass on the expenses to SNWA or any other large water withdrawal entity, that is an agreement with Nevada and the water uses, not between Utah and the water users.

There is nothing in the agreement that talks about funding. Who is responsible for costs? Will the complainant be presented with a bill from SNWA?

6.2 Any owner...who believes that development or withdrawal of Groundwater by SNWA has caused an Adverse Impact may notify SNWA...

This places the burden of proof on the water right user. The presumption should be that SNWA has caused the adverse impact and MUST mitigate it. All costs incurred by the water rights user should be borne by SNWA. The relationship between SNWA and Snake Valley citizens has been somewhat adversarial, given that SNWA has characterized the citizens as alarmists and wacky environmentalists. At state hearings, SNWA has proved to be ruthless and ready to wield all the power they can muster to get their way. To believe that SNWA will immediately become a caring, nurturing entity for Snake Valley water users is naïve and foolish.

In this agreement, SNWA is charged with determining whether the point of diversion is “producing sufficient water to meet the immediate needs of the permit owner.” This should be the role of Utah’s water rights department, not SNWA. It is premature to assume that SNWA will be the single large water user of the basin and Utah is abrogating its responsibility for caring for the citizens of Utah in handing over responsibility to another entity.

Mitigation needs to include monetary reimbursement for lost productivity - perhaps for a lifetime, if it forces businesses and ranches to close because of raising costs, lack of water, and degraded environment. Mitigation also needs to include an off-switch. When it is apparent that damage is severe, small measures will not stop the deterioration of the aquifer, which may become irreversible.

FIX: Utah will provide a mediator who will act as an advocate for the State of Utah on behalf of the water right user. SNWA will carry the burden of proof in determining cause of adverse impacts and it will be assumed that SNWA’s pumping has caused the impacts. SNWA will bear all costs incurred by the water right user to obtain justice. A predetermined cumulative adverse impact limit should be set where SNWA pumping should be cut off.

6.3 - 6.6 There is no time limit on the Interstate panel so deliberations can go on until the water rights user in Utah has run out of money. Further, this places Utah citizens under Nevada State Law and the Nevada State Engineer. This is an abrogation of Utah’s responsibility to its citizens. Utah needs to remain an active partner in overseeing protection of Utah water rights holders. The mitigation fund maintained by SNWA is too small and needs to be held and disseminated by an independent party.

FIX: Set time limits for the Interstate panel to make their determination and use SNWA funds to support families while deliberations are going on. Increase the \$3 million dollar fund and have it managed by an independent party. Utah will be responsible for ensuring that Utah water rights holders receive satisfying mitigation. Utah will process any challenges or reviews of the Nevada State Engineer for Utah water rights holders and determination must at least satisfy Utah water law.

6.7 Delaying this process for another 10 years is a mixed bag, but probably more negative than positive. The EIS may have to be redone; protestants will have had to wait 30 years for their time to be heard, effectively shutting many of them up; Snake Valley residents will be held hostage to another 10 years of unknown future; efforts and money which have gone into preparation for a hearing in 2011 will have been wasted. As a negotiating item, this tilts in favor of SNWA rather than Snake Valley citizens.

8.0 General provisions

This agreement is written in such vague terms that only those who participated in the negotiations actually understand the intent of it. One example of this is the statement "...delivery of water herein provided..." Even Utah team members do not seem to understand what this is referring to. This particular phrase should be deleted and other vague statements need to be cleaned up to clearly convey intended meanings. If this agreement is to be effective for the length of pumping by SNWA and beyond (75 years and more), then it needs to be able to convey its meaning to those who inherit positions responsible for carrying out the terms of the agreement: they need to be able to understand it. The agreement should be studied thoroughly by the respective state legislatures and provide declarations of monetary support. Since the legislature needs to approve monetary appropriations for the agreement, it should also be approved by the legislature. The governors of the states should be the signatories.

Print View

From: Joan Welsh <jwelsh425@yahoo.com>
To: <snakevalley@utah.gov>
Date: Wednesday - September 30, 2009 3:10 PM
Subject: Snake Valley Water Draft Agreement

The agreement to allocate this water is a mistake that will have long range and lasting consequences for the farmers and ecosystems of the Great Basin, not including the air quality of the cities to the east.

Las Vegas is such a starkly dry location, where even the few sagebrush struggle to exist, that much of this precious water will simply evaporate from the hundreds of swimming pools, the golf courses and decorative lawns and yards. Once the pumping starts down that billion dollar pipeline, it will be virtually impossible to shut it off. Sure, the agreement says it will be shut off if it proves to be damaging the Snake Valley, but everyone knows that the court cases and litigation will go on indefinitely until that aquifer is dry.

Unlike the Mono Lake near catastrophe, when in 1941 Las Angeles diverted the streams 350 miles south for their thirsty voters, the damage that pumping will do to the Snake Valley aquifer will not be as evident as was Mono Lake, until the damage is irrecoverable. As that lake was gradually drained, the wildlife was severely affected and toxic dust storms occurred. And just how long a time can the aquifer continue to water Las Vegas, then where will they get the water.

The lesson learned from Mono Lake was Las Angeles had to learn to live within limits. Las Vegas must realize it sits in a rock dry spot and should learn how to conserve and reuse its water rather than take it from others.

Please don't go ahead with the agreement, let this thing rest.

Sincerely, Byron and Joan Welsh, Salt Lake City, Utah

Stanley T. Holmes
846 N. East Capitol Blvd.
Salt Lake City, Utah 84103

Governor Gary Herbert
Utah State Capitol
Salt Lake City, Utah 84114

September 27, 2009

Dear Governor Herbert,

I urge you to oppose the currently proposed Agreement for Management of the Snake Valley Groundwater System. This agreement gives a green light to the Southern Nevada Water Authority (SNWA) to implement its plan to pipe water to Las Vegas at potentially unsustainable levels from the interconnected aquifer of which Utah's Snake Valley water system is a part. The agreement puts at risk Utah families of the West Desert who depend on already diminishing water supplies for their future even as they depend on you to take a political stand in their defense.

This summer, I attended a public meeting on the Snake Valley Agreement held at the Utah Division of Natural Resources building in Salt Lake City. I was struck at the similarity between the presentation made by Agreement proponents and presentations made 30 years ago by U.S. Air Force officials as they pitched the MX Missile system to residents of Utah and Nevada. The MX team assured citizens that resource requirements had been adequately quantified, and that any adverse impacts could be mitigated.

Then-Governor Scott Matheson --who had been an early MX supporter-- came to realize that the system would quite likely require much greater resources than advertised, and that once a green light had been given, the system would be virtually impossible to contain. Matheson also realized that there are some human and environmental impacts that are unmitigatable.

If you approve the currently proposed Snake Valley agreement with Nevada, SNWA will proceed with a Las Vegas pipeline plan based on assumptions of water availability much higher than would be the case without your tacit agreement to let them tap water "up aquifer" of Snake Valley. Please be aware that once that pipeline is put into operation, Las Vegas and SNWA will get what they want. As water supplies become more scarce in the future, the power of Las Vegas and SNWA will leave the small communities of Utah farmers and ranchers in the dust.

In the best interests of the people of Utah, please withhold your support of any agreement with Nevada affecting the Snake Valley aquifer until after Nevada has made a final decision on a SNWA pipeline plan that does not assume access to Utah water.

I look forward to offering you thanks for taking a stand in favor of rural Utahns in the West Desert.

Sincerely,

Stanley T. Holmes

Print View

From: <CarolStillman@aol.com>
To: <snakevalley@utah.gov>
Date: Sunday - September 27, 2009 1:22 PM
Subject: Snake Vally water

I object to this agreement because it siphons water out of an aquifer that cannot easily be replenished. I also think it shortchanges Utah. Las Vegas should learn to live with the water it already has. It cannot continue to grow and irresponsibly continue taking other's water, including from other less populated areas in their own state. They are, after all, right in the middle of a hot, arid desert.

Why should Utah be asked to sacrifice water to Las Vegas or to any other state? What in the world was Senator Bennet thinking by even entering into negotiations regarding Las Vegas siphoning water out of the Snake Valley aquifer??!!

For those saying that if any unacceptable changes are observed, the draining of the aquifer would be stopped, by the time anyone observes/admits that unacceptable changes have taken place, it most likely will be too late to mitigate the damage. And I would like to know.....once this aquifer is drained, much to the environment's detriment.....where will Las Vegas then go to obtain more and more water? They need to be stopped!

Do not sign any agreement giving Las Vegas or any other entity the right to drain precious water that is mostly located in Utah! Please do not allow this!!! The water belongs right where it is.....for use in its own area, if it has to be used at all.

Carol Stillman
797 E Rainforest Drive
Murray, UT 84107

Print View

From: <laurelsteele@comcast.net>
To: <snakevalley@utah.gov>
Date: Sunday - September 27, 2009 7:09 PM
Subject: Snake Valley

Dear sirs,
I am concerned that water has become commercial.

Aquifers do not replenish quickly. Groundwater recycles much slower than surface water. Removing large quantities of groundwater can permanently affect the overlying rock layers and alter the capacity of the aquifer.

Utah should not condone and encourage the wasting of resources. Vegas could support the water needs of several families each year with each swimming pool. Their golf courses could supply several blocks. Before suggesting their need for more water, Vegas should consider eliminating the evaporative losses that bathe the desert air around their city in humid wastage of natural resources.

Are pretty fountains the best use of a precious resource that Utah's governing body can support? Surely that is not one of the values to which the people of Utah aspire. If we are to squander our limited resources, why not consider the needs of ranchland and farmlands first.

Thank you for your consideration.

Laurel Steele

1987 south McClelland
Salt Lake City, UT 84105

Print View

From: Care Atkinson <antlersoutwest@yahoo.com>
To: <snakevalley@utah.gov>, <etters@sltrib.com>
Date: Monday - September 28, 2009 8:08 AM
Subject: Snake Valley Water

9/25/09

Snake Valley Water

Las Vegas quest for the water under Snake Valley in Utah's west desert will be disastrous. A fragile ecosystem will be destroyed. What will happen when agriculture is gone in the many small communities? Will the water at Fish Springs National Bird Refuge disappear? We put the Goshute Indian Nation on a reservation in this area over a hundred years ago. Imagine the white mans greed, to take this land once again from the people who this belongs.

Utah's water authority Mike Styler and Nevada's Allen Biaggi have got to acknowledge more public involvement on this matter. How can these two guys decide who gets what? Stewards of these lands should determine what happens here, not the bureaucracy of political involvement. If we let Nevada take what they want, Utah's portion will be worthless. Allowing Nevada to pump water out of this aquifer will cause the water table to drop. Anyone can see that when you suck on a straw your beverage level drops.

How do these water engineers know how many acre feet of water is under this valley? Do they really think this plan will not have any effect to this valley and other surrounding valleys? How are they going to monitor the water table when nobody know where the water is? Can Nevada's water authority really think that they can file a water claim in 1989 and take water away from someone else with an earlier claim. The water in this aquifer must stay in this aquifer.

I have grazed sheep in the winter on permits allowed by the Bureau of Land Management. I know first hand how delicate the balance is to the plants and animals here who rely on this water. Bands of wild horses roam this land. To survive they need a drink of water. Young colts are taught by their mothers where these small springs and water seeps are. All wildlife depends on the very limited supply of water out there. The friends of all animals should take a stand here. We need to do the right thing and protect the little water that they have now.

Lets be an advocate for this planet and stop this pipeline to fill Las Vegas fountains. We need to take front row seats on this issue because of so many unanswered questions.

David Bone
Oakley, Utah



Utah Farm Bureau NEWS
September Edition
President's Column

PROTECT UTAH'S SNAKE VALLEY WATER

By Leland Hogan

Almost four years of negotiations have yielded a draft agreement related to the water management of the Snake Valley that sits on the border between the nation's two driest states – Utah and Nevada. The draft agreement has drawn the ire of rural legislators, environmental activists, Millard County officials and organizations concerned with protecting the state's sovereign waters.

Snake Valley, secluded and quiet is just what Cecil Garland likes. However, their agricultural water and ranching heritage have become the epicenter of a raging debate between Utah and Nevada. Groundwater within the Snake Valley basin is coveted by Southern Nevada Water Authority (SNWA) to meet the growing needs of the nation's gambling Mecca – Las Vegas.

The two states are mandated by Congress to come to agreement regarding the allocation and management of the Snake Valley basins groundwater resources. According to the Department of Natural Resources Executive Director Mike Style, "The goal of the agreement is to protect the way of life of the water users in Snake Valley."

Utah and Nevada seems to always be in some kind of drought. Will SNWA's proposal inflict additional pain on the region's farmers and ranchers if the trans-basin water transfer is ultimately approved? In the arid west, sides are quickly taken when it comes to the region's most limiting factor.

Water is the lifeblood of the West. The availability of water is critical to our rural economies and farm families. Even the slightest lowering of the groundwater resource will hurt Utah family farmers and ranchers. Water resources depleted by the SNWA ultimately means increased costs to the area's farmers and ranchers.

In comments to the Governor's Office, Bureau of Land Management, Utah Legislature and Utah's Congressional delegation, Utah Farm Bureau called on the state officials to protect Utah's sovereign water. The draft agreement proposes splitting 132,000 acre feet deemed "sustainable" by the US Geological Survey's Basin and Range Carbonate Aquifer System Study (BARCASS). Farmers in the area note that when they "turn on the pumps" for summer irrigating, water levels quickly drop and artesian wells dry up. Does BARCASS overstate the recharge reality and what will be the impact of 20,000 or 30,000 acre feet leaving the basin?

Fact is, over 80 percent of the Snake Valley groundwater dependent acres are located in Utah.

Print View

From: Joe <jandcgates64@comcast.net>
To: <snakevalley@utah.gov>
CC: <jandcgates64@comcast.net>
Date: Wednesday - September 30, 2009 1:14 PM
Subject: Snake Valley water situation and agreement w/ Nevada

To those involved with the Snake Valley water agreement: I attended the Aug. 18th meeting at the DEQ building and have a few comments on the overall Snake Valley water problem.

1. I think the use of the terms "safe yield" and "sustainable yield" should be discouraged. These terms have been abandoned by hydrologists because they are misleading and very difficult to define. Basically, the terms are intended to mean ground-water withdrawals from a basin that are less than the average annual recharge to the basin, including both recharge from precipitation and other kinds of input such as subsurface inflow. The concept is that if withdrawals are limited to this amount, then there shouldn't be any permanent, continual decline in water levels, or ground-water mining. The problem with "sustainable yield" or "safe yield" is that they imply that there will be no problems until this amount is reached, and that is far from the case.

To illustrate, when ground-water withdrawals, say from a well-field, begin in a basin, water levels around the wells will decline as water is pulled into the wells. At first, most of the water comes out of storage in the aquifer as the water levels drop, and a "cone of depression" forms around the wells. As withdrawals continue, the cone of depression widens, and as it does it intercepts water that was discharging naturally, such as from a spring, from a marshy or wet meadow area, or by subsurface outflow from the basin. As soon as the cone intercepts enough natural discharge to balance the amount being pumped, then water levels will stabilize and the system is back in balance--the amount pumped is balanced by an equal amount of intercepted natural discharge. If the amount being withdrawn from wells gets up to the amount of recharge ("safe yield"), then all natural discharge from the basin will end--recharge to the basin is balanced by well discharge, and water levels will stabilize.

The problem with this is that all kinds of other problems likely have occurred--if pumping equals recharge, water levels in the vicinity of the well field can be lowered tens to hundreds of feet, and all the springs in the valley, the wetlands, and amounts going to other areas by subsurface outflow are gone. Other bad things also can occur, such as land-surface subsidence, and possibly inflow of poor-quality water from down-gradient areas.

I realize that at this point, the Southern Nevada Water Authority is not proposing to pump anything close to the annual recharge, which could be as much as 160,000 acre-feet/year (including subsurface inflow from Spring Valley) according to the BARCAS study, and that full effects wouldn't be seen for more than 100 years, but even amounts much less than this can cause problems over shorter time periods.

2. I am a little confused about the figure of 132,000 acre-feet/year that is mentioned frequently--according to the BARCAS study, the recharge is 160,000 (111,000 from precipitation in the basin and

49,000 from subsurface inflow). The only 132,000 number is their estimate of water discharge by evapotranspiration. During the Aug. 18th meeting, the 132,000 was also mentioned in terms of water rights and reserves--66,000 for each state. I realize that the BARCAS numbers represent a fairly large increase in previous estimates, and Utah is reluctant to use them, but then why use their number of 132,000 as the recharge (at least it seems that is how it is being used)? The original estimate of recharge made in the '60s was 105,000 acre-feet/year, including 4,000 from subsurface inflow from Spring Valley; a more recent estimate which tried to balance the budgets for all basins in the Fish Springs ground-water flow subsystem included, for Snake Valley, total recharge of 121,600 acre-feet/year, which consisted of 104,000 from precipitation and 17,600 from subsurface inflow. So I'm not sure where the 132,000 acre-feet/year came from.

3. I asked at the meeting how an "unacceptable" effect of pumping would be defined--one that would require some kind of change in how the project was operated. I realize that it is necessary to be flexible on this and deal with things as they develop, but I think it would be useful to at least make some effort to define unacceptable effects. One would be land subsidence, which I don't recall being mentioned--as a rule of thumb, this doesn't occur until more than 100 feet of water-level decline has occurred, and that decline isn't out of the question with the planned amount of pumping, although it would take a long time to occur. Another effect would be inflow of poor-quality water, but it might be good to have some kind of limit--such as an increase of 250 mg/l dissolved solids. A third would be loss of marsh/wetland/subirrigated pasture area--it might be useful to define how much is a problem, like 25% of the area. And then water-level decline--a limit such as 100 feet? Local water-rights holders can lower their pump if the water level declines and still get the water they need, but it costs more. I think some kind of attempt to define unacceptable effects of SNWA's project would be useful.

4. My last comment is on the overall uncertainty in the knowledge about the deep carbonate-rock aquifer. The shallow basin-fill aquifer is better known--not so much in Snake Valley with its relatively small number of wells and small discharge--but we do know much more about basin-fill aquifers in other parts of western Utah, and understand pretty well how they work. The carbonate-rock aquifer is a different matter. Except in a few areas, such as southern Nevada, we know little about it. The SNWA is doing, I presume, extensive drilling in Nevada and hopefully the data will be available to all. The Utah Geological Survey has completed a test-drilling program in Utah and has a lot of new, good information, but I think if you asked them, they would say they have just scratched the surface. We know little about the extent of the carbonate aquifer--it may not be much of an aquifer in many places. We know little about the quality of water in the carbonates--in some places close to recharge areas, such as in Snake Valley, it is good, but in other places farther from recharge areas it is slightly saline or worse, and we don't know much about what's in between. We don't know much about the degree of interconnection between the basin-fill and carbonate aquifers, although so far available data indicate it's pretty good. We also know little about the transmissive and storage properties of the carbonates--the storage coefficient of consolidated rock is generally much lower than basin fill and this value is very important in how the system will respond to development. We also know little about how water moves through the carbonates--many workers think that it moves through the entire mass of the carbonate rock, while a few others think water moves primarily along fault/fracture zones. Most of the existing models assume the first is the

case, but if movement is primarily along fault/fracture zones and storage is much less, then the models won't predict effects well.

If I were the SNWA, proposing to spend \$3.5 billion on a project, I would want to know much more about the system--they are obtaining information in Nevada, but none in Utah, and the biggest part of the Fish Springs flow subsystem is in Utah. It would seem prudent to me to take 1 or 2% of that \$3.5 billion and invest it in an extensive test-drilling and aquifer-testing program, with at least half in Utah. Finding out that the system doesn't work as was assumed, after having built the whole project, would be somewhat of a disaster. I would like to see such a program included in the Nevada/Utah agreement.

I appreciate having the opportunity to comment on the overall issue and the agreement--it's a good thing to get public input on an issue this important.

Joseph S. Gates, Hydrologist

2560

Cavalier Dr., Cottonwood Heights 84121

801-943-0957

Print View

From: "Burrows, Brett" <Brett.Burrows@vacationclub.com>
 To: <snakevalley@utah.gov>
 Date: Tuesday - September 29, 2009 8:05 AM
 Subject: my opinion about snake valley

to whom it may concern:

I figured I would voice my opinion even though I live in Salt Lake City. The issue I have is that I camp and explore Great Basin National park and surrounding areas (as does my family) and in fact I was just there 2 weeks ago for the weekend. I am concerned for several reasons-mainly 'dust storms' and lack of water killing plants and animals (what was the area of California where they did something similar and it turned into a desert? haven't we learned ANYTHING from when California did it to the 'salton sea' area (I think that's the area)???) .

My second concern is WHY are we giving Las Vegas more water? Las Vegas wastes an incredible amount of water so why should we give them more water to just waste more? when you look at satellite photos or even mapquest etc photos of Las Vegas just how many people have HUGE WATER WASTING pools (water evaporates in the heat right? which means these people are 'constantly' refilling pools) and what about the huge resorts that have 'water parks' or 'water exhibits' (which resort is it that has hourly water shows? I wonder how much water they waste on a daily basis?) or how about making the huge number of hotels in town put low flow toilets (maybe they already have?) and other water saving features like not giving water to restaurant diners automatically, etc.

what I am saying is simple-Las Vegas VOLUNTARILY wastes huge amounts of water so, until and unless Las Vegas does something to reduce there water usage VOLUNTARILY why should we give them more water which will just be wasted also? Utah has a water program where they have the "Slow the flow, save H2O" and its actually done some good according to the news. so why should we lose a national park and kill off fields and animals in the desert just so Nevada can build more water wasting parks and pools and exhibits? LET LAS VEGAS FIGURE OUT THEIR OWN WAY TO SAVE WATER and make Las Vegas figure out their own way to 'slow the flow'. its a simple concept but the morons in Las Vegas would rather waste water than start a voluntary water saving program. so how about TAXING people with pools? or charging a LOT more for more than a 'normal average family' uses on a monthly basis? until they do something to HELP THEMSELVES why should I lose a national park to give them more water? its not fair to me or anyone else in UTAH that already has their own water saving programs. and that doesn't even count the farmers who will lose their ranches and cattle and what about the wild horses and burros in the desert (assuming there are some in that area)? maybe after Las Vegas does something similar to Utah about saving water then maybe we should talk. but until Las Vegas takes care of their own water issues I don't feel we should be giving them any more of OUR water.

that is MY opinion. even though some is 'repeated'.

Brett L. Burrows

Print View

From: "Bader, Robert J." <rjb@spectrum-engineers.com>
To: <snakevalley@utah.gov>
CC: <patbader1952@comcast.net>, <lynn_brian@juno.com>
Date: Wednesday - September 30, 2009 11:48 AM
Subject: Snake Valley Water Usage

I am dead set against tapping the snake valley aquifer to support growth in Nevada.

What studies have been done that can support this water diversion and what is the basis of those studies?

This project requires monitoring of the water usage to assure the aquifer is able to support the withdraw. However after spending the millions of dollars for the pumping stations and the pipelines who is going to be willing to decrease or stop the withdraw if it is determined that it is detrimental? Who is going to be the overseeing authority and will that authority act after all this cost?

The West can't continue to draw water from the aquifers and expect them to continuously provide water yet this seems to be the prevailing belief.

This area is a dessert environment that was never intended to support the water usage that has been imposed and yet we continue to draw water to support further human habitation of this desert.

This water is not being taken to support agricultural needs but rather to support the Las Vegas playground.

We need to start serious conservation efforts and this project is just the opposite.

If the powers that be do not wake up soon and address the water shortages in both Nevada and Utah through strong conservation efforts then this area is going to become one gigantic dust bowl.

Sincerely

Robert & Patricia Bader

6392S 525E

Murray Utah 84107

Print View

From: "BRUCE JOHNSON" <patbru70@msn.com>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 12:13 PM
Subject: Excess water in Snake Valley

In September 2002 I obtained a permit to re-drill a culinary well located at my residence in Callao, Utah. When the drilling was completed, the well had an artesian flow over 8 inches above ground level. The well was capped, but in the spring of 2005 the artesian pressure was so great that the cap had to be removed and a well plug inserted.

On September 25, 2009 I checked my well to see the present water level. At this time, the water level is 32 inches BELOW ground level. A loss of 40 inches in 7 years!!!!

If the water table has dropped this much with normal agricultural pumping and some lean water years, what can we expect when SNWA begins pumping enough water to fill their 72 inch pipe??

There is NO excess water in Snake Valley and entering into an agreement that gives SNWA any water is a mistake. Slow down, wait for the scientific evidence and then choose a course of action. There is no need to hurry into an agreement giving away something we don't have.

Bruce Johnson
Callao, Utah

Print View

From: Barbara Ladakis <labarb@xmission.com>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 2:37 PM

THE IDEA THAT THERE IS WATER TO SPARE IN THE SNAKE
VALLEY REGION IS SURELY
WISHFUL THINKING. I AM STRONGLY OPPOSED TO ANY WATER
BEING TAKEN FROM THE
AQUIFER BENEATH THE SNAKE VALLEY.

BARBARA TURNER LADAKIS

Print View

From: "Jerry Taylor" <jerryt@uccu.com>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 4:09 PM
Subject: Utah/Nevada Water

September 29, 2009

To Whom It May Concern:

As a board member of an irrigation canal in Provo I know how emotional people get when talking about water. This being said I believe it to be a huge mistake to enter into any contract with Nevada until all possible information is on the table. If, as I understand, the water agreement isn't going to go into effect until 2019 I see no need to prematurely sign any agreements.

My concerns would be does the water talked about really exist or will this be another agreement similar to the Colorado River agreement where water was allocated that; in fact, was not there for the long term.

The residents in this area have some basic claim, if not legal, to the water due to their long history of usage.

What is the effect going to be to the quality of air along the Wasatch Front if this area does turn into a dust bowl. We have already seen how bad the air can be when California has wildfires. Are we just adding to this already existing problem.

Is anyone really so naïve as to believe if Las Vegas once has use of this water they will ever relinquish the use due to some farmer's problem in west desert Utah? Or for that matter any ecological problem. That simply won't happen-doesn't matter what anybody promises.

The fact that Las Vegas has done a poor job in planning for water use should not be put on Utah's plate and ask that we solve it.

The bottom line is that Nevada does have "rights" to existing water, however, until someone (preferably scientists-not politicians) decide how much water is there, how fast it replenishes itself in the worst case scenario, what effect the depletion has on the current residents and the Wasatch Front, Utah would be foolish to enter into any agreements.

Respectfully,

Jerry Taylor

1134 South Nevada Avenue

Provo, Utah 84606

801-376-2010

Print View

From: Ken Hill <kenhill84083@gmail.com>
To: <snakevalley@utah.gov>
Date: Wednesday - September 30, 2009 9:28 AM
Subject: independent verification of NV water rights

Utah should postpone signing the agreement for various reasons. One is to get independent verification of the NV water rights in block 1 and block 2. As Ronald Reagan preached, "trust but verify". A comprehensive accounting of water rights in both states should be included in the agreement as an appendix.

Ken Hill
Partoun
550 HC 51
via Wendover, UT 84083-9604

--

\o/ \o/

Let everything that has breath praise the Lord - Psalm 150:6

\o/ \o/

Print View

From: Merle Rawlings <desertlevite@hotmail.com>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 4:38 PM
Subject: NV/UT Water Agreement Comment

The amount of water (132,000 acre feet) postulated as the very foundation for the Agreement is highly speculative. Negotiators from both states, have used the highest USGS BARCASS Study "guestimates" as the amount of water available to be shared. This, in spite of a one-in-three chance BARCASS is incorrect in its assumptions of the real amount of water in the aquifer.

Haven't we learned anything from the disastrous Colorado River Compact water distributiton fiasco? Using data collected during some of the wettest ten-year periods of river flow on record, politicians distributed the highest amounts of water possible, not giving thought or consideration to a simple query: What if the river's annual flow is less than what has been forecast?

Incredibly, it appears the NV/UT proposed Agreement is moving full speed down that same road of over-promise and regret. Why are we being so generous with water that might not be there? After all, there is a greater than 30% chance (according to BARCASS) that is the case.

I urge the negotiators from both states to reconsider the 132,000 acre feet assumption as the starting point of an Agreement to divide the water of the Snake Valley aquifer. It is not too late to raise the essential question: "What if we are wrong?"

Thank you for considering my comment.

Merle Rawlings

North Snake Valley, UT

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Print View

From: P MEDINA <cmsutah@q.com>
To: <snakevalley@utah.gov>
Date: Wednesday - September 30, 2009 8:11 AM
Subject: Comments Regarding Pipeline Project

The purpose of this message is to voice my opposition to the Utah/Nevada Snake Valley Pipeline agreement.

The study conducted by Hydrology of Northern Utah Valley, Utah County, for the 1975 - 2005 timeframe stated that sources of water to the basin-fill aquifers were estimated to average 153,000 (+/- 31,500) acre-feet annually. During this same time ground-water discharge from the basin-fill aquifers was estimated to average 166,700 (+/- 25,900) acre-feet/year. Water levels in 110 wells covering all aquifers dropped an average of 22 feet.

After 4 years of study and negotiation, Utah and Nevada have released a draft agreement on the management of the Snake Valley groundwater system. The plan divides an estimated sustainable yield of 132,000 ac-ft evenly between the 2 states. Note that the estimates for the study of the water for 30 years was a +/- 31,500. That means the actual yield could be 122,000 ac-ft. How do you allocate water that doesn't exist? What happens to the people that have historically used an average 166,700 ac-ft per year? What plans are in place to cut the needs/usage of water by these users? How can there be any development in Utah if the amount of available water is reduced? This appears only to benefit Nevada.

The proposal is to take an average yield and split it between Nevada and Utah. The yield dropped an average of 22 feet per aquifer in 30 years (2,420 ac-ft). In the 1975-2005 study there is a variable in the numbers. Identified is a +/-31,500 for water sources and +/- 25,900 in consumption. If the 30 year study contains that much of a variable (20.5% and 15.5%) what has been changed to more accurately reflect usage by the States of Nevada and Utah once the agreement is in place? What plans are in place to mitigate environmental impacts?

I don't understand how the proposed plan will protect current rights and allow development for Utah residents. It is a one sided arrangement that appears to only benefit Nevada.

Please do not approve this plan.

Patricia Medina

Utah, Davis County Resident

Print View

From: <DAVIDSHANK2@comcast.net>
To: <snakevalley@utah.gov>
Date: Wednesday - September 30, 2009 7:03 AM
Subject: Snake Valley Groundwater Agreement - Comments

Subject: Snake Valley Groundwater Agreement - Comments

snakevalley@utah.gov

To: UDWR and Governor Gary Herbert:

It seems that the proposed agreement will not be something that can ever be revisited once signed. Given that if implemented, the removal of Snake Valley groundwater will not be reversible, I have several questions and concerns:

- 1) Have the projections of regional climate change been taken into account in the water balance and aquifer recharge estimates that have been developed?
- 2) Will the removal of groundwater from the Snake Valley have an adverse impact on the vegetation and wildlife in the area? I have visited the Owens Valley in California and seen the affects that diversion of that water system have had on the area.
- 3) Is the groundwater planned for extraction and pumping currently unappropriated or if not, what happens to the water rights of those that currently hold them?
- 4) I have seen then Lt. Governor Herbert's presentation on the plans to secure additional water sources to support growth along the Wasatch Front. If the water along the west margin of Utah can be extracted without a major consequence, wouldn't it be better to keep that source for use in here Utah?
- 5) Do Utah's plans for developing additional water sources for the Wasatch Front account for regional climate change?

Regards,
David Shank

Print View

From: Merle Rawlings <desertlevite@hotmail.com>
To: <snakevalley@water.nv.gov>, <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 4:56 PM
Subject: NV/UT Water Agreement comment

The Agreement stipulates 20,000 acre feet will be distributed to the Fish Springs Wildlife Refuge, a Federal installation. It would be far more equitable for each state in the Agreement to distribute 10,000 acre feet EACH since this is a national wildlife refuge. The same would be true for a national park or wildlife refuge entirely within Nevada--each state takes a 50/50% distribution of the legally mandated water.

As it is currently written, 100% of the Fish Springs water is charged against Utah's share of the supposed 132,00 acre feet available.

Thank you.

Merle Rawlings

North Snake Valley, UT

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Print View

From: Wayne Peay <waynejpeay@gmail.com>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 5:36 PM
Subject: Snake Valley Agreement

To whom it may concern:

I volunteer for the Raptor Inventory Nest Survey that monitors raptor populations on Utah's West Desert. This is remarkable country but I have found it to be surprisingly fragile. An ATV track will be visible for years. The invasion of exotics plants, especially cheatgrass, is having a vary significant impact on wildlife populations.

I am very concerned about the rush to an agreement on the Snake Valley water. This agreement, if it turns out to be a mistake, will have huge and long-lasting impacts on our state. We cannot afford to get this agreement wrong. Extensive study of the aquifer must be conducted and any allocations that are considered should be begin at the most conservative level and only increased after the impacts are carefully measured.

Again, we cannot afford to get this decision wrong. There is no rush.

Sincerely,

Wayne J. Peay
8804 Tracy Drive
Sandy, UT 84093

Print View

From: <ltate@bajabb.com>
To: <constituentservices@utah.gov>
Date: Wednesday - September 30
Subject: Snake Valley Agreement

The answer to Nevadas request to start pumping out of their 60% of the Snake aquifer HAS to be a RESOUNDING NOOO. If you have a bathtub of water and you pump 60% of the tub dry, the WHOLE bathtub is dry. You don't have to a degree in hydrology to understand that basic priniple of fluid mechanics. I'm sorry that Las Vegas has a problem, but THAT'S THEIR problem. The existing water agreement calls for BOTH states to agree on any pumping agreement. I don't understand why this is EVEN being discussed. Just look at the Ogalla aquifer under Kansas. They can't extend the depth of their wells fast enough to stay in the water of the aquifer. I wouldn't EVEN SELL our share of the Snake aquifer water to Nevada.

Leland TATE
St. George, UTAH

Print View

From: <gechapman2@yahoo.com>
To: <constituentservices@utah.gov>
Date: Wednesday - September 30, 2009 9:32 AM
Subject: FARMERS AND RANCHERS KNOW MORE ABOUT WATER

My father, William C. Chapman, worked for Thiokol when they first started up their Promontory facility. The reason they chose Utah was because of the dry air and manufacturing solid rocket motors is significantly easier in a dry climate. But they needed water. My father was intimately involved in the quest for water by Thiokol. Without water, there could be no Thiokol in Utah.

Thiokol tried everything they could to find water. They exhausted every scientific and engineering method for locating water. They even tried non-scientific methods like water divining. They all failed.

Thiokol got their water. They learned the lesson my father taught me from that experience.

That lesson is important in the Snake Valley water controversy. Thiokol got their water from farmers and ranchers in the area. The farmers and ranchers knew more about water in the area than the best water scientists and engineers Thiokol could find.

So when scientists and engineers say that the Snake Valley has enough water for Las Vegas, listen to the farmers and ranchers in the Snake Valley that say there isn't enough water.

Farmers and ranchers know more about water than any scientist or engineer.

George Chapman
855 E Spring View Dr
Salt Lake City, UT 84106
801-867-7071

Print View

From: paul oleson <pauloleson@yahoo.com>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 7:38 PM
Subject: Giving away our water

I find it amazing that anyone is even considering sending our water south to Las Vegas. I have spent my life in Utah from the age of 12 till the present, I am now 65. This state is a desert and I think most people forget that, they are used to having water. We have a delicate balance here in Utah between water needs and availability. I have always thought that the water being taken from the aquifer by the farmers would endanger the fine balance in the west desert. I can't imagine what the results will be with taking thousands of gallons of water on a regular basis. Where is the water coming from to replenish this aquifer? What is the impact on our springs in the mountains of the west desert.? What happens to our wildlife? What this does cannot be repaired once it is done and speculation about how feasible it is can not be proven. If there is the least amount of doubt about this project it should never happen. I am totally against emptying of our desert aquifers.

Thanks

Paul Oleson

September 29, 2009

Snake Valley Agreement
C/O Utah Dept Natural Resources,
Division of Water Rights,
1594 W North Temple, Suite 220
Salt Lake City, Utah 84114

Dear Governor Herbert,

Subsequent to the Salt Lake Tribune editorial regarding Snake Valley water and your request to hear from Utahns I am obeying the Governor.

I have followed water issues for a long time and have read much about usage, wasting pollution, division, etc. My concern with Snake valley was begun with articles regarding Las Vegas attempt to "steal" water from Beaver Dam, Arizona which is located @ 8 miles north of Mesquite Nev. When that did not work out they started inch-worming their way in every direction possible and they found a prize in west Utah. I wonder why they did not go for all the water available in their own state in the Ruby Mountain-Ruby Marsh Area? Another area is at the Humboldt sinks, where the Humboldt River, which rises in southern Idaho, disappears south of Lovelock NV

Especially troubling, they want it for development which is not the same as an emergency. They have touted all water saving techniques as a publicity means of hardship. When those in the desert states do nothing to do away with private swimming pools and golf courses for the rich, and have a lot of money sell their desires to an unsuspecting public it does not wash.

I do not believe the P.R. and think tank rhetoric regarding their resolve to stop pumping should the aquifer show stress (water loss) Once the wolf in sheep clothing makes a kill, it is dead. Unless of course the wolves come bearing gifts, MONEY. No amount of money, even if times are hard, is enough to compensate for loss of our most valuable resource.

The matter of dust bowl is not imaginary, each year the world deserts grow by 15,000,000 acres. There are many examples of mans folly regarding water, The Owens valley and Mono lake, Hetch Hetchy in Yosemite a dam for San Francisco, The Sahara once green and forested, The Aral Sea is now DRY. The Oglalla Aquifer once a tried and true source is now in trouble. The ground level in some Arizona areas has sunk 8 feet due to water pumping. The swamps in Florida are now being restored due to the mistake of draining and lastly The Mississippi River, Corps of Engineers and the resulting devastation of New Orleans. All the above have been proven by Geo-Scientific evidence. Utah Lake dried up during the thirties. If one could prognosticate, perhaps we could persuade Las Vegas that Utah Lake would serve their purposes. When it goes dry,

RECEIVED

SEP 30 2009

WATER RIGHTS
SALT LAKE

just think of the development potential and we would save the money for a proposed bridge. Who would not want to live in the prestigious, exclusive, gated LAKE BOTTOM ESTATES

Now to the farmers and rancher who KNOW about water from history & experience. They know about dust storms, drought & hard work. Ask the Native Americans who really know frugality regarding water in Snake Valley. As a child our well went dry and it necessitated carrying in buckets. One sees ads in the newspaper and magazines asking for help to supply water in third world countries. I saw the needy in Guatemala twice while there as a volunteer. The springs and marshes are a gift that Las Vegas no matter how money spent will never equal. The food generated from the land is now and will be in the future more valuable than men with big ideas to covet what is not theirs, to convert into a man made crime ridden metropolis, but wait! they have forgotten where they will get food.

The last sentence of the editorial stated, let's give him an earful. Here you have it. Please remember that dust causes snow to melt faster, so there goes the ski industry

Sincerely



Phyllis O Crookston
136 S Center St.
American Fork, Utah 84003
801-360-5405 cell

RECEIVED
SEP 30 2009
WATER RIGHTS
SALT LAKE

Print View

From: "Robin and Cindy Bell" <robbynbell@mwpower.net>
To: <snakevalley@utah.gov>
CC: <annette.garland@gmail.com>
Date: Tuesday - August 18, 2009 11:02 AM
Subject: The X Factor

Dear Governor,

The X Factor is the radioactive fallout from the nuclear testing done years ago that is still lurking in the soil, under the sparse vegetation, that will come back to life become airborne and impact the Wasatch Front.- (remember the sheep that died from from the "hot cloud" in Skull Valley?) Utah is taking an awful big chance in allowing SNWA to take all that water from Snake Valley, and in this case, Dust is not Dust. Owens Valley in California was not subjected to Radioactive Fallout! You have been given fair warning and the uncertainty of this kind of pollution is not worth the risk! Remember the incidence of Cancer? The air you breath is worth more than the water SNWA will be pumping. The Wonderful People of Snake Valley deserve being heard, Loud and Clear! Thank You.

Yours Truly,
Robin Bell

From: Betty Barela
To: Kaelyn Anfinson
Date: 9/14/2009 1:56 PM
Subject: Fwd: Re:Inquiry from R. Dale

Could you please get someone to respond directly to the constituent in the e-mail below referred by the Governor's Office. Make sure I get a copy of the response. Thanks!

Betty T. Barela
Utah Department of Natural Resources
801-538-7201
bettybarela@utah.gov

Utah Department of Natural Resources' hours are 7:00 a.m. to 6:00 p.m.,
Monday thru Thursday and closed Friday, state and federal holidays.

>>> Constituent Services <constituentservices@utah.gov> 9/14/2009 12:53 PM >>>

Below is an inquiry which was received by the Governor's Office of Constituent Services on 09/14/2009. Please respond directly to the constituent and reply to this email with a copy of your response by 9/28/2009. Thanks!

R. Dale
1450 E. Edgecliff
Sandy UT 84092

Office Phone:801 5580065
Cell Phone: 801 5580065

Email Address:medicinemom@q.com

SUBJECT:
This was sent from a different email address than before.

Governor Herbert,
Please do all you can to stop this Nevada water grab. What is the rush?

The air quality in Utah is bad enough. Do you and your kids and grandkids not have an intermitant cough as is?

Water diversion projects like this have been done in other parts of the country and other parts of the world. The results have been exactly what has been predicted: more dust, more pollution, and more disease.

In California where the Owens Lake was drained to supply Los Angeles with water the now dry lake bed has become the largest source of particulate matter air pollution in the United States.

For the small towns, ranchers, wildlife, and plant life in the West Desert there is no such thing as excess water. For many of them the proposed pipeline agreement is a virtual death sentence. But the rest of us will see our beautiful vistas obscured and our economy and public health imperiled, all for more fountains, urban sprawl and golf courses in Las Vegas.

Stopping this water grab would give you a great reputation as a man of action who cares about the people.

Robin Dale, PA-C, MS Medicine and Mother
Sandy, UT

Print View

From: "Burrows, Brett" <Brett.Burrows@vacationclub.com>
 To: <snakevalley@utah.gov>
 CC: <snakevalley@water.nv.gov>
 Date: Thursday - August 20, 2009 9:29 AM
 Subject: my opinion

to whom it may concern:

I figured I would voice my opinion even though I live in Salt Lake City. The issue I have is that I camp and explore Great Basin National park and surrounding areas (as does my family). I am concerned for several reasons-mainly 'dust storms' and lack of water killing plants and animals (what was the area of California where they did something similar and it turned into a desert? haven't we learned ANYTHING from when California did it to the 'salton sea' area (I think that's the area)???) .

My second concern is WHY are we giving Las Vegas more water? Las Vegas wastes an incredible amount of water so why should we give them more water to just waste more? when you look at satellite photos or even mapquest etc photos of lass Vegas just how many people have HUGE WATER WASTING pools (water evaporates in the heat right? which means these people are 'constantly' refilling pools) and what about the huge resorts that have 'water parks' or 'water exhibits' (which resort is it that has hourly water shows? I wonder how much water they waste on a daily basis?) or how about making the huge number of hotels in town put low flow toilets (maybe they already have?) and other water saving features like not giving water to restaurant diners automatically, etc.

what I am saying is simple-lass Vegas VOLUNTARILY wastes huge amounts of water so, until and unless lass Vegas does something to reduce there water usage VOLUNTARILY why should we give them more water which will just be wasted also? Utah has a water program where they have the "Slow the flow, save H2O" and its actually done some good according to the news. so why should we lose a national park and kill off fields and animals in the desert just so Nevada can build more water wasting parks and pools and exhibits? LET LAS VEGAS FIGURE OUT THEIR OWN WAY TO SAVE WATER and make lass Vegas figure out their own way to 'slow the flow'. its a simple concept but the morons in lass Vegas would rather waste water than start a voluntary water saving program. so how about TAXING people with pools? or charging a LOT more for more than a 'normal average family' uses on a monthly basis? until they do something to HELP THEMSELVES why should I lose a national park to give them more water? its not fair to me or anyone else in UTAH that already has their own water saving programs.

that is MY opinion. even though some is 'repeated'.

Brett L. Burrows
 Vacation Ownership Advisor for
 Grand Chateau
 310 Bearcat Drive
 Salt Lake City, UT 84115

Print View

From: Con Thueson <conthueson@gmail.com>
To: <snakevalley@utah.gov>
Date: Wednesday - September 30, 2009 7:10 PM
Subject: Do Not Let Nevada Steal Snake Valley Aquifer Water

I am a resident of Bountiful, Utah. I am very concerned about the attempt by Las Vegas to take water from the Snake Valley Aquifer. First of all, I am concerned about the direct negative effects this may have on Snake Valley farmers, ranchers residents and wildlife. And secondly, I am concerned about the negative effects (dust storms, lowered air quality, etc.) that this may have on the Wasatch Front. More studies are needed to determine how much water, if any at all, can be safely drawn from the aquifer. Please do not let this action go forward at this time. Thank You,

Con M. Thueson
1230 Canyon Crest Dr
Bountiful, UT 84010

Print View

From: Ronni McDonough <ronni.mcdonough@gmail.com>
To: <snakevalley@utah.gov>
Date: Wednesday - September 30, 2009 3:40 PM
Subject: Snake Valley Water

It seems nothing short of madness to even consider syphoning water from an already arid desert valley to meet the needs of Southern Nevada's inability

to curtail unrestrained population growth. This is not a deal where Utah wins. Please do not allow this to happen. Even if you have no regard for the people who live in Utah's west desert, you surely must care about the health and well being of your children and grandchildren who are living along the Wasatch Front. Our air quality is bad enough without adding to the existing pollutants the dust bowl conditions that will continually

blow our way if we allow the proposed pipeline to go through. God gave us brains, I think he intended for us to use them.

Thank you for giving us a chance to voice our concerns,

Ronni McDonough
1997 South 800 East
Salt Lake City, UT 84105

Print View

From: "Joseph W. Bateman" <seagel_inc@yahoo.com>
To: <snakevalley@utah.gov>
Date: Sunday - September 27, 2009 4:28 PM
Subject: Snake Valley Project

As a resident of Salt Lake City, who is downwind of the Snake River Aquifer, I oppose the deal of shipping water 300 miles to Las Vegas. Withdrawing water from this ancient aquifer could have drastic effects on the land above the aquifer, such as drought and dust that would blow towards the Salt Lake Valley. I would like more studies to determine the true impact of pumping the water that addresses the long term impacts on the aquifer as well as the impacts on the Salt Lake valley. In addition, this is just a short term solution to Las Vegas' water needs. Thanks for your time and consideration in this matter. Joseph Bateman 975 E 400 S, Apt. 18, Salt Lake City, Utah, 84102

Print View

From: brian moench <drmoench@yahoo.com>
To: <snakevalley@utah.gov>, <snakevalley@water.nv.gov>
Date: Sunday - September 27, 2009 10:52 PM
Subject: Las Vegas water pipeline

Dear Sirs:

Please add these comments to the official record.

The Utah Physicians for a Healthy Environment is a volunteer organization of physicians and consultants from other scientific fields like toxicology, biology, engineering and ecology. Our mission is to protect public health from the consequences of environmental degradation in Utah. We are very concerned about the proposed agreement allowing a pipeline to drain aquifers in the West Desert and ship the water to Las Vegas. So far the agreement, statements from the agencies of both states and many key elected officials appear to ignore in total, the potential for serious public health consequences.

Every resident of the Wasatch Front is all too familiar with the poor air quality that we experience about 20% of the time. Medical research is steadily expanding our understanding of the health consequences of air pollution. We have known for many years that air pollution causes the same kind of systemic inflammatory response as is caused by exposure to second hand cigarette smoke. The clinical manifestations are virtually identical.

Our current levels of air pollution cause the average person about the same health consequence as if we all lived with an active smoker or one fourth as much as if we ourselves smoked and that includes our children. The spectrum of pollution caused disease includes increased mortality rates from all causes in both adults and children, accelerated heart and lung disease, more hospitalizations, strokes, blood clots in the legs and lungs, permanently stunted lung development in children, more birth defects, premature birth, low birth wt. syndrome, and miscarriages.

In the last few years it has become well established that air pollution causes genetic damage in human embryos leading to a myriad of diseases later on in life including cancers, diabetes, atherosclerosis, immunosuppression, diminished intelligence and even Alzheimer's dementia.

Studies of even short term air pollution events demonstrate increased community wide mortality rates for as long as 30 days after episodes of pollution that last less than 24 hours and impaired lung function even in healthy people that can last at least a week after a short term pollution episode has ended. We all have observed significant dust pollution from the West Desert prior to storms moving into the state. If the Las Vegas water pipeline is built this phenomenon will become much worse as will all of the above mentioned health impacts to Utah residents.

Nevada soils however contain unique threats beyond desert dust. Mixed into Nevada soils are significant concentrations of some of the most toxic substances on earth. On a per weight basis mercury is the second most

toxic substance after plutonium, causing brain and neurologic damage even at unimaginably small concentrations. It is deposited ubiquitously throughout the environment because it is carried into the global atmosphere primarily from the stack emissions of coal power plants. It is also released during the smelting process at gold mines. Most of the gold mines in the country are in Nevada and the mercury from those mining operations concentrates in the Great Basin. Testing by the US Geologic Survey of 300 streams in the country revealed mercury contamination of every fish tested. The Great Salt Lake already has the highest concentration of mercury of any inland body of water in the United States.

Erionite is a fibrous mineral similar in microscopic configuration to asbestos and in fact causes the same kind of deadly, mesothelioma cancer that asbestos does. Erionite is found in the residue of weathered volcanic rock and it is widely distributed throughout Nevada soils. In some parts of Turkey, where it exists in high concentrations, it is the leading cause of death.

Nevada soils also contain residual radioactive isotopes from the over 900 nuclear bomb detonations that occurred in Nevada from 1951 to 1992, specifically americium, plutonium, uranium, cobalt, cesium, strontium and europium. Most of these elements are alpha emitters. One millionth of a gram can yield 1,000 alpha particles per day and each alpha particle carries over 4 million electron volts. It takes only 6-10 electron volts to break a DNA strand. This means these radioactive elements can all cause cancer and chromosomal damage especially when inhaled or swallowed even in minute quantities, like one millionth of a gram.

Valley Fever, or coccidioidomycosis, is a difficult to diagnose, sometimes chronically debilitating, occasionally fatal, fungal disease that has quadrupled in occurrence in the last ten years in some Southwestern states. It is a greater threat to immunosuppressed patients, diabetics and pregnant women. One gram of Nevada soil can contain a billion microorganisms that can carry this and other serious diseases when it becomes airborne.

As mentioned above, the storm track already brings dust from the Great Basin Desert into our airshed on a regular basis, already impacting public health in Utah. But the fragile and struggling native desert vegetation that keeps this from being even worse is already under assault from the hotter, drier conditions of climate change. Climate scientists' projections for further temperature increases and less precipitation in the decades to come are nothing short of frightening.

Meanwhile the aquifers of central and eastern Nevada and western Utah provide the main lifeline for desert vegetation in an area the size of the state of Vermont. Nevada water officials claim they will only pump "excess" water, but at the same time they acknowledge the projected water table drop will be anywhere from 50 to several hundred ft. well below the reach of most desert plants.

Nevada authorities also claim that the consequences of groundwater pumping cannot be known prior to actually removing the water and then offer the assurance that if the results look bad to them they will stop or offer compensation. That's like saying the consequences of someone pushing you off a thousand ft cliff cannot be known until after you hit the ground, but if the results look bad they will offer you first aid and promise not to do it again.

Water diversion projects like this have been done in other parts of the

country and other parts of the world. The results have been exactly what has been predicted: more dust, more pollution, and more disease.

A water diversion project drained 90% of the Aral Sea in Uzbekistan. Tens of thousands of people have been displaced and the life expectancy of residents who remain downwind of the dust bowl, has dropped by four years due primarily to increased rates of throat and esophageal cancers. In California where the Owens Lake was drained to supply Los Angeles with water the now dry lake bed has become the largest source of particulate matter air pollution in the United States.

For the small towns, ranchers, wildlife, and plant life in the West Desert there is no such thing as excess water. For many of them the proposed pipeline agreement is a virtual death sentence. But the rest of us will see our beautiful vistas obscured and our economy and public health imperiled, all for more fountains, urban sprawl and golf courses in Las Vegas.

We trust that you will act aggressively to defend Utah citizens from this ill-conceived proposal with such profound and likely irreversible consequences.

Sincerely,

Dr. Brian Moench

President, Utah Physicians for a Healthy Environment (UPHE)

Other UPHE members

Dr. Anthony Faber

Dr. David Crimin

Dr. Richard Kanner

Dr. Stephen Shuput

Dr. Cris Cowley

Dr. Maunsel Pearce

Dr. Scott Hurst

Dr. Howie Garber

Dr. Brooke Jennings

Debra Hobbins, RN

Marion Klaus, PhD

Kathy Van Dame

Randy and Stephanie Colquitt

Steve Erickson

Dani Babbel

Scott Williams

Robin Dale PA-C, MS Medicine

Joel Ban

Steven Seftel

Joan Gregory

Print View

From: Juan Arce-Larreta <juan231027@hotmail.com>
To: <snakevalley@utah.gov>
Date: Wednesday - September 30, 2009 1:11 PM

As a parent of three living in Davis County I am very concerned about the long term health of my children. Already facing numerous additional airborne health threats including pollution from numerous refineries lying just west of my home, extensive dust from gravel pits to the southwest, heavy congestion in our area along I-15, and dust rising from existing dried beds of the Great Salt Lake, I believe that drying aquifers in the west desert will result the creation of a dust bowl situation that will bring only more harmful particulates to the area. With more and more threats to the great salt water levels including growth of population along the wasatch front and proposed industrial expansions that may use hundreds of thousands of acre feet of lake water I imagine that threats of other airborne particulates from dried lake beds may, but definitely should not, already be in the future. Please do not take "any" action that may dry areas such as the west desert or the Great Salt Lake and subsequently lead to an unhealthier home in which to raise my family.

Sincerely,

Juan C. Arce-Larreta

677 East 50 North

NSL, UT 84054

801-936-1235

Print View

From: CLARE GILMORE <clare.gilmore@msn.com>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 7:23 AM
Subject: the agreement

This is a plea from a concerned resident. A resident who is already finding the air in our valley difficult to breathe.

The Snake Valley water allocation agreement is not only unfair to Utah but will be horrifically unhealthy. You must stop the current process and take the time to thoroughly study not only the fine details of the agreement but the water quantity of the aquifer and potential damage to the air quality of the Wasatch Front.

Your fellow Utahans depend on you to craft a fair, scientifically based agreement. Protect our health.

Thank you,

Clare Gilmore

Print View

From: <mbwhitt@aol.com>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 7:28 AM
Subject: Snake Valley Water

Dear Governor Gary Herbert and the Utah Department of Natural Resources staff,

???? After watching Ken Burns documentary on the National Parks, I am struck by how fortunate we are that Theodore Roosevelt and others thought of future generations and not of immediate economic gains when deciding to preserve Yosemite National Park and the Grand Canyon.

???? I? believe that it is in Utah's best interest to thoroughly study the environmental impacts of any water agreement with Nevada.? I am concerned about air quality in the Wasatch front being negatively affected by a drying desert.? I am concerned about Great Basin National Park being negatively affected by a reduction in water to its forests.? I am concerned about ranchers in the west desert maintaining their agricultural way of life and their contribution to preserving the land for fututre generations.

???? Please do not make a short-sighted decision to benefit an over-sized city in the desert (Las Vegas).? Lets live within our means, our water means, and keep water where it belongs.?Utah's people, plants and animals depend on it.

Thank you for your consideration.

Sincerely,

Mary Beth Whittaker

4084 Foubert Avenue

Salt Lake City, Utah 84124

801-278-7453

Print View

From: "Wilde, Jackie K CIV USA" <jackie.wilde@us.army.mil>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 8:00 AM
Subject: Vote No on this proposal

We have a family ranch in Skull Valley Utah and are worried that taking water from the aquiver will negatively affect our ranch. Please keep Utah water in Utah and conversely stop sending in waste from other states/countries and storing them in Tooele County. We are not the water bill payer for Nevada nor should we be the waste stock pile for others.

Jackie Wilde (Orrs Ranch)

Print View

From: Maia Taylor <maiataylor@gmail.com>
To: <snakevalley@utah.gov>
Date: Wednesday - September 30, 2009 12:38 PM
Subject: Proposed Pipeline

To Whom It May Concern,

As a resident of the arid Southwestern United States, our inability to adapt to the water issues we face at various times deeply concerns me. Nevada

and

Utah are the two driest states in the U.S., yet these states continue to expand whereby greater and greater amounts of already-scarce water are called for. Instead of changing our patterns of water consumption, energy use, and urban expansion, we seek out increasingly absurd ways to perpetuate

more

our outdated methods; this practice has only found us in progressively dangerous positions. Due to this habit, Las Vegas, a seeming-oasis in the middle of the driest part of the United States, now runs the risk of running

two

out of water entirely. Rather than reducing the excessive water use of the city, politicians have proposed building a pipeline to tap not one, but two aquifers.

principles.

I am a student in my final year of ecology at the University of Utah and would like to remind those who read this letter of a few of its Ecology is defined as the study of organisms and their environment. This implies that all things have some type of interconnection and rely on one another for some aspect of their livelihood. With that in mind, I would like

the

to state again that Nevada and Utah are the two driest states in the U.S. Aquifers, as you most likely know, are underground deposits of water, also known as groundwater. This water takes millions of years to build up and remains in delicate balance with the surrounding land, vegetation, and climate. If people drain aquifers, the land is left without water to speak of which results in death of plants, followed by the death of fauna, and generally relegates the region to a "wasteland." The desert land around

a

Snake Valley and Spring Valley aquifers rely a great deal on these two sources of water; without them, the areas will be severely damaged. Land subsidence will likely occur, in which the disappearance of water creates

occurred

weak foundation and the land sinks (the San Joaquin Valley of California and

Mexico City are prime examples of this). The nuclear testing which

in Nevada during the twentieth century left vast deposits of hazardous materials on the land. Aquifer depletion will allow these toxins to blow into the air as particulate matter and will most likely be inhaled. I hope that no one has forgotten the high counts of cancer which occurred in the

areas surrounding the test sites after the aforementioned years. As a resident of Salt Lake City, I am alarmed that the air stream blows directly into this valley from Nevada. I can't think of a single person who would like to become a new generation of Downwinders.

I have never encountered a single individual who argues against the inaccuracy of the Colorado River Compact and how this has damaged the West, particularly in recent decades. The Compact is antiquated at best yet we keep reacting emotionally at the idea of redistributing the water rights. The Colorado River no longer reaches the Pacific Ocean; this is not any type of secret, but I feel it necessary to remind people of this fact. The Colorado River is the most managed river in the world and it does not reach the ocean any longer. Mexico does not receive their entire allotment of water. We are literally depriving other people of water. And now Las Vegas wants to tap into the Snake and Spring Valley aquifers to perpetuate their city in a desert? I feel infuriated at this prospect and how far it has come. Las Vegas will only find itself in worse circumstances than it is now should this irrational water consumption go unchecked. We cannot continue to support this type and amount of waste in any capacity.

When we hear the word "sustainable" we must ask ourselves four questions: what is sustainable; who is it sustainable for; for how long is it sustainable; at what cost does this sustainability come? The proposed pipeline can answer none of these questions with any assurance. The pipeline aims to give Las Vegas more water since the reservoirs which supply the city hold less and less water as time goes on. This groundwater use will supply only Las Vegas with a limited amount of water for the future. The groundwater will only last a limited number of years. I do not feel comfortable offering an estimate given that aquifers take millions of years to regenerate. The pipeline will deplete natural water sources the surrounding environment has relied on for millions of years, create land subsidence, and dry the surrounding areas which will lead to hazardous particulate matter lifting into the air which will most likely blow directly into Salt Lake City, the most densely populated area in Utah. I urge you to reconsider the Snake Valley Pipeline proposal. This pipeline is an arrogant use of power and a fraudulent representation of the predicaments facing the Southwest. The proposed Snake Valley Pipeline will only create more and greater problems for the future adding strain to the healthcare system, Western water rights, and creates a precedent for encouraging outrageously

Sincerely,
Maia Taylor
Co-director, Sustainable Environments and Ecological Design

Print View

From: Daniel Craig Mccool <dan.mccool@poli-sci.utah.edu>
To: "snakevalley@utah.gov" <snakevalley@utah.gov>
CC: Daniel Craig Mccool <dan.mccool@poli-sci.utah.edu>
Date: Wednesday - September 30, 2009 12:35 PM
Subject: Snake Valley

Thank you for the opportunity to comment on the proposed Snake Valley Pipeline. My concerns focus on the "environmental escape clause," i.e. the language in the proposed settlement that purports to protect the environment of Snake Valley if the pipeline is built and then evidence shows that it is doing demonstrable damage to the flora, fauna, soil, and water table in the area. Las Vegas argues that this clause protects the Snake Valley from potential future harm. However, a dose of political reality demonstrates the absurdity of that claim. If Las Vegas builds this pipeline, at a cost of several billion dollars, and then we discover that the dire predictions of irreversible environmental damage actually come to fruition, it will be too late to reverse our actions. Las Vegas wants to build this pipeline so they can provide water for sprawling suburbs. The cost of the pipeline is enormous; such projects always cost more than their estimated cost, so it is not unreasonable to assume that this pipeline will cost \$4 billion. Once that system is in place, there is no chance whatsoever that it will be abandoned if we discover that it is doing significant environmental damage to the area. No reasonable person would assume that Las Vegas, upon a showing that the pipeline is actually having the detrimental impact that so many are predicting, would suddenly abandon the pipeline, forsake its enormous investment, and tell all the people living in those suburbs that they no longer have a source of water. That will not happen. Instead, what will happen is that Las Vegas will first deny there really is much impact, then express its regrets, and then tell Utah we should get a bill through Congress forcing the federal government--the American taxpayer--to pay for mitigation and damages. The long-term losses for Utah, rural Nevada, America's public lands in that area, and the American taxpayer will be staggering.

This proposed pipeline actually represents an opportunity, in two ways. First, the pipeline must be opposed by a broad-based coalition of grass-roots organizations and individuals that includes ranching and farming groups, environmental groups, fiscal conservatives, people in Las Vegas that don't want to pay for a big wasteful government boondoggle, and protectors of public lands in Nevada and Utah--including the agencies that manage them. Such a coalition would have the power and influence necessary to take on Las Vegas and win the battle against this pipeline. Second, this is an opportunity for Las Vegas and other western cities to start thinking about a new hydrological reality that forces them to live within their means. The notion that Las Vegas, and other western cities, can grow infinitely, in a world of finite resources, is illogical and essentially destructive. We now live in an age of limits, and the water problem facing Las Vegas is an opportunity to reexamine existing beliefs, assumptions, laws, and policy, and develop a new approach to sustainable cities and a viable economy that does not destroy its ecological foundation. It is also time to question the validity of the 1922 Colorado River Compact and consider significant revisions. It should be clear to all parties that the current system of water laws and policies, designed in another, vastly different era, no longer serve the public interest. Building pipelines will not solve our problems; we can only accomplish

that by living within our ecological means.
Thank you.
Dan McCool

Print View

From: Suzie Holland <hollandsuzie@yahoo.com>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 8:15 AM
Subject: snake valley water agreement

I don't agree that Nevada should be allowed to drill for water from the underground aquifer in Snake Valley. If the water table draws down too far we will not be able to stop them from continuing to use water unless we take them to court which would take years. In the meantime the air quality in Utah will deteriorate past its already unhealthy levels. Let Nevada learn to control its growth and live within its means.

Suzie Holland
7859 Nantucket Drive
SLC, UT 84121

September 30, 2009

Snake Valley Agreement
c/o Utah Department of Natural Resources
Division of Water Rights
1594 West North Temple, Suite 220
Salt Lake City, Utah 84114

To whom it may concern,

Thank you for the opportunity to submit comments on the proposed agreement between the states of Utah and Nevada regarding the management of the Snake Valley Groundwater System.

I am the biologist who wrote the Status Review (Jones 2007) on which the Petition to list the least chub (*Iotichthys phlegethontis*) as a threatened species under the Endangered Species Act (ESA) was based. As such, the bulk of my comments on the proposed water sharing agreement focus on how the transfer of significant amounts of ground water from the Snake Valley hydrographic basin will impact this species, which is likely to be listed under the ESA before pumping would commence around 2019.

However, I wrap up these comments by pointing out specific problems and issues with some of the details of the proposed agreement, primarily from a scientific and practical management standpoint. In addition I close these comments with more general arguments as to why the pursuit of this agreement is not in the best interests of the ecosystems and people of Snake Valley, Millard and Juab counties, and the state of Utah.

1.0 The impacts of ground water diversion on the least chub

Background on the least chub

The least chub (*Iotichthys phlegethontis*) is a rare species of minnow, endemic to Utah and restricted to Utah's part of the ancient Bonneville Basin. It is found in shallow, freshwater marshes and ponds, fed by natural springs.

The least chub has experienced dramatic population and distribution declines throughout its range. This species has been extirpated from the majority of historic habitats where it once existed and currently persists in only a few isolated spring complexes along the Wasatch Front, the Sevier River basin and in Snake Valley. The main threats to the least chub populations include increased urbanization, water development, livestock impacts, and predation and competition impacts from introduced nonnative species. There are currently only six known, wild, extant populations of least chub, in addition to a handful of refuge populations established through transplant in various locations within the range of the species. Overall, the long-term success of the establishment of refuge populations has been mixed, with about a 50% success rate. The few wild populations we know of are not for a lack of looking. Over the last decade the Utah Division of Wildlife

Resources (UDWR) has undertaken over 120 surveys in what was considered to be the best suspected least chub habitats remaining. Still, only six wild, extant populations are known today.

Least chub listing effort

The petition to list the least chub (*Iotichthys phlegethontis*) as a threatened species under the Endangered Species Act (ESA) was submitted in June of 2007 by the Center for Biological Diversity, the Confederated Tribes of the Goshute Reservation, the Great Basin Chapter of Trout Unlimited, and the Utah Chapter of the Sierra Club. In October of 2008 the U.S. Fish & Wildlife Service issued the “90-day” Finding on this petition, which found that listing of the least chub under the ESA may be warranted, and which triggered a 12-month formal status review by the Service to determine whether listing of the least chub is in fact warranted. In the 90-day finding, the Service specifically cited as one of the chief threats facing the least chub the proposed groundwater pumping in Snake Valley by the Southern Nevada Water Authority:

“...(L)isting least chub as a threatened or endangered species may be warranted due to water withdrawal and diversion....the level of concern regarding negative impacts to spring discharge rates, and ultimately least chub habitats, from groundwater pumping is high.” Federal Register / Vol. 73, No. 200. Pp. 61011 and 61012.

The USFWS has until mid October to come out with the final decision as to whether to list the least chub as a Threatened Species under the ESA. There have been indications from inside the Service that the decision will be to designate the least chub a candidate species with high priority for listing.

General Impacts of groundwater withdrawal on the least chub

Predictable water levels have been identified as important in the life history of least chub (Lamarra 1982; Crist and Holden 1980). Maintenance of certain water levels is particularly key because levels must be high enough to allow the fish to migrate between springs and surrounding marshes as environmental conditions change. Not only can reduced water supply diminish the amount of least chub habitat, and thus the capacity of an area to support least chub, but lowered water levels may also cause niche overlap with other species. These overlaps may increase hybrid introgression and interspecific competition (Crawford 1979, Lamarra 1981, Mills 2004). Lastly, maintenance of water levels and discharge volumes is critical in preserving natural sediment transport processes, thereby maintaining underwater habitat configurations and reducing aquatic vegetation encroachment into sensitive spring areas.

Water levels in pools containing least chub that are spring fed (basically all the habitat currently occupied by wild least chub populations) are in turn dependent on stable, functioning aquifers that enable water tables near to surface to allow for consistent rates of spring discharge. Water development, especially ground water pumping, could

significantly lower the water table, possibly drying up or lowering the water level in springs and marshes populated by least chub.

Southern Nevada Water Authority's proposal

By far the most significant threat to the Snake Valley least chub populations is future water withdrawals from the Snake Valley aquifer proposed by SNWA. As is typical of most Great Basin valleys, the groundwater beneath Snake Valley is contained within two separate aquifers, one sitting on top of the other (Van Liew 2006). The upper aquifer, an unconfined aquifer, resides in the alluvial material formed from the erosion of the surrounding mountain ranges, and is typically referred to as the local water table. The lower aquifer is part of a larger hydrologic area known as the Great Salt Lake Basin, which consists of a regional confined (artesian) aquifer whose water is contained within the fractured carbonate rock that resulted from the formation of the Basin and Range province. SNWA proposes to access this deeper, confined aquifer.

A few hydrogeologic studies of the Snake Valley aquifer have already been conducted and shed light on the kinds of impacts the SNWA pumping project in Snake Valley might have on the three wild least chub population complexes found there. The most widely cited analysis was conducted by Kirby and Hurlow (2005), which in turn relies heavily on the research and predictions contained in the previous study conducted by the USGS (Schaeffer and Harrill 1995). Although total annual recharge of the Snake Valley hydrologic basin was previously estimated to be around 100,000 acre-feet a year (Hood and Rush 1965, Carlton, 1985, Utah Department of Natural Resources 2006), the Proposed Agreement between Nevada and Utah chooses to use the higher estimate of 132,000 acre-feet/year estimated by the Basin and Range Carbonate Aquifer Study (BARCASS) (more on this point later in these comments). Principle sources of recharge are snowmelt from the Snake Range to the West, and infiltration of precipitation and surface runoff throughout the topographically lower parts of Snake Valley (Hood and Rush, 1965, Carlton, 1985).

Kirby and Hurlow (2005) predict significant impacts to the Snake Valley aquifer due to the proposed groundwater pumping. The following is an excerpt from this study:

Withdrawal from the nine wells in western Snake Valley and from other wells in the proposed SNWA well system, especially those in Spring Valley, will significantly affect the dynamics and overall budget of the Snake Valley ground-water system (Schaeffer and Harrill, 1995). The effects cannot be precisely predicted with available data, but the following changes are likely to occur:

(1) Ground-water levels will decline in both the basin-fill and carbonate aquifers.

(2) Recharge to the Snake Valley ground-water system will decrease by the 25,000 acre-feet per year (31 hm³/yr) withdrawn from the SNWA wells and by 4,000 acre-feet per year (5 hm³/yr) that presently enters the Snake Valley ground-water system as underflow from Spring Valley to the west (Carlton, 1985). The

underflow will likely be eliminated due to reversal of current potentiometric surface gradients.

(3) Discharge at major springs will decrease by at least 10 percent, as indicated by the example of Twin Springs in northeastern Snake Valley (Schaeffer and Harrill, 1995). Discharge at other springs closer to the well field, such as the Big Spring complex in western Snake Valley, will likely decrease by a greater amount. [later in report Kirby and Hurlow cite Schaefer and Harrill, 1995 who predicted reduction or cessation of spring flow in Snake Valley due to proposed pumping].

(4) Evapotranspiration in Snake Valley will decrease by about 40 percent (Schaeffer and Harrill, 1995, p. 34). Although decreased evapotranspiration may result in more ground water available for withdrawal, the ecological impact of this decrease would be substantial and water rights at the affected springs could be adversely impacted.

(5) Subsurface outflow from Snake Valley, estimated at about 25,000 to 35,000 acre feet per year (31 - 43 hm³/yr) (Carlton, 1985), would be reduced due to reversal of potentiometric-surface gradients in Snake Valley. This reduction in subsurface outflow may eventually cause decreased discharge at important regional springs north and northeast of Snake Valley.

Time-step models of the effect of the proposed ground-water withdrawals on ground-water levels show downward deflection of the local potentiometric surface within Snake Valley (Schaeffer and Harrill, 1995) (figure 12). The magnitude of the modeled drawdown cone is greater than 100 feet (31 m) for parts of western Millard County near Garrison. Local ground-water level drawdown, near Baker, Nevada reaches 100 feet (31 m) just after the 10-year time step (figure 12). Sequential time steps show a broadening cone of drawdown, which extends up to 30 miles (42 km) east into Utah (Schaeffer and Harrill, 1995) (figure 12). Discharge at important springs in Wah Wah Valley and Tule Valley may also decrease. The ground-water model of Schaeffer and Harrill (1995) assumes a simplified regional aquifer system consisting of upper and lower layers, which correspond to the unconsolidated basin-fill and carbonate aquifers, respectively.

By far the most important “take home message” from Kirby and Hurlow’s study is that, once ground water pumping commences at wells at the base of the Snake Range, spring discharge at springheads throughout Snake Valley can expect to decrease by an amount and at a rate that is as of now impossible to predict. SNWA itself has already acknowledged that its Snake Valley pumping will affect springs and spring-dependent species, as well as groundwater dependent plant communities and riparian areas (GWD Final Scoping Package, as well as the Proposed Agreement). As all least chub populations in Snake Valley currently rely on constant, predictable spring discharge (even if very small amounts), one is only left to predict that the consequences of future ground water pumping could be, at the least significant, and at the worst catastrophic, for

this species in Snake Valley. The argument that the aquifer is a renewable resource is also in dispute: subsequent conversations with Kirby reveal that the water proposed to be pumped from these deep wells may have been put down in the aquifer in prehistoric times, and its possible the area's complex geologic structure, if shifting has occurred at all, could now carry mountain runoff laterally miles away before entering any aquifer (McDonough 2006).

One other point to note is that, even if SNWA is not granted the rights to pump Snake Valley's aquifer, it already has been granted the rights in adjacent Spring Valley. Hydrological studies have noted that reductions in the water table in the Spring Valley aquifer could also decrease the present flow of significant amounts of groundwater through the alluvial aquifer that connects to, and delivers additional ground water to, Snake Valley (Harrill et al. 1988, and BARCASS).

The USFWS own 1995 proposal to list the least chub as endangered (which was thrown out after the Least Chub Conservation Agreement and Strategy was written) cited the existing and foreseeable surface and ground water pumping conditions in Snake Valley at the time as already being a threat to least chub persistence: "[p]resent water withdrawals from surface and underground sources are estimated at 10% of the total yearly recharge rate... (t)hese rates do not appear to be threatening to least chub habitat. However, additional proposed wells in the southern part of Snake Valley and surrounding areas could lower the water table, resulting in drying up or lowering the water level in springs and marshes populated by least chub."

Of significance, in 1995 the amount of water withdrawals occurring at that time in Snake Valley were considered a problem for least chub, yet no mention was made of the SNWA proposal in the Federal Register, which could take up to an additional 41% of the aquifer's recharged water annually (assuming the actual recharge is in fact 132,000 ac/ft/yr, which is a matter of some dispute). If the pumping situation in Snake Valley in 1995 was seen as problematic enough to warrant an endangered listing for least chub back then, the current SNWA proposal should certainly be seen as something of a problem for the species now.

In summary, based on the research carried out to date and summarized above, the proposed ground water pumping in Snake Valley (and adjacent Spring Valley) by SNWA could potentially cause significant drawdown of the Snake Valley water table, with potentially severe repercussions for least chub and all aquatic species and wetland systems that rely on consistent spring discharge.

2.0 Specific comments on the Draft Proposed Agreement

The sections of my comments below are tiered to the numbered sections of the Proposed Agreement, and Appendix C.

Specific Comments on main body of Draft Agreement

3.0 Available Groundwater Supply (p.4) One striking problem with the Proposed Agreement is the casual acceptance, carte blanche, of the BARCASS estimate of 132,000 acre-ft/year of recharge into the Snake Valley. As mentioned previously, a number of previous studies had estimated total annual recharge of the Snake Valley hydrologic basin to be around 100,000 acre-feet a year (Hood and Rush 1965, Carlton, 1985, Utah Department of Natural Resources 2006). In fact, BARCASS itself cautions that its estimate of Snake Valley's annual discharge, or available groundwater supply, is highly uncertain and not reliable (with a confidence rate of only 67%), conceding that it might well be 30,000 afy too high. Moreover, the Draft Agreement similarly concedes that the available groundwater supply for Snake Valley is uncertain, so uncertain that the Nevada State Engineer's hearing on Snake Valley will be postponed until 2019 so more data on available groundwater can be collected. It does not make sense to use such an admittedly uncertain, unreliable figure as the basis for calculating the amount of groundwater available for apportionment and dividing it between the two states at this time. At the very least, the Draft Agreement should eschew any commitment to a particular figure now and should lay out a more concrete and equitable method for adjusting the number at a later date. As written, Nevada has veto power over adjusting the available groundwater supply downward, leaving Utah with little recourse should additional scientific measurement and study confirm that 132,000 afy is inappropriately high.

And on top of the uncertain amount of groundwater that we are starting with in Snake Valley, the 132,000 does not account for and subtract interbasin inflow to Snake Valley from Spring Valley. BARCASS estimated that the amount of inflow to Snake Valley from Spring Valley is 49,000 afy. This inflow makes up a major portion of the BARCASS estimate of available groundwater supply in Snake Valley. But the Nevada State Engineer already has permitted Spring Valley to be fully appropriated by SNWA. Thus, SNWA already has been granted the right to pump groundwater from Spring Valley that presently flows into Snake Valley and makes up much of Snake Valley's available groundwater supply. So, the only prudent estimate to use from BARCASS would be 132,000 afy less the 49,000 of inflow from Spring Valley, which already has been accounted for in Nevada, resulting in a true available groundwater estimate of **83,000 afy**.

Yet an even more disturbing factor in the estimation of available groundwater in Snake Valley is the absence of any mention of current and future climate change this part of the region may encounter, and what effect this may have on future amounts of groundwater in the hydrographic basin.

During the past century, global surface temperatures have increased by 1.1°F, but this trend has dramatically increased to a rate approaching 3.6°F/century during the past 25 years, the fastest rate of warming in the past 1000 years (IPCC 2007). Temperatures during the latter period of warming have increased at a rate comparable to the rates of warming that conservative projections predict will occur during the next century with continued increases of greenhouse gases. As global warming progresses, maximum high and minimum low temperatures are expected to increase, as are the magnitude and

duration of regional droughts (IPCC 2007). Thus, the ecological effects of warming temperatures and droughts associated with global warming are likely to impact the Great Basin Desert. Among those effects are decreased duration and depth of winter snowfall (IPCC 2007), earlier spring runoff and **decreased water availability**, decreased productivity and cover of herbaceous vegetation and thus increased soil erosion, and unprecedented rates of vegetation shifts due to die off, especially along boundaries of semi-arid ecosystems (Allen and Breshears 1998, Davenport et al. 1998, Wilcox et al. 2003).

Of particular concern should be the potential for future declines in snowpack in the Deep Creek and Snake Mountains, which are the chief source of groundwater recharge into the Snake Valley aquifer. Discharge rates, in turn, are tied to a stable aquifer, which is in turn tied to recharge rates and pathways that are still not completely understood. However, if (for example 100 years from now) snowpack rates are, say, 20-40% less in these mountain ranges than they typically are today, one should assume this could have an impact on hydraulic heads tied to the deep carbonate aquifer that is dependent on snowmelt runoff. This prediction is not a mere guess: Hoerling (2006) recently examined temperature data collected by scientists' worldwide to inform a new assessment of climate change in Utah and Colorado. His analysis predicts a five degree rise in temperatures in this region by 2050, and perhaps as early as 2020. This will undoubtedly lead to a reduced snowpack in mountain ranges in Utah and neighboring Nevada.

It is mind boggling that the Proposed Agreement, purportedly written with sound science in hand and under guidance of scientists, has established an amount of available Snake Valley water, far into the future, without the slightest mention of what effect climate change might have on that future groundwater supply.

2.2 Specific Comments on Snake Valley Environmental Monitoring and Management Agreement (Appendix C)

RECITAL G. (p.1). Here it is stated that "The Parties desire to establish a consultative process by which to manage the development of groundwater by SNWA within Snake Valley," The fear that I have is this "consultative" process envisioned by the Draft Agreement appears cumbersome, expensive, ineffective, reactive, and unenforceable.

RECITAL H. (p.2). This recital continues a disturbing thread from the previous recital (G), in which the Parties agree that SNWA pumping "will result in changes to the existing hydrologic and biologic conditions" in Snake Valley. Specifically, Recital H goes on to state that "the safe yield doctrine...generally allows for...a reasonable amount of drawdown in the groundwater aquifer. Such appropriations necessarily impact the existing hydrologic system and captures discharge available to phreatophytes, streams and natural lakes." My question is, what level of drawdown will be reasonable for the least chub? Do SNWA and the State of Utah somehow have a priori knowledge that a certain level of drawdown in the water table will still be OK and allow for the spring discharge that feeds the least chub population sites? Or, rather, do Utah and SNWA think it is "reasonable" that three of the six known populations of this species (which will in all

likelihood be listed by the time pumping commences) will be extirpated when spring flows inevitably decline or cease?

RECITAL J. (p.2). Still following the thread above, this Recital states that “The Parties acknowledge that not all effects caused by the development of groundwater in Snake Valley are unreasonable.” I am eager to hear which effects Utah and SNWA think are “reasonable.”

RECITAL K. (p.2). Here, the Parties reiterate that they “shall rely on the best scientific information available...” If this is true, why is the Draft Agreement being signed now, before more data can come in from the test wells that were just appropriated by the Utah Legislature and built within the last year or so? Why the rush, in the face of lacking data?

Section 1. Statement of Intent (p.2). On page 2 of the Environmental Monitoring and Management Agreement, the document speaks of mitigating the effects of pumping on the hydrological and biological resources of Snake Valley. On this matter (mitigation), it has come to my attention that some of the local residents of Snake Valley concerned about the Proposed Agreement have been attending some video conferences with the Utah Department of Natural Resources to discuss the Draft Agreement. One point that has come up is the possibility that if pumping adversely impacts some areas SNWA would “create a refuge” for affected wildlife (ostensibly least chub, spotted frog, and the sub-globose snake pyrg, and longitudinal gland pyrg) and move them from their original habitat to another location further from the pumping.

This proposal is one that I believe most biologists would not support. First of all, in the hypothetical case of least chub transfer, where would SNWA propose to create such a refuge for the least chub? SNWA must keep in mind that the Snake Valley is the world’s current stronghold for least chub, and there is no other habitat that we know of, indeed anywhere in the Great Basin ecoregion, that can match Snake Valley in terms of outstanding least chub habitat quality. How do we know this? We know this simply because three of the six current, known, extant populations of least chub are found here. As the biologist who wrote the status review on which the current listing petition is based, I can say with authority that the Snake Valley habitats outmatch the other three locations we have left that still house wild least chub. The Mona population, by the Utah Division of Wildlife’s own admission, has been “written off” due to the failure to win the Mosquitofish battle there. At the Mills Valley population site, recent UDWR monitoring reports note that livestock damage at sites containing least chub in Mills Valley was “moderate to severe.” And the Clear Lake least chub population site, while in good condition, is in part a modified, man-made impoundment with plenty of exotic carp.

The point here is simply that, all evidence points to the Snake Valley spring-fed marshes and wetlands as being **irreplaceable** habitat for the least chub. Still, the UDWR is charged, through the Least Chub Conservation Agreement and Strategy, to in fact “back up” all six, known, wild populations of the chub (including the three in Snake Valley – Leland Harris, Gandy and Bishop Springs populations) through the establishment of two

separate refuge populations for each wild population to ensure genetic redundancy in case of catastrophic loss of any wild population.

If SNWA thinks the solution to the inevitable drawdown of the water table in Snake Valley that will likely result in diminished flow of the springs that feed the least chub marshes and ponds is to simply “create a refuge” somewhere and put the Snake Valley least chub there, it would I think be instructive for SNWA to first investigate what success the UDWR has had up to now locating suitable refuge sites for these three populations and successfully transplanting them for the long term. At the time of the writing of the listing petition (2007), UDWR had reintroduced least chub from Snake Valley to Deadman Spring (in 1995) in Fish Springs National Wildlife Refuge, but this transplant effort was declared a failure in 2002 when the UDWR determined the transplanted population was extirpated. The UDWR had transplanted the Bishop Springs population type to the Red Knolls refuge site (in 2005), where it is faring well. However, UDWR has not yet found a second suitable “back-up site” for the Bishop Springs Population. In 1987 least chub from Gandy Salt Marsh were introduced into Harley Saunders Pond but that transplant effort was declared a failure by 2004. The UDWR has not yet found a another suitable refuge site for the Gandy Population. In 1996, least chub from the Leland Harris population site were transplanted to Walter Spring in the Fish Springs National Wildlife Refuge. That transplant effort also failed by 2005, when that population was found by the UDWR to have been extirpated. UDWR has not yet found a another suitable “back-up site” for the Leland Harris Population.

On the whole, UDWR’s track record for successfully transplanting least chub into previously unoccupied habitat is not very good. On the eve of the listing petition, UDWR was batting only a 50% success record of extant, seemingly viable transplants. Given that, at the time of the listing petition, only one of those refuge populations (the Lucin site, established in 1989) was more than two years old, this certainly does not say much for the longevity of these refuge populations.

To be clear, the lack of numerous attempts to transplant least chub apart from what is discussed above stem from the fact that the UDWR simply cannot find high quality, non-degraded or human impacted, mosquitofish-free sites that are suitable to attempt a transplant of least chub into. At the time of the listing petition, the UDWR had conducted over 120 separate surveys for least chub across the state, at sites they thought would be suitable habitat, trying to find additional wild populations of the fish. These sites were presumably also assessed for their suitability for future transplants. Yet, we still have only a handful of sites where establishment of refuge populations has been attempted (and, again, so far with limited success).

This all brings us back to the question of how SNWA can, with a straight face, casually state that it can create additional refuge sites for impaired wildlife and transplant them there, so it won’t matter if the existing occupied habitat is destroyed when the groundwater levels inevitably drop. And let’s be clear about one more thing: I hope that in this misguided mitigation plan I was told of, SNWA is not proposing to, per se “create new wetlands,” but rather I assume SNWA will identify wetlands not already occupied

by endemic wetland species and announce some form of protection for the site. Actual “creation” of new wetlands where there previously were none is a much less proven, much more difficult, risky, and expensive option for mitigation. If SNWA is seriously considering a mitigation scheme of this regard, I would ask SNWA to give examples of previous, successful wetland creation from scratch into which populations of endangered species were put and monitored for successful population viability of the species for the long term. I would be extremely interested if SNWA could come up with any examples, because I for one am not sure that any do in fact exist. Yet another question to be answered would be, if SNWA is in fact intending to somehow create refuge wetlands from scratch where there were none before, which water source would be used? (the thought of bringing some of the water being piped from the Snake Valley aquifer overland to a mitigation site is, of course, absurd on its face).

Section 4 – Monitoring. Section 4 appears to include the monitoring of existing permitted users’ groundwater withdrawals in Utah, but existing permitted users are not signatory to the Management and Monitoring Agreement. I would be interested to hear how senior water rights holders in Utah are bound to the terms of this agreement?

In Section 4.1.1 on page 6 of Appendix C, the Draft Agreement speaks of the “frequency of data collection to ensure early detection of effects resulting from SNWA groundwater withdrawals in Snake Valley.” Once again, I point out that some degree of certain impacts are simply referred to as a “given” in this document.

Section 5 – Management Response and Operation Plan. regarding Section 5.1.1 (p.7), will “management response actions designed to **avoid** the indicated effects” be implemented **before** “management response actions designed to **minimize,....or mitigate**, the indicated effects”?

Section 5.1.3 (p.7) appears to give the Management Committee with its two Utah and two SNWA members absolute discretion over implementing any or all parts of the Management and Monitoring plan, regardless of the specific provisions of the Agreement, including early warning indicators, the severity and relative importance of the pumping impacts, etc. Is this really the best course of action?

Section 5.2 (p. 8) states that “the Parties agree that no management response action may be selected which...causes the existing viable population of a species to decline to an extent which necessitates the species come under the purview of the Endangered Species Act, (16 U.S.C. 1531, et. seq.) including Candidate Species provisions. In light of the fact that federal listing of the least chub under the ESA appears imminent (and this in the absence of any SNWA groundwater withdrawal in Snake Valley as of yet), this is an interesting statement that the Draft Agreement makes. It would seem that, if spring discharge begins to slow at any of the least chub population sites after pumping commences, the only course of action would be to cease pumping in the vicinity. Correct? (and on that note, if the least chub springs and marshes do dry up, what good would “acquisition of real property and/or water rights dedicated to the recovery of the Special Status Species within the current and historic habitat range within the Tier I

and/or Tier II Monitoring Areas” (p.9) do? See above comments about trying to create refuge sites for least chub).

Section 5.3 (and also Section 13) sets up cumbersome, expensive, and lengthy processes in cases of disagreement by the Technical Working Group resulting in delays in any actions to address adverse impacts, including reversing SNWA commitments in Sec. 5.1.3 to protect endangered, threatened and sensitive species and by the Management Committee resulting in a non-binding recommendations.

Section 6 – Data Quality Requirements. Section 6 provides for quality assurance/quality control in the collection of hydrologic, biologic, and air quality data in Utah's Snake Valley, a welcome improvement to data collection under the larger NV/UT Agreement.

Section 8 – Analytical Models. Section 8.1 provides for the mandatory inclusion of a regional groundwater flow numerical model in the Management and Monitoring agreement, but does not mandate its use in implementing the provisions of the agreement.

Section 12 – Funding. This agreement places the financial burden and the burden of proof on the Utah rancher, farmer or city/water district. Rather than having Utah as a partner, this Agreement requires that the rancher appeal directly to the Southern Nevada Water Authority. If SNWA disagrees with the damages, the next step is a panel. If the panel disagrees, the next step is the courts at the expense of the damaged Utahn. The State of Utah will not step in to protect its rural citizens financially or otherwise in the agreement. It is reasonable for SNWA to guarantee a multi million dollar bond to protect rural Utahns in the legal process for enforcement, compensation, and legal fees.

There is no guarantee for funding in this agreement for critical monitoring that would detect impacts. If monitoring is not funded (except for SNWA responsibilities: 4 required in this agreement) USGS has 8 that could be dropped and UT has many as well. This agreement does NOT require SNWA to stop pumping if the monitoring is not funded and discontinues.

Appendix 1 – Biological Monitoring. The Nature Conservancy's Conservation Action Planning (CAP) process is a good one and I support its use in this monitoring plan.

In Section 1.1.2 of Appendix 1 of the M&M Agreement (p.2) , it notes that the “sub-globose snake pyrg, and longitudinal gland pyrg are not currently monitored.” The Monitoring and Management Agreement should consider more extensive surveys and monitoring of these two mollusks, as the USFWS recently (August 18) reported in the Federal register a positive 90-day finding on the petition to list both of these species under the ESA.

Regarding Section 1.2 of Appendix 1 of the M&M Agreement (p.2), it states, “in the phreatophytic plant community south of Gandy Salt Marsh, a sufficient number of permanent transects will be established and annually sampled to track composition and cover at the alliance level.” Why are phreatophytes being monitored in only one

location? It scarcely matters what SNWA and Utah consider “a sufficient number” of transects to be in this case.....they are sampling only one area. This is known as pseudoreplication.

What do the highlighted (in grey) rows in Tables 1.1 and 1.2 (p. 2-3) mean?

Appendix 3 – Air Quality Monitoring. The Wasatch Front already experiences numerous compromised air quality days that affect the health of its citizens. The decrease in vegetation acknowledged in the Draft Agreement, as many studies indicate from the Owens Valley groundwater mining experience, will increase air pollution significantly along the Wasatch Front, further threatening its citizens’ health.. And as we have seen from the experience with Los Angeles and Owens Valley, mitigating for this kind of air pollution caused by desertification can run into the billions of dollars.

3.0 Closing Thoughts

I believe that the proposed agreement with the State of Nevada over the division of the Snake Valley Aquifer could potentially result in an unmitigable disaster, not only for the least chub, but potentially also for dozens of other rare and important native species that rely on functional wetlands of Snake Valley, as well as the human communities that live in Snake Valley.

In short, the Draft Agreement seems to be based on more assumptions than solid facts. The recharge estimate of 132,000 acre feet/year is optimistic, especially in light of only 67% confidence of BARCASS in its own estimate of available groundwater, in addition to 15+ studies that indicate recharge is closer to 100,000-110,000. The absence of any mention of how future climate change could potentially diminish the amount of available water to be divvied up between the states is striking.

This agreement acknowledges outright that groundwater withdrawals **will** affect plants, seeps, springs, lakes and flows to other basins thereby severely impacting the native species that rely on those systems functioning as they have historically. This is not to mention that the demise of these systems will also lead to the depreciation of other segments of Utah’s rural economy - namely livestock growing, farming, hunting, fishing and outdoor recreation. This Draft Agreement should not be signed until all projected impacts to the environment are stated, alongside models that are built which should include:

- Projected declines to groundwater tables stated in feet at 3, 5, 10, 15, 20, 50, 75, and 100 years out.
- Specific areas impacted and declines stated as noted in bullet above. The available science is clear that water table declines closest to the Nevada wells will be greatest.

In closing, by entering into this Proposed Agreement with an uncertain (and “high end”) estimation of recharge rates and available groundwater to share (and which accounts for

climate change in no way what-so-ever), and with the a priori admittance that this scheme **will** negatively impact the irreplaceable and fragile ecosystems of Snake Valley, the state of Utah is playing fast and loose with it's natural heritage. Utah is jumping into a bad decision and hoping that the impacts won't be all that serious, or perhaps we can "catch them" in time and somehow mitigate the worst of the impacts. This is taking a serious gamble on Snake Valley's health and future. And I think we all know which of the two states is better at gambling.

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Print View

From: <ileneferris@gmail.com>
To: <constituentservices@utah.gov>
Date: Tuesday - September 29, 2009 3:38 PM
Subject: Snake Valley Agreement

Dear Governor Herbert,

Please do not sign the Agreement for Management of the Snake Valley Groundwater System. There is no surplus water to be exported. This deal would result in drying up all the wetlands in the Valley - area farming, wildlife and recreation would be devastated. We could have tons more cancer and other related illness because of dust storms.

There is no urgency to approve this deal. Citizens should have the opportunity to review the entire project.

I am also writing for Darwin P. Leavitt 131 S. 200 W. Hurricane, UT 84737 who agrees with me. dbleavitt65@q.com

Ilene Carter Ferris
2081 Wilmington Avenue
Salt Lake City UT 84109-1156

Print View

From: paul gaia <paulgaia@hotmail.com>
To: <snakevalley@utah.gov>
Date: Wednesday - September 30, 2009 10:06 AM

To Whom It May Concern:

I am opposed to any allocation of the water in the Snake Valley. I have several reasons for my opposition. The first is for the health of my family and the health of my neighbors. I am concerned that if the water table is drawn down in the aquifer that the air along the Wasatch front will become even more unhealthy than it already is. There will be additional dust that will be blown into the air when a storm comes through the Snake Valley. When this dust is blown into the air and settles onto our snow pack in the mountains the snow melts faster. This may not only cause flooding, but will also impact the citizens of the Wasatch front economically by negatively affecting the ski industry. Does Utah want to be known as the "greatest snow on earth" or the "dirtiest snow on earth?" Lastly, allocating the Snake Valley water may cause water shortages if the Salt Lake aquifer is not able to be recharged.

Sincerely,

Paul Gaia, concerned citizen

Hotmail® has ever-growing storage! Don't worry about storage limits.
http://windowslive.com/Tutorial/Hotmail/Storage?ocid=TXT_TAGLM_WL_HM_Tutorial_Storage_062009

It is difficult to have to try to fight some entity away from reducing the quality of life for citizens of our state as well as that of rural Nevada, to support the growth of a distant area (Las Vegas). This is especially troubling when you consider that the primary commerce and produce of Las Vegas is entertainment. They don't produce food, clothing, building materials, automobiles or anything of lasting value, in contrast to the rural areas from which they propose to take the water.

Furthermore, there appears to be considerable risk that the air quality for vast areas downwind from Snake Valley could be seriously damaged.

The proposed agreement seems to outline recourse (turn off or reduce the pumping), if the other people involved are seriously affected. Let's be realistic, how many protracted court battles would have to be won before any pumping would be reduced? How much time and money might it take to fight these battles?

What is the hurry to sign an agreement now? Just that the SNWA has told us that we had better agree while we have the chance? Why not wait until the impact studies are all complete? What does it cost Utah to wait? We should always be able to agree to give up water later.

One other concern that I have with this agreement is why was it all negotiated in private? Why no public input until it's already put together? This should be entirely public business, it's public property except that which is already allocated and privately held.

Stanley Reese

6752 S 2700 W

West Jordan, UT 84084

Print View

From: "TERRY MASSOTH" <twmassoth@hotmail.com>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 7:08 PM
Subject: comment about proposed agreement

Dear Sirs:

My main concerns about this agreement are two-fold:

1. being a Salt Lake valley resident, I am most concerned about elevated dust levels almost certainly to come if water amounts in the agreement are withdrawn from the Snake Valley aquifer. As such, I would tend to request that the amounts of water be drastically reduced, like by an order of magnitude.
2. since I understand permit requests by Nevada authorities have been put on hold, I would request that this agreement similarly be place on hold.

Many thanks for this opportunity to comment.

Sincerely,
Terry Massoth
Consulting Geologist
Sandy, Utah

Print View

From: "Julio C. Delgado" <jcdelgado@comcast.net>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 8:19 PM
Subject: Snake Valley Water project

Please before approving this project we need to get a clear understanding of the future environmental consequences.

Print View

From: Linda RIES <linda_ries@yahoo.com>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 11:10 PM
Subject: Snake Valley Groundwater

Dear department of Natural Resources:

I attended the public meeting on August 18 in Salt Lake City and want to thank the Director of Natural Resources from both Nevada and Utah and their staffs and everyone who worked on this proposal. At the hearing I was persuaded that this may be a good compromise for the water distribution of the Snake Valley ground water.

Since then I have attended other hearings and done more research and looked at the hydraulics of ground water. While not an expert, it is increasingly apparent that there is no excess water to be shipped anywhere from the Snake Valley without serious and devastating results. In fact the current uses may already be extracting too much water. This is a zero sum game, what is taken out for use in agriculture or to water Las Vegas does not go back in to the ground water. Any withdrawal lowers the water table, which is the water resource for the valley and for other areas as well. This water is part of an ecosystem that barely maintains itself with current conditions. ANY removal of water will lower that water table and start the death of various plants, which hold the soils which prevents dust storms and feeds the wildlife and agriculture already present.

Once that vegetation dies, dust storms will increase, already polluted air in the Salt Lake valley will become more polluted, and the dust in winter will settle on the snow pack of the Wasatch mountains, causing the melting of this snow pack to be earlier, when it is not needed for agriculture and in wet years increasing the chances of floods. All of these things are tied together. You can not change one parameter without affecting all. Surely we know this by now.

Las Vegas, nor any city, can not keep growing in a desert area and expect to just pull water from any where because they "need it". There are limits to growth, especially in the arid southwest, which by most projections will only get drier in the coming decades. We must take a long term view and realize NOW, that growth must be controlled. Water must be available before growth is allowed, not found after the people are in place and then stealing it from other users, which includes wild life, forests, Native Americans, etc. At the informational meeting organized by the Great Basin Water Network on Sept. 9th, I stated these same ideas and reminded those in attendance that Las Vegas was only the first of many areas facing a water shortage due to uncontrolled growth. While the Wasatch front may have adequate water now, our time is also coming. If any area reduces its consumption of water by 50% per person, but the population doubles, they are using the same amount of water. GROWTH CAN NOT CONTINUE FOREVER.

Therefore, I must recommend against the adoption of this agreement, especially when there is no directive that any damages from the withdrawal of water by SNWA would cause the water removal to be stopped. That the

water removal may be reduced or stopped is not good enough. As seen in the Owen's Valley in California, once the water is being piped to the city, there is very little chance it will be turned off due to adverse environmental effects.

Thank you for your time and attention to this matter.

Sincerely yours,

Don Ries
663 E. Hollywood Ave
Salt Lake City, Utah 84105

Print View

From: <kpmendenhall@comcast.net>
To: <snakevalley@utah.gov>
Date: Wednesday - September 30, 2009 12:07 AM
Subject: Snake Valley Agreement

I appreciate the opportunity to comment on this important subject. I believe authors of the current agreement are on the right track, and support efforts of the governor and legislature to allow a thorough study of the draft before any decision is finalized that would allow massive withdrawal of groundwater to satisfy the thirst of our Las Vegas neighbors. Experts have already voiced concerns that delicate desert ecosystems would not survive the siphoning of groundwater and Snake Valley ranchers are worried about their livelihoods. I am gravely concerned that if the Snake Valley were to become a dust bowl, air quality along the Wasatch Front, already unhealthy much of the time throughout the year, would decline even further. There is no need to rush into an agreement. We all have a stake in this decision and need to get it right before it's too late. Let's allow the time to pursue more scientific study to determine how much water the aquifer holds and at what rate water can safely be withdrawn to preserve desert conditions needed to maintain air quality and ensure adequate water supplies for local communities in the Snake Valley.

Thank you for listening.
Kirk Mendenhall
Magna, UT

Print View

From: "Marion Klaus" <marionklaus@comcast.net>
 To: <snakevalley@utah.gov>, <snakevalley@water.nv.gov>
 Date: Monday - August 24, 2009 2:07 PM
 Subject: Comments on the draft agreement for managing Snake Valley groundwater

Dear Mr. Styler and Mr. Biaggi:

I appreciated the opportunity to attend the informational meeting in Salt Lake City about the proposal to divide Snake Valley water between Utah and Nevada and I have the following comments.

1) Mr. Biaggi mentioned that more precipitation is falling as rain instead of snow and that the melt is occurring much earlier than it previously had in the mountains that supply water to the Snake Valley. After the meeting, he clarified his remarks to me by adding that how this will affect Snake Valley ground water is yet to be determined. These variations are evidence of climate change, which is critical to consider in any such proposal to divide water. Temperature is expected to increase in the region, but the effects of precipitation variables for groundwater, vegetation, and wildlife are not as clear. Nevertheless, with hotter temperatures, vegetation and wildlife will likely need more water, not less. The same is true of the public who depend upon their prior claim to use the water in the area for their towns, homes, and agricultural interests. As presented, nothing exists in the proposal to account for changing needs that may occur as a result of climate change variables. Contingencies need to be in place to plan for changes in ground water supplies as a result of climate change and increased need due to higher temperatures. I believe that all planning documents constructed at this point in time need to include consideration for climate change effects, or at least that renegotiation will occur when effects of climate change become more apparent.

2) When Senators Reid and Bennet negotiated the language making this proposed allocation and management agreement necessary between the states of Utah and Nevada, representatives of the Goshute nation were not invited to the negotiating table. But, because they were left out of and not represented during the negotiations does not mean they should be left out of water. Their needs should also be factored into the document allocations.

the 3) Please alter the language in the Agreement to state that if conditions are, at any time, found to be unacceptable to those with prior claim to water, the engineers WILL make an executive decision to discontinue water removal until such time as ground water can recharge.

do, 4) The agreement as presented stated that biologic and hydrologic data would be monitored "as budgets allow". What happens if money is not available but the need exists and the drawdown is causing problems? It may take a very long time for ground water impacts to show up and by the time that they it may be too late. As one member of the audience said, "You can't drink dollars and you can't breathe dust!"

5) Most of the negative impacts of SNWA will be in Utah and this agreement does not give automatic power to Utah to stop pumping of groundwater by Nevada when impacts are detected. You may have divided the existing water supplies equitably as they currently exist, but Utah is not adequately protected either for drawdown or climate change impacts.

Marion Klaus

Marion Klaus, Ph.D. Biology
2730 Forest Spring Way
Salt Lake City, UT 847106

801-467-2946

Print View

From: Naomi Franklin <franklin@biology.utah.edu>
To: <snakevalley@utah.gov>
Date: Tuesday - August 25, 2009 2:31 PM
Subject: NO GO for Snake Valley Water Agreement!

Utah Dept. of Natural Resources
Division of Water Rights
1594 West North Temple, suite 220
Salt Lake City, Ut 84114

The Snake Valley Water Agreement between Utah and Nevada is NO GO! Water in the West (and on Earth) is in short supply---and yet undervalued. We need to cherish our water, increase its cost, use it with utmost care. The water demands of thousands of new homes must be calculated against our present and future water availability.

The water under dispute in the Snake Valley is not our water to negotiate. It is not present run-off from our mountains, but an underground aquifer of ancient water, a priceless reserve that may be replenished only at a very slow rate. We must not suck the life-blood from the earth in a thoughtless rush to economic growth.

With great care and restraint we may be able to provide for our present population. We cannot expand indefinitely our numbers, nor our consumables, nor our polluting wastes. Paraphrasing Professor Dan McCool (interviewed by Doug Fabrizio 8/21/9, on KUED's "Utah Now"), finite resources do not provide for infinite growth.

The "Snake Valley Water Agreement", open to public comment until 9/30/9, was devised in secrecy by the Utah Division of Natural Resources and the Southern Nevada Water Authority (8/15/09 SL Tribune, Patty Henetz). SNWA may already have started a water pipeline from Las Vegas towards the Snake Valley. Once such a pipeline (estimated to cost 3 billion dollars) is built, you can bet, as said Prof. McCool, that it will never be allowed to run dry. Desertification of Utah will not weigh in.

The pipeline will be financed by new water hook-ups in Las Vegas, i.e. it is designed to allow more home construction, more growth, in a place destined for disaster by not-so-far-off water depletion.

The Agreement must NOT be agreed to. The pipeline should be cut off at the knees. Then the ancient waters will endure, to be blessed by generations to come.

Naomi Franklin
1411 Utah St #4
Salt Lake City, UT 84104
801-974-5396

Print View

From: "Kathy Hill" <kathrynhillster@gmail.com>
To: <snakevalley@utah.gov>
Date: Tuesday - August 25, 2009 4:23 PM
Subject: comments

Comments about the Draft agreement on management of Snake Valley groundwater system

1st salvo:

General comments:

The agreement has two parts. One is the division and allocation of water. The other part is the monitoring and mitigation plan. The first part of the agreement concerning the division and allocation of water is weak in terms of science and equity between the states. A good agreement should reflect the best knowledge we have of the water basin, take into account the history of the basin, and be a fair division between parties. The first part of this agreement does none of the above. It clearly favors Nevada and SNWA in every respect. The second part of the agreement is stronger, but is not strong enough to counter and correct the weaknesses in the first part.

While I appreciate the extension of the comment period, it is still not long enough. 1st) Mike Styler should be available to hear people's comments and to answer questions as part of the process. Going on holiday during the month of September has essentially removed him from the process and dialogue is important in making the best agreement possible. 2nd) The residents of the Snake Valley want to understand the agreement and the intent of the negotiating team before making a decision about it. We currently are trying to schedule weekly interactive video-conferencing meetings between Snake Valley residents and the DNR, but it will take time to thoroughly study the agreement. 3rd) Snake Valley is primarily an agricultural community and fall (September) is one of the busiest times for ranchers and farmers, so time is limited to spend on studying the agreement.

From the discussion at West Desert School on Aug. 24

8.2 "Should any claim or controversy arise between the States; . (d) regarding the delivery of waters herein provided; . (emphasis mine)

what does "delivery of waters" entail? We need to make certain that Utah

is not required to provide the water declared available to Nevada in strongest terms possible.

6.0-6.8 Snake Valley residents are in an adversarial position with SNWA over the water grab. Dealing directly with SNWA agents about impacts places Snake Valley residents in an awkward and uncomfortable position. The Utah State Engineer could make this a more comfortable transaction by appointing a person to act as a mediator between residents and SNWA.

Print View

From: Abby jergins <abjergins@hotmail.com>
To: <snakevalley@utah.gov>
Date: Thursday - August 27, 2009 2:13 PM
Subject: snake valley aquifer

Utah can not afford to allow Nevada to pump water out of this aquifer. Nevada can not be trusted to accurately remove only Nevada's allotment of water even if they are monitored by Utah. So It is my opinion that Utah should remove Utah's water and put it in storage tanks or in a reservoir for Utah's usage. Simply put Nevada can't be trusted to be on the look out for Utah's water. If so Nevada will drink it; they can't afford to do anything else!

Bill Jergins
Saint George,Utah, 84770

Get back to school stuff for them and cashback for you.
http://www.bing.com/cashback?form=MSHYCB&publ=WLHMTAG&crea=TEXT_MSHYCB_BackToSchool_Cashback_BTSCashback_1x1

Comments on proposed "Agreement for Management of the Snake Valley Groundwater System"

August 25, 2009

By

Robin V. Davis, P.G.

524 Browning Avenue

Salt Lake City, Utah 84105

801-486-0757

rvdavis@utah.gov

The above-referenced proposed Agreement contains inadequate metrics and time frames in which an impacted resource can be timely mitigated. Scientific data that show large-scale pumping of a groundwater system, as proposed by SNWA, will cause excessive dewatering, drying-up of surface water and subsequent vegetation loss and significant increases in airborne soil particles. By signing this proposed Agreement, Utah demonstrates that it is unwilling to accept the scientific facts and historic data. In signing the agreement as proposed, Utah concedes that Nevada and SNWA can be unaccountable indefinitely.

My observation of this proposed Agreement is that relevant and valuable scientific evidence has been gathered, compiled, evaluated and reported by at least adequately-paid state personnel and highly-regarded scientists, and yet the science is clearly being ignored. I can only therefore suspect that elements outside of science are the subject and basis of these negotiations.

The Proposed Agreement Provides Inadequate Metrics for Determining Adverse Impacts:

- How dry does a spring or other natural resource need to be before being considered as adversely impact or considered for mitigation?
- How much soil-binding vegetation is Utah willing to lose?
- What volume of dust (how much?) is expected to be generated when surface waters are dried up? Quantifying the volume should be an easy task and is an obvious necessity to understand potential impacts on Utah by airborne soil particles. Utah's paid scientists should get this figured out and make it part of their monitoring for metrics of adverse impact. I performed the calculations and estimate that, when the vegetation dies, which it will within an estimated 25 years, that about 100 billion tons of soil particles will be available for airborne distribution, about 20 billion tons from Snake Valley alone
- How will the proposed metrics for monitoring measure and discern a SNWA pumping effect from a natural perturbation?
- How can mitigation be implemented if adverse effects cannot be determined in timely manner win which to restore the impacted resource?
- How is "timely" defined in this proposed Agreement? My suggestion: "... within a reasonable time frame in which to mitigate the problem..."

Reasons why this proposed Agreement is not acceptable for the State of Utah:

Utah is not acting responsibly in protecting its natural resources if it agrees to the current terms and conditions of this Agreement because Utah would be ignoring the historic and scientific facts and evidence that describe loss of natural resources through large-scale pumping, as proposed by SNWA. Even the proposed monitoring and mitigation measures will not protect Utah's ecology and economy from irreversible damages. Specifically:

- Scientific evidence shows that even the slightest impact caused by pumping can take hundreds to thousands of years to rebound (Bredehoeft and Durbin, 2009). The authors state that "If pumping continually exceeds capture, then water levels in the system can never stabilize, and the system will continue to be depleted," and "a new equilibrium state that includes pumping can never be reached." This means that water available from phreatophytes is quickly depleted and pumping exceeds the potential capture in the system.

- Similar studies reported in Schaefer and Harrill (1995) show that a new equilibrium in a groundwater system that includes pumping may be reached in over 200 years. Then there are more hundreds to thousands of years for the groundwater system to rebound *only* if pumping is stopped.

- Historic empirical data show that even minimal use and drawdown of the aquifer has dried up some springs and riparian areas in the Snake Valley (e.g., Cecil Garland, Callao). The drying up occurred about 30 years ago and matches the predictions simulated by Bredehoeft and Durbin (2009). These data indicate that, within about 30 years the effects of large-scale pumping will certainly dry up every surface water body, kill all the soil-binding vegetation, and will cause much greater and longer-term impacts and irreversible ecologic damage that cannot be mitigated by the measures proposed in this Agreement.

- Bredehoeft and Durbin (2009) find that greater distances between the pumping well and an impacted spring cause longer time frames (millennia) to recover.

- All of the scientific and historic empirical evidence shows that large scale pumping, as proposed by SNWA, is not environmentally sustainable and will cause drying up, death and loss of the desert vegetation that binds the soil (e.g., phreatophyte loss described in Bredehoeft and Durbin, 2009). Without the vegetation, airborne dust is generated, blows easterly to the Wasatch Mountains and accelerates snow melt (proven by recently published studies by University of Utah scientists). Utah will therefore suffer economically due to significant loss of snow necessary to sustain the ski industry, not to mention even poorer air quality than Utah has today.

- How will Utah prove that degradation of air quality is caused by SNWA pumping? If Utah signs this Agreement and at some point exceeds air quality standards as a result of airborne dust caused by the SNWA pumping, Utah will be stuck with

unacceptably poor air quality and non-compliance that it cannot reasonably or potentially mitigate. Section 6.4 of the proposed Agreement essentially states that SNWA can continue pumping as it studies and determines mitigation measures. Not requiring stopping pumping is entirely unacceptable and irresponsible natural resource management. That Section 2.8 states that Utah willingly accepts these consequences is evidence of Utah's irresponsibility in managing its natural resources. The result is that Utah will have no recourse.

- This proposed Agreement needs, at a minimum, the language in SNWA's recent applications to pump in Cave, Dry and Delamar valleys, where the Nevada State Engineer (2008): "The State Engineer finds that if unreasonable impacts to existing rights occur, curtailment in pumping will be order unless impacts can be reasonable and timely mitigated." In addition to "existing water rights" this language should include "existing natural resources including but not limited to springs, riparian areas, wetlands, surface water."

- Stopping the pumping is the obvious first step in mitigating impacts and "less stringent management actions have a correspondingly lesser beneficial impact" (Bredehoeft and Durbin, 2009).

- Not stopping pumping is disingenuous and absolutely unacceptable for two reasons: (1) \$3 million won't pay for much of anything substantially mitigative or meaningful, especially in decades from now, and; (2) Continued pumping violates all common and proven scientific sense when trying to mitigate an adverse impact.

During the August 17, 2009 meeting (10:00 am at UDEQ building 2, Salt Lake City) an audience member noted that stopping pumping is the obvious first step in mitigating any damage, yet it is not required in the proposed Agreement. Utah's deputy to the state engineer responded that he doesn't want to constrain the agreement by requiring a stop-pumping measure if deepening a permittee's well could solve a permittee's problem (of drawdown, e.g.). Deepening the well? To where? 2000 feet? Bredehoeft and Durbin (2009) present the results of a simple, exemplary model that shows 700 feet of drawdown can be expected from a project of this magnitude. That is significant drawdown certain to dry up all existing water rights and surface water and cause excessive volumes of airborne soil particles.

Other Comments

This document needs a table of contents, list of acronyms and other relevant elements of a professionally-drafted state document.

Page 2, Definitions: a section for "Sustainability" according to Nevada and Utah needs to be defined and inserted between Sections 1.12 and 1.13.

Section 6.5: the sentence ends with "laws of Nevada." What laws of Utah apply here, and if not, why not?

Section 6.7: Include Utah State Engineer following "...for use by the Nevada State Engineer..."

Section 6.8: Insert "and Utah's contractors" in two locations following "employees of the State of Utah"

Appendix A: Whose Public Law 108-424 is this? Nevada? Utah? Give the full citation.

Commentor's References

Bredehoeft, J and Durbin, t., 2009, "Ground Water Development-The Time to Full Capture," Ground Water, Vol. 47, No. 4, pp. 469-610, July-August 2009.

Nevada State Engineer, 2008, Ruling 5875-In the Matter of Applications 53987 through 53992.

Schaefer, D.H. and Harrill, J.R., 1995, "Simulated Effects of Proposed Ground-Water Pumping in 17 Basins of East-Central and Southern Nevada. USGS Water-Resources Investigation Report 95-4173. Reston, Virginia: USGS.

Comments RE Utah/Nevada Agreement Terry Marasco September 9, 2009

1. Process for damages – this Agreement places the burden of proof and expense of legal costs on the damaged party and requires to appeal to SNWA after inherent process is exhausted. The State of Utah does not stand by its citizens in the legal process. This needs to be changed as follows:
 - a. The State of Utah becomes the legal representative of the damaged party;
 - b. The damaged party and the State (UT) appeals to the State of Nevada, not SNWA;
 - c. SNWA must provide proof that their actions did not cause the damage; and,
 - d. SNWA is not a direct party to this process.

2. Groundwater mining

The presentation by Messers Styler and Biaggi stated “no groundwater mining” (removal without replacement). This statement cannot be supported by the science. The recharge produced by these processes is matched by natural discharge from the groundwater system. Over geologic time, the natural recharge to the groundwater system has produced a groundwater table that is very near the land surface within much of the targeted valleys. The shallow groundwater table is expressed in the springs, seeps, meadows, wetlands, and ponds that occur throughout the valleys. These groundwater-dependent environmental features consume groundwater, and their existences are inseparable from that consumption. Furthermore, the acreage of groundwater-dependent features is such that the consumptive use just equals the natural recharge to the groundwater system. However, the export pumping will disrupt that balance. The pumping will result in a one-for-one reduction in the natural discharge from the groundwater system. That reduction will be manifested necessarily as a proportional reduction in the acreages of meadows, wetlands, ponds, and large areas of phreatophytes

This agreement acknowledges a drawdown (sec 2.8, 2.9) and states “allows for the appropriation of groundwater in a manner that is sustainable and results in a reasonable amount of drawdown in the groundwater aquifer. Such appropriations necessarily impact the existing hydrologic system and captures discharge available to phreatophytes, streams and natural lakes.”

The agreement should not be signed until the impacts to the water table are stated 3, 5, 10, 20, 30, 50, 75, and 100 years, and shall include where the impacts are expected to occur (at and 1000' increment distances from each well). And, not before the public is allowed to review the expected impacts.

3. No guarantee for funding process and monitoring – this Agreement does not guarantee funding the process, nor near- and long-term monitoring processes, except for SNWA component. This agreement relies on hypothetical future funding. If monitoring is not funded (except for SNWA responsibilities 4 required in this agreement) USGS has 8 that could be dropped and UT has many as well. This agreement does NOT require SNWA to stop pumping if the monitoring discontinues. The operations plan depends on hypothetical future funding.

Utah should not bear the costs of any process or function. SNWA shall bear the costs and guarantee the funding with a bond valued at \$10,000,000.

4. This agreement does not meet a requirement of the Lincoln County Land Bill which set this agreement in place: (3) Prior to any trans basin diversion from ground-water basins located within both the State of Nevada and the State of Utah, the State of Nevada and the State of Utah shall reach an agreement regarding the division of water resources of those interstate ground-water flow system(s) from which water will be diverted and used by the project.”, not just Snake Valley required by the Land Bill;

For example: Double dipping: the block numbers stated in this agreement do not consider the 49KAF (acre feet) acknowledged by BARCASS (which they rely on elsewhere) that Spring Valley contributes to Snake Valley. The NV State Engineer has allowed 40K AF/year to be pumped from Spring (60k/year after 10 years). Additionally, the recharge figure used in BARCASS (132k af/year) is the highest of any studies (17-19 studies state 105K to 111k). The confidence rate stated in BARCASS for this figure is only 67%. Thusly, numbers are highly misstated.

The public needs to know the larger picture before this agreement is signed:

- a. the interconnectivity of the basins that intersect with Snake Valley (both in and out flows;
- b. the estimated amounts of inflows and out flows; and,
- c. a restating of the allocations with the above considerations.

5. Financial burden for Utahns – this Agreement leaves future Utah citizens highly exposed to financial burdens perhaps for generations. We need only look to the Owens Valley experience where the worst air quality in the US was declared by the EPA. Today, Los Angeles has had to pay \$551,000,000 to mitigate air quality there and at least \$65,000,000 to restore the Owens River. This Agreement places the entire financial burden of enforcement, compensation, and long-term mitigation on Utahns. It appears reasonable to ask Nevada to post a financial guarantee of at least \$50,000,000,000 to protect Utah against future damage and needs to include the following categories: the legal costs to Utah for enforcement of the agreements provisions; compensation to damaged parties; reparations for environmental impacts

6. Radioactive materials will not be monitored and need to be. The Snake Valley and most of UT are in the radioactive shroud from above-ground nuclear bomb tests. This area already has a history of down-winders. Using the Owens Valley as a template (similar hydrology –groundwater withdrawals-conditions, and vegetation), groundwater mining destroyed vegetation (acceptable in this agreement) resulting in dust storms causing the most polluted air in the US (EPA) and traveled as far, ironically, as Los Angeles. The Wasatch Front is in the path of Snake Valley air patterns.

Additionally, the air quality monitoring stated in this agreement is inadequate. There needs to be explained to the public before any agreement is signed:

- a. 5 years of pre-air quality data collected to establish benchmarks;
- b. At least 20 monitoring stations that cover areas near and distributed according to established wind patterns from Snake Valley to the Wasatch Front; and,
- c. Assurances from the State of Nevada that there will be adequate funding

7. After the comment period this agreement needs to be restated as a draft then released to the public for an additional comment period from the public.

8. Native Americans – 3 tribes (separate nations) were not consulted by the negotiating team, nor included in the Fed Bill. All tribes in the affected areas

need to input the agreement, restate the agreement with their input, and then release another draft.

9. An agreement is not required. In public meetings both Deputy UT AG Mike Qualey and Mike Styler misstated today that the Lincoln County Lands Bill "requires" that Utah and NV reach an agreement. This is not the case at all. UT and NV are required to reach an agreement only if the water is pumped. This was also misstated by John Entinger before the SNWA Board (SNWA attorney in Las Vegas before the SNWA Board).

This Agreement misses a large opportunity to approach water issues shared among these states in new and creative ways that decreases if not eliminates damage to either states' water resources and economies and minimize the need for pipelines and dams.

There are alternatives to Utah and Nevada water resource needs that may obviate the need for large-scale projects such as this. Both Nevada and Utah cities use significantly more water/capita than other western cities. If both Utah and Nevada approach per capita use in cities like Albuquerque and Tucson in residential water use, there may be more than adequate water resources instate for growth.

Rather than work on this agreement, the states agree to put off for 10 years any agreement then in the meantime:

Utah and Nevada Develop a Blueprint to Reconfigure their Water Resources that Benefits all Stakeholders and Minimizes the Need for Large-Scale Infrastructure such as Dams or Pipelines then Present the Blueprint to Utah's Governor and Legislature.

This process engages all Stakeholders: national, state and local government (both lawmakers and agencies), AG, M&I, Institutional, the general public, and conservation and environmental communities to develop and proffer a new blueprint to share current water resources, and looks to needs for the near- and long-terms. Technical and legal expertise from within and without the states is consulted. The group meets regularly. Meetings with all stakeholders, including the general public, are held throughout the state 2-3 times to gather ideas and concerns to input and refine the blueprint. The blueprint is released for comment, refined, and then sent to the governments of both states.

It is not out of the question the question to include all 6 Great Basin states (Utah, Nevada, California, Idaho, Oregon and Wyoming) and work with hydrologic boundaries rather than individual political boundaries.

Print View

From: <ggreathouse@frontiernet.net>
To: <snakevalley@utah.gov>
Date: Wednesday - September 30, 2009 11:01 PM
Subject: Draft Snake Valley Water Agreement

Comments on the draft agreement.

1. Allowing Nevada to proceed to an additional 36,000 afy in one block is not prudent. Nevada should have to phase in its water use over time (perhaps in 12,000 afy blocks). Then hold to that level of pumping for a period of years while monitoring of current wells determines whether there are adverse impacts on senior water rights in Utah. If there are adverse impacts, Nevada should not be allowed to proceed to developing the next block of water. The large amount spent by Utah on monitoring wells, would be further justified by their use in determining adverse impacts after each block of water was developed.

2. The Agreement contains no hard and fast stop on development if ground water levels do decrease. With all of the monitoring wells and the current wells and springs that are used productively, there should be some level of decline in spring flows and underground water levels that would require development of additional water by Las Vegas and Nevada to be stopped and if they have developed some of the additional 36,000 acre feet for their pumping of the water developed to be cut back or stopped to protect the senior water users.

3. It should be made clear that it is optional to approach the Las Vegas interests for mitigation of damages. Water users should have the option of working through the States to begin with, if the water user so desires. For instance, if over time it becomes clear that the Las Vegas interests consistently deny any adverse impact and refuse to mitigate damages to other water users, the water users should not have to continue going to the Las Vegas interests for damage resolution and should be able to go directly to the State of Utah for help.

4. The method of determining adverse impacts through the offices of the State Engineers of Nevada and Utah is not adequately developed in the Agreement. The Agreement seems to believe some determination will be reached, but no method of resolving differences in the views of the respective states by their State Engineers is set forth in the Agreement. It would appear that if the State Engineers disagree on impact, then there is no determination of impact and the Las Vegas interests could continue to pump. There should be a method incorporated in the Agreement to handle differences in opinion between the Nevada and Utah State Engineer. Perhaps a third State Engineer from either Idaho or Wyoming could be brought in to break stalemates or in the alternative an outside engineering firm could be used to ultimately decide an issue on which the Utah and Nevada State Engineers could not agree.

5. Senior water rights in Utah should be provided a direct right of action if they feel they have suffered an adverse impact that is not being resolved. They should not ultimately have to depend on the State of Utah to protect their interests against Nevada. There are not huge numbers of water users in the Snake Valley, so this should be able to be incorporated in the Agreement without exposing Nevada and Las Vegas water interests to a huge number of lawsuits.

Sincerely,
Greg Greathouse

Print View

From: Ken Hill <kenhill184083@gmail.com>
To: Boyd Clayton <boydclayton@utah.gov>
Date: Tuesday - September 15, 2009 7:08 PM
Subject: appendix 1 > 1.1 > sentence is convoluted

I think the first sentence of appendix 1, 1.1 needs fixing. The first comma is unneeded. The phrase "for the purpose of providing an early-warning indication as to whether, in combination with the hydrologic monitoring component, SNWA groundwater development in Snake Valley is causing adverse effects" does not make sense because of a misplaced comma. This sounds like snwa's pumping and hydrologic monitoring may cause adverse effects. I have supplied a fixed version. Does this need to be in a written comment?

---original version ---

The intent of the biological monitoring considered here, is to collect a suite of ecologically informative data, at Key Areas of Biological Concern (KABCs), for the purpose of providing an early-warning indication as to whether, in combination with the hydrologic monitoring component, SNWA groundwater development in Snake Valley is causing adverse effects.

--- better (if accurate) ---

The intent of the biological monitoring considered here is to collect a suite of ecologically informative data, at Key Areas of Biological Concern (KABCs), for the purpose of providing an early-warning indication, in combination with the hydrologic monitoring component, as to whether SNWA groundwater development in Snake Valley is causing adverse effects.

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\o/ \o/

Let everything that has breath praise the Lord - Psalm 150:6

\o/ \o/

September 30, 2009

Utah Department of Natural Resources
Division of Water Rights
1594 West North Temple, Suite 220
Salt Lake City, Utah 84114
RE: Snake Valley Water agreement

Thank you for the opportunity to comment on the Snake Valley Groundwater Draft Agreement (Draft Agreement). I represent the approximately 300 members of Western Wildlife Conservancy, a non-profit conservation organization located in Salt Lake City.

We are strongly opposed to the Draft Agreement and urge that it not be signed by Utah State officials.

Our chief concern centers on the lack of a reliable safety mechanism for terminating withdrawal of water from the aquifer should it become apparent that it is causing significant harm to air, water, wildlife or human beings. One of the provisions of the agreement is that the state engineer of either state (Utah or Nevada) will have the power to unilaterally stop the pumping once adverse effects begin to be manifest, but this is just talk. There are two reasons why no sane, informed person can take it seriously.

First, let us understand that the Snake Valley Aquifer, which straddles the UT-NV border, is connected with the Spring Valley Aquifer that underlies Nevada soil. There appears to be no guarantee in the Draft Agreement that pumping from the Spring Valley Aquifer can be terminated by the Utah State Engineer under any circumstances, even though it may deplete the Snake Valley Aquifer.

Second, by the time adverse effects become evident (whatever those might be deemed to be), stopping the pumps will obviously not be sufficient to prevent them; moreover, it will not be sufficient to prevent them from worsening, since there will be a lag time before effects already in the pipeline (so to speak) become fully manifest. In this respect, the situation is analogous to one in which a rise in the concentration of atmospheric carbon dioxide will produce ongoing atmospheric warming as the greenhouse gas absorbs energy that would otherwise be radiated out into space. The full warming effect takes time to develop. In the case of the Snake Valley Aquifer, a lowering of the water table will also produce effects that develop over time. Thus, by the time the Utah State Engineer (hypothetically) demands that the pumps be turned off, adverse effects will continue to worsen for years and decades into the future.

Third, seriously now, how can any thinking person believe that the Utah State Engineer will actually demand that the pumps be turned off once they are on? There will be powerful incentives not to. At the best, we may expect some so-called mitigation, in the form of pay-offs, to Utah, on condition that the pumps remain on.

Others will comment on the extent of the adverse effects to soil, air, water, wildlife and human beings that this project may be reasonably expected to cause. They will not be worth the price. We urge you to not sign the Draft Agreement. Anyway, what's the hurry? Why not

wait until more study has been done before contemplating such action? And why not deliberately involve the public in the decision-making from here on out?

Sincerely,

Kirk C Robinson, PhD., JD
Executive Director, Western Wildlife Conservancy
68 S. Main St., Suite 4
Salt Lake City, Utah 84101
801-468-1535

Print View

From: <vernalpool@riseup.net>
To: <snakevalley@utah.gov>
Date: Saturday - September 19, 2009 12:49 PM
Subject: UPDATED Comment on Snake Valley Utah-Nevada Agreement]

Hello,

Have recently learned some additional relevent details and am updating my earlier comment. My new position is to be against the Snake Valley Utah-Nevada Agreement. This has changed from my earlier position of neutrality based upon the vagueness of the document and my inability to decipher the politically framed jargon. My field of understanding is in the sciences and ecology, not in politically based legal documents that are designed to confuse the general public and discourage people from participating in these important matters.

My original position of being against the SNWA pipeline from Snake Valley to Las Vegas has NOT changed, I remain steadfastly opposed to the SNWA's pipeline idea. No confusion here.

However, i am in support of attempts made to protect the least chub, spotted frog and spring snails, though i feel the most effective way to accomplish this goal is by monitoring the water table so that it emerges at the springs. Protection of the Snake Valley aquifer would be most effective by keeping Snake Valley water in the Snake Valley and not allowing ANY water exports to distant metropolitan regions in either state.

In addition another reason for my opposition to the SNWA pipeline should be included, water table dropping would result in the loss of pump plants and their roots that stabilize the soils. Following this loss of soil support we can expect severe dust storms entering the atmosphere, eroding topsoil and causing air pollution from particulate matter for downwind residents.

Thanks for being patient and understanding my confusion. Below is the updated comment that should replace my earlier comment sent from the same email address.

Thanks,

Mark

Comment on Snake Valley Utah-Nevada Agreement for aquifer protection;

My goal in writing this comment is to protect the ecological integrity of the Snake Valley aquifers, springs and marsh complexes. It is very clear to me and many others who have begun researching this aquifer and springs complex that ANY excessive withdrawals and exports out of Snake Valley by

either state would spell disaster for the Snake Valley aquifer and related wetlands ecosystem. This comment will focus primarily on the proposal by SNWA to construct a pipeline capable of extracting large amounts of aquifer water to be transported to Las Vegas region.

The Snake Valley aquifer complex requires long term protection for the benefit of the ecosystem and also the region's human communities that rely upon this aquifer's water for their survival. Significant risks to the Snake Valley aquifer complex would occur by allowing the SNWA's 300 mile water pipeline to Las Vegas to be constructed. One of the primary risks is from aquifer cavern collapse as the overburden of eroded gravel sediments accumulated above the aquifer will no longer be supported by the water underneath. Aquifer caverns in this region are primarily composed of slightly metamorphosed limestone, and a brief visit to the crumbled rubble of Lehman Cave's Talus Room would show the potential of crumbled aquifers following years of overdraft by the SNWA pipeline.

The limestone caverns found at Great Basin National Park's Talus Room were formed and enlarged over the long term wet season years of rainwater percolating downwards and becoming carbonic acid, eating away at the limestone material. According to geological history, the Talus Room's rubble was formed during an interim dry season when the water table dropped several hundreds of meters, resulting in the excessive weight of overburden forcing collapse of the former aquifer's ceiling structure. The ability of the aquifer caverns filled to capacity with water were able to support the overburden's weight under gravity, though loss of the water and replacement with air proved to be insufficient to support such a tremendous burden. It is probable that future drops in the same region's water table due to excessive extractions and transport outside of the region by SNWA's pipeline would result in aquifer caverns becoming empty of water and thus stressed by the gravel overburden's weight, resulting in eventual cavern collapse.

According to studies and research on other aquifers, anytime an aquifer is overdrawn and the cavern partially collapses from weight of overburden without water to support the aquifer's ceiling, the result is compaction of sediments and land subsidence visible from the surface. The land subsidence occurs as the empty space of the aquifer cavern is filled with overburden, and the actual elevation of the ground then drops as the overburden fills the empty space of what once was an aquifer. This process has already been documented in several locations, including the permanent loss of the Midwest's Ogallala aquifer, the San Joaquin aquifer's subsidence of nearly twenty feet and sinkholes regularly appearing throughout Florida as their limestone aquifers are overdrawn to the point of ceiling collapse. In every case thus far, once an aquifer is overdrawn to the point of cavern ceiling collapse and surface level land subsidence, there can be no possible returns to the original storage capacity of the aquifer prior to collapse.

Another risk of excessive extraction from the SNWA pipeline would be to the ecosystem's food pyramid by preventing natural spring formation at intersections between the water table and above ground openings. Springs in this region occur when the water table is high enough to spill out onto the surface, resulting in unique isolated ecosystems capable of supporting their own endemic biota found nowhere else. The biota found here includes several species of plants, algae and other primary producers that photosynthesize sunlight into energy available for animal consumption. The next level of the food pyramid above the primary producer plants are primary consumers; insects, mollusks and other small organisms that feed directly upon the plants. Above them are secondary consumers; fish, birds

and mammals that eat the primary consumers. This entire food pyramid ecosystem is depending upon a regular supply of spring water appearing at this same location every year.

One of the focus species of the primary consumer category are spring snails, many considered either threatened and/or endangered because they are unable to travel to other springs and have become their own separate species due to the isolating conditions of the springs located far apart from one another. Each species of spring snail shows physical and physiological traits uniquely evolved in adaptation to their surroundings, usually determined by specific chemical, water and temperature conditions found only in their spring.

One example of the genetic isolation found in spring snail species is the Sub-globose Snake Pyrg (*Pyrgulopsis saxatilis*), found only in Gandy Warm Springs. Other spring snails endemic to the Snake Valley include the Longitudinal Gland Pyrg (*Pyrgulopsis anguina*) and the Bifid Duct Pyrg (*Pyrgulopsis peculiaris*). These spring snails have adapted to specific water conditions in the springs where they and their ancestors have lived for thousands of years.

This entire ecosystem can become non-existent by a long term drop in the water table resulting from excessive extraction by the SNWA's proposed pipeline. Once the spring snail's habitat becomes unlivable, there is a likely potential that the spring snail will be unable to reproduce and survive the loss of spring water. The outcome of this long term human induced drought would be extinction of each unique species of spring snail with no possible returns.

In addition to the spring snails are other secondary consumers that would include the snails at some stage of their life cycle as part of their regular food source. One of these is the least chub (*Iotichthys phlegethontis*), as mentioned in Appendix 4 of the Utah-Nevada Agreement. Here it states that Snake Valley springs and marshes (Leland Harris Springs, Gandy Marsh and Bishop Springs) play an important role in habitat for the remaining wild populations of the least chub, and without a regular water supply fed by a stable water table the least chub could be extirpated from this crucial habitat. Other threatened fish that depend upon regular surface water supplies from Snake Valley springs include the Bonneville cutthroat trout (*Oncorhynchus clarkii utah*). Provided that the Snake Valley ecosystem is protected and fish populations are able to increase, these larger native trout species also represent a fisheries resource for humans.

Long term protections are needed for the Snake Valley region's springs and their unique ecosystem inhabitants for several reasons. As conscious beings, we humans recognize that water tables can drop from reasons outside our control, such as long term drought and climate change. We also recognize that our actions independent of climactic processes can also result in the drop of the water table, and this is under our control. We can prevent extinctions of the spring snails and all the other animals that depend upon them simply by maintaining the water table to the levels required for the springs to emerge at their surface locations. To maintain the water table levels we only need to be careful monitoring and allocating water from these springs.

Current human uses of the Snake Valley aquifer water that would alter the water table levels and spring formation include ranching and limited residential uses. The ranching uses of aquifer water remains in the same region, and eventually percolates downwards and recharges the same

aquifer, thus maintaining some neutrality between losses from extractions and gains from recharges to the same water table. However, this would not be the case for the SNWA pipeline, where the aquifer water extracted from the Snake Valley complex would never be recharged to the same location, instead would be lost to the Colorado River system and eventually enter the ocean at the Gulf of California. While this may be good news for the beleaguered and overly saline waters of the Gulf of California, it is certainly a death sentence for the spring snails' food pyramid ecosystems that depend upon Snake Valley aquifer water emerging aboveground at the spring locations.

The good news is that with minimal interference the spring snails' food pyramid ecosystem will function normally provided that monitoring of the water table occurs on a regular basis. It would be far more logical and effective to monitor the local ranchers and residential water uses than to further complicate the equation of aquifer extractions and recharge by introducing the SNWA's proposed pipeline capable of extracting far greater quantities with no possible recharge to the original aquifer. Similar to overdrawn then collapsed aquifer caverns and extinction of endemic species, the chance of no possible returns is best avoided. We need to collectively protect the Snake Valley aquifers, springs and all their inhabitants and dependents by preventing the construction of the SNWA's proposed pipeline.

Another reason for opposition the the SNWA pipeline proposal is the risks of water table dropping resulting in dust storms. In addition to loss of animals that inhabit the springs, we can expect loss of phreatophytes, also known as "pump plants", whose deep roots tap into the water table below the overburden and around the springs themselves from a lowered water table. Some examples of phreatophytes include greasewood (*Sarcobatus vermiculatus*) and the bright yellow fall blooming rabbitbrush (*Chrysothamnus viscidiflorus*). In addition to providing forage to countless grazing ungulates like pronghorn, elk and deer, the phreatophytes also are important as soil stabilizers.

If the phreatophytes die off because their roots cannot reach a rapidly falling water table, they cannot play their vital role as stabilizers of the already dry surface soils. After the death of the phreatophytes we can expect a steady erosion of the surface soils lacking roots to hold soil particulates in place. This erosion would also occur during windy conditions, resulting in massive dust storms entering Utah and traveling further in the upper atmosphere. This form of air pollution could be prevented by protecting the aquifer's water table so that phreatophytes are able to access a relatively steady water table level.

In conclusion, by focusing mostly on divisions between allocations and ignoring potential risks of excess water extractions and export outside the region, the Snake Valley Utah-Nevada Agreement is not adequate to assess the complexity of the aquifer, spring and marsh ecosystems and the diversity of biota that depends upon regular supplies of water. The Snake Valley Utah-Nevada Agreement is unclear on methods of protections of the least chub and spotted frog that they mention in their Appendix, and their proposals made to distribute water in vaguely defined allocations enable SNWA pipeline advocates a greater foothold than is acceptable. Keeping in mind my original goal of protecting the Snake Valley aquifer from proposed SNWA exports, am voting against the Snake Valley Utah-Nevada Agreement.

The Snake Valley aquifer complex is not confined to human imposed state boundaries and needs to be treated as a single ecological entity across both sides of the border. Successful conservation of least chub, spring

snails, spotted frogs and other endemic inhabitants of the Snake Valley aquifer complex depends upon maintaining the water table at levels required for regular discharge at surface spring flows. A good rule of thumb for a sustainable water distribution agreement would be "water that comes from Snake Valley stays in Snake Valley." Since the Snake Valley covers both Utah and Nevada, the distribution of water to residents and ranches can be fairly even across both states.

The reason for keeping Snake Valley aquifer's extracted water allocations in the same original valley basin is to balance the extractions with constant recycling by percolating recharge water back into the same aquifer. This is the same process that Las Vegas implements with Lake Mead's water; all treated wastewater is recycled back into their original supply at Lake Mead. Geological history reminds us that the full capacity of the Snake Valley aquifer was attained only after thousands of years of rainfall during much wetter climates than our current weather pattern. This indicates that steady exports of aquifer water outside of the original basin (i.e., to Las Vegas and the Colorado River) will result in faster rates of depletion and drawdown of the aquifer than by using and recycling the water for recharge into the original Snake Valley basin.

Thank you for your consideration,

Mark Miller
P.O. Box 1864
Elko, NV 89803

Print View

From: <Gostalinda@aol.com>
 To: <snakevalley@utah.gov>, <snakevalley@water.nv.gov>
 Date: Saturday - September 19, 2009 7:48 PM
 Subject: Comments to Snake Valley Agreement

I understand the comment period has been extended to September 25. I did give you this in writing at one of your public presentations. My comments on the Snake Valley aquifer and water diversion project are as follow:

I understand that Utah has no control of this project, but Nevada did agree to measure the aquifer and to cease and desist if the aquifer was being depleted (mined) and not refilled.

I respectfully request that Utah use measurements from the GRACE satellite to determine the depletion, with before and later measurements. The detailed article printed in Science News I gave to you at your meeting is repeated below. I think the links will work, if not contact me for password information if needed.

Linda Johnson, 1356 E 4500 S, Salt Lake City UT 84117 phone 801-277-4499 and cell 801-870-5006

Home (<http://www.sciencenews.org/view/home>) / _News_
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 /
 News item
 Big Gulp, Asian style

Increased irrigation is rapidly depleting India's groundwater
 By _Sid Perkins_
 (http://www.sciencenews.org/view/author/id/21/name/Sid_Perkins)
September 12th, 2009; Vol.176 #6
 (http://www.sciencenews.org/view/issue/id/46803/title/September_12th,_2009;_Vol.176_#6)
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 (<http://www.sciencenews.org/index/generic>) Text Size

(http://www.sciencenews.org/view/access/id/46389/name/sp_india_groundwater_map.jpg)

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 (http://www.sciencenews.org/view/access/id/46389/title/sp_india_groundwater_map.jpg)

Drink up Dramatic increases in the irrigation of crops across northern India have substantially depleted the region's groundwater. Between April 2002 and August 2008, aquifers lost a total of more than 54 cubic kilometers per

year (larger amounts from the areas depicted in pink). Tiwari et al./Geophysical Research Letters (in press)

Irrigation in northern India in recent decades has pulled water from the ground faster than the region's soaking monsoon rains can replenish it. And satellite data reveal that the pace of extraction has accelerated in recent decades, scientists report in two new studies. In an area that's home to about 10 percent of the world's people, that could be a recipe for disaster, policy experts say. A growing population with an increasing standard of living will only boost the demand for groundwater, a trend that could eventually lead to a reduction in agricultural yields, shortages of potable water and an increase in societal unrest. Northern India and the surrounding areas — a 2,000-kilometer-long swath that rims the Himalayas from Pakistan to Bangladesh — are home to more than 600 million people. The region is also one of the most heavily irrigated areas in the world, says Virendra M. Tiwari, a geophysicist with the National Geophysical Research Institute in Hyderabad, India, and coauthor of a new

report to appear in an upcoming Geophysical Research Letters. Government policies put in place in the 1960s to boost agricultural productivity nearly tripled the amount of irrigated acreage in India between 1970 and 1999. In the mid-1990s, India's Central Ground Water Board estimated that farmers pulled more than 172 cubic kilometers of water each year from aquifers in the study region of northeastern India, southern Nepal and western Bangladesh, says Tiwari. That's more than three times the volume of India's largest surface reservoir. New data gleaned from gravity-measuring satellites suggest that the annual rate of extraction in that region has jumped more than 60 percent since then, Tiwari and his colleagues report. Researchers estimate that monsoon rains supply, on average, 246 cubic kilometers of precipitation to the region each year, says Tiwari. So, during the mid-1990s, groundwater supply — which largely comes from rainfall that soaks into the ground — was sufficient to meet agricultural demands. But data gathered between April 2002 and June 2008 by the two satellites of the Gravity Recovery and Climate Experiment show that irrigation now extracts substantially more water than is replenished each year.

(http://www.sciencenews.org/view/access/id/46814/name/storyone_backstory.jpg)

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Back story: Mining aquifers for farming_View larger version_

(http://www.sciencenews.org/pictures/091209/storyone_backstory_zoom.jpg)

| Underground

water supplies in many of the globe's most heavily irrigated regions, highlighted here in shades of purple, are draining faster than they can be replenished. Overall only about 10 percent of the world's agricultural food production depends on groundwater for crop irrigation, but some regions are much more reliant on aquifers for farming. Adapted from United Nations Food and

Agricultural Organization

GRACE, a joint mission of NASA and DLR, the German Aerospace Center, is designed to map Earth's gravitational field and to detect changes in that field over time (SN: 1/4/03, p. 6).

The craft can discern movements of groundwater " which, after it was pumped from aquifers to irrigate northern India, either flowed away from the region or evaporated, says Tiwari. Across the region, the net loss of groundwater averaged 54 cubic kilometers per year between April 2002 and June 2008, he and his colleagues estimate. As a result, the water table " the upper surface of the water in the aquifers " fell about 10 centimeters per year.

Coincidentally, this net loss of groundwater is about the same as that lost

from melting glaciers in Alaska during the same period, he notes.

A separate analysis of GRACE data, this one focused on northwestern India,

reveals that groundwater depletion there is even higher. Between August 2002 and October 2008, farmers pumped an average of 17.7 cubic kilometers of

water per year from aquifers beneath three states in India's northwest, says

Matthew Rodell, a hydrologist at NASA's Goddard Space Flight Center in Greenbelt, Md. In that arid region, home to more than 114 million people, the

water table fell an average of 33 centimeters per year, he and his colleague report online August 12 in Nature.

Because rainfall in the region was normal during the study period, all of the loss of water mass detected by the GRACE satellites is presumed to have

come from groundwater depletion, says Rodell. The net loss of groundwater

from northwestern India's aquifers is equal to three times the volume of Lake Mead, which supplies water for many parts of the U.S. Southwest. The pace of groundwater depletion in northern India is greater than anyone

expected and mirrors trends seen in many other regions, including China and

the western United States, says Sandra Postel, director of the Global Water Policy Project, based in Los Lunas, N.M. When groundwater disappears or

becomes too difficult to pump, people who now support themselves on the land

will become economic refugees, she contends. In many parts of the world, Postel adds, "water problems are becoming very serious, very fast."

Governments in many parts of the world often aren't forthcoming about groundwater or other resources within their borders, so using remote sensing

data is the only way to track usage trends for those resources, says Jay Famiglietti, a hydrologist at the University of California, Irvine and coauthor

of the Nature report. "Big movements of water can't hide from GRACE," he notes.

GRACE detects shifts in water storage indirectly. The two craft orbit the

planet along the same path, with one traveling about 200 kilometers ahead of

the other. As the first craft in the pair approaches a gravitational anomaly on Earth's surface " say, a mountain range made of dense rock " it is

pulled forward in its orbit. After the first craft passes over the mountains, it is pulled backward. The second craft is simultaneously pulled forward

as it approaches the mountains. The magnitude of subtle changes in distance

between the two craft reveals the size of the gravitational anomaly. Data gathered by the GRACE craft are versatile. Scientists have used the pair to measure ice loss from Greenland and Antarctica (SN: 12/17/05, p.

387), changes in water levels in the Amazon Basin (SN: 8/7/04, p. 94), and

even the movement of tectonic plates that occurred during the massive quake

that occurred off the western coast of Indonesia in December 2004 (SN: 1/7/06, p. 6).

Analyses using GRACE data "are an incredible tool," Postel says.

Groundwater data for most regions are notoriously poor, she notes. "Even in

industrialized countries we don't measure groundwater well."

Dennis Ghiglieri
619 Robinson Court
Reno, NV 89503

September 30, 2009

Allen Biaggi, Director
Nevada Dept. of Conservation and Natural Resources
901 S. Stewart St. #5001
Carson City, NV 89701

Mike Styler, Director
Utah Department of Natural Resources
Division of Water Rights
1594 West North Temple #220
Salt Lake City, UT 84114

Re: Draft Utah-Nevada Agreement for the Management of Snake Valley Groundwater System and the Snake Valley Environmental Monitoring and Management Agreement

Dear Directors Biaggi and Styler:

As a life-long Nevadan and conservationist I am writing these comments to express my concern about the negative impacts on the environment and rural communities that I believe are manifest in the draft agreement cited above. The agreement is a response to the application by the Southern Nevada Water Authority (SNWA) for 51,000 acre-feet-annually (AFA) from Snake Valley, a groundwater basin of eastern Nevada and western Utah, and required before SNWA can export any water through a pipeline to the greater Las Vegas area.

The agreement purports to support an equitable division of groundwater in three of the valleys it covers. The agreement is premised on a "yield" of 132,000 AFA. It divides the groundwater into existing rights and "new" rights and "reserved" rights. There are no rights specified in the agreement for water for protecting the environment in either Nevada or Utah. The lack of any specific right or guarantee to water which today flows in springs and wetlands and sub-irrigated meadows and groundwater dependent streams is a fatal flaw of the agreement and the agreement needs to be redrafted to incorporate specific protections for the groundwater dependent environment. A thorough agreement requires that both the environment and the economic interests of the valley are fully protected.

A side agreement between the SNWA and Utah to monitor and establish "management" committees is inadequate to protect the environment. Further, the side agreement completely ignores the serious environmental impacts of pumping to the portion of Snake Valley which lies in Nevada. In fact, the agreement offers no protections whatsoever for Nevada wildlife or natural groundwater dependent springs, wetlands, sub-irrigated meadows and streams. The Great Basin National Park, one of the important economic generators of the region, is given no mention or protection in the agreement. Any protection for

environmental resources in Utah is exclusively through the side agreement and does not actually call for any specific action to prevent loss of wetlands and springs. The agreement provides no defined protection for the environment dependent on the existing groundwater equilibrium nor is there any specific threshold which defines "reasonable" drawdown and decline in environmental resources.

The agreement fails to recognize and seek to protect the economic benefits of a healthy environment supported by the existing groundwater equilibrium. Rather, it treats the environment and the plants and animals (and the local users of water as well) as a problem deserving only of "mitigation". Mitigation must be decided upon with the agreement of SNWA. If SNWA doesn't agree to the mitigation, after an unspecified period of time has passed, and only for resources in the Utah portion of Snake Valley, would Utah be able to seek relief from the State Engineer or the court? The agreement itself does not provide the necessary structure to solve an environmental problem through a requirement to reduce pumping by SNWA.

While there is recognition in the "definitions" that there will be "changes" in the hydrology from groundwater development, there is no accompanying definition which limits the changes in any significant and specific way as already mentioned. For example, what is an "unreasonable" lowering of the groundwater or impact to springs and seeps and wetlands and groundwater dependent streams. I would submit that it is unreasonable for springs, seeps and wetlands to suffer loss which exceeds a well defined threshold such as 5 percent of its historic flow or extent. Leaving the subject of environmental degradation to guess work is not acceptable as a framework. Mitigation, also, can be selected from a list of possible actions but does not assure that the springs, seeps, wetlands, and/or groundwater dependent streams will be protected at all and may, in fact, be subject to complete loss.

The environmental impacts from pumping of groundwater will undoubtedly be felt first in Nevada. Yet, there are no protections built into the agreement which limit negative impacts in Nevada. At the very least, the environmental protections provided for resources in the Utah portion of Snake Valley should be extended to all water dependent environmental resources in Nevada. To do nothing for the Nevada water dependent environmental resources in the agreement is to seemingly sacrifice Nevada's environment to unreasonable loss.

Here is a list of other issues which need to be addressed before the agreement should be adopted by either Nevada or Utah.

- All water users in Snake Valley should be represented by a board or commission which is funded to look out for the economic and environmental interests of Snake Valley as an environmental and economic entity and not be subdivided arbitrarily or left as individuals to fight a huge, external agency.
- 132,000 AFA is not the perennial yield or available water supply but instead it is a calculation, from a single year study, of evapotranspiration rates measured in a few specific locales and extrapolated over the entire region. The basis for establishing the perennial yield should be exclusive of flow coming from up-gradient basins for which SNWA already has been granted rights.

- All existing uses and environmental uses of water within Snake Valley (and the other valleys to which the agreement refers) must be included in the already appropriated category.
- Terms such as “reasonable” must be defined. “Mitigation” must be defined in detail in the primary agreement and “mitigation actions” must be defined and a specific ordered list of those actions should also appear in the primary agreement and not left to a side agreement. The agreement between the states should define all the critical actions which the States agree are needed to protect the environment and people of Snake Valley as a whole.
- The agreement must recognize the environment as an important component of the Valley's healthy environment and existing economy and deserving of protection. The agreement's current statement that the states agree to “minimize environmental impacts and prevent the need for listing additional species under the Endangered Species Act,” is inadequate and offers no protection to the environment even in Utah. A complete inventory of water dependent environmental resources must appear in the agreement and specific protection spelling out what will be preserved must be included in the document. The document must cover all water dependent resources in both Nevada and Utah.
- All resource protections and inventories which are presently provided for only in Utah should be extended to include the entire region covered by the agreement.
- The studies to be carried out in the 10 year period should be specified and both states should agree that all studies which are to be used in decision making are to be done by an independent agency and be peer reviewed and pass quality assurance for all data collection.
- Baseline studies must be conducted during the 10 year period and should be conducted by an independent agency and be peer reviewed and pass quality assurance for all data collection. Baseline studies should be over a 5 year minimum period and completed at least 1 year prior to the 2019 NV State Engineer hearing on the SNWA Snake Valley applications.

Finally, I am deeply concerned about the side agreement exclusively between SNWA and the State of Utah. I believe that for the purposes of the agreement that the side agreement must be incorporated into the body of the main agreement between the States of Nevada and Utah and define specific actions and procedures to resolve groundwater pumping adverse impacts on the environment and the economic activity of the entire region for which the states are themselves responsible. Ultimately, the States cannot relinquish their responsibility to assure the agreement contains the protections for the environment which are meaningful and responsive to observed problems. Ultimately, only the States can assure that actions will be taken to protect its citizens and the environment which supports them.

Thank you for the opportunity to comment.

Sincerely,

/s/

Dennis Ghiglieri

Print View

From: Anita Hansen <homebase40@hotmail.com>
To: <snakevalley@utah.gov>
Date: Sunday - September 20, 2009 9:06 PM
Subject: our comments on the Snake Valley agreement

Page 1 - Before any Snake Valley water is pumped, Las Vegas should be required to meet very stiff water regulations. (golf courses, lawns, dust control)

The State engineers should represent the Governors.

This agreement should not stop further growth of Snake Valley. This agreement should protect and preserve Snake Valley water from SNWA and the growing Wasatch Front and Southwest Utah.

If the agreement goes forward, the water table drops and pump owners complain, SNWA should be required to turn off their pumps and it should be on SNWA's shoulders to prove that the damage is not caused by them. As is currently reads, it is the owner who has to prove that the damage was caused by SNWA.

SNWA should not be the ones to negotiate to determine well damage. It should be the two State engineers. (Page 7-A)

Page 8 gives a good list for SNWA to prove in court why water draw down is not their concern.

Page 9 The \$300,000 fund to be held for a mitigation fund is grossly low. It should be more like \$300,000 Million.

page 10 SNWA should not be signers to this agreement. The State Engineers should make this agreement and hold SNWA to the agreement requirements.

This agreement should be very clear and concise because in ten years all of the players in the current game will change. This agreement will affect the children of today. We should take the time to do it right the first time. What is the hurry?

An agreement should be made between the two states on Snake Valley water. We don't want to not have an agreement and have the issue go to the Supreme Court. By then it will be too Late!

We believe that Millard County should suggest a more fair water split, (68/32, 65/35 or 67/33)but that an agreement be made. It shouldn't be "do it our way or no way." The numbers bantered back and forth are mainly political. Let's not let "the numbers" be the driver for the agreement.

Please take the time to refine the agreement. Nobody knows how much water we are talking about under ground.

Bing brings you health info from trusted sources.
http://www.bing.com/search?q=pet+allergy&form=MHEINA&publ=WLHMTAG&crea=TXT_MHEINA_Health_Health_PetAllergy_1x1

Thank you for considering the following comments, questions, and suggestions.
Sincerely,
Gretchen Baker

Comments on Agreement for Management of the Snake Valley Groundwater System
General comments

1. There is currently pumping in Nevada that has caused Needle Point Spring in Utah to stop flowing and in fact, the water table keep decreasing. Yet, nothing has been done to ameliorate this situation. If the states have problems figuring out such a small interstate problem, it does not lend confidence to the states agreeing on such a large pumping scheme as proposed by SNWA and the multitudes of different ways it could affect water rights in both Utah and Nevada.

2. For the biological monitoring, it appears that conservation targets will only be sensitive species. This is too small a scope. It is likely that many species live in the aquifer underlying Snake Valley and have yet to be discovered and described. The Edwards Aquifer has 40 species of subterranean creatures living in it (<http://www.edwardsaquifer.net/species.html>). While Snake Valley's aquifer probably doesn't have so many, this aquifer should be searched. Scientifically based, peer-reviewed methods exist, and Dr. Steven Taylor from the Illinois Natural History Survey would be one person capable of overseeing such a study. The creatures living in the Snake Valley aquifer would be some of the first ones that would be affected by groundwater pumping. An inventory of them is critical before the commencement of the large-scale groundwater pumping. Wells and springs can be surveyed for these creatures, along with the Gandy Warm Springs Cave and Lexington Cave, both of which are in contact with the water table. A list of sensitive species should be developed after additional sensitive habitats are surveyed.

3. The extended comment period is appreciated, but it still seems that this process is being rushed. Additional time to review and comment on the agreement is requested.

Detailed comments

Section 1.1a regards a lowering of the water level in a well that differs from the "well's historical production." What time period does the "well's historical production" encompass? If a well has a long history, is the well's historical production averaged over this entire time period, or is more weight given to recent times, where lower water tables may paint a very different picture?

Section 1.1b regards a lowering of spring flow that differs from the "spring's historical supply." Most springs have scant or nonexistent discharge histories. Are more springs going to be targeted in order to develop this record of "historical supply?" How are seeps, which can be important for vegetation growth, to be treated, since spring flow at them is nearly impossible to measure? If different groups have different measurements, how will these be resolved?

Section 3.2 states that "Based on the best currently available data..." How will the states agree on a new afy number by future studies? I recommend inserting the clause right after data "scientifically based, third-party collected, peer-reviewed reports"

Section 4.5 regards data; Please use more specific language about who will create, maintain, and publicly share database and on what timeline.

Section 6.1 regards public notice. In South Snake Valley, we request that public notices be posted to the post office bulletin boards and be provided to

community leaders to post on the Snake Valley listserve.

Section 6.3.a.9 "Climatic conditions, e.g. drought year" Who determines what constitutes a drought year?

Section 6.3.b.7 "Recent seismic activity" Who will be monitoring this?

Section 6 throughout. It appears that the burden of proof falls on the Senior Water Right Holders. Although the senior water right holders should notify SNWA and the states of concerns about water reductions, SNWA should assist in gathering data of what their pumping may be doing to these senior water rights.

Print View

From: Terry Marasco <tmarasco@sbcglobal.net>
 To: <snakevalley@utah.gov>, <snakevalley@water.nv.gov>
 Date: Wednesday - September 23, 2009 7:29 AM
 Subject: Comments re UTVN Agreement

Comments for NV and Utah Agreement: Stop Pumping Triggers

Terry Marasco September 18, 2009

tmarasconrm@natural-resource-mgt.com

While it is acknowledged in this agreement that "more studies need to be conducted", the high estimate of water has been allocated. Then it is reasonable to include certain protections.

The science available now gives a reasonable picture of 1) the range of water volume, 2) where highest impacts will take place, 3) the time for impacts to occur, 4) the long-term effects of those impacts even after pumping ceases.

The reasonable template for legal actions for the groundwater mining expected by the science in Snake Valley is the Owens Valley experience. For example:

In the early 1970s Los Angeles completed a second aqueduct supplied by a dramatic increase in groundwater pumping from the valley, a further reduction in the amount of irrigated lands, and an increase in diversions from the Mono Basin. Despite Los Angeles' assurances that its activities would cause no harm, its groundwater pumping dried up most of the valley's major springs and began to deprive tens of thousands of acres of groundwater-dependent vegetation of its water supply. Also, by the mid-1970s, Mono Lake began to shrink.

Decades of expensive litigation (on some occasions even when Los Angeles signed then broke agreements) by the financially pressed local counties, the state, and environmental and citizens groups, combined with increased environmental awareness, have led to commitments by Los Angeles in recent years to restore the 60 miles of the Owens River, to mitigate the dust rising from the dry bed of Owens Lake, to maintain Mono Lake at specified levels, to return river flow to the Owens Gorge, and to responsibly manage groundwater pumping in the valley.

Therefore it is reasonable to include, with a clause that states these numbers may be adjusted based on new science before any agreement is in effect, and the history of such water diversions are likely to include near- and long-term legal actions:

1. pre-determined and automatic triggers that would curtail or discontinue groundwater pumping in Nevada if certain defined changes or conditions are detected by the monitoring including trippers upstream such as Spring Valley;
2. defined changes specifically by area (random valley floor stations, at springs, at ranches and residences), and defined small and large area flow systems in Snake and Spring Valley;
3. provisions that would allow the Utah State Engineer to seek mitigation and/or compensation in the form of guarantees of \$5,000,000,000;
4. Mandate fines of \$25,000/day if Nevada does not cease pumping, and require Nevada to provide guarantees of \$25,000,000 to enforce this agreement in the appropriate legal forums;

5. Provide specific air quality cease-pumping triggers. The triggers are to state not only PM10 and lesser particulates, but also levels of mercury, erionite (an asbestos like mineral that causes the same kind of mesothelioma cancer), the radioactive elements americium, plutonium, uranium, cobalt, cesium, strontium, and europium, and the fungal spores that cause Valley Fever (coccidioidomycosis) are all in high concentrations in surface soils in Nevada; and

6. provide that groundwater pumping could resume once groundwater levels, spring flows, depth to water in wells, have recovered to pre-determined levels.

Terry Marasco
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Fax: (435) 855-2432

Wednesday, September 30, 2009

Attn: www.waterrights.utah.gov

c/o Utah Department of Natural Resources, Division of Water Rights

RE: Snake Valley Agreement

I am 4th generation living and farming here in Snake Valley. I have a son working on the farm with me, he is 5th generation. Above all I believe local interests should be protected against the exploitation of our way of living. We have attended various hearings and meetings about SNWA's proposals to remove water from Snake Valley for the people of Las Vegas and are in full agreement with all of the objections we have heard to date! However, I would like to formally advise you of my own objections to the agreement in its current form.

One concern is that Southern Nevada Water Authority (SNWA) is a signer of the agreement and as such, becomes a principal when in fact they are simply a "water user". As a "water user" they are at the same level as the farmers and ranchers in Snake Valley. The level of cooperation of this agreement should be among the state of Nevada, the state of Utah, their natural resource departments, and their state engineers. By making SNWA a principal it is like having the fox watch over the hen house...we all know that won't work!

At each meeting/hearing endangered species in the West Desert such as the Bonneville Trout were brought up, but the residents of this valley are also endangered and with the proposed agreement we will be harmed to the point that we will be unable to earn a living in this valley. There is great concern about the wildlife, ecosystem and the lives of all the residents of this valley.

As stated by Steve Maxfield, from Kanosh, UT "there is no extra wet water to divide between the two states." He went on to quote from one of the professional papers from the 1995 United States Geological Survey (USGS) 149D shows the basin and the inner-flow in question and puts it further out. It goes to Utah Lake and Great Salt Lake. This year we had a wet spring. Lake Powell came up 12 feet. They thought it would come up 30 feet. They thought that the Great Salt Lake would come up 1 foot but it went down 1 foot. We are talking about water that is going underground. He called it the "underground Colorado River". These rights and historic uses have already been transferred into interbasin. He thinks that we will have an impact of a minimum 20,000 acre feet a year from Spring Valley to Snake Valley. As we look at Snake Valley and the

wet water, the water just isn't there. The pumping in Snake Valley has already drawn down the water table and has gone through transevaporation."

The agreement lacks a provision that actually protects the people living in Snake Valley, let alone the people of Utah. The provision in the agreement states that no third parties can bring any action against the agreement. It appears that the agreement is not protecting the people at all! When it comes to mitigation as stated in 6.2 it states, "Any owner of an Existing Permitted Use who believes that development or withdrawal of Groundwater by SNWA has caused an Adverse Impact to its Existing Permitted use may notify SNWA that the permit owner claims an Adverse Impact and shall provide any pertinent information that supports their claimed Adverse Impacts."

In other words, SNWA will have the right to determine if they have harmed other water users in Snake Valley and they will determine to what extent the other water users have been damaged. What protection does that give to those of us who have been living here and making out living for generations! **There should be a third party, not SNWA determining the harm that has been done, in any agreement that is made between the two states! SNWA should have nothing to do with mitigation and/or decisions made related to "Adverse Impact". They should have no rights beyond the rights of the people of Snake Valley! As the agreement is written there is no protection for the people of Utah.**

Another point we oppose is the amount of money that SNWA would hold in a mitigation fund, as noted in 6.4 of the proposed agreement. The current agreement states that in no event will the balance of the mitigation fund be reduced below \$3,000,000 while SNWA maintains groundwater development and withdrawal facilities in Snake Valley. We all know that \$3,000,000 is a pittance and doesn't even approach the damage that will be experienced when they begin pumping water from Snake Valley. For a more reasonable amount to be held in a "mitigation fund" perhaps the amount paid for ranches in Spring Valley should be looked at. In addition, the agreement should spell out who would manage and administer the funds and where would they be held. This information should be spelled out in the agreement.

I am in agreement with the comments of John Keeler, Utah Farm Bureau. He said, "at this point there doesn't appear to be a pressing need for Utah to sign this agreement. The Nevada State Engineer has set Spring of 2011 as his evidence for submission deadline and the hearings on Snake Valley in the fall of 2011. With so many unanswered questions that have been talked about – recharge, hydrologic connection, on-going drought and fairness – Governor Herbert and the State of Utah Water Rights Officials should put this draft agreement on hold and insist on a more fair and equitable split for Utah. As Congress has mandated, an agreement between Utah and Nevada is a worthy goal, but not as an expense to Utah."

Another concern is related to "Air Quality" and monitoring. My wife and I had the frightening experience of being caught in a dust storm between Garrison and Milford. The dust was so heavy that you could see nothing beyond the inside of the windshield!

The cab of the truck was so filled with dust that we had difficulty breathing. Two school buses were also caught in this dust storm and emergency vehicles had to come to the rescue with oxygen masks for a number of the students. Can you imagine what will happen when the water level is so low that existing ground cover is gone? We are already experiencing deterioration of ground cover and increased dust storms because of the drought and it isn't isolated to Snake Valley. We have experienced dust storms in Delta, Hinckley and even in the Salt Lake area. Imagine what will happen as water is piped out of this valley.

I also noted some problem with terms in the proposed agreement. For example, in section 2.5's statement on evaluating with certainty available groundwater is filled with vague undefined terms such as, "evolving trends" Defined terms must be used throughout the agreement so nothing will be left to the imagination or interpretation.

The agreement states that monitoring of data from groundwater pumping would be required and would be incorporated into a database for public viewing. But it doesn't spell out who would manage the database or exactly what database would be used. Who will be responsible for the cost of development and maintenance of the database?

The agreement also indicates that future studies and other information would be incorporated into the process of administering and managing groundwater development in Snake Valley...how will it be determined what future studies and other information will be needed? Who will collect the future information and how will it be used? Who will pay for these future studies...what is the definition of "Other Information"?

The agreement in the current state leaves too much to interpretation. What is the hurry? Take the time necessary to define all the 'vague terms' and make sure all the necessary scientific studies have been completed and utilized prior to an agreement being signed.

We all know the "Golden Rule"...those with the gold make the rules. As farmers and ranchers in Snake Valley we simply don't have the gold to hire the high priced attorneys that SNWA has working for them. Lets face it, we have a fox guarding the hen house as well and the "gold" making the rules, and people who don't even live here making the decisions that dictate even the possibility of our generational livelihood. Nevada has water rights in this valley, but I am definitely against the deportation of it via the proposed agreement.

Please note, we are in full agreement with the response offered by Great Basin Water Network in their response dated September 23, 2009.

Regards,

Darwin C. Wheeler
P. O. Box 40
Garrison, UT 84728

Emma Kay Wheeler
P. O. Box 40
Garrison, UT 84728

Christopher Wheeler
P. O. Box 40
Garrison, UT 84728

Print View

From: "Kathy Hill" <kathrynhillster@gmail.com>
To: <snakevalley@utah.gov>
Date: Wednesday - September 30, 2009 1:58 PM
Subject: additional comments

These comments are the result of a meeting with members of the Great Basin Water Network. They express my sentiments exactly and so I enter them as additional comments.

INAPPROPRIATE STATEMENTS RE LEGAL STANDARDS (Sections 2.8 and 2.9):

Sections 2.8 and 2.9 should be deleted. They purport to do nothing more than restate existing legal standards in both states. If this is all they do, then there is no need for them, and they certainly do not belong in the "findings" section of the Agreement. But, in fact, these sections do not accurately reflect the more nuanced and dynamic nature of Utah and Nevada water law and policy. Historically, both states' standards have shifted with changing circumstances and understandings of hydrogeology. At the present time, the legal treatment of groundwater drawdown and impacts to senior water rights is more complicated and variable than the simple statements contained in sections 2.8 and 2.9 reflect. And it is to be expected that in the future, the legal standards and policy imperatives informing these issues will evolve. Accordingly, there is no place in the Agreement for such oversimplified and rigid legal formulations, and they should be taken out of the Draft Agreement.

Further, the Lincoln County Lands Act requires that the shared groundwater resource be managed sustainably, and given the numerous water rights, livelihoods, and environmental resources at stake, greater protection for Snake Valley under the agreement is necessary. In order to guarantee appropriate protections to Utah citizens, Utah ought to insist that principles of true sustainability guide the management of Snake Valley by the States. Such principles would not allow for the drawdown of the groundwater system to the extent of capturing much existing evapotranspiration in Snake Valley, which includes legally protected, economically and ecologically vital subirrigated meadows.

INADEQUATE MITIGATION FUND (Section 6.4):

The provision for a minimum of \$3 million in Section 6.4 to fund mitigation effort is laughably inadequate. For nothing more than dust mitigation impacts from drying out previously most areas of Owens Valley the Los Angeles Department of Power and Water already is locked into about half a billion dollars of immediate mitigation costs, followed by ongoing

annual operational costs in the tens, and perhaps eventually hundreds, of millions of dollars. Since Snake Valley's wind shed includes the Salt Lake City area and Wasatch Front, the dust mitigation costs for increased dust emissions from Snake Valley alone could well run into the billions of dollars. And other environmental and senior water rights mitigation costs are likely to be in the tens, if not hundreds, of millions of dollars as well.

So, the Agreement should require SNWA to establish and maintain a mitigation fund of at least several hundred million dollars, and preferably a billion dollars. Given the scope and gravity of mitigation that may be necessary for Snake Valley, and for downwind Utah more generally, anything less than a fund of few hundred million dollars would not provide even a temporarily adequate sort of cushion or guarantee to Snake Valley water rights holders and Utah residents who will depend on that money when they are impacted.

Thank you for the opportunity to comment on the draft agreement. Please accept these comments on the draft agreement submitted September 28, 2009, by Steve Erickson, 444 Northmont Way, Salt Lake City, UT 84103.

I believe the State of Utah and its negotiators must into account take these and other serious and substantive comments submitted and return to negotiations with Nevada to fix what are clearly significant, even fundamental flaws with the draft. Further, if this is to be seen as an honest public process, then any changes made to the draft agreement in future negotiations must be made public and the public must have an opportunity to review and comment on those changes prior to finalizing the agreement. To do otherwise would be to disregard and disrespect the citizens, organizations and governmental entities who have provided a public service to Utah by weighing in on this most important and controversial matter.

Hydrology:

There is no surplus water in Snake Valley that can be exported without unacceptable consequences.

Utah gives away its water for nothing but promises and some monitoring requirements in return. Las Vegas gets the water, Utah gets the dust storms - and the health consequences that go with them.

This is not a "fair and equitable" division of the water in the Valley. It uses bad math and questionable science to arrive at an arbitrary formula that permits Nevada to take the majority of the water in the basin. The Utah Association of Counties (UAC) estimates the agreement gives Nevada a 7 to 1 edge in the split.

It will be necessary to dry up all the wetlands in the valley in order to achieve the export targets set by this agreement.

This deal could result in draw-down of the aquifer by dozens to hundreds of feet near Baker, Eskdale and Garrison. When the springs and meadows dry up, it will be too late for mitigating the damages other than to pay the water rights holders.

The available groundwater supply is grossly overestimated and greatly exceeds the recharge. Nevada currently publishes the perennial yield as 31,500 afy on its side of the border, not the 66,000 afy assumed by the agreement. The potential error in the GWET estimate is plus or minus 30,000 afy. The reliability factor of the BARCASS figures used in the agreement is just 67%. And a drop in annual precipitation of just ½ inch would alter the BARCASS model for recharge by 10,000 acre feet/year.

The deal includes in Utah's current use 20,000 afy in Fish Springs NWR water rights even though Fish Springs is outside the Snake Valley, effectively over-stating Utah's current use and thereby contributing to the unequal split of remaining water favoring Nevada. Fish Springs' water should be accounted for separately, not counted against Utah's "share".

The deal does not include adjustments for SNWA groundwater pumping in Spring Valley which could reduce the in-flow to Snake Valley by 16,000 afy or more. Spring Valley pumping must be factored into any agreement.

The Nevada State Engineer (NV SE), who will rule on the SNWA applications for over 50,000 acre feet of groundwater per year (afy), has generally granted under 50% of applications in previous rulings on SNWA applications in Nevada valleys. We could reasonably expect he would do the same on the Snake Valley applications. Yet the draft agreement puts the Block 2 "ceiling" for the NV SE at 36,000 afy. While the NV SE will make his decision based upon the facts and testimony presented at the Snake Valley hearing, this agreement effectively gives him Utah's permission to go up to 36,000 afy, and since he is a political appointee, it is reasonable to assume that this will influence his decision. It should be remembered that SNWA stated its intent to seek only 25,000 afy in 2007 (though they did not withdraw or amend their original applications), presumably because they felt it was a more rational, supportable quantity. They subsequently reversed course when the BARCASS numbers suggested greater perennial yield in the valley than 15 of 17 previous studies.

Any privately owned water rights in the Snake Valley that are sold to SNWA should be subtracted from the amount of groundwater available as "unallocated" for export to Las Vegas.

Timing and process:

There is no urgency to sign this agreement. The Nevada State Engineer will not rule on the SNWA applications until the fall of 2011 at the earliest.

Last spring, SNWA requested a one-year delay of the NV SE hearing on Snake Valley because its required groundwater model was taking longer than expected to complete (the SE granted a two-year delay in Interim Order #3). In their response to Interim Order #3, SNWA wrote that the groundwater model would be done by late 2009. Since this key piece of "evidence" is so close to completion and could contain information that would make substantial changes to the draft agreement prudent or necessary, Utah should not sign the agreement until the public and those whose water rights might be affected have ample opportunity to review and comment on that model.

A ten year delay benefits SNWA, not Utah. SNWA director Pat Mulroy has said she's not concerned about the delay because the pipeline probably won't be built and ready for Snake Valley water until 2019 (Las Vegas Sun, 8/24/09). SNWA's original plan and timeline was for Snake Valley pumping to come on line in 2022.

With the current economic crisis in Las Vegas, SNWA can't justify the need for the pipeline based on now inaccurate growth projections, nor are they likely to secure financing for this multi-billion dollar boondoggle.

Just two weeks ago, SNWA suspended construction on the so-called "third straw" in Lake Mead, a billion-dollar project to assure delivery of water to Las Vegas if the lake drops below the currently used intake. Why? Reduced demand for water in Las Vegas due to the recession and the collapse of the

housing market. Clearly, Las Vegas doesn't feel quite the urgency to seal the deal as Utah seems to feel. That's hard to understand, and Utah officials have yet to do so.

Utahns should have an opportunity to review and comment on the entire SNWA Groundwater Development Project through the BLM's Environmental Impact Process (EIS) before their unelected state officials sign off on just the Snake Valley portion of that pipeline project. Utahns should know that the impacts of the project in Nevada alone may have dire consequences for Utah, and they should have the chance to weigh the Snake Valley impacts in light of those larger impacts. Postpone the agreement until after the conclusion of the EIS.

Environmental Concerns:

Appendix C of the agreement is full of good intentions but is largely unenforceable. The intent to "establish plans", "set out a process to define" and "establish... responses" amounts to a contract of unspecified hypothetical eventualities. If something happens, then maybe something else will happen.

SNWA agrees to maintain a mitigation fund of \$3 million (1/1000th of the low-ball estimated cost of the pipeline construction) to assist or compensate water rights holders. There is no funding for restoration of the environment. If SNWA's pumping creates a dust bowl like Owens Valley, CA, the mitigation and restoration costs will run into the hundreds of millions of dollars – money that Utah would have to sue to recover. This agreement could hamper Utah's case to recover damages.

The agreement is an "unfunded mandate" in that it requires certain costs of groundwater monitoring. There is no guarantee that the Utah Legislature will agree to fund the monitoring program in future years.

Legal concerns:

The agreement does not comply with the Equitable Apportionment Doctrine, which favors current and historic uses of waters and does not consider relevant the location of the recharge of those waters.

The burden of proof is on the small water users to convince SNWA that it is SNWA's pumping affecting their wells and their water rights.

The agreement doesn't cover third parties. SNWA is buying up ranches and water rights and putting that water in their pipeline. The agreement should cover all Snake Valley water that goes into that pipeline regardless of whose it is.

Just because the State claims the agreement is not an interstate compact doesn't make it so. Effectively it is an interstate compact and as such doesn't comply with legal requirements for a compact.

The agreement undercuts or ignores other legal challenges and excludes the Goshutes entirely.

The agreement prohibits "groundwater mining" but fails to define it. This ban of groundwater mining is also in Nevada water law, but this has not deterred the Nevada State Engineer from allowing SNWA to pump and export over 59,000 afy from previously adjudicated Spring, Cave, Dry Lake, and Delamar Valleys. This glaring flaw in the agreement must be fixed prior to approval.

The agreement would undermine the federal environmental review process which is now underway.

The agreement might jeopardize any future case brought by the State of Utah for damages or for restoration of the environment should the SNWA pumping cause Owens Valley-like impacts upon the environment.

Print View

From: Ken Hill <kenhill184083@gmail.com>
 To: <snakevalley@utah.gov>
 CC: Boyd Clayton <boydclayton@utah.gov>
 Date: Tuesday - September 29, 2009 8:28 AM
 Subject: comments RE UT-NV-SNWA agreements

Please accept these comments concerning the draft UT-NV-SNWA agreements.
 Please consider them in further negotiations to improve the agreement.

Ken Hill
 Partoun
 550 HC 61
 via Wendover, UT 84083-9604

--- === General === ---

--- general ---

Too much of this agreement is couched in vague terms. Terms should be changed to be as specific as possible while retaining flexibility to respond to unforeseen or developing conditions.

This water export proposal is one sided to the extreme. Southern Nevada stands to gain only benefits while Snake Valley stands to gain nothing but negative impacts. All phases of this agreement should be slanted toward safety. Any allotment of water should begin low and gradually increase if safe. Upon any unacceptable impacts should trigger stopping the pumps until it is certain the pumping is not responsible.

All funds required to monitor and otherwise implement these agreements, including staffing by either party, should be paid by SNWA or its successors. The funding should be without strings attached. This applies to the TWG and Management Committee staffs. This also applies to any expenses of the Snake Valley Aquifer Research Team in the exercise of their appropriate duties.

--- future drafts open to public comment ---

All future drafts of the agreements should be open to public comment for at least 30 days.

--- public scrutiny in implementing and readjusting agreement ---

The negotiations have taken place in secret. As a result, the agreement is not as good as it could be and public confidence in the agreement is weak. To avoid this problem in the implementation of the agreement, public scrutiny must be mandated and maintained. Data will be publicly available and so should the decision making based on the data. Otherwise

stakeholders will not be able to discern whether the TWG and Management Committees are properly and adequately addressing issues.

Just as the monitoring data will be public, so too the meetings and decisions of the Technical Working Group, the Management Committee, and any other entity created by this agreement be open to public scrutiny. Meetings should be open to public attendance, including conferencing hook ups (including video, phone, and internet) so people at remote sites such as Garrison, EskDale, Partoun, Callao, and Ibapah can attend without having to travel hundreds of miles.

Within 7 working days of any meetings of the TWG and the Management Committee, minutes should be published on publicly accessible web sites.

--- delay because of unresponsive GRAMA request ---

The comment period should be extended because a GRAMA request for documents underlying the agreement was at first denied then granted a few days before the ending of the comment period -- and even then the documents were not immediately released. This has had the effect of denying possibly crucial information needed to properly evaluate the agreement. The comment period should be extended an additional 30-60 days to allow for proper analysis of this new information.

--- snwa drops out of SV -- UT stuck with an agreement ---

If SNWA bails out of the project, is UT stuck with an agreement with NV RE water available? The agreement needs to address this possibility.

--- No Goshute input ---

The Goshute Tribe in Ibapah, Utah, has stated that no one contacted them about their interests in these agreements. This is the same kind of treatment they received from the Department of Interior when they were not consulted about the Spring Valley stipulated agreement.

Signing of this agreement should be postponed until such consultation with the Goshute Tribe can be completed.

--- funding ---

Just as SNWA is guaranteed a portion of federal land sales in southern Nevada, Snake Valley should be guaranteed a portion of the value of water transported in the pipeline for necessary monitoring. Monitoring should not be left to the resources and inclination of either the Utah legislature or the SNWA board.

--- vague definitions ---

Many parts of the agreements are vague and prone to making discussions go on too long. Word like "may" or "strive" should be "will". It reads more like a memorandum of understanding than a contract or agreement.

Words or phrases like "harm" and "acceptable impacts" need to be defined so they mean something specific both now and when the current negotiators are no longer in office.

Also, comments by negotiators indicate they intend certain conditions and outcomes that are not spelled out in the agreement. For example, negotiators have said Utah will be a closed basin which will mean new impacts have to be the result of SNWA pumping. But the agreement does not reflect that. It should -- by imposing triggers to respond to the impacts obviously caused by SNWA's pumping.

--- === UT - NV agreement === ---

--- findings 2.8 and 2.9 ---

Utah's concept of safe yield and Nevada's concept of perennial yield are explained in "findings". But Nevada's concept is more aggressive in allowing more drastic drawdowns and destroying more vegetation. There should be more detail in the Utah section, including discussion of the 'root zone exception' as outlined in the excerpt below or in other language as appropriate.

Furthermore, an additional definition should be included to explain the differences between UT and NV water law and the ramifications of those differences in this agreement. This is important because UT citizens are being handed off to function under NV water law and its implementation under the NV Engineer.

And, of course, the agreement needs to include language ensuring that Utah residents do not get shuffled to a system of laws that are less concerned with environmental damage (NV) than the laws they would normally be under (UT). All the agreement sections dealing with Utah residents' relationships with NV water law need to be examined and carefully worded to ensure Utah residents' rights are not being curtailed and to ensure that changes in NV water law do not diminish Utah water rights holders.

GROUNDWATER CASE LAW AND LEGAL ISSUES IN UTAH
presented before the TASK FORCE STUDYING WATER ISSUES OF THE UTAH
LEGISLATURE
by John H. Mabey, Jr.
October 21, 2004

b. "Root Zone" Exception

In 1949, the Utah Supreme court excluded the water in soil that sustains the beneficial plant life on a landowner's property. This "root zone" water is considered part of the soil owned by the landowner and is not public property subject to appropriation. *Riordan v. Westwood*, 203 P.2d 922 (Utah 1949).

--- changes in NV water law ---

Since Utah water rights holders will be subject to Nevada water law, the agreement needs to specify what happens when any changes to NV water law

occur, either by legislation or legal decision. Otherwise, Utah residents could find themselves in a position where their legal rights are diminished relative to other Utah citizens. The agreement needs to ensure that changes in Nevada water law do not harm Utahns in Snake Valley or diminish their rights.

--- duty values need to be specified ---

Duty values should be specified, particularly the duty for exporting water from the basin.

--- recital about interbasin flow ---

Since BARCASS underlies much of the agreement, especially in estimating discharge of 132,000 afy, there should be a recital added indicating that BARCASS also estimates interbasin flow from Spring Valley to Snake Valley as well as other interbasin flow throughout the regional flow system.

If SNWA is allowed to pump Spring Valley and thereby interrupt the flow into Snake Valley, they will be given double water rights for the amount that is interrupted. The agreement should take that into account, but does not.

Because interbasin flow is not considered in this agreement, the allocated water amounts in this agreement are skewed to favor NV and SNWA.

--- recital reinforcing NV water law RE interbasin exports ---

A recital should be added.

The Final Agreement should acknowledge that Nevada law requires the State Engineer to take environmental conditions and potential for economic development of the host basin into account in decisions related to interbasin transfers. The Final Agreement should hold Southern Nevada Water Authority (SNWA) responsible for negative impacts on the environment, economic potential, or senior water rights holders in Snake Valley and in any other basin that might be contributing to the water available in Snake Valley.

--- agreement area is too narrowly focused ---

Public law 108-424 specified an agreement that factored in the regional flow system, not just Snake Valley. Therefore, this agreement is insufficient. It does not take into account interbasin flows as estimated in BARCASS.

--- spring valley as stand-alone ---

Even if Snake Valley does not become a target basin, BARCASS indicates an interconnection between Snake Valley and Spring Valley, among other interconnections in the regional aquifer system. The agreement does not cover that, contrary to the specific wording in public law 108-424. The agreement must specify what mitigation will address interrupted interbasin flow whether or not water is exported from Snake Valley. Additionally, not accounting for interbasin flow in the agreement could mean SNWA getting more water than deserved. If they get Spring valley

water that diminishes recharge into Spring Valley -- without having that amount deducted from any Snake Valley water rights -- that will be the equivalent of getting that amount of water twice.

PUBLIC LAW 108-424

Section 301 (e) (3)

Prior to any transbasin diversion from ground-water basins located within both the State of Nevada and the State of Utah, the State of Nevada and the State of Utah shall reach an agreement regarding the division of water resources of those interstate ground-water flow system(s) from which water will be diverted and used by the project. The agreement shall allow for the maximum sustainable beneficial use of the water resources and protect existing water rights.

--- 132 k -- too much ---

Should start much lower and increase if safe to do so. Not start high and try to pull the plug later, against great political and economic pressures. USGS is rethinking the discharge numbers and is planning a further study. They admit BARCASS probably overestimated discharge. It is irresponsible to maintain the high BARCASS numbers.

Additionally, the split between the states is unrealistic in light of the historical use and natural discharge in Snake Valley -- which favors Utah. Basing a split on recharge flies in the face of traditional water apportionment, including the Colorado River and the rivers feeding Walker Lake. It is contrary to federal equitable apportionment standards.

The amount of supposed available water comes from evapotranspiration over the whole of Snake Valley. But there is no way Callao ET can be realistically captured from Baker without totally unacceptable negative impacts. Therefore, the amount of "available ET" is unrealistic and should not be used in this agreement.

Finally, interbasin flow from Spring Valley into Snake Valley, as estimated by BARCASS, is not factored into this agreement at all. This grossly favors NV and SNWA by drastically skewing the allotments in NV's favor.

--- 1.4 -- order of beneficial use does not imply priority ---

1.4 "Beneficial Use" means the use of water for one or more recognized purposes including, but not limited to, municipal, domestic, irrigation, hydropower generation, industrial, commercial, recreation, fish and waterfowl propagation, and stock-watering; it is the basis, measure and limit of a water right.

This should be changed to ensure that the list of beneficial uses in not a prioritized list:

1.4 "Beneficial Use" means the use of water for one or more recognized purposes including, but not limited to, and in no priority order: municipal, domestic, irrigation, hydropower generation, industrial, commercial, recreation, fish and waterfowl propagation, and stock-watering; it is the basis, measure and limit of a water right.

--- BARCASS disconnect ---

BARCASS is being used for some key factors such as discharge estimation but another BARCASS finding is being ignored: interbasin flow. If one is accepted, so should the other. The agreement must mandate monitoring to determine if Spring Valley pumping interferes with interbasin flow from Spring Valley into Snake Valley. Any interference must be accounted as a severe impact and charged against SNWA water rights in Snake Valley. Such interference should be cause for immediate cessation of pumping in both Spring Valley and Snake Valley.

--- Block 2 Utah water designation ---

The designation of 'block 2' water based on a cut off date of 1989 is inappropriate. Utah water rights holders filed applications in good faith without any notification their rights would be junior to Nevada water rights. Utah water rights applicants in 1979 would have had no expectation of Nevada rights being senior to theirs. The situation would have been the same in 1989 in Utah. This agreement is supposed to protect water rights holders but if this provision is allowed to stand will, in fact, abrogate the rights of many Utah water rights holders. This could be grounds for law suits against Utah and the agreement.

--- block 3 waters -- reserved water ---

In most other similar situations, reserved waters are generally used for something other than future development.

--- verification of current water rights allocations ---

Accurate inventories, particularly in Nevada, are needed to insure that the basic water rights allocations are correct. This needs to be verified as it could affect the division of water between the states. They should be published in detail in an appendix. As Ronald Reagan said many times, "trust but verify."

--- 3rd parties ---

8.4 Nothing in the Agreement is intended to provide any contract for the benefit of third parties, and no such persons or entities shall have any cause of action as against the States arising from this Agreement...

This seems overly optimistic and non-binding on any Utah citizen who is damaged by any misconduct or negligence in the implementation of this agreement. The mere fact of its inclusion will not prevent a 3rd party from acting in his/her best interest, including legal action.

--- Utah Snake Valley Research Team and Advisory Council ---

Systematic liaison between the TWG and Utah's Snake Valley Aquifer Research Team has been established in the UT-SNWA agreement. Similarly, systematic liaison between the Management Committee and the Snake Valley Advisory Council should be included in the agreement.

--- === UT-SNWA agreement === ---

--- 1. statement of intent ---

1. Statement of Intent.

In order to accomplish the purposes of this Agreement, the Parties agree, as more specifically set forth in this Agreement, to 1) establish monitoring plans to determine the hydrologic, biologic and air resources of the state of Utah which may be affected by SNWA's development of Nevada state groundwater rights within the Snake Valley HB, 2) set out a process to define, subsequently review and, if necessary revise, early warning indicators of sufficient scope and diversity to indicate effects to the hydrologic, biologic and air resources caused by SNWA's groundwater development in Snake Valley, and to 3) establish reasoned and effective management response mechanisms to counter the effects through, initially, avoiding the actions leading to the effect, secondly, minimizing the effect, or thirdly, mitigating the effect. In order to accomplish these tasks the Parties agree to utilize the following tools:...

This should be reworded to specify that the list of tools includes the following tools but is not limited to them. This would allow for such issues as climate change which may or may not fit into one of the enumerated established models and plans.

--- funding the agreement(s) implementation ---

All funds required to monitor and otherwise implement these agreements, including staffing by either party, should be paid by SNWA or its successors. The funding should be without strings attached. This applies to the TWG and Management Committee staffs. This also applies to any expenses of the Snake Valley Aquifer Research Team in the exercise of their appropriate duties.

The bills should be sent to SNWA for payment.

--- 2.3 operational period ---

2.3. Operational Period. "Operational Period" shall mean the time period beginning immediately following the export of any groundwater by SNWA from Snake Valley and lasting for so long as SNWA holds Nevada state groundwater rights with a point of diversion within Snake Valley.

SNWA could conceivably cease holding Nevada water rights without cessation of the pumping. If SNWA were to enter into an agreement with a subcontractor, for example. Or if SNWA were to sell or otherwise transfer their water rights. The agreement needs to apply to whoever may succeed SNWA for as long as anyone has water rights to export water from Snake Valley.

--- maps are not accurate or complete ---

The agreement references map (Figure 1 - Utah/SNWA Agreement Monitoring Areas). The map is not accurate. It depicts phreatophitic areas as hardly existing. But whole sections of the bottom land of Snake Valley contains greasewood so thick it is hard to walk through. Other aspects of the map may also be inaccurate.

The map needs to be completely updated and resubmitted to public scrutiny and comment.

Basic and details maps of soil compositions throughout the basin should be added to maps in order to better determine the number of air quality stations needed. The agreement seems to reflect a theory that the soils are consistent throughout the basin, which may not be true and which may require multiple air quality stations.

--- appendix 1 > 1.1 > sentence is convoluted ---

appendix 1 > 1.1 > sentence is convoluted

I think the first sentence of appendix 1, 1.1 needs fixing. The first comma is unneeded. The phrase "for the purpose of providing an early-warning indication as to whether, in combination with the hydrologic monitoring component, SNWA groundwater development in Snake Valley is causing adverse effects" does not make sense because of a misplaced comma. This sounds like snwa's pumping and hydrologic monitoring may cause adverse effects. I have supplied a fixed version. Does this need to be in a written comment?

---original version ---The intent of the biological monitoring considered here, is to collect a suite of ecologically informative data, at Key Areas of Biological Concern (KABCs), for the purpose of providing an early-warning indication as to whether, in combination with the hydrologic monitoring component, SNWA groundwater development in Snake Valley is causing adverse effects.

--- better (if accurate) ---The intent of the biological monitoring considered here is to collect a suite of ecologically informative data, at Key Areas of Biological Concern (KABCs), for the purpose of providing an early-warning indication, in combination with the hydrologic monitoring component, as to whether SNWA groundwater development in Snake Valley is causing adverse effects.

--- operational period ---

2.3. Operational Period. ~~â€œOperational Periodâ€~~ shall mean the time period beginning immediately following the export of any groundwater by SNWA from Snake Valley and lasting for so long as SNWA holds Nevada state groundwater rights with a point of diversion within Snake Valley.

The agreement responsibilities and obligations need to be binding on anyone who may become successors to SNWA or who may be engaged as sub contractors in any phase or aspect of the water withdrawal process.

--- 10 year starts after spring valley pumping ---

6.7 Nevada agrees to hold the SNWA Applications in abeyance through September 1, 2019, to allow additional hydrologic, biologic, and other data to be collected in Snake Valley for use by the Nevada State Engineer and for use in other processes. Prior to September 1, 2019, the Nevada State Engineer will not hold a hearing or grant a permit pursuant to the SNWA Applications.

BARCASS, upon which key elements of this agreement rely, predicts large amounts of interbasin flow from Spring Valley into Snake Valley. Due to the real possibility that Spring Valley pumping will interfere with interbasin flow into Snake Valley, the 10-year abeyance should begin when Spring Valley pumping begins in order to better study whether interbasin flow is occurring.

And upon good evidence that interbasin flow is being interrupted, any drop in Snake Valley recharge must be charged against any water rights NV has awarded SNWA in Snake Valley.

--- monitoring for ground cover closer than Gandy ---

Appendix 1 -- section 1.2

In the phreatophytic plant community south of Gandy Salt Marsh, a sufficient number of permanent transects will be established and annually sampled to track composition and cover at the alliance level.

This is not specific enough as it could imply that the only phreatophyte monitoring is directly south of Gandy Salt Marsh. Phreatophyte monitoring needs to be done all up and down Snake Valley, but particularly in tier 1, close to the well fields. The section should be reworded:

In the phreatophytic plant community south of Gandy Salt Marsh and extending to the southern end of Snake Valley, a sufficient number of permanent transects will be established and annually sampled to track composition and cover at the alliance level.

--- Bonneville Cutthroat Trout ---

Bonneville Cutthroat Trout are not being monitored as part of these agreements. They should be.

--- 8.2 monitoring in operational phase ---

Notwithstanding anything to the contrary contained in this Agreement, SNWA's contributed funding of the ecological model during the Baseline Period shall be limited to \$500,000. Any funding commitment for ecological modeling during the Operational Period is subject to appropriation approval by SNWA's Board of Directors.

===

There presently is no ecological model for the Spring Valley biological monitoring. We will be meeting in October to select a committee of experts to help us (the Biological Work Group) choose what ecological model to use. Then it will take at least a year for that model to be developed with the Spring/Snake Valley data.

The Stipulation called for exploring the use of an ecological model, but didn't say that one had to be used. The NPS thinks it's necessary in order to see effects before they get up into the park and cause impairment. At this point, all the Stipulation Parties seem to see the usefulness of an ecological model, but it's not certain that there will

be one, especially since they can be expensive.
Gretchen

--- snwa monitoring funding limit : .5 M ---

8.2 Ecological Model.

Notwithstanding anything to the contrary contained in this Agreement, SNWA's contributed funding of the ecological model during the Baseline Period shall be limited to \$500,000. Any funding commitment for ecological modeling during the Operational Period is subject to appropriation approval by SNWA's Board of Directors.

This should be tightened to require SNWA's continued funding if the TWG and Management Committee decide it is necessary. SNWA's board should not be in a position to veto important funding.

--- stopping the pumping ---

6.5 The Interstate Panel shall determine whether an Adverse Impact has occurred. In the case of the occurrence of an Adverse Impact, the Interstate Panel shall determine the appropriate mitigation. The determination of the Interstate Panel shall be administered by the Nevada State Engineer. The process for any challenge or review of an order of the Nevada State Engineer shall be determined by the laws of Nevada.

Some specific triggers need to be established that, if met, would stop the pumping while determinations are arrived at.

--- 8.2 -- delivery of waters ---

8.2 Should any claim or controversy arise between the States; (a) ... (d) regarding the delivery of waters herein provided; the signatories of this Agreement, or their successors, ...

This is vague and undefined. In a meeting at West Desert School, Boyd Clayton, Mike Queally, and Walt Donaldson could not answer what this meant.

Either (1) this should be deleted or (2) it should be clarified to say what it means and then be subject to another round of comments -- since we are not in a position to comment on such vague and undefined language.

--- 3.2.2 consensus ---

The TWG shall strive for consensus in all determinations and recommendations.

Consensus is fine, but can be time-consuming, almost a veto. The agreement should contain language that forces SNWA and Utah representatives to strive for reasonable but limited lengths of time. If a negative impact is the source of discussion about which consensus building is sought, the likely source of the impact should be stopped while consensus is coalescing.

--- 3.2.2 - 9 ---

9. If appropriate, oversee development and use of a regional ecological model to track biotic community response to SNWA's groundwater withdrawal from Snake Valley

Strike 'if appropriate'. Why would it not be appropriate to track biotic community response via a regional ecological model?

--- 4 monitoring objectives ---

3) include certain water quality parameters that may be affected by groundwater development within Snake Valley; and, 4) include certain air quality parameters that may be affected by groundwater development within Snake Valley.

The word 'certain' in water and air quality parameters should be made more specific.

--- 5. Management Response and Operation Plan. ---

5. Management Response and Operation Plan.

5.1 Creation of Operation Plan. Prior to the beginning of the Operational Period, the Management Committee, upon the recommendation and advice of the TWG, shall approve an initial written Management Response and Operation Plan (the "Operation Plan"). The Parties recognize that the scope, terms and conditions of the initial Operation Plan will necessarily be based upon the data available at the beginning of the Operational Period.

This description needs to be clarified. It reads like the operation plan will be created prior to the beginning of the operational period based on data available at the beginning of the operational period. The cart is before the horse.

--- 5.1.1 ---

5.1.1 The Operation Plan shall include:

1. Identification and definition of early warning indicators for effects to hydrologic, biologic and air resources in the Area of Interest;

This should specify that acceptable levels of drawdown will be determined in this phase.

--- 5.1.2 ---

5.1.3 Notwithstanding anything to the contrary contained in this Agreement, nothing contained in the Operation Plan shall mandate or

otherwise require that any specific management response action be implemented based upon an early warning indicator or otherwise. The task of initiating any and all management response actions shall be within the sole discretion of the Management Committee.

This seems like an anti-off switch. The management committee has an effective veto. Even after 3rd party arbitrators make suggestions, the management committee can veto their implementation.

--- 5.2 ---

As part of the determination, the Management Committee shall take all necessary steps to ensure that management response actions are: 1) scientifically sound; 2) can be engineered and implemented in a reasonable manner; 3) are implemented in a timely manner.

How can anyone in Snake Valley find comfort in this statement when the amount determined as natural discharge and the 50/50 split in allocation of that inflated amount is far from scientific or reasonable. And the only thing timely about this process is the rushed comment period.

point 2 seems like a plea for cost-effectiveness so SNWA does not have to spend too much. This should be made more specific and stringent and binding.

--- 5.3 missing 'of' ---

5.3 Good Faith Effort to Finalize Operation Plan. SNWA and Utah shall in good faith pursue the creation the Operation Plan as set forth in section 5.1

should have 'of' between 'creation' and 'the'

--- 5.3 final payment ---

Final payment to the third party shall be conditional upon completion within the allotted year

All costs associated with the monitoring and other implementation of this agreement should be SNWA's responsibility without giving SNWA the ability to use this financial obligation as a lever to control or manipulate.

--- 8.2 sufficiently resolved hydrological model ---

The Parties agree that regional ecological model may be a useful tool in evaluating and predicting effects of SNWA groundwater development when coupled with a sufficiently resolved hydrologic model.

This should be more specific and as accurate as possible.

--- 8.2 funding for ecological model after baseline period ---

Notwithstanding anything to the contrary contained in this Agreement, SNWA's contributed funding of the ecological model during the Baseline Period shall be limited to \$500,000. Any funding commitment for ecological modeling during the Operational Period is subject to appropriation approval by SNWA's Board of Directors.

Funding for an ecological modeling should not be left to the discretion of SNWA board. They should be required to pay for this if the TWG and management committee so order or a 3rd party group decides upon failure of the management committee to reach consensus.

--- 10 NV Engineer proceedings ---

The wording should clarify that this, as everything else, is binding on SNWA's successors, subcontractors, or anyone else exporting water from Snake Valley using water rights originally applied for by SNWA and/or their predecessor.

--- 12 Funding ---

All costs associated with the monitoring and other implementation of this agreement should be SNWA's responsibility without giving SNWA the ability to use this financial obligation as a lever to control or manipulate.

All funds required to monitor and otherwise implement these agreements, including staffing by either party, should be paid by SNWA or its successors. The funding should be without strings attached. This applies to the TWG and Management Committee staffs. This also applies to any expenses of the Snake Valley Aquifer Research Team in the exercise of their appropriate duties.

--- 13 dispute resolution process -- conflict of interest ---

Agreement should specify how conflicts of interest are to be determined.

--- need for experience-based input in monitoring plan ---

The agreement should specify that the creation of monitoring plan(s) must include fact-finding sessions with Snake Valley residents to verify that scientific theories about monitoring realistically conform to observation by residents who have much more onsite experience in Snake Valley. For example, the main map indicates only a few small phreatophyte areas but residents could easily point to large areas of phreatophytes throughout the length of Snake Valley. Residents in every Snake Valley community and farm should be systematically interviewed and allowed to scrutinize monitoring plans for accuracy and reliability.

--- 13 dispute resolution process ---

The recommendations reached by the dispute review board should be considered binding until overturned by higher authority. The pumping or other likely source of negative impacts should cease until proven they did not cause the source of contention.

--- ==== biological monitoring ==== ---

--- invasive weeds ---

As the water table drops and phreatophytic plants die off -- which is the discharge the agreement says will be captured -- invasive weeds may very well become established throughout Snake Valley, leading to negative ecological and economical impacts. The phreatophytic and other monitoring should be very extensive and specifically include monitoring for invasive weeds. The agreement says avoidance is the first strategy, and that philosophy also should be applied to monitoring and avoiding invasive weeds.

--- 1.2 tier 1 biological monitoring ---

In the phreatophytic plant community south of Gandy Salt Marsh, a sufficient number of permanent transects will be established and annually sampled to track composition and cover at the alliance level.

To avoid a narrow interpretation, this should be changed to read "In the phreatophytic plant community south of Gandy Salt Marsh, EXTENDING TO THE SOUTH END OF SNAKE VALLEY, a sufficient number of permanent transects will be established and annually sampled to track composition and cover at the alliance level."

This also should include monitoring for invasive weeds that may replace dying phreatophyte communities.

--- === hydrologic monitoring === ---

--- 1.1 hydrologic monitoring costs ---

The capital costs of establishing the hydrologic monitoring network shall be shared as stated in Sections 1.1.1 and Table 1.1.

All funds required to monitor and otherwise implement these agreements, including staffing by either party, should be paid by SNWA or its successors. The funding should be without strings attached. This applies to the TWG and Management Committee staffs. This also applies to any expenses of the Snake Valley Aquifer Research Team in the exercise of their appropriate duties.

--- 1.1.1.3 funding maximum of 3 new wells ---

1.1.1.3. New Monitor Wells

SNWA shall install up to three (3) new monitor wells should the TWG determine that the "existing" monitoring network outlined in section 1.1.1.2 is insufficient

This is one of the few places in the agreement that is specific. Three wells may not be enough.

--- 1.1.1.4. Groundwater Production ---

1.1.1.4. Groundwater Production

As stated in Section 1.1.1.1, SNWA shall continuously record groundwater production rates and volumes in all SNWA production wells. The State of Utah, through the Utah Division of Water Rights (UDWRI), shall record all groundwater production data on groundwater production wells in Snake Valley, Utah used for irrigation, mining, and municipal and industrial purposes. At a minimum, these records shall report monthly production totals and the duration of pumping during the reporting period.

Why does this section specifically limit this to Utah wells? Nevada wells other than SNWA's also should have the same requirements.

--- 1.1.1.5. Springs and Surface Water - costs ---

1.1.1.5. Springs and Surface Water

SNWA and UGS shall work cooperatively to establish monitoring sites at the selected springs and diffuse groundwater discharge areas listed in Table 1.1. The Parties shall share in the capital costs of establishing these monitoring sites as provided for in Table 1.1.

All funds required to monitor and otherwise implement these agreements, including staffing by either party, should be paid by SNWA or its successors. The funding should be without strings attached. This applies to the TWG and Management Committee staffs. This also applies to any expenses of the Snake Valley Aquifer Research Team in the exercise of their appropriate duties.

--- === appendix 3 - air quality monitoring === ---

--- 1.1 2nd paragraph ---

An air quality monitoring station shall be located within the Utah portion of the Tier I

Due to the variation of soil types, this should not be limited to one station.

--- 1.1.1. Tier I Air-Quality Monitoring ---

1.1.1. Tier I Air-Quality Monitoring

SNWA, in consultation with the TWG, shall locate, construct and

instrument a monitoring station for air quality and meteorological data within one year of the beginning of the Initial Period. This station shall be located in Utah at a site representative of the Snake Valley airshed and operated continuously for at least 5 years prior to and for the duration of the SNWA groundwater withdrawal.

This should be longer than 5 years prior to pumping. This should be for 10 years after pumping begins in Spring Valley because of interbasin flow, as per BARCASS.

Also, the duration is not long enough. It ends when pumping stops but the effects may continue to degenerate for several years after. The agreement should include some specific air quality and all other monitoring and mitigation obligations beyond the cessation of pumping.

--- radioactive particles ---

The southern part of Snake Valley has been identified as having suffered negative effects of nuclear testing in southern Nevada. There could be significant amounts of radioactive particles bound in the soils that could be disturbed if vegetation dies. These particles could contribute to unhealthy air quality. This should be included in the air quality monitoring plan.

--- === missing appendixes === ---

--- appendix 4 agricultural impacts ---

There should be another appendix specifying monitoring for agricultural impacts.

--- appendix 5 -- socio-economic impacts ---

There should be another appendix specifying monitoring for socio-economic impacts.

--- appendix 6 -- list of all costs implementing agreement ---

The agreement should have an appendix listing all costs identified in the agreement and who is responsible for them. SNWA should be responsible for all capital and operating costs.

--- appendix 7 -- detailed water rights inventories ---

There should be an appendix with detailed water rights inventories for both Utah and Nevada. Accurate inventories, particularly in Nevada, are needed to insure that the basic water rights allocations are correct. This needs to be verified as it could affect the division of water between the states.

Print View

From: William Moellmer
To: snakevalley@utah.gov
Date: Tuesday - September 29, 2009 9:19 AM
Subject: Snake Valley Water

Greetings:

It seems to me that the issue can be easily solved by requiring the SNWA to keep a healthy data base of all wells' water depths in the entire valley. When one well starts to drop, then Nevada has to stop taking the water.

William O. Moellmer
william.moellmer@utah.gov

William O. Moellmer, Ph.D.
Environmental Scientist
Utah Division of Water Quality
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Print View

From: Annette Garland <annette.garland@gmail.com>
 To: <snakevalley@utah.gov>
 Date: Tuesday - September 29, 2009 11:10 AM
 Subject: Comments on the Utah-Nevada Snake Valley Draft Agreement

September 28, 2009

Annette Garland

Callao 225 Pony Express Rd.

Callao via Wendover, Utah 84083

I am commenting on the proposed Utah-Nevada Snake Valley Groundwater Draft Agreement. While I appreciate the complexities of this agreement, I feel that it is fatally flawed in many areas and should not be signed until these flaws are corrected.

In Findings:

2.4 The States acknowledge that such information is insufficient to determine with precision the Available Groundwater Supply.

Use of Inflated Available Groundwater Figure:

The figure of 132,000 afy is the highest figure that I have seen attributed to the available groundwater in Snake Valley. The BARCASS itself says that this figure is probably too high and has only a 67% confidence rate in its accuracy. Therefore, when dividing up the water, this agreement has started with an unrealistically high figure. A more moderate figure should have been used as a reasonable estimate. It is most irresponsible for our Utah officials to settle for this estimate. If Utah agrees to this figure, we will be giving up any rights later on to refute it. *The agreement must use a lower and more reliable estimate of the available groundwater in Snake Valley.*

2.6 Recharge of the Groundwater supply in the Snake Valley Groundwater Basin occurs primarily within Nevada. Groundwater discharge and Consumptive use has historically occurred primarily in Utah.

50%-50% Division:

This document declares that Nevada is entitled to 50% of the water in

Snake

Valley's groundwater supply. While I'm sure Southern Nevada Water Authority would like for all of us to believe this, western water law does not support this "entitlement". Western water law has always favored the discharge areas- not the recharge areas. Historically, 80% or more of the groundwater in Snake Valley has been used in Utah. Also, over 80% of the land area under the aquifer is in Utah.

* In fact, the Supreme Court has weighed in on equitable apportionment.

In

Colorado v. New Mexico, (1982) , it was ruled that equitable apportionment

usually favors current users and economies that are already using the water.

In equitable apportionment the headwaters or recharge location is irrelevant. 1*

In *Nebraska v. Wyoming* (and reaffirmed in *Vermejo II*) it is stated that prior appropriations will be the guiding principle of water distribution. The character and rate of return flows, the extent of established uses, the availability of storage water, the practical effect of

wasteful uses downstream and the damages to respective state interests if limitations are imposed. 2

By saying that Nevada is entitled to 50% of the water because Nevada mountains get 60% of the recharge, the agreement is, in fact, rewriting western water law. I dare say that many places in the west use water

where

there is no recharge or head waters-including Las Vegas. This Finding also does not take into account the recharge from the mountain ranges on the eastern edge of the Snake Valley basin. The Fish and House Ranges are

both

over 9,000. *Therefore, I believe that a good agreement must adjust this figure to reflect historical consumptive use and the land area beneath the aquifer.* *At present, there is no surplus water in Snake Valley on

either

side of the line.*

2. 8 "Utah generally allows for the appropriation of Groundwater in a manner that is sustainable and results in a reasonable amount of drawdown in the ground water aquifer."

Unknown drawdowns:

How much drawdown is "reasonable"? Stefan Kirby and Hugh Hurlow say that

the drawdown is likely to be as much as 100 feet near Garrison, Utah.3

This

is not acceptable. John Bredehoeft and Tim Durbin's model shows that there

could be a very large area where the drawdown exceeds 700 ft., and equilibrium to the Carbonate Aquifer may not be reached for 2000 years. 4 This

does not protect water rights, nor does it protect the environmental integrity of Snake Valley.

Interbasin transfers are often controversial due to their size, their costs,

and their environmental impacts. This transfer will have significant environmental impacts on Snake Valley's aquatic ecosystem. The wetlands, seeps, and springs in Snake Valley are dependent on a water system that

the

BARCASS says is in equilibrium. Because of the existing pumping and the drought, we are already beginning to see the effects of an unbalanced

water

system. Only under the most severe situations should water be stripped from a basin-of-origin and be moved to another basin. This is not that situation.

The agreement should protect Snake Valley from drawdowns that would destroy the phreatophytic environments of the valley. The mining of water from Snake Valley is not acceptable.

*6.1 **â€œâ€ that any owner of an Existing Permitted Use may notify SNWA of

a

claim to an Adverse Impact to its water right due to Groundwater

withdrawal

by SNWAâ€.â€*

Go to SNWA first?:

This problem-solving strategy is repugnant to most Snake Valley residents. SNWA

has been an arrogant adversary for more than 5 years. The example of Kennecott Corporation working with neighboring citizens is explained as

the

rationale for this Finding. SNWA is not Kennecott. Kennecott Corporation has a vested interest in protecting its Utah neighbors. SNWA has no such interest. Utah officials are abdicating their responsibility to the citizens of Utah by not initially representing us in effect arbitrations.

*SNWA

must not be our first defense against pumping impacts. We do not choose

to

live dependent on SNWA for our sustenance.*

*6.2 **â€œâ€ Permitted Use(r) may notify SNWA that the permit owner claims and

Adverse Impact and shall provide any pertinent information that supports their claim of Adverse Impactâ€.â€*

Burden-of -Proof:

SNWA should not be able to determine what is and what is not an adverse impact. Also, the burden- of -proof of an adverse impact should be the responsibility of SNWA*. *Farmers and ranchers are hard working people who

do not have time to fill out forms and jump through hoops. *Whatever the venue of appeal, SNWA should be required to provide the burden- of -proof that its pumping did not cause the adverse impact. *

Public Law 108-424 Section 301 (e) (3)

Utah-Nevada Agreement:

The Lincoln County Lands Act says that â€œprior to any transbasin diversion from Groundwater Basin within Utah and Nevada the states shall reach an agreement regarding the division of water resources of those interstate

groundwater flow systems. The proposed agreement does not deal with the entire flow system, except to charge 20,000 afy to Snake Valley for Fish Springs. The agreement does not address the SNWA pumping that will occur in Spring Valley, and it doesn't address the water that will flow to the

Great

Salt Lake. I have heard this figure to be at least 10,000 afy.

There is not a time requirement for an agreement mandated in the LCA. We don't have to be in a hurry to sign this agreement. *This Agreement should not be signed until the entire flow systems of both states are addressed.*

* Snake Valley Environmental Monitoring and Management Agreement*

Management Committee

*3.1.1 **Creation and Purpose: The Parties shall create a Management Committee, to include two executive principals from each of the Parties*

The Utah representative to the Management Committee shall coordinate efforts with the Snake Valley Aquifer Research Team.

This agreement plainly implies, but does not state, that the sole decision-making body of this Operation Plan is made up of 2 executives

from

SNWA and probably 2 of the Utah officials that negotiated this agreement. It

the

is unclear how the Management Committee would coordinate efforts with the Snake Valley Research Team. There is also no mention of the Snake Valley Advisory Council also mandated in Utah's HB120. It appears that the citizens of Snake Valley, who will be most affected by the pumping, really have no input into this Operation Plan. So far, the agreement favors Nevada (SNWA) in all cases.

Disputes Review Board:

The dispute resolution process under the Disputes Review Board is also a problem. This Board includes 1 member of SNWA and 1 from Utah and 1

member

agreed upon by the first two.

13. Although the recommendations of the Board should carry great weight for both Utah and SNWA, they are not binding on either party.

It would appear SNWA could stall any action or ruling by the Management Committee while the pumping proceeds. This agreement is not enforceable.

*A

good agreement must be enforceable, and SNWA or other entities that would inherit their water rights should not be able to control the decision-making process.*

The Process of the Utah-Nevada Agreement:

The process of writing this agreement has been flawed. It has taken 4 years of secret negotiations to produce this document. The only input taken

from
 the citizens of Snake Valley has been given by way of Dean Baker. While I
 believe he honorably participated in the negotiations, I do not believe
 his
 views were allowed to shape very much of the agreement. It is obvious
 that
 SNWA was very influential. The Utah negotiators have asked the citizens
 to
 trust them, but they have not been forthcoming with any of the documents
 that would shed light on these negotiations. Only after receiving a GRAMA
 request appeal have Utah officials promised to reveal the details of the
 negotiations. This is a false concession as we will still not see these
 documents before the comment period is over.

The Utah DNR held 4 public information meetings within a week of the
 release of the agreement- all at times that were either inconvenient or
 too
 soon to be published in the local newspapers.

The recent meeting with the Governor and the Advisory Council was rushed.
 The
 signing is being rushed. Utah citizens want to know why, and our
 "representatives" are not answering that question*. *It then becomes a
 question of trust. It's foolish to trust without some knowledge.

*The public has overwhelmingly rejected this agreement and the rush to
 sign
 it. The citizens of Utah have spoken and still Utah officials are pushing
 ahead to sign the agreement. The negotiations have taken 4 years to
 produce
 a document that won't be used for 10 years. Therefore it must not be
 signed
 60 days from its release. If and when there is a good agreement, the
 governors of both states should be politically responsible and sign their
 names to that agreement.*

References:

1. *Colorado v. New Mexico*, 459 U.S. 176 183 187(1982).
1. *Nebraska v. Wyoming* 515 U.S.
1. *Hydrologic Setting of the Snake Valley Hydrologic Basin, Millard
 County, Utah, and White Pine and Lincoln Counties, Nevada" Implications
 for
 Possible Effects of Proposed Water Wells* by Stefan Kirby and Hugh
 Hurlow. Excerpt from the *Report of Investigation 254, Utah Geological
 Survey*.
1. *Ground Water Development- The Time to Full Capture Problem * by J.

Bredehoeft and T. Durbin. Groundwater 47, no. 4: 511.**

* *

* *

* *

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Cecil C.and Annette H.Garland
Rafter Lazy C Ranch
Callao 225 Pony Express Road
Callao, Utah via Wendover 84083
435-693-3132

Print View

From: "Kathy Hill" <kathrynhillster@gmail.com>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 4:30 PM
Subject: more comments

Kathy Hill

Comments Set 4

Comment 1

Definition of "Findings"

The conclusions of a judge, jury, or administrative tribunal regarding the underlying facts of the case under consideration.
Webster's New World Law Dictionary

I question the term "FINDINGS" for this section since some of them don't seem to have undergone the scrutiny of a judge, jury, or administrative tribunal. Of particular concern is the misstatement of section 2.8.

2.8 states the safe yield doctrine that allows for appropriation of Groundwater in a manner that is sustainable and results in a reasonable amount of drawdown in the Groundwater aquifer. It further states there will be impacts and capture of discharge to phreatophytes. I question whether the last sentence is really part of the safe yield doctrine which I quote:

73-5-15. Groundwater management plan.

(b) "Safe yield" means the amount of groundwater that can be withdrawn from a groundwater basin over a period of time without exceeding the long-term recharge of the basin or unreasonably affecting the basin's physical and chemical integrity.

FIX: Use (b) as the statement finding the safe yield document. Delete anything that is not stated in (b).

Comment 2

2.11 "desire" and "assist" are not measurable terms.

FIX: change wording to "The States shall incorporate monitoring data from measured Groundwater withdrawals into a publicly available database, which the State Engineers will use to manage the Available Groundwater Supply.

Comments on the Snake Valley Environmental Monitoring and Management Agreement

Comment 3

General comments:

It seems inappropriate to have an agreement with one specific water applicant and the State of Utah. I am concerned about the implications if the States of Utah and Nevada go to Supreme Court over disputes. The UT/NV agreement is primarily a water apportionment agreement. Given the Supreme Court's reluctance to interfere with states' right, they may determine to stay with the current water apportionment no matter how inequitable it is. At the same time, the Supreme Court may choose not to address the M & M agreement with SNWA. This would leave Utah at a severe disadvantage. If the Agreement between Utah and Nevada were a strong, equitable document, this agreement between Utah and SNWA would not be as critical. However, since the UT/NV agreement is a political agreement and does not reflect good science or an equitable apportionment of water between the states, this agreement becomes the saving grace of Snake Valley, its residents and environment. It is essential that this document has water-tight language if it is to serve the purpose intended for it - to protect Snake Valley from over appropriation of the groundwater system.

Comment 4

John Bredehoeft (J. Bredehoeft, T. Durbin GROUND WATER 47,no.4:506-514)

has published a paper that details the problems of monitoring a system as large as Snake Valley. It is simply impossible to adequately monitor and mitigate large areas since the impacts are delayed by distance. It is quite conceivable that impacts are irreversible by the time the impact has become apparent. Mitigation is equally ineffective over large distances. So to believe that early warning signs and minimal response actions will prevent serious harm is naïve and dangerous. The only safe way to manage the groundwater in the basin is to be conservative in available groundwater supply and only allow water removal in small increments over a period of many years.

Comment 5

An agreement between Utah and SNWA leaves an enormous hole through which water can run out without interruption. This agreement should be between Utah and any party exporting any amount of water from the basin.

Comment 6

Mike Styler has said that he expects this agreement to be signed in mid October. This does not allow enough time for a thoughtful review of submitted comments or time to present them to Nevada for possible

renegotiation of difficult issues. The signing of the agreement needs to be postponed for a number of reasons. 1) some comments will require more serious negotiations before Utah citizens will consent to an agreement. 2) after a new draft agreement has been written, it should be presented to Utah citizens again for comment and review. 3) An agreement may establish a framework for future Supreme Court decisions should that action be necessary. Therefore, it is critical that the agreement is one we can survive with or without the mitigation component.

RECITALS

Comment 7

G. "desire" does not mean commitment. Use "Will" instead of "desire". The reiteration of agreeing that detrimental changes will occur appears to give permission rather than restrict the impacts. Those assertions should be deleted.

FIX: Change wording in first sentence to "The Parties will establish a consultative process; define consultative process; delete ".which the Parties agree will result in changes to the existing hydrologic and biologic conditions and may potentially effect the air resources of Snake Valley and the defined Area of Interest." delete ".if necessary."

Comment 8

H. Statement does not accurately reflect Utah's safe yield doctrine.

FIX: use precise language: 73-5-15. Groundwater management plan.
 (b) "Safe yield" means the amount of groundwater that can be withdrawn from a groundwater basin over a period of time without exceeding the long-term recharge of the basin or unreasonably affecting the basin's physical and chemical integrity.

Comment 9

J. "Not unreasonable" is left to individuals to define.

FIX: Define what reasonable effects are.

This interesting statement should be included indicating capturing ET on private property in Utah is illegal if the owner of the land considers the plants beneficial.

"Root Zone" Exception

In 1949, the Utah Supreme court excluded the water in soil

that sustains the beneficial plant life on a landowner's property. This "root zone" water is considered part of the soil owned by the landowner and is not public property subject to appropriation. Riordan v. Westwood, 203 P.2d 922 (Utah 1949).

Comment 10

2.1 - 2.3 outlines Initial, baseline, and Operational Periods. Another period is necessary - that of ongoing mitigation after operation is over. Models predict it may take hundreds or even thousands of years for the groundwater system to be recharged. SNWA's obligations need to continue until mitigation is not required any longer - until the groundwater system recovers to initial baseline stage.

FIX: require mitigation and monitoring go beyond operational period until former levels of groundwater are reestablished.

Comment 11

3. 1 Management Committee is comprised of an even number - a stalemate on issues that may need quick responses. A list of triggers and responses should be included here. The management committee may choose to override the responses only if there is unanimous agreement and compelling reasons for it. There is too much power in this committee, no checks or balances, and too much conflict of interest to make objective decisions.

FIX: predetermined list of triggers and responses established by group of experts only to be over-ridden by compelling reasons and unanimous consent by the management committee

Comment 12

4.1 Monitoring Area Description Figure 1 shows Key Areas of Biological Concern, but the map is not very comprehensive and misses acres of phreatophytic vegetation.

FIX: a map showing KABC should be assembled by local people of Snake Valley and experts as a joint work. Local people know the area, experts know the types of things to be included.

Comment 13

4.1.2 Monitoring does not include the possibility of reverse flow or a lessening of hydrostatic pressure that would allow intrusion of salt water in the aquifer.

FIX: Reverse flow and hydrostatic pressure measurements need to be

included in the monitoring of Tier II and should be monitored from the beginning of the project.

Comment 14

5-6 The Operation Plan is a Christmas Wish list that asks for nothing but a "good faith effort." There is a broad range of response actions to avoid, minimize, or mitigate impacts but no penalties for causing impacts. It is easy to foresee a series of weak response actions to manage a deteriorating environment and a shell game evolves as management shifts water from one area to another.

FIX: The monitoring plan needs to include thresholds and triggers that invoke specific and progressively more rigorous response actions up to and including shutting down pumping; severe monetary penalties for slow and/or ineffective responses; a framework of the plan laid out before the agreement is signed; safeguards for water rights users as well as for the environment.

Comment 15

7 Data collecting and reporting is currently left to SNWA. There should be other avenues of monitoring and comparing data to ensure accuracy. It is unclear if this data will be available to the public or only to State agencies.

FIX: "trust but verify" and ensure that data is available to public.

Comment 16

9, Conditions set in 6.8 of the UT/NV agreement to allow UT to present relevant information during the hearing of SNWA applications need to be in place also for change applications. Sufficient time also needs to be given to run models and get baseline data before change is granted.

Comment 17

10. This needs to be a requirement for any party seeking to export water from the basin, regardless of the amount. If the water goes into a pipeline, the agreement needs to be binding on them.

Comment 18

12. This is an unfunded mandate. Funds need to be guaranteed by SNWA and the Utah legislature for the duration of the agreement.

Comment 19

13. In a dispute, the Board must have the authority to make a decision that is binding on both parties. Otherwise, the process can be stalemated for an indefinite and prolonged amount of time.

FIX: Decision by the Board needs to be binding. Disagreement with ruling can be brought before the State Engineer. Until the State Engineer makes a ruling, the Board's decision needs to remain in effect.

Comment 20

Biological Monitoring

1.1 Map needs to be redone as it does not cover all the KABC. When the TWG makes recommendations to the Management Committee, the Management Committee should only be released from the recommendations of the TWG by producing compelling evidence to the contrary.

Comment 21

Hydrologic Monitoring

1.1 monitoring sites should have recommendations by local Snake Valley citizens. Sites should be included in recharge areas where headwaters are found. Trout Unlimited has published findings that indicate headwaters can be affected by groundwater withdrawals.

Comment 22

Air Quality monitoring

1.1 One air quality monitoring station is not adequate for the size of Snake Valley. The south end of Snake Valley had sandy soil, while the northern end is primarily clay soil. In the bottomlands where water collects, the soil is more easily carried by wind than in other areas. We have already seen deterioration of ground cover and increased dust storms to the drought, particularly in the bottomlands. Air quality experts should consult with local citizens to determine the appropriate placing and quantities of monitoring stations.

Finally, it is with great trepidation that I submit these final comments. I do not believe the monitoring and management will prevent massive destruction due to the de-watering of Snake Valley if Nevada takes the

water allocated to them as their share of the aquifer. The only thing that will protect Snake Valley is an agreement that allocates the water based on a realistic, sustainable amount. This agreement in its current form does not provide the protection Snake Valley needs.

Print View

From: Kristen Anderson <kleighanderson@gmail.com>
 To: <snakevalley@utah.gov>
 Date: Tuesday - September 29, 2009 8:20 PM
 Subject: Undue haste

I understand and appreciate that the State of Nevada has rights to the Snake Valley aquifer as well as the State of Utah, and that it is important to maintain good relationships with neighboring states and cooperate to solve disputes. However, neither state benefits from tapping an aquifer if there is not enough information to estimate the Available Groundwater Supply as is specifically mentioned in section 2.4 of the proposed deal, especially with considerations such as seasonal variation and drought to be factored in.

Furthermore, Section 2.8 recognizes that drawdown of the aquifer would "necessarily" have an impact on the hydrological systems of rivers and lakes. It may also potentially affect groundwater wells, such as those used in the region for agriculture.

Agreeing to perform studies during operation, as opposed to identifying areas of concern and potential impact prior to budgeting and construction has a high potential for risk.

No method for enforcing compliance to allocated and unallocated water use is included in this plan, the same cautions being taken for reserved groundwater in Section 5.3 ought to be taken for allocated and unallocated water. There is no apparent reason other than the desire for implementation that the same caution should not be extended to allocated and unallocated water prior to construction and budgeting.

Hydrologic Monitoring and Management Plans suggested in Section 5.2 have no oversight mentioned in regards to representatives of the other state. Re-consultation and withdrawal reduction in Section 5.4 may have negative effects on users in both states who rely on the already established withdrawals.

The interstate panel in section 6.5 should be co-administered by both the Nevada State Engineer and the Utah State Engineer in order to adequately meet the claims of citizens of both states.

In conclusion, this deal needs to consider the impact of withdrawal to areas of concern and determine Available Groundwater Supply for allocated and unallocated groundwater before implementation. Also, citizens of both states would be better served if representatives of both states are involved in the drafting of Hydrologic Monitoring and Management Plans that withdraw large quantities of water, and also if representatives of both states administer interstate panels for adverse impact claims.

Print View

From: <detar@physics.utah.edu>
To: <snakevalley@utah.gov>
CC: <detar@physics.utah.edu>
Date: Tuesday - September 29, 2009 9:41 PM

Utah Department of Natural Resources
Division of Water Rights

We have read the draft agreement and appreciate the opportunity to comment.

We are familiar with Snake Valley, having spent several weeks doing archaeological field work and wildlife observation there.

We are dismayed at the historical legal definition of "beneficial use" and "senior rights", which ignores prior beneficial use by wildlife. In our view using precious water to float pirate ships at casinos in Las Vegas is an abomination and not worth the life of a single Snake Valley midge. But by law just about any human use is beneficial and senior wildlife rights are not part of the picture.

We recognize that this agreement includes provisions for environmental monitoring. However, aside from focusing on two important native indicator species, the Columbia spotted frog and the least chub, which we applaud, the stated criteria for preservation of wildlife is that no species should be reduced in numbers so as to end up on the Endangered Species listing. This sets the bar almost at ground level. Thus, for example, it appears that reducing the Snake Valley antelope population by a significant fraction would not be considered an adverse impact. Later in Appendix C it is stated that impacts are expected and some such impacts are acceptable. We think the draft agreement should require NO SIGNIFICANT REDUCTIONS in any wildlife species that can be attributed to loss of surface water.

We are concerned that withdrawals of ground water will cause unacceptable reductions in the level of the underlying aquifer. The agreement says that withdrawal is permitted that "results in a reasonable amount of drawdown in the Groundwater aquifer". The key issue here is sustainability, which the agreement mentions as a goal. But sustained at what level? Half of the present level? This needs to be quantified. Any withdrawal that results in significant loss of phreatophytes should be unacceptable.

We are concerned that the enforcement process for adverse wildlife impacts is too limited. The management committee tasked with wildlife protection can only make recommendations, which could be disregarded by SNWA. Since the bar for wildlife protection is set so low, it is highly unlikely that much will come of such recommendations.

Thus we think the current agreement provides woefully inadequate protection for existing wildlife species and needs to be amended to do so.

Sincerely,

Carleton DeTar
Laurel Casjens
953 Little Valley Rd
Salt Lake City, UT 84103

Researchers estimate that monsoon rains supply, on average, 246 cubic kilometers of precipitation to the region each year, says Tiwari. So, during the mid-1990s, groundwater supply — which largely comes from rainfall that soaks into the ground — was sufficient to meet agricultural demands. But data gathered between April 2002 and June 2008 by the two satellites of the Gravity Recovery and Climate Experiment show that irrigation now extracts substantially more water than is replenished each year.

GRACE, a joint mission of NASA and DLR, the German Aerospace Center, is designed to map Earth's gravitational field and to detect changes in that field over time (*SN*: 1/4/03, p. 6).

The craft can discern movements of groundwater — which, after it was pumped from aquifers to irrigate northern India, either flowed away from the region or evaporated, says Tiwari. Across the region, the net loss of groundwater averaged 54 cubic kilometers per year between April 2002 and June 2008, he and his colleagues estimate. As a result, the water table — the upper surface of the water in the aquifers — fell about 10 centimeters per year. Coincidentally, this net loss of groundwater is about the same as that lost from melting glaciers in Alaska during the same period, he notes.

A separate analysis of GRACE data, this one focused on northwestern India, reveals that groundwater depletion there is even higher. Between August 2002 and October 2008, farmers pumped an average of 17.7 cubic kilometers of water per year from aquifers beneath three states in India's northwest, says Matthew Rodell, a hydrologist at NASA's Goddard Space Flight Center in Greenbelt, Md. In that arid region, home to more than 114 million people, the water table fell an average of 33 centimeters per year, he and his colleague report online August 12 in *Nature*.

Because rainfall in the region was normal during the study period, all of the loss of water mass detected by the GRACE satellites is presumed to have come from groundwater depletion, says Rodell. The net loss of groundwater from northwestern India's aquifers is equal to three times the volume of Lake Mead, which supplies water for many parts of the U.S. Southwest.

The pace of groundwater depletion in northern India is greater than anyone expected and mirrors trends seen in many other regions, including China and the western United States, says Sandra Postel, director of the Global Water Policy Project, based in Los Lunas, N.M. When groundwater disappears or becomes too difficult to pump, people who now support themselves on the land will become economic refugees, she contends. In many parts of the world, Postel adds, "water problems are becoming very serious, very fast."

Governments in many parts of the world often aren't forthcoming about groundwater or other resources within their borders, so using remote sensing data is the only way to track usage trends for those resources, says Jay Famiglietti, a hydrologist at the University of California, Irvine and coauthor of the *Nature* report. "Big movements of water can't hide from GRACE," he notes.

GRACE detects shifts in water storage indirectly. The two craft orbit the planet along the same path, with one traveling about 200 kilometers ahead of the other. As the first craft in the pair approaches a gravitational anomaly on Earth's surface — say, a mountain range made of dense rock — it is pulled forward in its orbit. After the first craft passes over the mountains, it is pulled backward. The second craft is simultaneously pulled forward as it approaches the mountains. The magnitude of subtle changes in distance between the two craft reveals the size of the gravitational anomaly.

Data gathered by the GRACE craft are versatile. Scientists have used the pair to measure ice loss from Greenland and Antarctica (*SN*: 12/17/05, p. 387), changes in water levels in the Amazon Basin (*SN*: 8/7/04, p. 94), and even the movement of tectonic plates that occurred during the massive quake that occurred off the western coast of Indonesia in December 2004 (*SN*: 1/7/06, p. 6).

Analyses using GRACE data "are an incredible tool," Postel says. Groundwater data for most regions are notoriously poor, she notes. "Even in industrialized countries we don't measure groundwater well."

Print View

From: "Earl Christensen" <EChristensen@propellerinc.com>
 To: <snakevalley@utah.gov>, <snakevally@water.nv.gov>
 CC: <Brad_Shafer@bennett.senate.gov>, <gfairbanks@utah.gov>, <awelling@utah.gov>
 Date: Tuesday - August 18, 2009 5:56 PM
 Subject: Snake Valley is a bad idea

Building a pipeline from the Snake Valley to Las Vegas is a very bad idea. Here's why:

1) The entire negotiation process has been deceptive to the public. Why were the negotiations held behind closed doors? Is it fundamentally so that the people of Utah would not understand Nevada's attempted water grab or so that Utah's "negotiators" wouldn't be embarrassed?

2) Despite any agreement, is there anyone who truly believes that, once the pipeline is built, that it would ever be turned off regardless of the water table level in the Snake Valley? Absolutely not. Who is going to turn off water to thousands of people? So, fundamentally, any agreement is null once the pipeline is built. All the water is going to Las Vegas no matter what. Consider the water disagreement between Kansas and Nebraska:

"OMAHA, Neb. (AP) -- Kansas' top water resources administrator says a letter he received from Nebraska on Monday did nothing to move the states closer to an agreement in their dispute over Republican River Basin water.

Nebraska Department of Resources Director Ann Bleed said in her letter to David Barfield that she disagrees with the methods Kansas used to measure the overuse of water....."

Here's the link on the above water dispute. Read it carefully as you can change the names Kansas and Nebraska with Utah and Nevada one year after the pipeline is built:
<http://www.siouxcityjournal.com/articles/2008/02/05/news/nebraska/f6072be39554489a862573e60013c068.txt>

3) The Utah "negotiators" do not know their history. Read up on what Los Angeles did to the Owens Valley with their water grab. The once thriving farm community is now a ghost town. It transformed "The Switzerland of California" into a desert. And, after destroying the

Owens Valley by stealing the water, is Los Angeles any better place to live? This episode is famous for creating the saying "water flows uphill towards money". What happens when the money runs out?

4) Every community has to live within its means. Go ahead, Las Vegas, grow as fast as you want. Add more casinos, golf courses and car dealers. But you can only grow until your resources run out. I vote you have to stop when taking my resources begins. I want my kids and grandkids to see the Snake Valley as it is and I want Utah's air to be dust free.

5) A good relationship between states is important. Nevada is showing bad judgment, disrespect for Utah, and poor statesmanship.

I vote no on the pipeline and seriously question the Utah negotiators. What are you thinking? How do we get out of this mess?

Sincerely,

Earl G. Christensen

President

Propeller, Inc.

office 801-607-3211

cell 801-368-7100

362 S. University Avenue

Provo, UT 84601

www.propellerinc.com <<http://www.propellerinc.com/>>

Awarded "Utah's fastest growing company" in 1997

Richard and Carol Borgmeier
4260 South Foothill Drive
Bountiful, Utah 84010
August 22, 2009

RECEIVED

AUG 25 2009

NATURAL RESOURCES

Utah Dept. of Natural Resources
Attn: Director Mike Styler
P O Box 145610
1594 West Temple
Salt Lake City, Utah 84114-5610

Dear Director Styler:

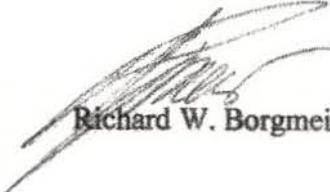
Re: The Snake Valley water aquifers

This aquifer controversy has been in the news, and for comment over the last few months.

It now appears that after four years of apparently secret negotiations that Nevada will best Utah in gaining access to and the use of the aquifer's waters.

My comment is that hopefully Utah maintains the rights to and access to the aquifer waters that are underneath the State of Utah and that these waters could be pumped out to needy Utah locations sometime in the future. If Nevada is going to be allowed to pump waters from their side of the aquifer, Utah should maintain the rights to pump waters from the Utah side of the aquifer. It may be many years before this becomes a necessity, however, the rights should be established for the State to take these waters when needed.

Sincerely yours,


Richard W. Borgmeier

RECEIVED

AUG 26 2009 AA

WATER RIGHTS
SALT LAKE

Print View

From: <Gostalinda@aol.com>
 To: <snakevalley@utah.gov>, <snakevalley@water.nv.gov>
 Date: Tuesday - August 18, 2009 9:45 PM
 Subject: Comments to the Snake Valley Groundwater System Management Plan

Comments to the Snake Valley Groundwater System Management Plan

To whom it may concern:

I attended the Salt Lake City presentation of Utah DNR et al regarding the Snake Valley water removal project today, and would like to offer a few comments. Before I start, I will bring to your attention that you hosted a presentation, not a public hearing. You took but did not record questions and answers. Public hearings should be recorded and the questions and answers should be part of the record. All of which I am sure you know and

calculated carefully. The result of so doing is to destroy any trust in the planning group as honorable and fair. That's a bad and wasteful outcome.

1. Mitigation can only be in dollars if the water has already been put to a non-stoppable use. Las Vegas should be prohibited from taking the water and using it to support infrastructure growth like housing until some trial period has proved the water removal to be benign.

2. Although your (mine too) attorney insists there is no other vehicle than the Supreme Court of the United States in case of a dispute, it is possible for the parties to bindingly agree to other methods of arbitration. The Colorado River Water Compact has been notoriously difficult to arbitrate, yet they have managed to do so, and there is precedent and proven methods for cooperation to be gleaned from their practice book. I think further work to make the agreement more binding can succeed and should be undertaken.

3. Along with # 2, I think too many words are meaningless in the agreement. I would substitute "shall" and "will" in many cases, for various forms of "might" and "may." If A, then B WILL happen, eliminating the "maybe could" concepts. Not "we agree to address" adverse impacts, but that "adverse impacts will be mitigated before...." The large amount of non binding verbiage in the document appears to be deliberate obfuscation, and the public is very aware of it.

4. There should be a section of the document which addresses funding of monitoring in a binding fashion. I suggest that a portion of the value

of
the water sent through the pipeline be dedicated in binding agreement to
the
monitoring. Monitoring should not be left to the whim of the budget
committee of the State Legislature(s).

5. There are new and better ways to monitor the effects of pumping from
the aquifer. The newest I am aware of (this is not my field) is reported
in
Science News this week. The Gravity Recovery and Climate Experiment
satellite co sponsored by NASA and DLR, the German Aerospace Center, is
designed
to map Earth's gravitational field and detect changes over time. It
apparently was able to detect huge deficits in groundwater in northern
India and
map changes thereto over the relatively short time span of six years.

Here is the url for the article regarding the GRACE satellite, which has
the ability to synthesize groundwater levels, and depletion thereof. I do
not
know how long this posting will remain available, so I gave a print copy
of the article to you at the presentation.

[_http://www.sciencenews.org/view/generic/id/46322/title/Big_Gulp%2C_Asian_style_](http://www.sciencenews.org/view/generic/id/46322/title/Big_Gulp%2C_Asian_style)
[yle_](http://www.sciencenews.org/view/generic/id/46322/title/Big_Gulp,_Asian_style)
(http://www.sciencenews.org/view/generic/id/46322/title/Big_Gulp,_Asian_style)

Thank you for consideration of my remarks,

Linda Johnson
1356 E 4500 S, Salt Lake City UT 84117; home phone 801-277-4499
submitted 8/18/09

Vote NO! To the dividing of the aquifer that runs under the Snake Valley with Nevada, for Las Vegas benefit & our demise.

I am the 5th generation of my family to live in Snake Valley, the first arriving in 1872. I understand the importance of water & know the importance of the weather, which replenishes the ground water in this high desert area. The early ranchers relied on the weather & the mountain water to grow their crops. The ranchers of today have underground well to back up the weather & mountain run off. But in recent years they have had to drill the wells deeper. Proof that the weather is changing & the water is receding to deeper levels.

All of the original ranches & homesteads had hand dug or drilled wells not much deeper than 100 ft. In 1997 the town of Baker, Nevada put in a town water & sewer system. Since that time all the old wells have gone dry. And the Baker Ranch had to go deeper with its irrigation wells. To further prove that the water table is dropping, all of the original places had water running to their property, this was used to water trees, animals, hay and other crops. Probably in some cases it also supplies the water they used in the homes. Now you do not even know of the existence of some of these homesteads because the water no longer reaches their so the trees have all died & fallen over. We who have lived here all our lives know what it takes to not only grow crops but to sustain the lives of the trees & other forms of plant life that was started over 100 yrs ago.

Vote NO! To SNWA & Las Vegas, they need to learn to say no to growth & learn to live within the limits of what their present water supply will allow them to survive.

What is happening to our water supply? The weather is changing & the water is receding. What happened to Lake Bonneville & the Sevier Lake? Both have disappeared because the amount of snow & rain fall has continued to change & become less. This along with the hotter temperatures & wind have cause the evaporation of these bodies of water to be non existence with only dry land left to even show of their existence.

Why is Utah in such a hurry to draft a plan with Nevada to divide the aquifer? Money or power? Either way we will be sold out. Why because SNWA has more money & political power than we do.

Even though Snake Valley straddles both Utah & Nevada, the water should not belong to **either state** but to **Snake Valley & the people who live here. OUR WATER is not for sale.**

I think it is important for the people who are drafting this plan with Las Vegas, SNWA, & the state of Nevada, to come to Snake Valley & see how hard the ranchers & everyone else work to survive. With the water we have.

As an allergy & Asthma suffer the wind & dust is not fun. But it would be much harder if SNWA get's this Valley's water.

I am asking you to reconsider before you vote to give half of the Valley's aquifer to Las Vegas, & SNWA. Las Vegas needs to curb its growth, & live within the limits of its water supply, instead of stealing our water & our way of live. We may only be a handful of people in the eyes of the big cities. But where to the people of the cities think the beef for Hamburger & steak comes from. Cattle, hay & other crops are grown here which are all important in some way. A lot of the hay grown in Snake Valleys goes to Las Vegas. We can breathe fresh air here instead of living in the close confinements of the cities adding to their pollution. Believe it or not we do have money that we take to these cities & spend.

I don't believe that the laws or people with more money & power should be allowed to play God's with our lives. We were put on this earth the same as the rest. But we choose to live in the desert, living a simpler but harder way of life. Does this give the Utah representatives or SNWA & the Nevada representatives the right to sell us out because we live in this valley? That allows us clean air most of the time, where we can see for miles & our closes neighbors are a few miles away, instead of in the confines of the cities with it pollution. **VOTE NO!** To sending our water to a congested city located in a DESERT which does not seem to know how to say STOP to its growth. STOP to parks, golf courses, & casinos. Stop Las Vegas from growing beyond its own means of survival.

I thought that all men were supposed to be treated with equality. Then why are our voices not being heard? Why does our way of live not matter? Because the people, who were elected to represent us, are taking it upon them selves to only represent the parts of the state that have money & power. Is this discrimination? Yes! Because we pay taxes & have right to our water, & the right to be heard. We are human beings, we deserve to be heard & our way of live allowed to be sustained. Not ignored while the big cities are allowed to continue to grow at our expense.

Patsy Baker Schlabsz
Baker,NV

Print View

From: Mira Roper <amroper@rocketmail.com>
To: <snakevalley@utah.gov>
CC: <snakevalley@water.nv.gov>
Date: Tuesday - September 8, 2009 3:46 PM
Subject: Snake Valley Groundwater PROTEST

We live and farm around Delta, Utah and have for our entire lives. We are very concerned if ANY water is pumped from the Snake Valley aquifer it will not only affect their ground water but most certainly our ground water as well. We strongly oppose any water being taken from the aquifer to supply Las Vegas. If they have allocated all their water, they need to conserve water and stop expanding. We don't know why we should jeopardize our way of life and livelihood for Las Vegas' needs (greeds).

As it is, over the past couple of years, many people have had to drill new wells because the water level has dropped due to irrigation and other unknown factors in our area. This will be greatly compounded if any more water is taken.

We feel the Salt Lake Valley and the entire northern section of Utah will be very adversely affected if this happens. We hope Mr. Styler will show some loyalty to his hometown and not be "bought off" or sell out his fellow farmers/ranchers. How Mr. Styler thinks this split is fair to Millard and Juab counties is beyond belief!!

If all else fails, studies need to be done for at least 10-20 years to see what the actual affect would be to the areas involved. There is no need for Utah to rush a deal through. We're afraid Nevada feels the studies will show damage to the landscape and aquifer; therefore, they need to make a deal permanently and quickly.

I guess we'll all see exactly what money can buy.

Alan Roper
Mira Roper
214 West 300 South
Delta, Utah 84624

Print View

From: Ken Hill <kenhill184083@gmail.com>
To: <snakevalley@utah.gov>
Date: Friday - September 11, 2009 7:21 AM
Subject: Public scrutiny

So far the negotiations have taken place in an environment of confidentiality, excluding public scrutiny of the agreement details. I am concerned that this not be continued as the agreement provisions are implemented.

I propose that just as the monitoring data will be public, so too the meetings and decisions of the Technical Working Group, the Management Committee, and any other entity created by this agreement be open to public scrutiny. Ideally, meetings should be open to public attendance, including conferencing hook ups (including video, phone, and internet) so people at remote sites such as Garrison, EskDale, Partoun, Callao, and Ibapah can attend without having to travel hundreds of miles.

Also, I propose that minutes of every meeting be posted online on a publicly accessible website within 7 days of the meeting.

Ken Hill
Partoun
550 HC 61
via Wendover, UT 84083

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\o/ \o/

Let everything that has breath praise the Lord - Psalm 150:6

\o/ \o/

Print View

From: <redrock50@comcast.net>
To: "." <snakevalley@utah.gov>
Date: Wednesday - September 30, 2009 5:15 PM
Subject: Delay any approval of the Snake Valley proposed water redistribution project

I am skeptical that anyone other than highly paid lawyers and/or representatives of special interests will have any impact on the outcome of this issue. The impact of redistributing this water to Las Vegas has ramifications that will certainly be more significant than any early study may imply. I hope that the governor will delay any "deal" until all issues are thoroughly addressed. The result of losing this groundwater can have a long-lasting negative impact on the entire Wasatch Front, in addition to the local ranchers who will cease to exist.

Please delay any immediate approval!

Thanks for your consideration.

Brad Weston
302 West 1060 South
Orem, UT 84058

From: Brauer Family, Jim, Ann & Ell
PO Box 269 Indian Springs, NV 89018
PO Box 151 Beaver, UT 84713

September 30, 2009

To: Allen Biaggi, Director
Nevada Department of Conservation and Natural Resources
901 S. Stewart Street, #5001
Carson City, NV 89701

Mike Styler, Director
Utah Department of Natural Resources
Division of Water Rights
1594 West North Temple, #220
Salt Lake City, UT 84114

Thank you for the opportunity to submit comments on behalf of our families, children, and future generations.

The Draft Nevada-Utah Agreement for the Management of Snake Valley Groundwater System and the Snake Valley Environmental Monitoring and Management Agreement SHOULD NOT go forward as currently proposed. We strongly agree with the comments submitted by the Great Basin Water Network (dated September 23, 2009) and other parties with scientific expertise. We look forward to seeing the comments carefully evaluated and incorporated into an agreement which will protect the shared groundwater system in Snake, Hamlin, and Pleasant Valleys, and will protect existing water rights, and the environment of the valleys.

1. The agreement was negotiated in secrecy. For an agreement on such an important resource as water to be successful, it must be based on public participation, full disclosure, scientific evidence, and good faith negotiations that include all affected parties. Important parties to the agreement have been completely left out. Examples are the Goshute Tribes, endangered and threatened species of the future, National Parks, and Wildlife Refuges.
2. This is an interstate compact that encumbers funds from Nevada and Utah, as well as the Federal Government. As such it requires the approval of and funding by these entities before it can be finalized.
3. The legislation requiring this agreement says the states must agree on "maximum sustainable use of the waters prior to any interbasin transfer from groundwater basins located within both States." The agreement, 2.8, states "Utah generally allows for the appropriation of Groundwater in a manner that is sustainable." Further, in 2.10 and 5.4 the agreement states the desire of the States "to allow for the development of the maximum sustainable Beneficial Use of water resources within each state." In no instance is the term SUSTAINABLE defined, although 5.4 allows for its recalculation. What is the agreed upon definition of SUSTAINABLE. Will a "maximum sustainable use" remain constant through time, or be reevaluated periodically?

4. The agreement addresses only two threatened or endangered species in Snake Valley. No complete biological survey of Snake Valley has ever been completed. This is a necessity to be able to predict and identify changes caused by ground water pumping. The agreement must provide for incorporating other potential threatened or endangered species that are discovered, identified, and/or listed in the future.
5. The ten-year delay before Nevada State Engineer hearings on SNWA's applications in Snake Valley has the effect of removing protestants from the process. In the period since 1989 when the applications were filed and protests were accepted, a number of the protestants have died, moved, or sold their property. The added ten-year delay will only increase this number, allowing SNWA to move forward without having to address protestants. It ties up water applications and hampers economic development in Snake Valley and other affected valleys. The agreement must include a provision that protests will be accepted again before hearings proceed, whenever that may be.
6. In the past, SNWA has operated in secrecy. Data and research have not been publicly available or peer reviewed. It is unacceptable to have SNWA as a third party in charge of collecting and/or interpreting data, receiving and evaluating complaints, or making decisions about whose damages are to be mitigated, whose are not, and the amount and kind of mitigation.
7. There is no provision in the agreement for changes to water laws in either state that may affect the agreement. Allowing the agreement to be amended by the agreement of the parties (Nevada, Utah, and SNWA) is vague and unacceptable. SNWA must not be a third party with the power to bring about changes. It is not a sovereign entity, and must not encumber Nevada or Utah. Should SNWA fail, go bankrupt, or leave Snake Valley, will the states of Nevada and Utah then have to assume liability? The agreement does not specify how long it is effective, or how long SNWA is responsible for the pumping effects, damages, debts, or mitigation. This is unacceptable.
8. Any monetary amounts established by the Agreement must be stated in 2009 dollar equivalents, thus protecting against inflation.
9. In the twenty years since the applications were filed, SNWA has shown no progress toward using existing and/or new technology to conserve and reuse water efficiently. SNWA must be required to show significant progress in conversation before hearings proceed on the water applications. As it stands with the agreement, there is no incentive for SNWA to improve its conservation practices.

Comments sent via email to:

snakevalley@utah.gov

snakevalley@water.nv.gov

Print View

From: SHM <kapsacademy@yahoo.com>
To: <snakevalley@utah.gov>
Date: Wednesday - September 30, 2009 1:00 PM
Subject: Snake Valley water

The Southern Valley Nevada Water Authority's proposal to pipe water needs to be studied closely. The delicate balance of the ecosystem, if destroyed, would have serious repercussions that cannot be ignored. Not only would the natural environment be potentially devastated, but the livelihood of ranchers and others could be as well.

This proposal needs significant time to study, and rejected if the outcome will be as dismal as it now appears it would be.

Sincerely,

Susan Mikesell
Park City, UT

Print View

From: Debra Pritchett <dep3591@gmail.com>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 7:31 AM
Subject: Snake Valley Agreement

I am writing to ask that all time and consideration possible be given to the decision to finalize an agreement regarding Utah's west desert water use. This decision will impact Utah for the rest of forever. The only appropriate way to make a decision of this magnitude is to know, as well as possible, the future effects. Please take the time to know what water is available, how it is changing already, and what the impact of piping it out of Utah into Nevada will be. That time now may provide water to our Utah in the future, that otherwise will be gone in the very near future. Allow the studies to be completed before any final recommendation is made.

Print View

From: Dorothy Getz <mainepower@aol.com>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 8:18 AM
Subject: Snake Valley Water

PLEASE DON'T GIVE AWAY WATER RIGHTS TO NAVADA WHEN UTAH MAY NEED THAT WATER IN THE FUTURE. PLEASE DON'T MAKE A DECISION UNTIL THE ADVISORY COUNCIL CAN HAVE TIME TO STUDY THE SITUATION AND MAKE AN EDUCATED RECOMMENDATION. IT WOULD BE UNWISE TO CONDEM THE FUTURE OF UTAH WATER USE BECAUSE OF POLITICAL PRESSURE. THANKS FOR CONSIDERING WISDOM AND PRACTICALITY.

SINCERELY, DONAREE NEVILLE, HOLLADAY, UTAH

Print View

From: Gretchen Semerad DuBois <semerad7@yahoo.com>
To: <snakevalley@utah.gov>
Date: Wednesday - September 30, 2009 11:04 AM
Subject: Draft Snake Valley Document

Dear Governor Herbert,

As a native Utahn and scientist, I believe that there is no need to finalize an agreement with Nevada over the Snake Valley aquifer at this time. There are a number of serious concerns that should be further studied before any decision about the aquifer is made, including impacts to the desert ecosystem tied to the aquifer, impacts to our local ranchers and farmers, and potential air quality impacts to the Wasatch Front. I support additional scientific studies of these issues, as well as further studies on the amount of water that the aquifer holds and whether or not it is already declining.

If the climate continues to warm as scientific consensus currently shows, water will become more and more important to our state. There is no need to rush to an agreement on this issue, especially before all the scientific data is in. We need to protect our state's resources, ecosystems, air quality, and our citizens. I encourage you to seek all possible scientific data on this issue and allow plenty of time to collect and understand that data before any decision is made.

Thank you,
Gretchen Semerad
1533 Kings Row Drive
Salt Lake City, Utah 84117

Print View

From: <tatum@hum.utah.edu>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 10:22 AM

Dear Governor Herbert: I am writing in regard to the proposed UT/NV draft agreement about the proposed use of Snake Valley water resources for the Southern Nevada Water authority. I agree with today's SL Tribune editorial suggesting that there is no urgency to approve this agreement prior to the hydrology science being finalized and a reassessment of the need for the water in today's economy and the slowdown in development in Clark County, NV. I am very concerned about the possible repercussions of draining the Snake Valley aquifer with regard both to the lives and cultures of ranchers and farmers in the West Desert, the sustainability of the Fish Springs National Wildlife Refuge, and air quality along the Wasatch Front resulting from dust storms of blowing soil. Please do not sign off on this agreement for the state of Utah at this time. Thank you for your attention.

Stephen Tatum
198 Q. Street
Salt Lake City, UT 84103

Print View

From: "Joseph Sloat" <JSloat@WarnerTC.com>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 10:58 AM
Subject: Snake Valley Water

Water is the oil of the future in terms of the scarcity of natural resources. Utah.....HOLD OFF!! Nevada is not worthy of one gallon of our most precious resource. Not to mention that there is scientific data that suggests that if the Snake Valley Aquifer is tapped, it could soon be infiltrated with brackish water from the Great Salt Lake.

What about our farmer?

Secret meetings to determine allocation of OUR WATER?????? Nonsense I say!!!!

Las Vegas growth has outpaced water needs? TOO BAD!!!!!! How ridiculous is it to have a gigantic city that is dying of thirst in the middle of some of the most inhospitable country in the United States

I propose that IF Nevada is in such need for our water, we give them the option to pay the same price a Salt Lake City resident pays for household water consumption. The revenue could be invested in Utah State Infrastructure, education, and a host of other needy areas.

Ridiculously high water costs will curb Las Vegas growth.

I say Nevada is not due one ounce of our most precious resource. NOT ONE OUNCE!!!!

Joseph C. Sloat
Truck Sales Representative
Warner Truck Center
2240 South 5370 West

Print View

From: Jp Conaty <loopy18cc@yahoo.com>
To: <snakevalley@utah.gov>
CC: <mariepoulson@utah.gov>
Date: Tuesday - September 29, 2009 3:22 PM
Subject: Water sharing

It's easy to see interests in Las Vegas wanting to see this agreement on a fast track, but why aren't Utah leaders digging in their heels a little more? At least until more scientific analysis can be done? With the current real estate bust in Las Vegas it seems like pressure from the Las Vegas developer should eased as well

Rather than dragging our feet every inch of the way, Utah, western desert ranchers aside, seems certain and maybe even eager to see this suspect deal done.

What am I not seeing?

Thank you.

Print View

From: "Richard Spotts" <spotts@infowest.com>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 8:20 PM
Subject: Please postpone signing UT/NV Snake Valley agreement until all the facts are available

September 29, 2009

Dear Utah officials:

Please postpone signing the UT/NV Snake Valley agreement until all of the current related hydrological and biological studies are completed, as well as the BLM's NEPA process of preparing a Draft and Final Environmental Impact Statement. At that time, the best available scientific information will be available, and the BLM's NEPA and related public involvement process would be finished. With all of that scientific information and public input at hand, the Utah and Nevada officials should take a fresh look at this draft agreement and decide whether or how it should be revised.

The parties to the draft agreement, and the language of the agreement itself, acknowledge that there is no rush to execute this agreement at this time. Doing so now would be patently premature, and arguably would circumvent or denigrate the importance of the pending studies and NEPA process. Please do not put this important cart before the horse. Please be patient and wait for the full picture.

Snake Valley ranchers concede that the ground water table has already been falling, and that many wells and springs have already dried up. This creates a clear presumption that current groundwater extraction already exceeds the natural recharge rate, and that perhaps there have already been more water rights granted than the aquifer can sustainably provide. Climate change will likely cause prolonged droughts in the West, which would make the currently bad situation much worse. Absent objective studies that demonstrate a clear "surplus" of water in this aquifer, it would seem foolish and wasteful to proceed with an agreement that purports to allocate water well in excess of reality.

Please add me to any snail and/or E-mail list to receive news or updates on this matter.

Thank you very much for considering my comments.

Sincerely,

Richard Spotts
1125 W. Emerald Drive
St. George UT 84770-6026
spotts@infowest.com

Print View

From: <braun_bear@beyondbb.com>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 9:31 PM

Dear Gov. Herbert and other involved state officials. I'm writing to request that you allow more time for analysis and comment before making a decision regarding this Snake Valley Groundwater Agreement. There's too much uncertainty about the impact of this agreement to rush into it.

Thanks for accepting my comment.

Mark Montgomery
1075 W. Emerald Drive
St. George, UT 84770

Public Comments on the Draft Agreement:

Transcript of UAC-GBWN Citizens' Hearing Held September 9, 2009

List of Speakers: (in order, name underlined above their comments)

Peter Corroon, Mark Ward, Terry Marasco, Dan McCool, Brian Moench, Kenneth Norman, Curtis McCarthy, Steve Summers, Maury Harmon, Cecil Garland, Robert Comstock, Kirk Robinson, Bob Brister, Paul Van Dam, Joel Ban, Jerald Anderson, Don Ries, Gerald McDonough, Ted Wilson, Paul Tusting, Chris Wheeler, Ed Uehling, Ilene Ferris, Rupert Steele, Darin Smith, Kathy Walker, Steve Erickson

Mayor Peter Corroon:

Welcome everybody. Thanks for coming to the hearing tonight. We appreciate it. We're going to get going here in a second. In case you're... we have a lot of meetings in this building so in case you're here for the Snake Valley discussion. I know there's another meeting about after-life experiences, it's not in this room tonight. That's supposed to be downstairs. So if you're interested in after-life experiences you can go downstairs as well.

This meeting tonight is organized by the Utah Association of Counties. Thank you very much. Brent Gardner is here and Mark Ward as well is here from the Utah Association of Counties. We also have the Great Basin Water Network who's represented here. And Steve, I assume that's you.

That's me.

The representative here tonight. I did have a chance to go down to the Snake Valley and visit, and Cecil Garland was very kind to give me a tour and wonderful family. Fed me

lunch as well. We appreciate them being here. We had some good discussions. I met with a few people. It's always interesting and important to see things firsthand. So I got that opportunity. Which is why, I think, we wanted to have a public meeting tonight to hear from our Salt Lake County residents and record what is said and the comments that are made and make that a part of our official comments to the governor on this matter.

I think the KSL editorial board had some good wisdom in March when it made these comments. It said, "Water stored naturally beneath Utah or Nevada should only be pumped to the surface and diverted to Las Vegas when it can be proven the project won't adversely affect the fragile West Desert ecosystem." I'll add on to that saying that the farmer's and rancher's livelihoods as well. And I know there's been a lot of people working on this issue, concerned about this issue, and I know our two states have been negotiating in good faith over an agreement. And so we want to hear what your comments are on the Draft Agreement and what you feel is important that we send as comments to the governor. So, I appreciate you all being here. The comment period ends September 30, so if you want to submit your own comments you're welcome to do that. The Draft Agreement can be found at www.waterrights.utah.gov. So if you want to read it. I don't know if we have copies of the agreement available here for anybody. We don't. So get online and check that out if you'd like to do so. Without further ado, I'm going to turn it over to Steve Erickson who's going to tell you where the bathrooms are and other important matters.

Steve Erickson: Thank you, Mayor. I have the most important job of the evening.

And I'm Peter Corroon, the Salt Lake County Mayor. I just heard somebody say that, so I apologize for not introducing myself. I guess I'm in my own home so I forgot to do to, and I apologize.

Steve Erickson:

We greatly appreciate Salt Lake County and Mayor Corroon in making this facility available and Ann Ober for her assistance in all of this and welcome you all here. I'll act tonight as your hearing officer. I'm not an impartial party. I've worked for the Great Basin Water Network. We are opponents of the Las Vegas pipeline and we have concerns about the agreement. We hope to hear your concerns about the agreement tonight. Our intent is to deliver those to the State for inclusion in their collection of comments that they're collecting online and hopefully those comments will be incorporated into the final, final draft, and at that point we hope that the State will commit to another opportunity for people to look at the last and final draft before the agreement goes through the next process, which we presume will be signing, unless the decision is made not to sign it.

I want to tell you that if you care to speak, we'd like to have you sign up. I'm going to try to go through in order of those who signed up after we have a few speakers to give you a little more background. There's a sign-up sheet on the clipboard there, we also have postcards which we would encourage you to look over. If you agree with the message, we'd like to have you sign it and leave it here and we'll hand deliver it to the governor, addressed to the governor, and we'd love to have you do that if you're so interested. At the back there's also copies of a letter from, rather an op-ed piece from the Utah Farm Bureau, as well as some suggestions for talking points and/or comments on

the agreement you could use if you care to. If you wish to make agreements, uh, with comments on the agreement, as Mayor Corroon said, we would encourage you to do that. Go to the Division of, the Utah Division of Water Rights website, you'll find a whole section of information on the proposal and on the agreement, as well as comments that have already been posted from others and you'll hopefully learn a great deal more. You can, at that point access the agreement itself, as well as several associated documents. So we encourage you to do that as well.

We hope to give everyone sufficient time to speak. We're going to try to hold everyone, other than maybe the first couple of speakers who have some PowerPoints to do and a little bit more background, to about five minutes. So I'll, when the time is up, I'll give you the yellow card. I don't have a red card; we won't throw anybody out, but a five minute limit and I'll give you the hint about a minute to go and hopefully that will help you to curtail your comments, but be brief and to the point.

The ladies rooms are down here, down the hallway on my left, your right; the men's rooms directly opposite this hallway. I think with that we essentially covered the major logistics. I'll probably remind people as they come in that if they wish to speak they can sign up over here.

With that, again, I'd like to introduce Mark Ward with the Utah Association of Counties who has a presentation to make which hopefully will inform your comments and will also serve as the comments as the Millard County, and indirectly as the Association of Counties. So, Mark...

Mark Ward:

Thanks, Steve. I'm Mark Ward, again, with Utah Association of Counties. I'm a policy analyst and attorney there working on mainly natural resources, public land issues and, of course, water issues as they come up. In the last approximately three years, I've provided representation to different levels for Millard County, Juab County, Tooele County and to a certain extent, Salt Lake County and Utah County. They're all stakeholders in this controversy. And what I bring you tonight are the collective concerns of the counties about the tentative agreement and some thoughts about maybe ways to improve that agreement. Talk about some principles that ought to, I think, would better serve the State, especially from the county standpoint, with respect to the tentative agreement. As we look at the tentative agreement, and we look at the question: What is a proper split of groundwater between two states? How much groundwater belongs to each state in a property state? To us, there are five factors you look at. And what I have over here to help kind of further the discussion is a poster, and it's not, sorry it's not larger, but maybe you can take it look at it at a different time. Maybe I'll just put it right over here for ease of...or is that, that's going to block your view of the screen, isn't it? Maybe I'll just put it right over here. And what it is is an outline of Snake Valley. And you can't see it maybe very well, but there's a state line running right through it. And what you see in the middle there, sort of that light colored, sort of streak in the middle is the area where the United States Geological Survey, USGS, believes the groundwater is, is used. That's where there, those are the acres where the groundwater is used and that's where what's called discharge. That's where groundwater in a basin is actually comes off and is used by plants and animals, where it evaporates in springs and standing water. And so to us, our manner of thinking, we think it's the system with western water law that discharge is

probably the most important factor. The next most important factor is historic use. Where has the water historically been used in the basin? Recharge is in there, but we don't think, we submit that it's not as important as historic use or discharge.

Also another factor is what happens to Fish Springs? Now Fish Springs is a National Wildlife Refuge in a valley that's downstream from Snake Valley. The question is, when you utilize the groundwater in Snake Valley, what happens to that resource downstream?

And a fifth factor is there's another valley called Spring Valley, and that's part of the project. Southern Nevada Water Authority has been granted rights by the Nevada engineer to pump anywhere from 40 to 67,000 acre feet a year from that valley. What will be the impacts to Snake Valley from the pumping in Spring Valley? So in essence, you're standing there in Snake Valley, you look downstream to Fish Springs, which is in Fish Springs flat, and you ask, what will our, what will the pumping here and the use of water here do to that resource? And then you pivot and look upstream and you ask, what will pumping the Spring Valley do to the resources of the Snake Valley? They're all interconnected.

Discharge. Where is the land that depends upon the groundwater? In other words, where is the groundwater put to beneficial use for such things as crops, pasture, forage, for municipal and so forth, and also, just as important, where does nature use the groundwater for plants and for wildlife. There are two ways to look at discharge. First, what are the acres in Snake Valley that depend upon it? Where are those acres? And how many acres are there in each state? Another closely related way to look at it is how much acre feet of groundwater is discharged in those acres? So there's acres of land and acre

feet of groundwater. According to the USGS in their BARCAS study, of the acres in Snake Valley that depend upon groundwater there are 220,779 acres of those acres in Utah. That's 84% of all land that depends on groundwater in that valley is found in Utah. In Nevada, it's 41,364 acres, or 16%. This is from USGS Utah recalculating the BARCAS data. BARCAS is the definitive study. It was commissioned by Congress in 2004. So right off the top, you know that 84% of the groundwater dependent land in Snake Valley is situated in Utah. Now what about discharge and acre feet? Again, BARCAS tells us that 82% of the groundwater, in terms of volume of water that's discharged in Snake Valley, is discharged in Utah—108,000 acre feet or more. In Nevada, it's 24,000 plus. So the split there is 82% to 18%. It's remarkable how close those two ratios are: 84 to 16 for acres and 82 to 18 for acre feet of water. So that those are the relevant facts that kind of hit you right off the top in between in the eyes on the question of discharge. Discharge is heavily favored in Utah's favor.

Now, some say, well, yeah, but a lot of those acres are just desert plants and desert animals. Are they really tied to water rights? Maybe not. But Millard County, who was the only entity to file a protest when SNWA's—when I say SNWA, that's the acronym for Southern Nevada Water Authority. In Nevada they say "sun-wa". For some reason, the regional dialect here, we say "sin-wa". I don't know why [laughter]. But here we say "sin-wa". Millard County was the only county to file a protest of those applications. They filed applications in Snake Valley before the Nevada engineer for 50,000 acre feet of water a year. Millard County was diligent and filed a protest, but in paragraph 6 of that protest, after, I'll say in the prior paragraphs, Millard County made a big deal to try to protect the water rights. But then they said this, they said, "the

appropriation of the water will further threaten springs, sinks, and phreatophytes.” Those are, that’s groundwater dependent plants, which provide water and habitat critical to the use and survival of wildlife, livestock and other existing uses. In other words, Millard County made it a point to protest not only in behalf of traditional water right uses of irrigation and agricultural uses, but also I submit, what we’ll call nature uses as well. And Millard County today is simply standing behind that protest. And, incidentally, that protest was signed by then Commissioner Michael Styler. So we are continuing that course. When I say we, Millard County. Okay. That’s enough for discharge.

Real quickly, historic use. How does the water divide out between the two states in terms of allocated water rights historically? And here we’re looking at the critical data of 1989 or earlier. The depletion on the Utah side based on 1989 or earlier groundwater rights we’re told by the Utah negotiating team is 35,000 acre feet. In Nevada it’s 12,000 acre feet. There the ratio is 74 to 26%. Again it favors Utah. What about recharge. We’re told again by the Utah negotiating team that here recharge, recharge for those of you who don’t know a whole lot about hydrology, you can think of a water budget in a closed basin kind of like your bank account. There are deposits to your bank account and there are withdrawals. Deposits we call recharge. That’s like rain and snow that falls and that’s also like water that flows into the valley from other basins. That’s recharge. And outflows is evapotranspiration through the open standing water and also through the plants, the water, that’s how it discharges out into the ___?___ and some of the water flows out of the basin. So you have inflows, rainfall, that’s recharge, evaporation, evapotranspiration, outflow, discharge. Again, 60%, 40% there for Nevada.

Now the question is, you know, what's more important? Discharge and historical use or recharge? Without launching into a long boring lecture on western water law, I think I can generally say with confidence that western water law favors where the water's going to be used, where it comes out and is depended upon. That's how the Colorado River Compact is largely structured.

Uh, in any event, moving on. What about downstream impacts? We, uh, we're told by the negotiating team, and we have no reason to doubt it, in fact we, we actually support that to protect Fish Springs downstream, Snake Valley consumption should be reduced by 20,000 acre feet in order to protect the resources of Fish Springs. We support that.

Does that mean present use? Reduce the present use of the water?

No, I'm sorry. Good question. It means if you take the total water budget, which is 108,000 acre feet, wet water, we're told by the folks at Utah Division Water Rights and the Department of Natural Resources that really you ought not to use that maximum amount. You ought to back off 20,000 acre feet down to 88,000 acre feet, to make sure that we're not interfering with the flow of ground water from Snake Valley over to Fish Springs. We have no reason to doubt that. We applaud that and we support it. But that just underscores the fact that these basins are interconnected. However, here's where the discussion becomes, I think, interesting. If that's the case, then what about the impacts from upstream? What about the impacts from Spring Valley where pumping's going to occur? There are really two questions, two sub-questions to this. First, what is the Spring

Valley to Snake Valley interbasin flow? How much is that? The second is, how much of that will be reduced if the pumping occurs? So you have to quantify what is the flow in the first place and then how much is that going to be interrupted? These are not easy questions because it's groundwater. It's carbonate aquifer background water. We have some guidance. BARCAS estimates that Spring to Snake Valley estimated flow is at 49,000 acre feet a year. However, there's a statistical range of probability on that based on current science could be as high as 60,000 acre feet or as low as 30,000 acre feet. BARCAS came out and said, look we've got this confidence interval, but we'll peg it 49. And 33,000 of that flows around the southern flank of Snake Range, which is a critical area where it's right in the line of pumping on the Spring Valley side where the water flows to where it's going to be pumped on the Snake Valley side. And here's a map to demonstrate that. Snake Valley, course, that's where the state line runs through. You see Spring Valley over there and the directional flow of groundwater, uh, if you look at that 33 there, that's the estimation. You see the 30...oh, I'm sorry. Hit the wrong button. You see the 33, you see the 16, that's where you get the 49, and they estimate that 33's coming around, but that, course, that could be lowered, could be higher. Now what's the reduction for that interstate flow, interbasin flow? We don't know for sure, but Millard County's position right now is that it's safe to take half that 33,000 or roughly 16,000 acre feet. In other words, the position of Millard County is that, you know, you took off 20,000 to protect downstream impacts to Fish Springs. You ought to require Nevada to take 16,000 acre feet off, out of their allocation too, because they're going to be using it up in Spring Valley. The way to think of it is Utah decided to retain 20,000 to protect its use that they're going to take at Fish Springs. Nevada's decided to take their part up at

Spring Valley. Why not, uh, you know, you can't use it twice. You can't use it in Spring and then Snake too. But that's a discussion point and it's a major concern that the counties have is that the agreement, while taking care to protect against the impacts of Fish Springs, does not appear to make allowances for impacts from Spring Valley. So this 60,000 acre feet, again, is roughly half of the interbasin flow south of the Snake Range.

Now why is this important that we look at both valleys? Well, it's underscored by the fact that Congress in 2004, Congress said, BLM you cannot allow this water to go to Las Vegas from Snake Valley until the two states sign an interstate agreement. That's what, we're here, we're here to talk the interstate agreement. But if you take a close look at the language, the congressional language says before there's a transbasin diversion from a groundwater basin located both in Nevada and Utah—which is we're talking about Snake Valley, right?—before that happens, the state, the two states shall reach an agreement regarding the division of what? Those interstate groundwater flow systems from which water will be diverted. Well a flow system is different than a basin. A flow system are several basins. Again, well I haven't shown this map yet, but there's several maps out there and everybody understands that area that...that area there, there, that's known as the Great Salt Lake Deseret Flow System. It includes Spring Valley, it includes Snake Valley, it includes the valleys beyond Snake Valley, including Fish Springs. And what Congress is saying in that statute is you have to divide not the water of a basin but the water of a flow system. Okay? Now there's wisdom in that language because it happens to dovetail with the county's concerns about looking both upstream and downstream when you figure out how to divide the water. The two are harmonious. The instinct, the natural instinct that you have that says, yeah, you ought to look at the

dynamics from valley to valley to valley happens to be consistent with the congressional language that says you're not supposed to divide just a basin; you're supposed to divide an interstate groundwater flow system, and that's section 301(E)(3) of Public Law 108-424, otherwise known the 2004 Lincoln County Conservation Recreation and Development Act. Okay?

So, again, that map I showed you a minute ago, the blue, this is a BARCAS report. The blue is color coded to mean the Great Salt Lake Desert Flow System. Why is it a flow system? All that water heads to one destination: Great Salt Lake. It knows no boundary. It doesn't understand state boundaries and it doesn't understand valley boundaries. The water moves from valley to valley. What you do with Spring Valley affects Snake Valley. What you do in Snake Valley affects Fish Springs. And the negotiating team, hats off to them for recognizing, innately recognizing that by what they did to protect Fish Springs. But our dialogue with them is could you pivot around, please, and do the same thing for Spring Valley.

So we have discharge 82 to 18. Historic use, 74 to 26. Recharge favors Nevada. Fish Springs allowance 20,000 acre feet. Spring Valley pumping allowance 16,000 acre feet.

Quick look at the Draft Agreement. On its face the agreement gives Utah 55,000 acre feet of allocated water and 12,000. But again, 20,000 of that is Fish Springs allowance. So it's really only 35,000 that's being, that's for use right in Spring Valley, or Snake Valley. 35 to 12. A minute ago I told that that's the historic use ratio, 74%. Now here's what the agreement purports to do. It identifies another 41,000 acre feet of water that's unallocated that's part of that 108,000 acre budget, acre foot budget and it says,

okay, Nevada gets 7 acre feet for every 1 that goes to Utah. In other words, 36,000 acre feet of unallocated water would go to Nevada; 5,000 acre feet will go to Utah. There's another category called Reserve. I call it dry because it really is, I think both sides will tell you, it's really dry water. What they try to do is square up the 108,000 acre foot budget with BARCAS's budget of 132,000, that's a difference of 24,000. That's 6 plus 18, 24, and they say, well, look, Nevada, you take three shares to every one of ours and we'll, the numbers will come up even, 66,000, 66,000. So it's been presented as an even split. Again, it fails to take into account depletion from Spring Valley pumping. It's one of the big problems. It fails to take into account Spring Valley pumping. Plus, it's problematic when you look at discharge, historic use, which has favored Utah; it's problematic to look at the unallocated as a 7 to 1 split in favor of Nevada. That's a real, that's a sticking point for the counties. It flies in the face of discharge; it flies in the face of historic use, plus the failure to account for Spring Valley. So, uh, what happens is there's really, when you throw in the 16,000 acre foot depletion and you force the 36,000 acre feet for Nevada, they end up taking 64,000, you've only got 108 to split, well, that leaves only 44 left for Utah. If their allocated is already 35, if they're trying to save 20, set aside 20 to save Fish, what does that mean? It means a potential deficit for Utah. What's that deficit...because you can't...35 plus 20 is 55. You've got to do subtract to get down to 44, which is all that's left after you take Nevada's 12, 16 impact from Spring Valley and 36 that they're going to get allocated under the Agreement. The math leaves you with a deficit and the math leaves you with a 59/41 split over all ___?___ Nevada. And that's the concern. So how do you square 59 to 41 with discharge of 82 to 18,

historic use 74 to 26 and recharge at 60 to 40? That's the problem. And that's basically the concern.

There are other tables here, which if you're interested in afterwards I can show you how it breaks out if you want to split the water according to discharge or recharge or average the two. But that's a quick overview of the county's concerns, why the tentative agreement doesn't seem to square up with the time-honored principles of discharge and historic use. Thanks.

[applause]

Steve Erickson:

Thank you, Mark. Our next presenter is Terry Marasco, who is a stalwart with the Great Basin Water Network and business owner in Baker, Nevada. Terry...

It's going to take a minute to just get this...[pause]

While Terry's getting ready we wish to remind people that if you wish to sign up you can either do so at the desk or our able assistant, Deb Callister, is circulating around the room and we'll try to go in order here. We'll try to move it along. There's also yellow cards that we're asking you to sign if you agree with the message and we'll deliver those to the governor. We do want to recognize Representative David Litvak who's here this evening, our lone representative in attendance. Thank you, David. There's also on the staff table some suggested talking points and information about the agreement. Also the statement of the Farm Bureau. So, feel free to get up and pick those up if you so wish.

[discussion of technical difficulties]

We're going to ask everyone else (laughs), with no PowerPoint in tow to use this microphone to that those in the back can hear effectively. Maybe you can help me there, Brian. Thank you.

Does this work? Yes. I'm Terry Marasco. I own a restaurant and motel out in Snake Valley in Baker, Nevada. And I bought it in '04 and learned about the water grab and have been on top of this ever since. One of the rules I took very soon on, because I have an amateur interest in geology, was to follow the science because the science to me is the most objective thing we can talk about when we look at this issue.

This is a picture of a dust storm. And I'm going to start at the end. This is the future of what the science says if we have massive groundwater removal from Snake Valley. I'm a photographer. I took this picture, uh, while I was going west on Route 50, west of Delta, and this is a dust storm headed to the Wasatch Front without a water problem. This is already the desert, very dry as you can see, and unfortunately that's what I think the science brings us to.

I just want to talk very briefly today about one problem with the agreement, and it's this section 5.4. It says it prohibits groundwater mining, impairment of water quality, and compaction of aquifers or surface instability. This flies in the face of the science on this particular issue. The Owens Valley experience, which is similar geology, similar surface vegetation, similar precipitation, much more water volume from snow melt, but

in fact, is the same environment in the Great Basin that we would look forward to if these huge amounts of water are pulled out the ground. If I could say in the most simple terms that the science has taught me—and this is done by one of our scientists—that you cannot have the same body of water in two places at the same time. It's either going to be in Snake Valley or it's going to be somewhere else. And that somewhere else not only is Las Vegas, but it could be factors or organizations in Utah looking to that water. There are already applications from central Iron County out in Wah Wah Valley, which is the southern Snake Valley. So everybody's got their eye on Snake Valley from what we're learning.

But anyway, this is the system as it is now, recharge is 100%, some of the things that Mark talked about. This is a system, what's called a disturbed system in scientific terms, whereby the pumping takes out 90% of the water in this example and only 10% is left to springs, meadows, farms, etc. When in the undisturbed state, it's simply 100% goes to those factors. This is the map that Mark—let me just reduce this a little bit. Let's see, let's close this—that Mark referred to and one of the more recent analyses that I've seen that concerns us is in order for...

That's actually from the Draft report.

From the Draft report, okay. One of the issues that we have in the most recent analysis is that the pumping of the volumes of water that are proposed here would have to cause a backflow from Snake Valley back to Utah, so the water would be prevented from going to Snake Valley because it's being pulled out in Nevada. But to get the volumes they want, they would not only lower the groundwater table in Snake Valley significantly, but at the same time would have to pull the water that's already there out

and pump it to Las Vegas. So, just in a nutshell—I've been given 7 minutes—I'm trying to convey to the public, and when we go back and look at this slide presented by the State of Utah and Nevada, that if you pull out these massive groundwater withdrawals and you have drops in the water table, according to USGS, half of what's proposed in Snake Valley is 25,000 acre feet, they expect a hundred foot drop in Garrison. And that doesn't account for...let me just get to this next slide. That doesn't account for a doubling of that that SNWA wants.

This again is a basic, very basic...I asked our hydrologist to boil down in a graphic something that everyone could possibly understand. Current state, natural condition, water goes to shrubs, goes to farms, goes to meadows, goes to springs. The removal of the recharge to Las Vegas, you have dead shrubs, dry meadows and dry springs. And fundamentally when you look at this, I think this is a fair statement given the volume of water that they want to pull out, the only green spots perhaps left in Snake Valley would be farms. All the phreatophytes that depend, and their roots go down, let's say 60 feet, large shrubs, the water table drops to a hundred, 200 and more over time, that's the end of vegetation as we know it in Snake Valley.

So, let's see...to the air quality issue. This is Sally Manning. Sally Manning's a scientist that did a lot of work in Snake Valley and generously has given us many thousands of pages, as, by the way, have many scientists on this issue, actually from all over the world, not just the US. We had enormous studies on this issue. This is called pedestal grass and pedestal grass, this used to be in a meadow, a wet meadow, and you notice that there's this pedestal and the pedestal is indicative of a drop in soil level after the meadow's dried up in this specific case from groundwater mining in the Owens

Valley. And that the soil went somewhere and ironically in the early years before mitigation the soil went in dust storms in the Owens Valley (laughs), this is not funny, but it is, guess where? On the cars, roofs, and all over Los Angeles. And they were wondering at the time where this dust was coming from. So that's a long way that this travels. So when we think about air patterns in Snake Valley over into the Wasatch Front, we have this problem. This is another example of a former wet meadow and bunching of organic soils in sort of ___?___, but you can see the amount of soil that has disappeared.

Uh, I just want to relay in less than 30 seconds a personal conversation I had that I think is, gives not only my perspective, but I think, where I think many people might want to think. Westminster College had come out and did a seminar and stayed at my motel, a whole bunch of kids, and I gave them a talk on the water grab. And one of them raised their hands and said, "You sound like someone who doesn't want to compromise." And I said, (laughs), "Well, when you have this kind of potential devastation, what is there to compromise about? Why would I want Snake Valley to turn into this dust bowl?" I have a business that relies on tourism. We have a park that relies on clean air and I said, "There are some things in life you compromise on; there are some things you absolutely do not." Thank you.

[applause]

The next speaker is Brian Moench.

...so I can get my computer set up...

We can do Dan McCool as our next speaker. Dan, are you ready?

Do I need to face you? Or can I face the people?

No, in fact...by all means. However you're most comfortable. Just do grab the mike.

Dan McCool:

Let's try this to see if it works. Mark and Steve, thank you so much for inviting me to speak. I only have five minutes to explain a very, very complicated situation. Let me just talk about the long-term politics. I'm a political science professor at the University of Utah. I've studied water policy my entire professional life and I think the handwriting on the wall is very clear on this. If they build that pipeline and they spend \$4 billion and they put in another 250,000 homes in the suburbs of Las Vegas and then we find out that, low and behold, the predictions are true, it's going to do tremendous damage, they are not going to somehow magically say, "Okay, our \$4 billion investment has been wasted, we will abandon the pipeline. We'll tell 250,000 people they have to move elsewhere and their homes are worthless." That is not going to happen. So if they build it, we are stuck with it, regardless of the amount of damage it does.

Now, assuming this happens. When they suck this aquifer dry and they keep inviting more and more people to come, then they're going to ask for more. We cannot have a Las Vegas that grows endlessly. That concept is physically impossible. So if we give them this they're going to ask for more and more and more and more. And where's

it going to come from? It's not going to come from Nevada; it's going to come from us. That's the political and hydrological reality of this situation.

So this is...Mark did a wonderful job of explaining how unfair the allocation is. The bottom line, though, is that we must not allow this pipeline to be constructed. If we want a long-term future for Utah with our water, we cannot allow this to happen. And what's so fascinating about this situation is we have a very unique political opportunity here to put together a very broad coalition of interests. This is almost without historical precedence in water policy. We can put together a coalition that includes environmental groups, ranching and farming groups, fiscal conservatives, people who care about states rights. And don't forget that there's a bunch of people in Las Vegas that don't like this either. They may not care about us, but they care about the environment of central Nevada and the parks there. And there's a lot of people in Las Vegas who don't want to spend \$4 billion and be taxed for it so some developers can come out and build a couple of more suburbs. So we really have a golden opportunity to stop this if we all get together in a very broad-based political coalition and fight this thing. So I don't think it's unrealistic to say we can stop this pipeline. I think it can happen. I really do. Water politics, you know, it's always tough, but this can happen.

So the last thought I want to leave with you is, you know, America loves a David and Goliath story and we have one right here. The Goliath in this case is the hopelessly non-sustainable urban environment of Las Vegas, right? And the David, well, there's a roomful of David's here tonight. So remember to use that sling and I think we can kill this project. Thank you very much. I appreciate that.

Thank you, Dan. Brian Moench is next.

Good evening. My name is Brian Moench. I'm the president of the Utah Physicians for a Healthy Environment. We are the largest volunteer advocacy group for environmental health in the state of Utah.

Every resident of the Wasatch Front is all too familiar with the poor air quality that we experience about 20% of the time. Medical research is steadily expanding our understanding of the health consequences of air pollution. We have known for many years that air pollution causes the same kind of systemic inflammatory response as is caused by exposure to second-hand cigarette smoke. And the clinical manifestations or diseases are virtually identical. Our current levels of air pollution cause an average person about the same health consequences as if we all lived with an active smoker, or one-fourth as much as if we ourselves smoked, and that includes our children. The spectrum of pollution-caused disease includes increased mortality rates from all causes in both adults and children, accelerated heart and lung disease, more hospitalizations and strokes, blood clots in the legs and lungs, permanently stunted lung function development in children, more birth defects, more premature births, low birth weight syndrome babies and miscarriages. In the last few years it has become well established that air pollution causes genetic damage in human embryos, leading to a myriad of diseases later on in life, including cancers, diabetes, atherosclerosis, immunosuppression, diminished intelligence and even Alzheimer's dementia. Studies of even short-term air pollution events demonstrate increased community-wide mortality rates for as long as 30 days after episodes of pollution that last less than 24 hours and impaired lung function even in

healthy people that can last at least a week after a short-term air pollution episode has ended.

We have all observed significant dust pollution from the west desert prior to storms moving into the state. And here's an example of one in Milford. If the Las Vegas water pipeline is built, this phenomenon will become much worse as will all of the above mentioned health impacts to Utah residents. Nevada soils, however, contain unique threats beyond just desert dust. Mixed into Nevada soils are millions of tons of some of the most toxic substances on earth. On a per weight basis, mercury is the second most toxic substance after plutonium causing brain and neurologic damage, even at unimaginably small concentrations. It is deposited ubiquitously throughout the environment because it is carried into the global atmosphere primarily from the stack emissions of coal power plants. It is also released during the smelting processes at gold mines, and most of the gold mines in this country are in Nevada. And the mercury from those mining operations concentrate in the Great Basin. Testing by the US Geologic Survey of 300 streams in this country revealed just about two weeks ago showed mercury contamination of every fish tested in the entire country. The Great Salt Lake already has the highest concentration of mercury of any inland body of water in the United States.

Erionite is a fibrous mineral similar in microscopic configuration to asbestos and in fact causes the same kind of deadly mesothelioma cancer that asbestos does. Erionite is found in the residue of weathered volcanic rock and it is widely distributed throughout Nevada soils. In some parts of Turkey where it exists in particularly high concentrations, it is the leading cause of death.

Nevada soils also contain residual radioactive isotopes from the over 900 nuclear bomb detonations that occurred in Nevada from 1951 to 1992, specifically mercurium[?], plutonium, uranium, cobalt, cesium, strontium and europium. Most of these elements are alpha-emitters. Now I know most of you came here thinking there would be no math, so my apologies. One millionth of a gram of any of those radioactive isotopes can yield 1,000 alpha particles per day and each alpha particle carries over 4 million electron volts. It only takes 6 to 10 electron volts to break a DNA strand. This means these radioactive elements can cause cancer and chromosomal damage, especially when inhaled or swallowed, even in minute quantities like one-millionth of a gram.

Valley Fever, or Coccidioidomycosis, is a difficult to diagnose and sometimes chronically debilitating, occasionally fatal disease that has quadrupled in occurrence in the last ten years in some southwestern states. It can be particularly dangerous for people with compromised immune systems, like diabetics and pregnant women. Now last time I checked Utah does have a few pregnant women (laughter). And only one-third of us are diabetic. It is caused by inhaling the microscopic fungi spores that thrive in the alkaline soils in the deserts of the southwest. In some areas, one gram of dust can contain a billion of these microorganisms.

As mentioned before, the storm track already brings dust from the Great Basin into our air shed on a regular basis, already impacting public health in Utah. But the fragile and struggling native desert vegetation that keeps this from being even worse is already under assault from the hotter, dryer conditions of climate change. Climate scientists' projections for further temperature increases and less precipitation in the decades to come are nothing short of frightening. Meanwhile, the aquifers of Central and

eastern Nevada and western Utah provide the main lifeline for desert vegetation in an area the size of the state of Vermont. Nevada water officials claim they will only pump excess water. But at the same time they acknowledge that the projected water table drop will be anywhere to 50 to several hundred feet, well below the reach of most desert plants.

Nevada authorities also claim that the consequences of groundwater pumping cannot be known prior to actually removing the water, and then offer the assurance that if the results look bad to them, they will stop or offer compensation. That is like saying that the consequences of someone pushing you off a thousand foot cliff cannot be known until after you hit the ground. But if the results look bad, they will offer you first aid and promise not to do it again.

Water diversion projects like this have been done in other parts of the country and other parts of the world. The results have been exactly what has been predicted: more dust, more pollution and more disease. Over the last 40 years a water diversion project has drained the, quote, excess water, from the Aral Sea in Uzbekistan. These are satellite photographs of what has happened to the Aral Sea, which used to be the fourth largest lake on earth. It is now 10% of its original size. Tens of thousands of people have been displaced and the life expectancy—listen to this—the life expectancy of residents who remain downwind of the now created dustbowl has dropped by four years, due primarily to increased rates of throat and esophageal cancers. This is what is left now of 90% of the Aral Sea.

In California, quote, excess water, in the Owens Lake was drained to supply Los Angeles with water. The now dry lake bed has become the largest source of particulate

matter air pollution in the United States, producing as much as 8 million metric tons of dust per year. The closest town in Keeler, California, has seen particulate matter pollution levels 23 times higher than the national health standard allows. This is a quote from the ER physician at Ridgecrest Community Hospital 60 miles away. "When we see the white cloud headed down through the pass, the ER and doctors' offices fill up with people who suddenly got worse. It's a pretty straight-forward cause and effect." For small towns, ranches, wildlife and plant life in the western desert, there is no such thing as excess water. For many of them the proposed pipeline agreement is a virtual death sentence. But for the rest of us, we will see our beautiful vistas obscured, our economy and public health impaired, all for more fountains, urban sprawl and golf courses in Las Vegas.

Former president George W. Bush issued this famous warning to countries throughout the world a few years ago: you are either with us or against us. I predict that Utah voters will use this same warning to those who run for public office in this state, referring to the Las Vegas water grab: you are either with us or against us. Thank you.

[applause]

The next speaker is Kenneth Norman. Kenneth and everyone else, when you come to the podium, please just state your name for the record so we get it recorded.

Okay, my name is Kenneth Norman. I'm from Salt Lake. My mother-in-law lived down in Vegas before she was murdered. And what gets me is I really don't know why they want to come all the way up here to tap into retorts that's been there for hundreds of

years and I think it should stay that way until we really, really need it. Lake Mead is just a fraction away from Vegas, just a fraction. Instead of going 360 some-odd miles for the line, they could probably go about 35, 40 miles and tap into Lake Mead. And I don't know why they have to have all this rigmarole when it'd be a lot easier and less expensive to tap into Lake Mead. They could have all the water they want. I don't see us have to go with the water for their swimming pools down there. I know there's hundreds of swimming pools, which is more than there is in Salt Lake. And then they got your big casinos with the waterfalls, with the water, with the...what do they call it? With the battleships? They cannot keep that because it gets silt, so they have to change it. So why, like I say, why cannot tap into Lake Mead instead of tapping into something that's been there for years. Thank you.

[applause]

Thank you, Kenneth. Our next speaker is Curtis McCarthy.

My name is Curtis McCarthy. I live in the south end of this valley, Bluffdale. I'm kind of here on my own agenda. See, I've got grandchildren that want to live here along the Wasatch Front. And the medical, I know all too well, only mainly because my father served in the Air Force, World War II, he was in the medical corps at Kearns flying field, which was just on the west side of the valley here. It was top secret at the time and he told me years later several times that they had the highest respiratory infectious rates of any base in the United States. And that was because there wasn't, they'd disturbed soils

and then by greening it up, this valley was able to reduce that amounts of dust storms. But as you remember, if you'd been in the valley, it was in August, that horrible dust storm we had. Couldn't even go outside. In my opinion that was way worse than smog because, I mean, because it was literally horrible. I know the west desert. I also know that when you pump just a little bit you move salt underneath the soil, it moves from one well to the other well. Uh, we've got to be able to be on top of this and I, I don't want to see the dust storms coming because I want to protect my children, my children and my grandchildren. Thanks.

[applause]

Thank you, Curtis. Our next speaker is Steve Summers.

Thanks. I'm here for Bonneville Cutthroat Trout. It's a fish that's a native trout, the Great Basin of Utah. It's been out there for tens of thousands of years. It belongs there. It is our native trout. And it's not truly endangered, but it's considered by me to be threatened. If we go out and put an 84-inch pipeline in there, we will lose the springs, we will lose the flows, we're going to lose the little tiny streams that these trout do so well in. Las Vegas already has enough water features, it has enough golf courses, it has enough filled suburbs. It doesn't need any more water at this time. The old western saying goes, "Water doesn't flow downstream; it flows towards money." And it really bothers me to see who's behind all this. I'm really curious to see where the money, where the power is going. Utah really is a David in this Goliath story. So speaking for the

Bonneville Cutthroat Trout, I want to say this is an absolutely terrible idea to pump the water out of the west desert. Thanks.

[applause]

Thank you, Steve. Next speaker is Maury Harmon.

I'm Maury Harmon and I'll read this. Question: Is there not someone of sufficient power and judgment to stop this act of ___? ___. Some thoughts. One, it is provincial to assume the use of the aquifer is just a Utah Nevada problem. The purposes for which water is used are national in scope. Two, in determining highest and best use of the aquifer, we should consider the value of Las Vegas to the nation. Las Vegas provides glitter, golf, entertainment, and gambling in million dollar casinos. How high are these objectives on the scale of nation building and stability? Three, Las Vegas has deep pockets and is prepared to purchase what it wants through generous contributions to political campaigns. Campaign funding biases political judgment. There is an anecdote. The body politic has power in numbers. Let our elected officials, officer holders, know your concerns. Four, Las Vegas prides itself on the efficient use of water. Containment is the answer to our controversy. Not one more drop of water from any source. Tell Las Vegas to accept the burden of getting along through superior management of the water they now have. Should they wish more urban sprawl, then reduce the number of golf courses and water features. We do not owe it to Las Vegas to look like a lake in a desert. Five, leave the Snake Valley aquifer alone. Do not mess with something that can result in

dire consequences for the rest of the nation. It was mentioned earlier about the Owens Valley. Good example. It's a dust bowl. All the water went to Los Angeles. Marvelous tradeoff. That's the world's largest open sewer (laughter).

Thank you, Maury. Our next speaker is Cecil Garland.

I'm Cecil Garland. I've lived 36 years in Snake Valley. My wife's a teacher and has been teaching there for 36 years.

I very much appreciate the Mayor coming out and he spent a day asking me all the right questions. To me, that's the way to see and understand Snake Valley. I started out with shovels and canvas dams irrigating and I've watched our community grow and their use of the water, our use of the water has grown, if not exponentially, it's doubled, tripled itself.

I have a little amusing story. Last night (laughs), most of us were in Delta doing pretty much the same thing and our friend, Mark Ward, was holding forth about how he had spent the entire day putting together all these figures and so forth that he had and then it was the middle of the night and he was still trying to get these figures to mesh and work up and he said all of a sudden it occurred to him, that hey, there's no surplus water in Snake Valley. I thought, Mark the next time you want to know something about Snake Valley, ask me. I'll tell you (laughter). We don't have any, we don't have any surplus water in Snake Valley. I'm incapable of turning on a computer so I can't make any models. But I'll tell you this: I know what it was like when I came to Snake Valley 35 years ago. I had springs. Some were, maybe 40 springs, maybe more on our ground that

don't exist now. The swimming hole pasture, the swimming hole, doesn't have enough water in it to float a duck anymore. A place where I couldn't ride a horse because it was so swampy, you can drive a tractor or truck or anything across it now.

I'd like to quickly tell you about one spring we call Rocky Springs, which is two miles west of, on the mountain west of Callao. This spring, when I first came there, the sheep men used to ___?___ out their sheep there and they built a little pond in there, as big as this room, approximately. And the spring, Rocky Spring, would run down in there and fill that up. My cows could go there and drink water. And then it would come out of that little pond that the sheep people had built, run down and run across the road and maybe run down a mile, three quarters of a mile down the wash before it sunk into the ground again. The last time I was up there, which was last spring I believe it was, there wasn't hardly enough water coming out of there, much less to fill the pond or run down across the road or down a wash. There was hardly enough water out of that spring to, for a child to get a drink. Now this is a thousand feet above where we're irrigating. In other words, about ___?___.

So when our neighbor people—or I guess we call them neighbor people; they don't act very neighborly sometimes in Southern Nevada—complain about the drought, for goodness sake, we're the epicenter of the drought. We know what drought is all about. We're in some form of a drought all the time. How in the world would one of the driest valleys in the southwest, the driest part of the United States, be able to furnish water to a metropolis? And even if not one soul lived in Snake Valley, I think it would be wrong to strip the water out of it and kill the vegetation.

I was able to show the Mayor what happens when you take the greasewood off. Greasewood roots will go down about sixty feet in search of water. When you see greasewood, you know without any question or doubt that down in underneath someplace there is water. There may not be a lot, but they, it does exist. So on the valley floor there's literally a carpet of greasewood that goes over a hundred miles long. You get up on the bench a little bit, there is no greasewood because the greasewood can't reach that water.

So I was able to show Mayor Corroon what happens—and I've cleared about 300 acres of ground for hay ground; I raise cattle and hay—and there's a short period of time in there when I can't keep water on that and I can't, it's the wintertime and I can't irrigate, and these pictures of dust storms are pretty classic of what happens, except that I'm only talking about 40 acres or 20 acres. Can you imagine what's going to happen—and it's already happening, as a matter of fact. The greasewood is already stressed. I could show you, and did show the Mayor in many places, where the greasewood is already stressed—because we're pulling the water table down, this terrible drought that we have now, or whether it's climate change or whatever, is affecting the greasewood, the vegetation there now. But I was able to show him what happens. And on the north end of the field, the prevailing wind's from the south, you've got sand dunes that didn't exist there before and it came off of my 30 acres of ground. Now I've got it into hay production and there's no dust, but I'm just telling you what can happen and I've seen it time and time again. About six or seven years ago, the wind blew so hard and I just planted a 40 acre piece of ground and it blew so hard it took the whole four inches of top

soil and all the seed out. I had to go in and completely disc that and reseed it again. Now it's in grass and alfalfa.

As far as the agreement is concerned, it's almost impossible for me to understand—I can't understand—why any people, any agency that represents the people of Nevada, or of Utah, pardon me, would sign such an agreement. I, I cannot understand what...what is the impetus? What prevails here that I don't understand? I can only say that in my opinion is a disaster. Number one, we're putting this off for ten years. In ten years, Southern Nevada will have all of their options and applications for water open. They'll still have those. They will have, perhaps, recovered it was that timeframe when they intended to use the water anyhow. And where will Utah be? We will have signed away our options and when we sign this agreement, that's basically what you do. You've eliminated on down the road. Sure you can haggle over this study and that study, but that's what it will amount to is haggling. Now, in this agreement, personally as a rancher, it says mediation and compensation. Think about that (laughs). Who in the hell am I going to mediate with? Well, Southern Nevada Water, of course. Well, they said, we don't know what happens with your water, the cow drunk it or something (laughter). But we'll compensate you. I don't want to be compensated by these people. I don't want to be an indentured servant. I don't want to go to them with my hat in my hand saying give me some money. I'm happy with my ranch the way it is; I want to keep it that way. So we don't have any surplus water and how do I know that? Well, my springs are drying up. Water table is falling and I can measure it every day I want to in the well and it's drying up.

How am I doing, Steve?

You've got a minute (laughter).

I get carried away. Vegetation is suffering. There is no question at all. Heck, you got California on the west and the Colorado River on the east side and we're right in the middle. California is dying, burning up. Colorado River we hear a lady friend in Las Vegas complain about it almost every day, Pat Mulroy. But Colorado River's drying up. They're going to be without a drink of water in Las Vegas. I'm reminded what Marie Antoinette said. Paraphrase that a little bit. If they can't drink water, let them drink whiskey or beer or something (laughter). That's being facetious, but I want to tell you this much, one of the most contemptuous things that you can say in the southwest, and particularly in our valley, is "we've come to take your water." We're not down there trying to take their water, but they're come to take our water and that's exactly what they said. When they came up there the first time, and I'll never forget it, they said "We've come to take your water." Or they didn't say your water, our water. And "you don't know how much water you've got and you're wasting a lot of water" and that was the beginning of this whole thing. I said that very day, "We don't have any surplus water in Snake Valley. We don't have any surplus water."

Now in spite of all of the figures that you've seen today, you want to remember this one thing: the water that they're going to give to Las Vegas supposedly in this proposal is fiction. It's fiction water. It exists on paper but it doesn't exist in reality. And dear folks, remember this single one thing: all of the water in Snake Valley is presently under water rights and when they take the water, whether they take it out of Spring Valley, Steptoe Valley or Lake Valley, it doesn't come into our valley. Or whether they just pump it out of our valley, they are taking water from two things: from the water

rights holders, the senior water rights holders, and they're taking it from the phreatophyte vegetation, which can only protect the valley from dust storms and destruction.

One final word about Owens Valley. Owens Valley is close to the ocean. They get more snow in feet than we would normally get in inches. They had a river; we don't have a river. They had a lake; we don't have a lake. The devastation that will happen in Snake Valley...I've got to (laughs)...is far, far greater and quicker, much more rapidly than whatever happened in Owens Valley.

Thanks for holding this meeting. It's only through our ability as a small population to come to people like yourselves, who have a strong interest in the future of Utah and the west desert and to spread the word and to bring about the political voice, the powerful political voice of the people. And I thank all of you for coming to this meeting.

[applause]

SE: With that I'd like to recognize the one person who can reign in Cecil Garland, that's his lovely wife, Annette. And she's selling these cookbooks to benefit the water grab fight. So if you're interested, we've got a whole batch of them here at the end of the meeting. Or if you're ready to leave, you can settle up with Annette and grab one of these.

Our next speaker is Robert Comstock:

Just two points. First, we must tonight acknowledge that this pipeline, if allowed, will irrefutably and irrevocably abrogate constitutional rights to life, liberty and the pursuit of happiness for thousands of US citizens who have lived, labored and died for up

to five generations in these threatened valleys. Number two, if this agreement is signed the economic interests of Las Vegas, including the Coyote Springs development that seeks to build 150,000 single family homes and 16 Jack Nicklaus golf courses, will immediately upon signing, will immediately and incessantly move to up the date for the starting of the pumping to support this development. Once the pumping starts, due to the proponents of this ecological disaster, will they expect us to believe that when the environmental destruction starts to appear, that then the pumping will stop and 2 to 300,000 people will be told to walk away from their homes in Las Vegas?

[applause]

SE: Thank you, Robert. Deb, I heard a beep up there. Was that one of your tapes? I'm just curious. I think this one's all right.

Our next speaker is Clare Gilmore. I'm sorry, pardon me, Clare. Our next speaker is Kirk Robinson.

Hello, my name's Kirk Robinson. I'm a citizen of Salt Lake City and of Utah, a native resident. And I'm also director of Western Wildlife Conservancy founded here in Salt Lake City in 1996 and represent the interests of a number of members of my group.

Now I don't know all the details of this proposal and particularly what will happen if this particular agreement is not signed, or perhaps if no agreement at all is signed, but I have very serious concerns about this particular agreement. It seems to me that given the fact that we live in a desert already, that Nevada and Utah are the two driest states in the nation, and secondly that the climate is warming, whether it is a result of ___?___ causes, CO₂ or whatever, it is warming. Hence, there is going to be more

desertification, not less. We've already got a problem; pumping this water is going to cause problems. I don't see how anyone can take seriously the idea of surplus water in a desert, especially surplus sub-surface water, excess water. How did anybody decide that there's water that has no purpose in this place and can just be taken without any negative effect on anything? I think it's utterly ridiculous on its face and this whole thing is a grand exercise in delusional thinking.

Now, I went to a meeting about three weeks ago in another location where Michael Styler and others from Utah and Nevada talked on this subject and following that meeting, I went up to Michael Styler and I asked him if it was conceivable to him that if this agreement is signed that it will lead ultimately to the pipeline extension into Snake Valley not being built. And he leaned over and he whispered to me, "That's my ulterior motive." He thought that the conditions in the agreement were so, uh, strict that ultimately the [SNWA], or whatever they're called (laughs), the Southern Nevada Water Authority people would decide it wasn't worth the cost to try to build the pipeline into Snake Valley. Now I've learned that Snake Valley's actually connected to Spring Valley and even if they didn't build it in the Snake Valley, you might want to build it in Spring Valley and that would affect presumably Snake Valley water, possibly Fish Springs, possibly even the Great Salt Lake. And I'm very concerned about that. He told me that, well, he actually told everybody in the audience that the state engineers, either one of them or both together, could decide at any future time to shut down the pumping from Snake Valley if, in their judgment, certain unwanted effects were to occur to the soil, to the atmosphere, to wildlife, etc. That in fact the state engineer of Utah would have

unilateral authority under this agreement to turn off the pipeline and he thought that that would be incentive enough for them to decide not to build it.

My final comment is I'm not convinced about that. It's a gamble, you know, and it's a serious gamble and I worry that maybe Mike Styler and others in the state are not as good at gambling as people in Nevada (laughter). Thank you.

[applause]

Thank you, Kirk. Our next speaker is Bob Brister.

My name is Bob Brister. I'm a resident of Salt Lake City. I want to congratulate the people of Snake Valley who've really been on the front line in this fight against the Las Vegas water grab. They've really been doing the fight for all of us and Utah in my opinion.

I'm a Salt Lake City resident and I do have a stake in this fight. I'm very concerned about the dust, the air quality issue. We already have huge air quality problems here in Salt Lake City and this stealing of the water from Snake Valley's only going to make it worse. I'm concerned about wildlife in the west desert, Fish Springs. One of my main forms of recreation is going out to our beautiful public lands and wilderness areas, including those out in the west desert, and I want to see the wildlife out there flourish and stealing water from them is not the way to do that. I'm concerned about the environmental justice issue for the residents of Utah and Snake Valley in particular. I see this whole water grab as extremely anti-democratic. I'm very concerned about Utah state

officials selling us out. There's a lot of money in Las Vegas and they can buy a lot of power and I'm concerned about the Utah state officials and I think we have to take a really hard line with them politically. If they sell us out on this issue, we never vote for them, ever. Thank you.

[applause]

Thank you, Bob. I know that there's been a few people come in as we've been going on here. If you'll see Deb Callister, who is the woman waving at me here, she's got sign-up sheets.

Our next speaker is Paul Van Dam:

Thank you for coming out tonight. I think this is important. Elise and I drove from St. George where we live. I've been a resident of this area for most of my life, but I moved from here to St. George about a year and a half ago because I couldn't breathe anymore, Dr. Moench. The air was so bad so often I went to where it was better. I've been the county attorney of this county many years ago in the 70s. I've been your attorney general, uh, in the early 90s. I got involved, very involved in the Central Utah Water Project and as attorney general got to know water in Utah pretty well. And so I went to Southern Utah, I was hired as an executive director of a citizens group who was concerned about water conservation, concerned about the Lake Powell pipeline.

And so when Cecil Garland said he doesn't understand what might be going on here, I have a possible explanation. As you know Pat Mulroy, who is the water czar in

Southern Nevada, began sometime ago to raise serious questions about the Lake Powell pipeline and whether or not Utah should be building it, whether or not it was water, what it did to Nevada. And I can tell you Utah very, very much, very desperately wants to take that 100,000 extra acre feet of water that they believe they still have in the Colorado River after the Central Utah Project. And they don't want Nevada to become a hindrance to that. So I have to wonder if it isn't possible that within the hierarchy of state government, there isn't a little deal being made that simply goes like this: we won't oppose your water project, your pipeline, if you don't oppose our pipeline.

Both of them make about as much sense as the other one. I mean, Lake Powell is down to half; Lake Mead is well below that. There've been 19 different models, very reliable models done of weather change, and yes, there are parts of this country that will get drier and there are parts that will get wetter, but the parts that will get drier are these southern parts of the country. And so I've watched during my lifetime here in Salt Lake and in Utah and Southern California, I've watched the growth. I've watched Nevada grow. When I became a water-knowledgeable person, I began to wonder, well how is water is going to be obtained for the kind of growth that we're expecting. Well, along the Wasatch Front, this may be the second driest state in the Union, believe me, the Wasatch Front is water rich. We have the equivalent of somewhere around a 30 to 40 to 50 inches of rain because of what we get from the mountains and we get a million, a million acre feet of water that gets diverted from watersheds that should be in the Colorado River that comes now to the Wasatch Front and to all the places the Central Utah Project serves. So there's no shortage of water here, even though I think our water people would like us to

believe that. Southern Utah also is blessed with what's called the Pine Valley Mountains and the Virgin River and there's a lot, a pretty good amount of water down there.

Las Vegas and Nevada basically, just simply when the ___?___ Colorado River Compact was signed in 1922, were not at the table with a significant amount of political power to accomplish anything. And what did they get from the mighty Colorado River? 300,000 acre feet of water. That's a drop in the bucket. And so, yes, as they began to grow, they had no water. Well, they've got a 1,800,000 people in Clark County and the environs there. That's a staggering number of people and they're pulling all of their allotment out of Lake Mead. They've got 70,000 acre feet of water underneath the valley itself. And they're buying a huge amount of water from Arizona right now and they're getting very desperate for more water. And I have to ask you, and I have to ask them, when do you do the math? When do you say, you know what? We have limited resources and we've got to stop growing. It just simply won't work.

And that's what happening in our end of the state right now. Our county now has 150, 160,000 people. That's a lot of people in a little valley in a little place in St. George. And we are blessed with a pretty good supply of water. It's called that Virgin River, the Virgin River Gorge, and the water that's underneath it. But 130 mile Lake Powell pipeline that's being proposed, it's now going to cost a 1 billion dollars, plus 50 years worth of interest, making it in today's terms about a 3 billion dollar project that we can't afford, is not the reliable source of water and, as has been pointed out so many times tonight, at some point there's going to be a serious drought. We know that from tree rings that have been studied over millennia, and we like the Indians, the Anasazi that preceded us, are going to be walking out of here or driving out of here to places that have water.

So what I say is I couldn't be more supportive of Cecil and of the people in that valley because, you know, they've always been living on borrowed time and borrowed water and there is no excess water there and it isn't going to happen. And you know that 250 mile pipeline being proposed by Las Vegas is a frightening thing because it is taking, it is proposing taking water that is not there. What I think they have to face, what we all have to face, ultimately, is that there are limits to resources, there are limits to growth, and we better start thinking about living within them because it's catching up to us and it's catching up to us rapidly. God bless you and I hope things work out there. We're fighting for you.

[applause]

Thank you, Paul. Our next speaker is Joel Ban:

I wanted to make two observations with respect to the meeting Kirk referenced, the one with Michael Styler where they presented the draft agreement. The first point is one of the attorneys from, I think, the state of Utah said that this agreement was really in the best interest of Utahns because the alternative would be a legal situation where the Supreme Court of the United States would have original jurisdiction and how to equitably apportion the water between Utah and Nevada and it's better to go through this process, through the deal with, between Utah and Nevada than to have to go to the Utah Supreme Court. It's not clear to me, and the attorney didn't really make it clear, that it would be more equitable to go that route than to have to go with the situation we're in now, where

Nevada gets seven times the water as Utah gets. And my opinion is we should, if Nevada wants to take our water, then that's fine. We have to fight them either with, through the political process or through the courts, whether it be through the US Supreme Court or through other federal courts, the state engineer, whether through the Endangered Species Act or the BLM process with ___?___. And that's, that's my first point.

And secondly, Professor McCool's point about once the pipeline is built, you know, I wholeheartedly agree with the fact that once that pipeline is built there will be no way to stop the flow of water. Someone had mentioned that possibly the state engineer would use his discretion to shut off the water. I don't think it's very realistic that that's going to happen. First of all, a lot of the problem with that assertion is that the effects, and there will be effects, the state governmental representative said there would be effects, it's just not clear as to what those effects would be, but the effects would appear long after the water has been taken from the resource. So it takes time for those effects to show up. And that's the main problem with the mitigation they're offering is once it becomes apparent that these effects have taken place, the mitigation will be quite useless since, you know, the resource has already been, uh, utilized, you know, it's beyond repair, essentially. There's an appeal process where the states have to go through this, uh, some type of appeal process. It wasn't entirely clear to me, but once that appeal process has taken place, it's pretty clear that there'll be no hope in saving the resource because the effects will have taken place and the resource will already have been utilized. So that's my two observations from the meeting that they had a couple of weeks ago. Thank you.

[applause]

Thank you, Joel. Next speaker is Jerald Anderson.

My name is Jerald Anderson and I live on the south end of Snake Valley, down in the Garrison, ___?___ area. Cecil and Annette and a number of us seem to tag-team this because this is important to us. We've talked about a number of things tonight in terms of the importance of air quality issues and this is kind of the air quality issue that we live and breathe all the time since this issue came up. We're here tonight to try to understand what kind of comments we ought to make with reference to this agreement. And I really appreciate the work that Millard County and Mark Ward has done to kind of give us a sense that there are other ways to look at how we evaluate this resource that's shared in Snake Valley between Utah and Nevada. And there's no way around the fact that it has to be shared; physically that's the way it is and I appreciate Marks' description of the physical realities of this groundwater system. This is a dynamic, living ecosystem and we need to keep that in mind as we evaluate what could happen here, what's happened in the past, what could happen in the future, what the impacts are of making changes to the distribution, whether they're natural or manmade, whatever those impacts are, the changes to the system.

I was part of the team that went to the interim committee at the Legislature in 2004 to present this issue, which ultimately resulted in the language that Mark was talking about in the Public Law, the Lincoln County Lands Act. We recognized early on how significant any removal of water from Snake Valley could be because we live there.

We make our living there, we grow things off the land, we understand the characteristics of the water, what it means, how it's used, where it ends up.

One of the things I didn't realize was how good our neighbors were because you work pretty hard with your nose to the ground out there and unless an issue like this comes up to unite you, you don't have the opportunity to really rub shoulders with people like Cecil and Dean Baker and the Hills and a lot of other people, and now Mark Ward and our county commissioners. That really has been a blessing. If nothing else comes out of this we know each other better and we know who we can count on now. Terry and Gary ___?___ on the Nevada side and as much as we might possibly disagree with each other on the finer points of this, we're absolutely united that there is no excess water in Snake Valley. It's the truth. We get to see it. We get to live it.

As far as the agreement is concerned, I brought this notebook up here just cause it's the smallest one I've got. But we've got reams and reams and notes and paper and reports and the things Terry talked about to try to evaluate what's going on, look at the potential issues, the impacts. So it's not my intention to try to go through the detail. There are a myriad of comments to be made about the technical, the political, the environmental issues. There's some real simple ones if we think about the history. One is we believe that we've been living off that, off that incredibly wet season of '82-'83, which flooded the highways and the Sevier Lake, which caused the building of a pumping station to evaporate water out the Great Salt Lake out here on the west side of the lake. That provided a source of water that fed springs, kept our water levels high, but that has been used up. We've seen the natural level of the system begin to reduce from the effects of that great recharge. We also recognize that the BARCAS study was done in the wettest

period of time since that '82-'83 season. The numbers that this agreement are based on do not represent any sort of reality in the drought situation that we face in Spring Valley and have faced since at least the late '90s and I suspect before that. We just weren't as aware of it then.

So there are a lot of comments to be made, but it occurs to me that you can do the wrong thing the best way possible and still have done the wrong thing. And I think that's what we're looking at as we evaluate this agreement. Mark has shown us, and I wasn't really thinking this way until I saw these numbers last night, that there are other and better ways to evaluate what would be called an equitable distribution. And probably more along the lines the courts would take if we were to do an adjudication action. I'm less afraid of the court action than I am an agreement that's based on the premises and desires of the person who wants the water.

So, one of the other things we recognize is that that this is a little like, well, my daughter's a medical student. This is a little like the cadaver lab that she attended when she was in her undergraduate program, because what this agreement does in terms of its allocation is it puts the Utah side of Snake Valley in a jar of formaldehyde and all you get to do is slice it up and look at the way it used to be. It will never be better than it is now, if it's ever that good. The economic reality of that is to those of us who live in Millard County, we'd like to be a resource, an improving resource to Millard County and to the state of Utah and the agreement as it's currently framed makes that an impossibility. The future is dead in Snake Valley. So, we have to find another basis to evaluate this. If there's going to be an agreement, on what basis is it going to be made, because it can't be on the proponent's basis. That's a surrender, not an agreement.

So I was thinking about this, you know, what's the best example we can come up with of how to divide up one thing that two people claim? Well, it occurs to me it's the biblical story of Solomon and the two women who claim the same baby. So if we look at it in that context, the first thing we have to do is decide what the ultimate objective of the agreement has to be. Now in Solomon's case the stated objective was to determine who owns the baby and that's kind of the way this agreement has worked out. But if we look at the story in a little more detail and understand what it portrays, we realize that isn't the ultimate object of Solomon's wisdom. The real objective was to let the baby live. Solomon's initial procedural situation was the same as this agreement: just divide up the object of controversy; everybody walks away with their legal share. The problem with that is the baby has to die. So it's the life of Snake Valley that's being divided up, not just some number that's being used to portray some quantity of water, whatever you believe that number is. This is a living ecosystem and it cannot survive without all of its component parts. Now an agreement that protects this groundwater base life in Snake Valley and the ecosystem and its inhabitants, whether they be plant, animal, people, anything that lives there, might be a good thing if it's based on that common objective that the baby has to live. But this agreement cuts off parts of the baby and allows one of the women to carry it off to her home and baby does not live in this agreement, that baby dies.

So what I say is let's take the information that Mark and Millard County have developed. Let's take the work that's been done as a foundation to develop this agreement because it's opened our eyes to so many things, so many facts, so many new ways to look at things. Lets take that and use it to evaluate the potential for a real

agreement, a cooperative agreement that provides life for Snake Valley and maybe if we do that, and this is what I would recommend to Governor Herbert, that he wait until we take another look at this whole situation from all these other perspectives. Maybe an agreement can rise like a phoenix from the ashes of what the work has already been done. Thank you.

[applause]

Thank you, Jerald. Our next speaker is Don Ries.

My name's Don Ries. I live here in Salt Lake City. I don't have any more information to present than these gentlemen have, but I have some questions for all of us and I think if we don't address some bigger questions, we're not going to win this thing. Nobody's going to win. First of all, what's water, what water's available for the wildlife of the natural ecosystem? Nobody's allocated anything for that it seems in this agreement. So it seems like from all the testimony that we shouldn't be taking any more water out of the Snake Valley. If that's true, then before we castigate Las Vegas too much, I think we need to look a little bigger picture. Somebody said the Wasatch Front is a rich in water, but for how long? How long can we continue to grow and use this water until we come up to the same problem that Las Vegas has? How long can Washington County grow until they come up to the same problem? So before we start throwing stones as Las Vegas, I think we've got to look at the bigger picture and come up with a plan of how are we going to manage all this water out here because we're all in the same boat.

Las Vegas is at it now; in 10, 15, 20 years, Salt Lake's going to be in it. We cannot continue to grow as we are growing. I don't care what your religion is, all you have to do is the math. We can't keep increasing our population. It just isn't going to work. There's a limited resource. It sounds like the Snake Valley's already drying up somewhat.

I would ask us another hard question. If it continues that way without any pumping to Las Vegas, are we willing to use less water from the aquifer? How much are we willing to give back to the aquifer?

Lastly, if this agreement is not going to work then what's, where do we go? All I've heard is this agreement is bad. But where do we go? What are our alternatives? What do we do next? How do we work this out? And I hope you folks could write all of us with some answers on that. Thank you.

[applause]

Thank you, Don. Our next speaker is Gerald McDonough:

I've got to leave my wife stranded on a street somewhere, so, uh, I'll try to be as brief with this as I can. Uh, all of the comments that have been made have been absolutely wonderful and I've learned a lot tonight and it's altered my view of several things. Uh, I'll just read a couple of things that I've extracted here.

Before any agreement is entered into there are numerous legal questions that should be addressed. Over the last three years negotiations with the state of Nevada have been conducted in absolute secrecy by Mr. Styler, and of course, now serves as director

of Natural Resources for the state. One of the questions that should be asked is in whose best interest was it that negotiations remain secret for such a long period of time? It was certainly not in the best interest of the ranchers and the water right holders in the state of Utah. Was the secrecy of the negotiations in violation of any of Utah's open meeting laws? Um, for a long time Mr. Styler's position was that he had more information that we did and if we had the information that he had, uh, we would agree with him. But over the three years of negotiations he divulged nothing to the public whatsoever; he did make some very interesting sorts of revelations. Several of you have already made reference to the original release of the pre-BARCAS agreement two and a half years ago. Now I was at that particular meeting at the State Capitol with the joint committee of the, uh, Senate and House department of, uh, committees on natural resources. And Mr. Styler got up and said that he had read through the BARCAS study, in the preliminary study, and that the BARCUS study, preliminary study, was not in favor of the state of Utah. Uh, when he was asked by members of the committee to produce evidence or to give some sort of reason why he thought that it didn't favor the state of Utah, he said that he promised not to. And when they asked him who he promised him not to, he wouldn't reply. I have never found out an answer to who it was that he made that promise and I'd like to find that out now. After reading through the BARCAS agreement, many people have come to the conclusion that the BARCAS agreement doesn't favor Nevada or Utah. The primary discovery of the BARCAS agreement was that the valleys are more interconnected than we had previously thought, that is, that water comes out of the mountains in, you know, Steptoe valley and makes it way in a round about fashion into the Snake Valley. Prior water rights would seem to indicate that the ranchers in the, you know, Snake Valley,

should have a better legal claim. It must be asked whether there is any ulterior motive outside the immediate agreement that might be behind the push for an agreement to sign now. The public has to know what these outside arrangements might be.

Pat Mulroy, the executive director of the Southern Nevada Water Authority, has threatened if the state of Utah impeded the construction of the Southern Nevada Water Authority's pipeline that she would see to it the planned pipeline from Lake Powell to St. George was stopped. Whether this is true or not, this kind of intimidation should not have had any bearing on the stipulations in the agreement, and I want to know if they did.

Uh, Mike Styler repeatedly stated that the agreement, uh, is necessary to prevent unnecessary legal, unnecessary litigation, is needed to prevent unnecessary litigation. While avoiding unnecessary litigation is commendable when an equitable agreement can be reached an equitable agreement is an unsatisfactory alternative to lawsuits. At the public hearings conducted by the state engineer's office, most of the citizens who commented protested voraciously that the agreement was inequitable. In response, Mr. Styler has agreed to extend the deadline from making written on the agreement until the end of September. This is hardly a reasonable response, as the protest will end up being reviewed by the very same person whose actions are being protested. This would seem to raise some constitutional questions since the right of citizens to petition the government to redress of grievances is being short circuited if not hijacked entirely, and it makes a mockery of Utah's public meetings law.

Why should the state of Utah stipulate to anything that is not based on established or science? I won't read any of the rest of that. I've got to get out of here. I'm sorry.

Perhaps the most worrisome of all is the question that is yet to be answered to my satisfaction is to what extent will the silent disagreement bar or restrict access to courts of citizens along the Wasatch Front and Salt Lake Valley who may be impacted by future dust storms and air pollution originating in Snake Valley.

The issues are enormous, the potential consequences so long lasting and irreparable, it would seem to be a form of criminal negligence not to exercise due diligence in this case. I think there's a lot of other legal questions too. Maybe we should, you know, draft a letter to the, uh, state attorney general. Of course, we have an ex-attorney general here; he could probably answer half of those. Thank you.

[applause]

SE: Thank you, Gerald. Just a quick update for everybody. We've been here two hours now and I admire your patience. There's about 10 more speakers left and please, if you're wanting to fill out any of those yellow forms, the yellow card, just leave it on your seat or bring it up in front. Also, feel free to pick up information at the back.

Our next speaker's Ted Wilson:

Good to see my good friends from Snake Valley, Annette and Cecil. I met them years ago, uh, and if you've ever been to their home out there, you've got to have an emotional moment for the people who care about that land and have developed their little corner of it over the years in concert with good water usage.

And I think what we're faced here with is something much more serious and much bigger than maybe we're even focused on here tonight. And that is very, very simply, that you go to an area, you build a city, the city is supplied by water that was computed in 1922, Paul mentioned that. You build growth into the formula of prosperity, the degree that that area must continue to grow in order to have prosperity of any kind. And then after you run out of water you develop a project of water from nowhere. I'm not just talking about Las Vegas. To a degree I'm talking about Salt Lake City, even though you're right, we have a lot more water than meets the eye. I'm talking about Denver, with the big straw project on the, on the, onboard. I'm talking about Los Angeles that's already committed this big sin of starting the Owens Valley and these Rube Goldberg schemes are now appearing all over the west: pump water from nowhere. And the Snake Valley, Spring Valley, all the valleys that are interconnected by an underwater flow between them, have no water. They have no water. They have enough water for a few farm families, like the Garlands and the others that live there. They have enough water to keep our plants and perhaps avoid the disaster that Brian Moench so articulately and eloquently presents to us. And we need to catch onto all these schemes, because, folks the west has outgrown its limits to the point that we're going to have to find a nice way to retract. And that's the seriousness of this project.

Now can we give this message to Utahns? I remember a debate in this state called the MX. Remember Cecil?

Yes, I do.

There are something modes, something modes, and co-modes, right? Cecil says (laughters). There's the basin mode and there's a something mode and then there's the commode. And we got that message out because they wanted to put a race track, first strike insensitive hard shelled track in every valley of this state, almost, to tell the Russians or the Soviets that they couldn't attack us with a first strike missile. The project was finally defeated when people at the LDS Church in the upper echelons looked at a map and got the message. And then others came in and it became a groundswell of operation throughout this community. This can find the same course. Brian Moench has the absolute answer to this for the bigger population. For the smaller population we need to talk about water rights and the fact there is no water and the goodness of good family farm life. But in terms of the overall message to the state, Brian, you've got the key and congratulations for your analysis. And Terry you have the key, as you look at business and the kinds of things it would do to you in Nevada. And Mark, good job on those stats. They all come together. We have a fight here and I want to put Utah Rivers Council that I direct firmly in support of it, because we can win it and I wish you all well. Thank you.

[applause]

Thank you, Ted. Our next speaker is Paul Tusting.

Hi, there. My name is Paul Tusting and I'm a Salt Lake County resident but I've spent a lot of time in the last 10 years kind of poking around out in the west desert. For those who haven't been there before, I'd really encourage you to head out there. It's a

special place. It's as wild as anywhere I've been in Africa or Asia or even Alaska, you know, it's a really beautiful place. It's got mountains higher than anything here in the Wasatch and it's got lots of these small little, beautiful fragile desert oases. And you've got to see it to believe it.

And, you know, I was here at the meeting about three weeks ago and, you know, I do want to commend that group that put that together. There's a difference between the pipeline and the proposal for the two states working together. There's an old western saying: "Whiskey's for drinkin', water's for fightin'" and I think that group is, there's some good minds there and some good people trying to figure it out.

My problem with the agreement is that they really talked about two options: sign it now or face a fight down the road. And that's pretty discouraging. You know, one thing is that proposal hasn't been out there for that long to the public. We as citizens have been able to read and look at it, but we have limited resources. What about some of the other stakeholders here? You know, the BLM, there was a quick comment about at that meeting, you know, had they had time to do environmental impact statement? No. BLM has lots of the low lands and lots of the foothills. You know the Forest Service manages a lot of the high lands, you know, up on the mountain peaks as well as the Forest Service, or, uh, the National Park Service.

But, you know, maybe even more important than that is the confederated band of Goshute Native Americans. They are a sovereign nation. They should have at least as much right as states in this matter, you know. We're talking about a high tier there and I don't know if time or resources have been allocated there to really get that kind of input in.

You know, my last real comment has to do with how vague this agreement is in terms of what happens if all...there's a lot of prescribed metering. But what's going to happen when the metering shows that there's damage? It's very vague on what may happen. There's no talk about what must happen. And there's been a few folks talking earlier tonight, once a billion dollar, multi-multi billion dollar, uh, pipeline is in, I just have a hard time believing that people are just going to turn it off, you know. I just don't see it as being realistic.

So, you know, what I'm asking for today is not to sign or to not sign the agreement, I still think there's a lot of promise with it with that team. What I'm asking is for the state of Utah to have more time to come to a good conclusion. That's it. Thank you.

[applause]

Thank you, Paul. Our next speaker is Chris Wheeler.

Hello, there. Chris Wheeler from Garrison, Utah, out there in the sticks (laughter). I'm sixth generation, a rarity there. You don't find those very often; I'm among the very few.

Anyway, there is no extra water out there. My farm, there's no water. I mean there's no extra water. So basically, yeah...I don't have a speech ready so I'm a little bit nervous (laughter). But, anyway, um, putting our trust in the state, state guys is a little bit scary cause I know that state is a little bit money hungry, not because it's money hungry,

but it's low on money and it's easily bought and that's scary, especially being out there cause we have no say. There's maybe 500 people maximum in the whole valley. I mean there's not very many. That's just too scary. It's scary having our trust in all these, in everything. I like all the scientific data, that's all great, yes, fine, dandy. There is no water (laughs).

Why don't we take that pipeline and ship it southwest to the ocean, desalinate. It's expensive. I know they've proposed it. Why don't we take the pipeline, turn it around. We know Lake Mead's appropriated. Let's go to the ocean, desalinate the water, bring it up. It's an endless supply. It can help us with that climate change and the ocean rising, what little bit it might actually help (laughter). I mean I know it's expensive. It's going to take a lot of electricity to do and run, but it's going to take a lot of electricity to run all these wells and ship it that way, too. So let's go green. Keep the valley green and let's all stay, let's keep it green. Thank you.

[applause]

Our next speaker is Joseph Bauman(?) He may have just stepped out, uh. Ed Uehling, is that, am I mispronouncing that, Ed?

Ed Uehling:

No, that's right. Exactly. I guess I'm the only one here from Las Vegas. I appreciate the opportunity to speak. I just can't get out of my mind, though, an experience that I had almost exactly 20 years ago and I'd like to discuss, tell about that first. I went with my son, I took my son to Israel and we drove around Israel and West

Bank and had a dinner with friends of a friend, or relatives of a friend, in the City of Janeen on the West Bank. Uh, these people were Palestinians. They'd been, their families had been on the land for 600 years. They had, the family had lands, but they could only get water for a few hours every week in a tank that they had on the roof of their house. That was the only time the water was given to them and they couldn't, they had no water for their crops, for their farm. And a few miles from there, we went, we were able to drive all over very easily because we had Israeli plates on our car. We were able to enter the settlement that's up above that city. Uh, the word settlement is really, it's a fancy suburb. It's a very nice area of houses, like in Las Vegas or like in Salt Lake City. There the water was flowing all over the place. Water in the, water displays in the city. And this in the emotions of this hearing remind me of that.

This water is being stolen from a valley that needs it. You've expressed so well, especially, especially Mr. Garland has expressed so well about what is, what's happening. There is no water. And I think there are some very good solutions, though. Some that were, would cost nothing. If Terry—I'm sorry I don't know you, but I don't know your last name, and Dr. Moench, Dr. Moench, and Mr. Van Dam, and Mr. Garland, would go, appear on a radio program "State of Nevada". The, the, it's on the public radio in Las Vegas. It's done by a person who's had Pat Mulroy on the program a number of times and has disputed several things with her. You could make a phenomenal presentation that would have a tremendous effect in Las Vegas if you would just go and be on that program. The person who runs the program I'm sure would think it would be amenable to that and would invite Pat Mulroy and almost certainly she would not show up. But if she

did, she is a, she is a compulsive liar. I'm sorry. But she...those are strong words, but she is.

She told us several years ago when she wanted to implement a sales tax because she couldn't raise the water rates in Las Vegas. We had to have this sales tax. We passed the sales tax and she's, she's raised the water rates a number of times since the sales tax has been passed. And she put ad in the newspaper telling, total fictions about this project. Number one that there's a drought in the Colorado River. No, there's not a drought in the Colorado River. There's a normal flow in the Colorado River and it's, and it is about six million, six million acre feet per year of which, as has been pointed out, uh, by Mr. Van Dam, Las Vegas gets about 300,000 acre feet, which is 1/20th the flow of the river. It's the only big city on the river. And the flow, though, when they distributed the water on the river back almost 100 years ago, they were using years that had, that were very wet. So they're distributing 8 million acre feet of water so the level of Lake Mead is dropping. They're taking 2 million acre feet of water excess out of the lake. The lake is built for three years supply of water, 25 million acre feet. And they're taking, so the water level's dropped a hundred feet. They're missing, what, about 12 million, almost half the water in the lake, 12 million acre feet, 10 million acre feet. And so where is that water going? It is going for totally absurd uses and there, so this is where I would disagree with Mr. Van Dam. There is plenty of water and it's only 20 miles from Las Vegas. It's just that the water is being misallocated and this allocation can be turned around, can be changed.

Last night in the hearing in, a, in Delta, a number of people expressed anger with—not during the thing, during the hearings, but afterwards—I talked to people and they felt that Harry Reid was, was really behind this and gave a number of reasons: he's

involved with the Coyote Springs, or his son's involved with Coyote Springs. This is another suggestion I would make to you, is go approach and try, he's very powerful, as we all know, try to get him to change this Colorado Compact. He has the power to do that. Just a few changes, just, for example, just charging people to take water out of the Colorado River. Charge a hundred dollars an acre foot. Then, within, within five years, the Lake Mead will be full, Las Vegas will have all the water it needs. The water district, Pat Mulroy charges us approximately a 1,000 or 1,200 dollars per acre feet for the water that we, that we use in Las Vegas. So there are numerable, there are numerous alternatives here.

Another is, for example, they're talking about decreasing by conservation the amount of water, the average amount of water consumed. We consume 250 gallons per person per day in Las Vegas. Albuquerque consumes 99 gallons. Las Vegas wants to reduce this to 200 gallons. This will produce about 50,000 acre feet of water, which is double what we're talking about being taken of this valley that really has no excess water.

There are, the point is, there are lots of alternative and there are lots of ways of fighting this, and the really inexpensive way is just to go appear on this program. You people make a very compelling case that would be heard by the, by the key people in Las Vegas. This program is listened to by the key people in Las Vegas. Oh, I see my time is up. Okay. But, and then there are other alternatives that could also be used.

[applause]

Thank you, Ed.

Ilene Ferris:

___? ___ we all live downstream. I grew up, my great-grandfather, my grandfather came to the White River Valley in 1899 and now I'm third generation and the next two generations are there running the ranch. And already they fought water rights. One of the big ranches, you probably know which ranch where they're pulling the water into the Cummins Lake? Do you know that one?

[SE: I'm sorry, I don't.]

Anyway, they're already, you know, completely ruined one ranch by pulling out the water so that it can't produce anything. What I'm wondering is what are we going to eat? Uh, these ranchers out there produce some good things that we need to eat and, anyway, I agree with all of it, all of it. But, then the Nevada people who live, all live in Clark County, there are so few of them that they really don't get a voice in it. Thanks.

[applause]

Morgan Larsen? Wasn't sure about that. Uh, James Thalman? Is James back? Well it appears we don't have any additional folks signed up. So, seeing that Rupert Steele has come in, Rupert do you want to speak this evening?

Good evening, everybody. My name is Rupert Steele. I'm chairman of the Confederate Tribe of the Goshutes. Some of you may not know there's two band of

Goshutes. There's the _____ band, they're about 40 miles west of here, and I'm with a band of Goshutes out to Wendover.

It's been frustrating for the Tribe because, uh, when the BARCAS was first out with the draft, we noticed that the Reservation was horse shoed around and with this Snake Valley agreement, they also did the same thing. So it's been frustrating for the tribe. So I asked the question, why is that being done? And the question that I got was that your water aren't, your reservation, the water underneath the Reservation will not be affected (laughter). So I'm trying to get assurance from somebody that our water will be guaranteed. But we know, I've been born out there, I born and raised out there, and I know that we are in a very serious drought out in the Reservation. We had to cut down half of our cattle on the Reservation due to lack of grazing. So, and when they tell me that you guys have a lot of water out there, and being born and raised there I know they're not telling the truth. I know there's no water out there for anybody to take out of those springs of Snake Valley.

The reason that we're, I found out that they didn't want to deal with us because of our sovereignty. We're a state within a state. So the, the only thing that we could do is to go to the federal governments. But, guess what federal government did? They sold us out. They signed this ___?___ agreement without our knowledge. So my point there is the Tribe is not being consulted with in the whole project, with the BARCAS and also the Snake River agreement. So it's been frustrating and we do have two council members that are sitting on the Snake Valley Water Board that the governor had established, but still, they weren't invited to any of the meetings. So, it's been frustrating for us and we opposed by resolution the BARCAS and we oppose the Snake Valley agreement

primarily because we weren't brought to the table for any of the talks. So that's where the tribe stance is and I don't see them changing their resolutions. I think it will be impossible for them to change it.

There's a lot of good information that we saw here today. I don't know if any of you have visited the Deep Creek Range? The Tribe has, we have some hunting, we do elk hunting, we do deer hunting and during the year, like right now, those water artesian wells that are out there, they're starting to slow down. With this drought going on, they may lower. I don't know what's going to happen and with, and you know, I can just imagine how much it's going to take to fill a 7 foot water pipe down there.

And my other concern was who's going to have to and ask to go tell our water authority, hey, the water's going down? You need to shut that pump off. But I know that once that water gets inside that pipe it's not going to stop until the water is completely drained out of there and the pumps have burned themselves out. So this is very serious and I agree with each and every one of you that there's no water out there for transport out of there. It may have been different if there's rivers in Snake Valley. But Snake Valley, we don't have any rivers out there. All we depend on is Mother Earth to provide us with snowfall and rain and in a few years we haven't gotten that.

I remember, I was a little boy, it used to snow a lot. I was running around out in the snow. The snow was almost as deep as I was. It was up to the window sills and that's the last time I ever remember. I was a little boy then that this happened. And today, we don't get anything out there at the Deep Creek Range. And we're the last range that when the snow comes in from the northwest, we get the last part of the snow because the rest of the ranges get it and we get the last part of it. So when they tell me there's a lot of water

out there, I don't know where. Somebody knows. But when I ask, they say, we won't know. We do not have the numbers of what it is. It's only estimated guess, it's a good guess. And the other thing that really scares me is that we won't know until we start pumping, so (laughs), that's not good.

The Tribe ___?___ as well as everybody in Spring Valley and Snake Valley's in great jeopardy. Our existence is in great jeopardy. I met with the Secretary of the Interior, Larry Echohawk, last week and I asked him or I pleaded to him, I said, "What are you going to do when the Reservation runs out of water? Are you going to move us somewhere where there's water? That's your responsibility." But he wouldn't give me a straight answer. So, I've been going to the top levels with this issue to hopefully try to put a dent in it and try to prevent it from being pumped out. So, thank you, Steve.

[applause]

Thank you.

SE: Is there anyone we missed, other than the two commissioners I'm going to introduce in just a moment, who would like to speak at this point? If not, we're closing in on the end, but we have with us two of the county commissioners from Millard County who are the only protestants who are officially recognized in the State of Utah other than individual water rights holders in the Nevada state engineer's hearings process. And Millard County has carried the ball for us rather well up to this point. We're certainly only in the early innings of this baseball game, but with us tonight are Commissioner

Darin Smith and Commission Kathy Walker. And they're going to conclude for us, if they will.

Commissioner Darin Smith:

Thank you. I appreciate being here tonight. One of our objectives, Commissioner Walker and I, was to come up here tonight and listen to all your comments and we truly appreciate your comments. We met Governor Herbert last week and in having a discussion with him, you know, we said we're going to go and have a couple of public meetings and get the input of the public and see what their feelings are. In all the public meetings I've been at there are always a lot of good common sense, ___?___ proposals that come out and I appreciate that process and I think Governor Herbert appreciates that process. Being a former county commissioner, he understands kind of where the rubber meets the road and I think he's very open and interested in the comments that we gather. We're going to take them and present them to him. We're going to present a kind of a counter-proposal that we hope that he'll take back to Nevada.

I appreciate Boyd Clayton being here tonight. You know, Boyd's part of the negotiating team and I know there's a lot of folks on the Utah side that have put a lot of time and effort in to coming up with this agreement, you know, so far, but it's the first time we've all been able to see it. It's the first time that Millard County has seen it and as you've all seen by Mark's presentation, uh, kind of what our comments are and the direction that we think it ought to go.

Appreciate Steve and the efforts that he's made the last three or four years. Couple of years ago I was in a meeting with some of our local state representative down in Nephi and we brought this issue up and there was a little bit of lip service that was

done to this issue, mainly by them and some folks in the state were there and everybody's like, well, we can't really do anything, you know, we don't know what we can do. Kind of a dead issue or we're kind of powerless. And I got up in that meeting and I looked at all of them in the face and I said, "You folks are here to represent me and I represent some of these folks and this issue is an incredibly important to us, to the State of Utah, really to the western United States." And some of them were offended at first a little bit. Afterwards, I think thinking about that, some of them said, "You know, you're right and these are the people that we represent and there is something that we can do." And from that time forth we've got incredible support through all of our legislators. We've gone and got bills passed. We got appropriations for studies. And it gives you a little bit of faith in the process. If you really want to make a difference you can if you get involved and you should and we appreciate everyone that's been involved.

Our citizens who live out there are incredibly smart people and they live out there by their choice. They love their quality of life and they wouldn't trade it for anything, not for money, not for anything. And as I sit down as an elected official I represent them and I say, you know, well, uh, there's a movie I watched with my kids once. It's called "Independence Day". I don't know if some of you have seen it. It's about aliens come down and have taken over the world and it's kind of doomsday and the president stands up as they're all trying to decide who's going to fly the jets and he gives a little speech. He says, "We will not go quietly into the night." And that's been my motto in representing the citizens in my county. An emotional issue for me because it's their livelihood and it's their independence and they deserve the right to live the way that they want to.

I live underneath an agreement. I'm a farmer by trade and I live at the bottom or the end of the ditch on the Sevier River system and the Sevier River system is regulated by an agreement called the Cox Decree, which allocated the water for use along the Sevier River a long time ago and I'm dependent on that and I appreciate that agreement because it brings order to that system. And there's an issue, although I fight with county commissioners from Garfield County and Sevier County because they think that I get their, their water, it's a system and it works and it's been upheld and respected for a century. And so I don't think an agreement is that bad of an idea. I think that if it's the right agreement and there's enough public input and enough of a process that it goes through, that it's something that people can work with in the end that it might be the way to go. I think Governor Herbert thinks at some point there ought to be an agreement.

I'm a gambler: I'm a farmer (laughter). I gamble every year and I hope and pray every year at this time that I have enough to do it again the next year. And I don't know that not having an agreement is better than having a bad agreement. I personally, not speaking as a county commissioner, I guess, I would probably take my chances with the current agreement we have; 7 to 1 split over that water is not enough to sustain a valley. Basically it locks the valley up and allows for no growth, no other input into Millard County economically or any of that stuff. And that's not acceptable. And that's our main issue right now, as Mark has explained to everybody. It's not equitable the way that it's being split. There ought to be some other way.

And the other issue we have is timing. Why do we have to do it right now? Why can't we take the time? Like Cecil says there is no extra water in Snake Valley. There is not. Some people claim that there is. State law allows for the groundwater table to be

lowered. It's all accepted, it's accepted in Utah and Nevada. We have lots of springs around our valley, around Salt Lake Valley, around any valley where there used to be flowing wells. And there aren't anymore because it's been allowed and accepted that a drawdown of the water table is accepted for certain uses. Water always goes for the highest and best use. And that's probably okay; it's been okay. It's had to happen. But at some point the State of Utah and the State of Nevada are going to have to produce some legislation that puts a limit on that. They're going to have to say this is acceptable, but you can't go, you can't go lower than a point, otherwise, we're all going to be in trouble. And you know, that's something that we're going to pursue. I think Senator Stowell's going to pursue that. Dean Baker completely agrees that that's the issue. He's done it to himself. He's put in ___?___ in dried up wells and affected himself. And the whole area out there's been shown that it's in balance now. As Mark has shown and other people have talked about, it's in balance now. There is no extra water. This issue is a political issue. It's an environmental issue and it's a moral issue. Morally it's wrong, okay. Environmentally, the folks that live and depend on resources out there are, in my opinion, the best environmentalists that you will ever find because they're not miners. I'm not a miner on my farm. If I'm a miner I don't get to do it very long. They're more concerned about protecting the resource than anybody because they depend on it. They have a lot of knowledge and, you know, this process helps bring that up. A lot of common sense.

Question?

Please. What's the investment, the wind farm, the wind turbines and...?

Millard and Juab Counties? I'm sorry, Beaver.

Yes. Yeah. What's the investment and what will these dust storms do to those turbines?

You know, I don't think those dust storms, the way the wind blows, will affect those turbines. It usually blows this way or it comes back this way. No, it could happen.

But I mean, if the water's taken...

If the water's taken, you know, that may happen. They're quite a ways away. But the possibility is always there. The possibility's out there for a lot of things to occur. So I guess the point I'd like to make is why not take a lot of time in looking at this issue, because by the time that you decide that it didn't work it's going to be too late. Why not—and there've been lots of good suggestions, even last night—maybe give Utah and Nevada a little bit of water in ___?___ and see the effect of that. Why not wait and see what happens in Spring Valley in 20 years and then look at it and see. There should be a process of in really small increments as pumping is allowed, to see, you know, what the effect is. That's the only way to safely do it.

Are they already taking the water from Spring Valley?

No, just the ___?___ out there is appropriated 40,000 feet to start, and then they can scale it up. Is that right?

Yes.

But, then take it to where?

They scale it. They start at like 10 or something and work their way up.

It will go to Las Vegas.

The production hasn't occurred yet. It's still years away.

Yes, it's years away, but Utah ought to wait until they see what that effect is, you know, and account for that water because it's a closed system, as Mark has explained. It's a groundwater flow system. It's not just one valley. It's all related. We're all related. This is an, initially people say, oh, this is a rural issue. It's not just a rural issue. We're all connected. All the public land issues that we deal with are everybody's issues. You guys have issues up here that really concern me and I want to be a part of it. Our association of counties has learned that because we have rural and urban commissioners who get together and we talk about, you know, all these issues and how we're going to deal with things. We take a lot of time. You know a lot of protections on our form of government, the way things are built, sometimes can be very frustrating because they take a long time.

As a county commissioner sometimes I like to see things happen a little quicker and it's very frustrating because it takes not only months but years to do certain things and that a protection that we have and it's a good protection, even though it might be frustrating to a lot of us, but things need to take time so you get it right. And with this issue, this agreement needs to take time and we need to look at the, we need to wait 10 years. We need to wait to sign this agreement for a while. There's no urgency now other than political. And so in a political environment, which, you know, I deal with a lot, you have to stand up and fight for what you think is right and it takes a lot of input from the public and citizens. So we encourage you folks to send your comments to the governor and to Mike and to Boyd, the negotiating team. They said that they will look at all the comments and go, you know, and meet with Nevada again. Maybe Nevada will say, no, sorry, you know that's it. But we try and we keep trying and we won't give up and we truly appreciate you folks' support, comments and your involvement and I again, thank you for coming. Thanks, Steve, for having us, this meeting and I appreciate your guys' support. Thank you.

[applause]

Commissioner Kathy Walker:

I guess I'll say a few words. I won't talk nearly as long as Commissioner Smith. Hi, I am Millard County Commission chair Kathy Walker. It's my pleasure to be here and it's nice to see so many. We really do appreciate your support.

The Snake Valley offers unbelievable recreational opportunities as so many have already stated. There is hunting, hiking, uh, rock climbing. It may be just a perfect place

for solitude, a place to escape from the crowd. If you've ever been down there, the silence is just unbelievable. And thank you, Mr. Wheeler, for pointing that out. It's just an amazing place. There's also economic development there. There's agriculture, there's ranching, there's tourism related services, and there's potential for many other projects that haven't been developed yet, but the potential is there.

As Millard County Commissioners, we believe that the current draft agreement eliminates future growth and development. It may very possibly change if not destroy the lifestyle in the Snake Valley, throughout Millard County and throughout Juab, Tooele, and even into the Wasatch Front. The Milford Flat fire was a natural disaster caused by lightning strike. I'm sure everyone on the Wasatch Front has felt the effects. We're seeing that as the dust storms from Milford Flat blow here. The draft agreement as currently proposed, we believe, is a man-made disaster, which may be even more hazardous to health of all Utahns, not only in Millard County, but throughout the entire state.

Millard County Commission and Millard County residents and our Snake Valley friends, our Nevada friends, we all believe that water is worth fighting for and we will continue to do so until we feel that Utah water is protected. So we thank you very much for your support and ask for your continued support and as Commissioner Smith and many others have said, ask for your comments to our governor and to Department of Natural Resources Director, Mike Styler, and, of course, Millard County Commission is willing to take comments and present those as well. If there's no questions, I'll step down.

[applause]

Steve Erickson:

Well, with your indulgence I'll take a quick moment and give Brian this card just in case I start to wander. But I think what you've heard from our commissioners here is exactly right, that this is a political policy decision that has to be made. It's not an agreement that deserves to be done simply because of well-negotiated, negotiated in good faith. It needs to be fully vetted. What we've seen so far, it's failed the test. What we need to do is to tell Governor Herbert in whatever way you choose that it's not in his best interest for his first major policy action to be a giveaway of Utah's water. That he, his legacy shouldn't be, a, Harry and the Gary pipeline legacy of dustbowls in Utah. And it's also important that you get to your legislators to tell them that in fact, this is an unfunded mandate and that they are abrogating their responsibility to public policy-making in this state to allow decisions like this of this magnitude of this importance to be made by the executive branch without their oversight. So we've got a real problem here with the way this has been approached. We need, as citizens, to make clear to our elected officials, we can't allow this to go forward, that we have to pause, that we have to look at this much more carefully. We need to have an opportunity for people to look at the big picture. We haven't even had a chance to weigh in on the pipeline itself yet, to hear what the impacts will be in Nevada alone, even if Snake Valley is exempted from this. If somehow Snake Valley's never to lose any water to Las Vegas, just what will happen in Nevada will have an impact upon us on here downwind in central Nevada when it gets deserted by, by this massive pipeline project. So there's no reason, other than, uh, threats from the Nevada interests for Utah to sign an agreement prematurely.

Those of you who represent organizations, we need to get all of your members to write to the governor and to write to legislators to say, no it's not time to do this agreement as it stands now. We hope we can generate even more public pressure over the next couple of weeks, but we will need all of your help and I really, really thank you all for being so patient, staying here through this lengthy meeting, having other things, even the President to watch tonight that certainly could have conflicted. So thank you again. Thanks Salt Lake County for their support in all of this and they're making, the making the facility available. And hope we can keep the pressure up and get the result that we can all live with down the road.

Is there a plan? Do we have a plan? What's our plan?

Well, the plan right now is to continue to get the message to leadership, the legislature, that this agreement needs to be fixed or nixed. That's basically the way we'd like to see it done. Uh, improve it or set it aside. And there's no need, again, to sign this agreement in any hurry or any pressure from Nevada interests.

Do you see any effectiveness to a demonstration?

When you get out the numbers, I guess that's the main thing we'd have to see. I think right now we've got another couple of opportunities. We'll be meeting with the legislature next week. They'll be an opportunity for discussions with Salt Lake County again next week, so there's a number of things going on. But it's mainly right now, I

think, letting the governor know and letting your legislators know that we're not satisfied with the product that's come out of this four years of negotiations in spite all the efforts.

Steve, I talked to Senator Stowell today and Senator Stowell chairs the interim committee, he's the Senate chair for that, the joint Senate/House Natural Resource Interest Committee. He said that to make sure that people know that the committee wants to take public comment at that meeting. That meeting is on the 16th, which is a week from today. I cannot remember the time.

It's later in the meeting and there's only half an hour, so I'm not sure very many people are going to be satisfied...

He told me there'd be 45 minutes to an hour.

For those who come up you might get a minute or two, but there should be an opportunity, I would think, for people to also submit their comments to the interim committee. So if you have your comments done, we'll hand deliver them if necessary or take them up to the Capitol, email them to me, if you like. I can give you my email and I'll make sure I print them out and people are aware. We're going to deliver these to the governor, but there's no reason we can't show them off to the legislature first. We had about 80 of these cards signed last night and about 60 last night in Millard County and Delta and we've had others from Snake Valley in the past, so we've got a lot of public support. There is not much support for the pipeline, period, that I'm aware of anywhere in

the state. So it's really just a matter of galvanizing that opposition, making sure that the decision makers are aware of it.

One quick housekeeping matter, very important. I, on behalf of the Association of Counties, want to thank Salt Lake County. Ann Ober has worked with me on this issue. She works with Mayor Corroon and just thank you for providing these facilities and for the opportunity to ___?___. Thank you.

And thank you all.

My email if you care to send me anything is Erickson.steve1@comcast.net.

[end]

COMMISSIONER DARON P. SMITH

COMMISSIONER KATHY Y. WALKER

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September 22, 2009

Honorable Gary R. Herbert
Governor, State of Utah
Utah State Capitol Complex
350 N State Street, Suite 220
PO BOX 142220
Salt Lake City, UT 84114-2220

Dear Governor,

Please find enclosed the comments made by the citizens of Nevada and Millard County in regards to the Snake Valley Water Draft Agreement Hearing held September 8, 2009 in Delta, Utah. Also, a copy of the presentation that UAC Attorney Mark Ward presented, as well as a copy of the Utah Farm Bureau News by Leland Hogan and comments from Harvey Hutchinson, who was unable to attend the meeting due to his recent spinal surgery.

Sincerely,

Kathy Y. Walker
Millard County Commission Chairman

Enclosures - Mark Ward's presentation, Snake Valley Water Draft Agreement comments, copy of Utah Farm Bureau News letter by Leland Hogan, and comments from Harvey Hutchinson

09222009:mr

MILLARD COUNTY COMMISSION PUBLIC HEARING
 THE 8th DAY OF SEPTEMBER 2009
 Millard County Fair Grounds, 187 S Manzanita, Delta, Utah

Public Hearing to discuss the Snake Valley Water Draft Agreement.

PRESENT: Kathy Y. Walker Chairperson
 Daron P. Smith Commissioner
 Bart A. Whatcott Commissioner

 Richard Waddingham County Attorney
 Marki Rowley Deputy County Clerk

ALSO PRESENT: Mark Ward Utah Association of Counties (U.C.) Attorney
 Diane and Max Chipman Las Vegas, NV
 Dorothy Morrison Columbus, OH
 Julia Sharp Delta, UT
 Pam Layman Oak City, UT
 Fred S. Tolbot Abraham, UT
 Dough Turner Southern, UT
 James Kallin Sutherland, UT
 Clayton Jeffery Delta, UT
 Scott Anderson Delta, UT
 Linda Gillmor Delta, UT
 Amy Odonaghue Deseret News
 John and Anita Hansen Garrison, UT
 Clay H. Cummings Fillmore, UT
 Brian Allen Fish Springs National Wildlife Ref., Dugway, UT
 Dean Baker Baker, NV
 Marjorie S. Jenkins Meadow, UT
 Shermon Tolbert Hinckley, UT
 Jerald and Marlene Bates Garrison, UT
 Paul J. Stephenson Delta, UT
 Lavar Cox Delta, UT
 Shawn Gonder Oak City, UT
 Clyde and Nan Bunker Delta, UT
 Steve Walker Delta, UT
 Robins McPherson Lyndyl, UT
 Andy Nickle Delta, UT
 Patrick Painter Nephi, UT
 Paul Caso Fillmore, UT
 Betty Jo Western Delta, UT
 Jeanie Owens Fillmore, UT

Dean Draper Hinckley, UT
 Steve Erickson Salt Lake City, UT
 Craig Greathouse Delta, UT
 Gary Perez White Pine County Commissioner
 Karl Jenkins Meadow, UT
 Kay Wheeler and Darwin Wheeler Garrison, UT
 Jerald Anderson Garrison, UT
 David Starlin Eskdale, UT
 Ed Uehling Las Vegas, NV
 Carrie C. Stephenson Delta, UT
 Layne Tolbert Abraham, UT
 Blaine Ipson Delta, UT
 Robert D. Nielson, Lynndyl, UT
 Russell Greathouse Lynndyl, UT
 Daniel Anderson Oak City, UT
 Gayle Bunker Delta, UT
 Beverly DeWyze Delta, UT
 Ladd Holman Millard Co. Water Cons. Board, Leamington, UT
 Ron Draper Delta, UT
 Wade Tolbert CUPHD, Hinckley, UT
 Ida L. Tolbert Hinckley, UT
 Jim Raufman Black Rock, UT
 Stephen W. Martin Delta, UT
 Emery Polelonema Six County AOG, Richfield, UT
 Todd Turner Delta, UT
 Jim Nickle Delta, UT
 Jolinda Nickle Delta, UT
 Megan Greathouse Lynndyl, UT
 John Keeler Manti, UT
 Cynthia Kaufman Black Rock, UT
 Leo Stott Meadow, UT
 Todd Thorne Six County AOG
 Deborah Callister SLC, UT
 Trent Wilde Millard County, UT
 Pete Shields and Shirlee Shields Delta, UT
 Ken Hill Wendover, UT
 Bob Meinhardt Delta, UT

PURSUANT TO AN AGENDA WHICH HERETOFORE HAD BEEN PROVIDED TO each member of the governing body, posted at the principal office of the Millard County Commission, posted on the Utah Public Notice Website, and provided to the Millard County Chronicle Progress, a newspaper of general circulation within Millard County, as required by law, the following proceedings were had:

Commissioner Walker called the meeting to order at 7:00 p.m. after a brief welcome and explanation of what the meeting will be about.

After a Presentation given by Mark Ward, UAC Attorney, Public comment was heard.

Lavar Cox, Hinckley Utah, asked why Southern Nevada Water Authority (SNWA) is part of the negotiating committee, when it is a water user. "It's like having the fox in the henhouse." This agreement should be between two states, deciding what the historical use is. He said that SNWA needs to be out of the decision making. There should be an agreement between Utah and Nevada but it needs to be based on historical use. He wanted to know if this is a government for the people, of the people and by the people, or is it a government by politicians. If it is a government by the people, then the people have already spoken under historical use. They have said no to SNWA. White Pine County, Millard County and any resident in Snake Valley have said no. We need to pay attention to that particular "NO" because that is the historical use of those who use the water. He is very thankful for the work that the Millard County Commissioners have done on this.

He said that he talked to a representative from the state of Utah about having SNWA in the agreement process and they said that Nevada will not come to the table without them. Mr. Cox says he calls their bluff.

Paul Stephenson, Delta Utah, said that the presentation may have changed his mind on some of the things, but not all of them. He said that he has been thinking about this for sometime and has come to the conclusion, as most of the people have, that he does not want legalized theft of the water in the west valley. He cannot imagine what was in the minds of the commission to allow an engineer from Nevada to make any decision regarding this matter. That makes him not trust this process from the start. This should have been done by qualified residents of another state, not of Utah or Nevada. Mr. Stephenson says that we need to get to work and find a way to stop the theft of the water. The County Commissioners, if they can, should stop all drilling if that water will be going into Nevada.

There are endangered species in the West Desert such as the Bonneville Trout. If the Sahara Club doesn't want to bring suit he says that we should start organizing and bring lawsuits right now. If we do nothing we will have no water in the west valley, leaving the area unhealthy to live in. The air will not be fit to breath. He has already noticed the amount of trees that have died. He says that Mud Lake has dried up as well.

He is also concerned with the pumping of the water that could cause the aquifer to decrease. He says that the rocks above the aquifer are kept up somewhat by the pressure of the spring. If you empty the springs there will be a big hole there. If this is done what will happen? Will the rocks move and cause earthquakes from Nevada to the Wasatch Front. Have they thought about that? Mr. Stephenson says we need to start calling and writing letters to the legislature until this thing is abandoned.

Steve Maxfield, Kanosh UT, said that he has gone through the professional papers and the empirical evidence that was included in the barcass study. There is no extra wet water to divide

between the two states. In one of the professional papers from the 1995 United States Geological Survey (USGS) 1409D shows the basin and the inner-flow in question and puts it further out. It goes to Utah Lake and Great Salt Lake. This year we had a wet spring. Lake Powell came up 12 feet (ft). They thought it would come up 30 ft. They thought that Great Salt Lake would come up 1 ft but it went down 1 ft. We are talking about the water that is going underground. He called it the "underground Colorado River". These rights and historic uses have already been transferred into interbasin. He thinks that we will have an impact of a minimum 20,000 acre feet a year (af/y) from Spring to Snake Valley. When we look at that, that is what will affect the historic use. As we are looking at Snake Valley and the wet water, the water isn't there. The pumping in Snake Valley has already drawn down the water table and has gone through transeaporation.

This agreement lacks the proper signatures of authority as well as the parties to the agreement. There is a provision in the agreement that states no third party can bring any action against this agreement. He questioned who this is protecting, the states, or the people. The people are the direct water users and this is our one chance to protect our water.

He thinks that definitions are the most overlooked damning thing in this document. He made comment on definitions 2-8 and 2-9. We are not talking about wet water that flows in the ditches that we are trying to give away. We are talking about water that plants, native and non-native, are using to survive, and water that is already allocated in other basins all the way into great basins. There isn't any water to split. He also has concerns with the transbasin flow, the mitigation, the right to farm and the people's rights as it is/or isn't said in the agreement.

Megan Greathouse, Lynndyl Utah, said she has some doubt as to whether the water is there. She said that SNWA would have to wait ten years to develop the water, but at that point they would be able to develop 30,000 af/y. She thinks that if this is allowed it should be developed gradually not in that big of an acre amount. Their addendum to the contract allowed for ecological issues which include hydrologic studies every year or less if they agree upon it. This is given them a loophole to not monitor the groundwater situation as closely as it should be. Also, anyone that is adversely affected by water pumping, appeals to SNWA. There are things that are inherently wrong with that. They are the one getting the water and you are going to go to them and say, "You've hurt me help me". That will not be an affective method. There is an interstate board that you can go to beyond that, but at that point the damage may already be done. She also thinks a \$3,000,000 mitigation fund, looking at the number of acres and talking legal battles doesn't allow adequate money to compensate.

John Keeler, Utah Farm Bureau, said that at this point there doesn't appear to be a pressing need for Utah to sign this agreement. The Nevada State Engineer has set Spring of 2011 as his evidence for submission deadline and the hearings on Snake Valley in the fall of 2011. With so many unanswered questions that have been talked about - recharge, hydrologic connection, on-going drought and fairness - Governor Herbert and the State of Utah Water Rights Officials should put this draft agreement on hold and insist on a more fair and equitable split for Utah. As Congress has mandated, an agreement between Utah and Nevada is a worthy goal, but not as an expense to Utah.

Attached is a letter from the Utah Farm Bureau News.

John Hansen, Garrison Utah, said that the well that currently runs his home was drilled after

1989. According to page 5 of the agreement that talks about water rights prior to 1989 he will lose his water that runs to his house. He wanted to thank the Millard County Commissioners for the effort they have put forth in this matter. He said he doesn't like to speak against people but, he thinks that so far the state representatives have put this together "cowardly" and not standing up for the people that they represent. According to this agreement, Nevada wanted the water so they could grow more, and this stops all the growth in Utah because there is no more water to be taken. We have to be the ones to prove damage and that expense is all on us. If there is any damage then pumping should stop and SNWA should be the one proving that they haven't caused any damage, not us proving that they have caused damage. So far as he can see Las Vegas hasn't had to go through as many sacrifices as they have put us through. There are still a lot of lawns, parks, golf courses, swimming pools and all kinds of places that they could start making sacrifices, before they have to "rape" us up here. SNWA has full representation, the people and Snake Valley have no representation other than through the Commissioners and this shouldn't be the way.

Marge Jenkins, Meadow Utah, said that they came to a meeting here a couple of years ago that started off with a film presentation of all the wonderful aspects of Las Vegas and moving to Las Vegas. They commented that they would like to increase their housing by 15,000 new homes and told of all the wonderful recreational aspects, in particular, their 63 golf courses. We know that grass uses the greatest amounts of water. She thinks that if Las Vegas will cut down to about 10 golf courses then we could think about giving them water. Until they do, she says "No water"!

Pam Lyman, Oak City Utah, she wanted to make sure that everyone got a questionnaire.

Ron Draper, Delta Utah, said this is a complex issue. He came to this meeting to see what he could learn. He said that Millard County extends all the way out to Snake Valley and we need to do whatever we can to preserve our water rights for our county. We need water to do whatever we need to do; housing, residential use, commercial use and farming. He has a little bit of pessimism with Millard County having about 12,000 residents vs the millions of residents of Las Vegas. It seems like a very small David against a very large Goliath. Overall, he thinks that we need to do all that we can to preserve our Millard County water rights.

Ed Uehling, Las Vegas NV, said that he wanted to comment on the integrity of the SNWA and the Las Vegas Valley Water District. Several years ago they wanted to increase the sales tax because they said they were unable to raise the water rates. That was not true. Since they increased the sales tax, which produces about \$50,000 to \$100,000 a year for the water district, they have raised the water rates tremendously as well as the connection fees. Then during the first 6 months of the year they published several false advertisements, one of which was, there is a drought in the Colorado River. There is not a drought in the Colorado River. There is 6,000,000 af/y. There is only a drought of common sense with brain cells and political will. Nevada is only supposed to get 300,000 af/y out of the Colorado River, but they are actually taking more and that is why the lake is going down. The rest of it goes to farms in Southern California and Arizona. They are using irrigation techniques that were used back in the times of the Romans which is a huge waste of water. There are many things that can be done to trade that water. They could build desalting plants on the ocean and trade with the city of San Diego and the city of Tijuana or the farms of the Imperial

Valley. Doing this they would be able to get hundreds and thousands of af/y.

He says that he is very unhappy with the representation made by the SNWA. This agreement is not the only solution. At a meeting held in Las Vegas on August 20, 2009 there were 50-70 solutions presented. The director of the water district had her back to all the presenters and only looked at a few who complimented her. She refused to listen to any of the presenters and was incapable of expressing even one idea that was presented at the meeting. He says that it is very dangerous to make any agreement with SNWA.

Cecil Garland, Juab County, said that everyone is right on with what they are saying. He has worked with the water for 35 years. There is no surface water in Snake Valley. He finally got Mike Styler, Director of the Division of Natural Resources, to admit that. Boyde Clayton admitted as much, but he said "We've been using the water all this time, now it's Nevada's turn." Mr. Garland said that isn't what he thought the law was based on. He sees it this way: if there is no surface water in Snake Valley then all the water that is being pumped out is under valid water rights. If you start taking that water from Lake Valley to Step-Toe to Spring Valley to Snake Valley then that water will be taken from our water rights. He said that the greatest harm this agreement has done to the water users who are fighting against this, is an official declaration or a quasi-official declaration that somehow or another because water comes out as a resource or recharge it gives Nevada the right to 50% of the water. The water that they are talking of is "paper water, fictional water". When we talk about lowering the water table feet, we who live in Snake Valley, are talking about inches and inches hurt us and dry up springs! He had about 40 springs on his property. He remembered so well when he first came to his place how the springs flowed. The kids went swimming in the hole, now the springs have all dried up. The water table has fallen about 10 ft. The springs are drying up; the vegetation is also drying up and dying. He doesn't need computer models to tell him this because he already knows. This has to stop. If they are saying put it off for ten years, then put it off for the ten years. The problem is that in ten years Nevada will have all of its viable applications lined up and ready to go, and Utah will be standing there scratching their backside and picking their nose wondering what the heck happened. They will have nothing because options are what matters. Utah better not give up their options. If we give up our options we will have nothing.

Terri Marrasca, Baker Nevada, said that based on the science and Mark Ward's presentation, not only will the water table drop in Utah but there will be a back flow. If SNWA wants to pump as much water as they propose, the water that they pull out of the ground will have to not only come from lowering the table but from a back flow to feed that pumping. This analysis will come out in the near future. The agreement should have as much as a \$50,000,000,000 bond because in Owens Valley LA Water and Power had to put up \$551,000,000 to mitigate air problems and \$65,000,000 to restore the Owens River. The financial impact on Utah is so far more than \$3,000,000 which is supposed to be a fund that is re-fed. To guarantee Utah's protection, Las Vegas or SNWA should put up a huge amount of money that is guaranteed to Utah.

On the issue of trust, during the Spring Valley hearings and the time leading up to the hearings, Pat Mulroy, SNWA, had a campaign that said, "We are environmental stewards. We will protect the environment in Spring Valley." At the same time, SNWA lawyers went to the State Engineer of Nevada and said they want to eliminate environmental considerations scenic and recreational values from the hearing. So you have this rhetoric that was discussed. Before that,

SNWA says one thing, and in the meantime they go to the state engineers and say lets get rid of this stuff that we say in our add that we will protect. This is on the public record and we all understand what we are dealing with.

Clayton Jeffery, Delta Utah, said that water runs downhill and that seems to be our problem. Some of the things that are bothering him is that this agreement has three parts to it: Nevada, SNWA and Utah. It boils down to if Utah has an issue, it will be turned over to SNWA or Nevada. They are saying if you have an objection they will write it down and say okay you have had your say, so what. Its like "hooten in the wind". There needs to be some teeth in this thing, any fool knows that if you take water out of the bottom the top goes down. If we have to make an agreement we shouldn't be in any sweat to do it. This should be a tentative thing.

Shawn Gonder, Oak City Utah, said that this is going to set precedence for years to come on political water issues. Why can't I transfer water from Garrison to Oak City and drill a well, they are transferring water out of state from Snake Valley, Utah to Las Vegas, Nevada. He heard someone from Millard County say why are we fighting this water issue, this doesn't affect us anyway. It really does affect us. He feels that if Nevada wants the water then they should put up the bonds for the damages or the extension of the wells for Snake Valley. If they pump even 12,000 af of water from the lower aquifer that took thousands of years to form, it will affect all springs. Do we know how much af/y pumping affects Burbank, Fish Springs, Indian Peaks, etc. You can see over the years what happens when you stop recharging the water. It has caused a lot of slews to dry up.

Within the past year the Delbert Young place by Big Springs added more pivots and now Needle Point Spring on the mountain home range has dried up. Where is the excess water there.

Is Utah trying to make amends with Nevada so they can pipe Lake Powell to St. George and not have Nevada dispute that project. Why do you think Lake Powell and Lake Meade's water level went down. Is there political movement of water to say that we need more water. He really thinks that Utah needs to handle this wisely because it will have a lasting affect.

Dorothy Morrison, Columbus Ohio, and a former Millard County resident said that the thirsty tentacles of the South West are already reaching into the Great Lakes area. This is a pivotal battle ground. She came to support this and encourage Utah to fight the fight.

Robert Nielson, Lynndyl Utah, agrees with what Clayton Jeffery said. Mr. Nielson served on the Millard County Water Conservatory District for 25 years; 18 of those years he was the president of the board. It seems strange to him that Nevada could take as much water as Utah. He took a class from the University of Utah taught by a water law attorney. The attorney very definitely stated that the water that is within the state of Utah belongs to Utah and the water that is in the State of Nevada belongs to Nevada. Far more of Snake Valley is in Utah than in Nevada, so far more of the water should be allotted to Utah.

Going back to Millard County's water history, his father was one of the first people to drill an irrigation well between Lynndyl and Leamington. When the Delta companies found out there was water along the river between Lynndyl and Delta, they immediately filed suit for ten large wells. Mr. Nielson's father and the other farmers already had their permits filed and were already drilling. The

state engineer at that time was Hubert Humphry. He was very definite that each party who was drilling a well only had 17 years to drill the well.

They found out that in Millard County there are two stratas of water: the upper water strata and the lower water strata. The upper water strata only goes to about 650 ft. The lower water strata starts at about 700 ft and goes to as much as 1200 ft. The farmers of Lynndyl, Leamington and Oak City area came to an agreement with the Delta farmers that Delta would not perforate their wells above 600ft and the farmers of Lynndyl, Leamington and Oak City would not perforate their well lower than 520ft. This was strictly adhered to by Hubert Humphry. He went to the point of having a representative from his office come out and inspect the perforation of the wells as they were drilled. The majority of the wells in the Lynndyl, Leamington, and Oak City are drawn from the upper water aquifer. They are adhering to what the state engineer had told them and they don't have any trouble with it. Mr. Nielsen wants to work out an agreement like this with Nevada so they will not be allowed to take more water than is allotted to them. This should all be worked out legally and there shouldn't be any big hurry to get it done right now. The people in the state offices shouldn't be in such a big hurry to settle and come to an unfortunate agreement.

Kane Hill, Partoun Utah, thanked the Commissioners for having the meeting and for all the work they have done. They are kind of an inspiration to all of us out there. So far the negotiations have been taken place in secret and haven't had public scrutiny. He wants to wire into the agreement throughout the monitoring that the data and the decisions that follow the data be public. Whenever they have a meeting they should allow the presence of the public, or at least get the minutes of the meeting publicized no later than 7 days after the meeting takes place. If the public could have a view of the process it would take it out of the realm of secrecy. Some places in the agreement say that Utah will pay certain costs and a few places that say SNWA will pay certain costs, if their board approves it. He thinks that it should be hardwired into the agreement that SNWA should pay all costs incurred in association with this agreement.

Gerald Anderson, Eskdale Utah, wanted to applaud the commissioners for the work they have done. He also liked the letter from the Farm Bureau. He said that it defines the people in Snake Valley. These are things that the negotiating team should of had access to and been given the chance to debate in public or at least get public input. The way this agreement is structured may protect the way of life as it is now, but it doesn't leave a future for Snake Valley. The water is already allocated. There is nothing left with which to do anything.

If this agreement goes into effect the way it is stated, then there will be no additional future economic value for Millard County from Snake Valley. It will not be possible for Snake Valley to be more than it is today. Snake Valley has a tremendous amount of developable resources whether it is agriculture or tourism, but it has to have an environment that is attractable to potential economic development.

Allan Biadgy's statement was, "There won't be a green spot left in Snake Valley after this is done". That is a pretty clear indication of what the future of Snake Valley will be under this agreement, as it's stated. The agreement itself addresses the desire to establish an equitable and a cooperative arrangement for the administration of the water resources in Snake Valley. Mr. Anderson also said that the work Mark Ward presented gave us a new idea of what the term "equitable" really should mean when we talk about sharing resources. For that reason alone this

agreement needs to be halted in its tracks. It has to be resurrected as a phoenix from its ashes or it has to be completely reformed as something that is equitable.

The second point is being cooperative. The level of cooperation of this agreement is among the signatory parties between the state of Nevada, the state of Utah, their natural resource departments, their state engineers and the proponent of taking the resource out of the valley. When SNWA is a signatory to the party they become a principal and we just can't get the elephant out of the room. The fact that it is cooperative for the agencies doesn't do anything for the people who live there.

One of his concerns with this agreement is, while it may accomplish nothing in terms of administering the resources or protecting the vegetation or any of the natural resource value of Snake Valley, it will create an administrative load on the people who live and work there now. From that standpoint alone, he doesn't see enough in this agreement that it can stand on its own. He can't identify that it solves or addresses its own stated goals nor does it do anything of value for the people of Utah. He thinks that we should just step back.

Kathy Hill, North Snake Valley, thanked the commissioners for giving people the opportunity to talk about their concerns. She especially thanked Mark Ward for laying out the problems with the 50/50 split. There was one part that she feels was not looked at close enough and that is just the sheer science of letting Nevada access 36,000 af/y. Nature doesn't allow for that. It's like a bathtub that has been installed wrong and the drain end is upstream from the downstream. They are going to try and capture water that is already being used for another purpose. The purpose right now is phreatophytes. Most of the phreatophytes are in north Snake Valley. Pumping water from the southern end will destroy the phreatophytes on the north end of Snake Valley as a result of ground water mining. The water is going to continue to draw down for several years after they stop the pumping.

There is not any protection in this agreement at all. There is some mitigation, but it is not protection for Utah water right users. She can foresee ranchers in Snake Valley loosing all their water in their wells. There is mitigation by SNWA giving them paychecks. They will become on the dole by SNWA. They will pump our water down and then say they can bring in new water. She foresees that they will be waiting on the dole for SNWA and waiting for water trucks to bring them water. That is what this agreement allows and this is totally unacceptable.

Gary Perea, Baker NV, appreciates the work that Millard County has done. The good that this has done is it has brought people together that would not normally work together. The one thing he wants to touch briefly on is the allocations of water. He agrees with the residents of Snake Valley that there is no extra water. The water table is going down now. He would like to see in the agreement that both Utah and Nevada each get 10,000 af/y of unallocated water, then Utah gets 10,000af/y and Nevada gets 25,000 af/y of the reserved water. Utah and Nevada both have power over that water. 10,000 af/y is probably still to much but at least it will be a starting point, and would still give 10 years to look at the science. Neither state water engineer should be able to permit water in any given year of more than 1,000af/y. This will give at least 10 years to measure the withdrawal of that water. This should be a gradual step; not taking so much water all at once. There are positives and negatives to both having and not having an agreement.

Dean Draper, Hinckley Utah, says in reading the agreement as it is written now there are no teeth. There are will's and may's when there should be shall's. It is an unfunded agreement. There are no enforcements to be had as written. He talked of a town called Carigo that has a steam ship that once floated but now it is embedded in the lake covered with dust. The prospect of having all of that water drained from our valley would mean that Snake Valley would look like Sevier Lake.

An aspect of the agreement that was not considered was that SNWA has the propensity to buy ranches and file for water which they would allegedly have the right to move water from one basin to another. In the agreement to keep them from purchasing water existing allocated rights prior to 1989. If they had a willing seller to transfer that water down to the Lincoln County line. Interstate transfer of water is supposed to stop at the state line. This needs to be investigated and included in the agreement. There are rumors that there might be as much as 20,000 af of water already allocated in Snake Valley by Utah that could be up for sale. This needs to be investigated to see if there is some way to preclude it from transfer and have it addressed in the agreement. Those who have proposed this agreement have viewed this as a way to take SNWA applications for 50,000 af/y in the valley and drop it immediately to 36,000 af/y. That is a net loss of 14,000 feet right up front. If the state engineer of Nevada allocated 50% as set forth in the agreement and drops it to 18,000 af/y, the hydrologic studies would make it so they would have very little to begin with. The idea being that "there is no extra water". The agreement is a good idea to protect both states but it needs to be redone and needs to address these other issues.

Dean Baker, Baker Nevada, thanked the Millard County Commission for the work they have done and how much they have supported the opposition of this pipeline. He has worked for 20 years on opposing this pipeline and will continue to do so. There is nothing about this agreement that makes him in favor of the pipeline or wanting to sale water. The only way that he will do this is if he has no other choice because of the laws. If you take Mark Ward's numbers and put them on this valley and Mudd Lake, Clear Lake, Flowell and all of those it would be an interesting comparison of the numbers. It has become totally acceptable to both states to draw that water level down. So neither one of those states could legally say that you can't lower the water table because any place you go to it has been lowered. The difference is that they built a city there, but to transfer the water out and still say that it is acceptable to draw it down is as wrong as it could be. There should be a huge effort by both states to have their legislatures limit drawdowns in exporting water. That view seems to be unable to get around. He virtually agrees with everything that has been said here. Whether it is better to have an agreement or not is still a very clear question in his mind.

Having listened to all of what has been said here and what has been going on for two years, there is no potential for this to stay in negotiations with those people any longer. This had to get on the table and he totally disagreed with it not being on the table for all the time he was there. There was no use for it to go on any longer. Nobody knows if the numbers are right we just know that the water level is going down. If it is drawn down more it will have major impacts. The acceptability of taking the water somewhere else is the bad part. How we stop the pipeline and keep them for creating the impacts is a question in his mind.

There was no other comments made.

Some of the concerns are:

- The agreement opens the way for Southern Nevada Water Authority (SNWA) to pump water from Snake Valley to Las Vegas, as much as 200,000 acre-feet of water per year via a 350 mile pipeline.
- The water is wanted to support urban development in Las Vegas, including the Coyote Springs Project, which would create an artificial golf oasis and 150,000 new homes to the north of Las Vegas.
- Las Vegas is already drawing water from other valleys in the surrounding area. It continues to allow growth and development when it does not have the water resources to support this large population.
- These projects threaten to deplete the Great Basin of scarce water resources to facilitate explosive growth, They would degrade the quality of life in urban areas and to destroy rural livelihoods.
- Removing water from desert aquifers will draw down water tables, dry springs, and potentially turn rural lands into dustbowls.
- Habitats for endangered and sensitive plant and animal species will be threatened.
- Rural economies are threatened in favor of big city growth.
- The agreement has been written and signed by Mike Styler, Utah Department of Natural Resources and his Nevada counterpart, Allen Biaggi. These are not elected officials. The advisory committee included engineers from both states and legal advisors. No residents or business owners representing Snake Valley were included in the negotiations. This is very much an attitude of "The government knows what's best for you".
- The agreement ultimately will be signed by the governors of Utah and Nevada. Presumably, they will follow the advice of their respective officials unless they hear from their constituents (voters).
- The proposal is opposed by officials in ALL affected counties, as well as surrounding counties. Salt Lake County Mayor, Peter Caroon (who will possibly run against Governor Herbert in the next election) has voiced his opposition to the proposal. Governor Herbert, at this time, seems to favor it.
- If you have ever lived in Snake Valley, if you have ever visited Lehman Caves, Great Basin National Park, Fish Springs or Hidden Canyon Ranch, you should oppose this agreement.
- The agreement "protects" the rights only of people who were water users in Snake Valley prior to 1989. It means any of the people who have moved into the area in the past 20 YEARS have NO RIGHTS under this agreement and NO PROTECTION from damage to their property or livelihood should their water be pumped out through the pipeline.
- The agreement ignores the rights of the Goshutes and other tribes whose homes are on reservation land in the Snake Valley. As Native Americans, these tribes constitute a sovereign nation. Utah and Nevada have no right to divide the water of this land without making these tribes equal party to the agreement. What use is it to give land to these people by treaty, then take their water from it?
- The entire Snake Valley is arid desert land. Would it be such if there was "excess" water?

Public comment on this agreement will be taken until Sept. 30th, after which the final draft will be made and sent to the governors to sign. There is no guarantee that Mike Styler and Allen Biaggi will make any changes based on those comments. The only motivation is for the Governors to respond to their constituents.

Here's what you can do (please choose at least two):

Leave a comment below. I will forward and comments to the official public comment site, as well as to Governor Herbert.

Send your comments directly to snakevalley@utah.gov before Sept. 30th.

Contact Governor Herbert's office through www.utah.gov/governor/ (click on the COMMENT button on the top right of the page) or send a message to him on Facebook (Gary R. Herbert)

Get your Facebook friends to join the cause

Visit info@greatbasinwaternetnetwork.org for more information

Attend the next public hearing Sept. 9th, 6:30 to 9:30, at the Salt Lake County Government Complex, 2100 South State Street, Room #N-2003.



[Curtis McCarthy](#) wrote

at 10:07pm on September 4th, 2009

In early summer this year we had horrible dust storms here in the Salt Lake Valley. Those are just a sample of the dust storms we will have to endure once western Utah starts to wither from the over pumping of water to Las Vegas. This is bizarre to think we can pump water out of a desert basin and think the plants that rely on that water will survive. After the damage is done a "I told you so" will not be any solace.



[Brittany Stauffer](#) wrote

at 10:21pm on September 4th, 2009

This is a good cause to support. I will send this to all of my friends!!!



[Leanna Stauffer](#) wrote

at 7:41am on September 5th, 2009

What Curtis says is so true. This ultimately will affect all of us. There are people that live there - it's not a big open area. Read the info, let your voices be heard. Don't let the government decide what's best when they don't have a clue as to what is going on!

[Ken Hill](#) wrote

at 7:55am on September 5th, 2009

They negotiated in secret for 4 years and then held whirlwind public meetings within a couple of days before most people could read the draft agreement. Then allowed 30 days (extended to 45) for comments. Prior to public release to citizens, Mike Styler of UT DNR, sold this agreement to Utah media editorial boards. This agreement uses unrealistically large estimates of available

water and divides it in a way contrary to how water normally is allotted -- by recharge rather than historical use. Governor Huntsman promised Utah an off switch when negative impacts began appearing. This agreement's only triggers begin an endless process of yak, yak, yak, yak, yak -- while the environment goes "south" and dust storms go north (to the Wasatch Front). Nevada gets all the benefit, Utah gets all the risk. Having no agreement only guarantees lengthy, expensive legal battles -- against deep-pocketed SNWA. Gov. Herbert: is this your legacy? This agreement badly needs fixing.

The UT DNR has agreed to have video teleconferenced meetings using UEN, EdNet equipment. These meetings are to go through the agreement line by line. We had one on 2 Sept. The next is 10 Sept. Remote sites attending the first meeting were Nephi (Juab Commissioners), EskDale, West Desert High School, Ibapah (via phone link), and a lawyer friend in California (also via phone link). Anyone interested might check with a local high school to see if EdNet equipment there could be used to add another remote site. We seriously need to understand the agreement in order to make more effective comments so we discourage any general, philosophical, "No, no, no" rants (although many of us feel that way).

[Rhiannon Webster Fowden](#) wrote
at 6:51pm on September 5th, 2009
I couldn't have said it better than Curtis.



[Felicia Rae Johnson](#) (Bonneville High School) wrote
at 10:30pm on September 5th, 2009

Western and Southern Utah have enough water shortages as it is. We don't need to pump out more of it to Nevada.



[Clay Stauffer](#) wrote
at 8:08am on September 6th, 2009

Governor Herbert, please do not sign this agreement without first studying ALL sides of the issue. People who live on Utah's deserts are important Utah citizens too!



[Emily Fowden Johnson](#) (Weber) wrote
at 4:13pm on September 6th, 2009

Gov. Herbert, we elected you and Gov Hunstman to represent us. Now is the time to do it. Gov Hunstman promised to put a stop to it and we would expect you would do the same.

It is a Desert! How are we taking water from somewhere that does not have excess water? What

about the Native Americans? What about the ranchers? What about the every day citizens that need this water to sustain their livelihood? What about the natural habitat? Or be selfish, what about those of us on the Wasatch Front who would suffer?

This is such a serious issue to consider and yet it seems as though it is being taken lightly and not being given the proper attention and not getting the information to the citizens of your state. Please consider OUR state and the ones that elected you and not take the "Government knows best" approach. That is why have a democracy.



[Melody Dillon Anderson](#) wrote
at 9:37pm on September 6th, 2009

Gov. Herbert, the lives of many who live in the desert will be adversely affected. That is not the only issue at stake. Please do not let this happen. Study the adverse affects not just to the people, but to the land and all those in other places that would be adversely affected.

cc: Boye
Response
9/30/09

From: Betty Barela
To: Kaelyn Anfinson
Date: 9/30/2009 9:56 AM
Subject: Fwd: Re:Inquiry from Brian Moench

Could you please get someone to respond directly to the constituent in the e-mail below referred by the Governor's Office. Make sure I get a copy of the response. Thanks!

Betty T. Barela
Utah Department of Natural Resources
801-538-7201
bettytbarela@utah.gov

Utah Department of Natural Resources' hours are 7:00 a.m. to 6:00 p.m.,
Monday thru Thursday and closed Friday, state and federal holidays.

>>> Constituent Services <constituentservices@utah.gov> 9/30/2009 9:38 AM >>>
Below is an inquiry which was received by the Governor's Office of Constituent Services on 09/30/2009. Please respond directly to the constituent and reply to this email with a copy of your response by 10/14/2009.

Dr. Brian Moench
Utah Physicians For A Healthy Environment
4091 Splendor Way
Salt Lake City UT 84124

Email Address: drmoench@yahoo.com

SUBJECT:

The Utah Physicians for a Healthy Environment (UPHE) have thoroughly studied the proposal by the SNWA to drain significant quantities of water from the aquifers of Nevada and the Snake Valley that is shared by Nevada and Utah. We wish to expand on our previously submitted comments.

We draw much of our information on the legal and political history on this issue from investigative reports appearing in the Las Vegas Sun, Los Angeles Times, Bloomberg News, and transcripts from southern Nevada TV news reports.

There is wide spread skepticism on the part of many highly regarded and well qualified biologists, geologists and hydrologists who are not under contract or the employ of the Southern Nevada Water Authority about whether substantial water can be withdrawn from the aquifers of Eastern Nevada and Western Utah without a drop in the water table of between 50 and several hundred feet. This is the consistent position of experts such as Timothy Durbin, James Deacon, John Bredehoeft, Martin Mifflin and David Charlet. We also note that the EPA, BLM, Nation Park Service and Interior Dept. eventually abandoned objections apparently due to Congressional or other political pressures rather than a revision or "improvement" in their scientific data regarding the water table drop.

We have also listened to and read testimony from the residents, farmers and ranchers who have lived and worked in the affected area for many years and derive their livelihood from water dependent activity. Uniformly they express disbelief in the claims of excess water being available. The figures in the agreement regarding volume of available water seem to many experts and Snake Valley residents to be based on historically "wet" years and unrealistically optimistic and self serving projections of future precipitation.

We are aware that under Nevada law "water mining" is illegal, prohibiting a manipulated drop in the water table, but that it also gives no protection to vegetation like the phreatophytes which serve the critical function of anchoring desert soil and preventing dust storms. In fact, in the neighboring Spring Valley, the SNWA applied to the Nevada state water engineer for expropriation rights to the phreatophytes' calculated share of the water.

We have read several journalists' reports stating that internal memos from the SNWA revealed a specific strategy to pump the aquifers aggressively enough to kill the phreatophytes so that they could not compete for water all while claiming publicly that they intended to spare the phreatophytes.

Even if this alleged strategy is not deliberately employed, there is substantial risk that air quality throughout the Intermountain area will be adversely impacted. In our examination of the agreement we find very little comfort that the suggested monitoring will translate into public health protection for several reasons.

1. The proposed monitoring process for assessing adverse impacts seems remarkably nonspecific and therefore easily subject to possible manipulation. The multitude of factors influencing ambient PM10 concentrations at monitoring stations would almost surely

limit the ability to assign responsibility to the pipeline as the cause of increased PM10 levels.

2. There is no specificity about what concentration levels, frequency or duration of PM10 increases would trigger a protest from the state of Utah or begin the "dispute resolution process".

3. There is no requirement that the person representing Utah in any "dispute resolution process" will have either environmental or health expertise or the approval of organizations that do. That would be essential for protection of Utah public health in any future dispute.

4. The lag time between the death of phreatophytes and their eventual disappearance from the landscape almost certainly guarantees that the air quality impacts may not appear until it is too late to revive them. If air quality is used as the threshold for beginning the "dispute resolution process", by then the damage to native vegetation may be irreversible. Many biologists feel that if these plants are killed off it may be a prolonged period of time, likely decades, before a new generation returns to the landscape, especially in a hotter drier climate that the Great Basin is virtually guaranteed to experience in the decades to come.

Furthermore, under those circumstances there would be few substitute plants capable of establishing themselves well enough to provide soil retention. One is the notorious "cheat grass" that has played a large role in more easily propagated Western wildfires and has been the target of eradication efforts in Utah.

5. Using NAAQS as the means for judging the public health consequence of air quality impacts from this project is inadequate. Because of the perennially slow regulatory process, even under the best of circumstances there is a multi-year time lag between new results from medical science and corresponding adjustments of federal regulations. However, the degree to which new science triumphs over politics in updating EPA standards can vary widely depending on the personalities and political philosophies of the current Administration.

Recently published medical research has clearly established that for particulate matter air pollution there is no threshold below which health effects are not seen. In other words, any increase in pollution will have an impact on public health whether or not it reaches the threshold of the NAAQS.

In fact, this research has established repeatedly that for many pollution components, including particulate matter, the disease consequence is not linearly related to ambient concentrations. In the same way that smokers of only a few cigarettes a day have almost as much clinical risk as heavy smokers, exposure to low concentrations of pollution carries almost as much risk as exposure to much higher concentrations. If the Las Vegas pipeline ends up creating more particulate pollution, but the concentrations remains below current PM 10 standards, that does not mean public health will have been protected.

6. There are unique threats in the soil in the West Desert that will have potentially profound impacts on public health beyond just particulate matter. Mercury, erionite (an asbestos like mineral that causes the same kind of mesothelioma cancer), the radioactive elements americium, plutonium, uranium, cobalt, cesium, strontium, and europium, and the fungal spores that cause Valley Fever (coccidioidomycosis) are all in high concentrations in surface soils in Nevada. Other diseases now thought to be transmitted through microorganisms carried by dust are meningitis, influenza, SARS, and foot and mouth disease.

Nevada soils contain some of the most toxic substances known and yet this agreement does nothing to assess or mitigate this threat.

7. The publicly offered rationale from Utah's executive branch for entering into this agreement now centers on the desirability of avoiding a prolonged and perhaps costly court battle with Nevada in the future. We caution that this agreement will likely result in more legal battles not less. If public health impacts are suspected or even proven the enforcement arm of this agreement is so vague that it would almost guarantee lawsuits between Utah and Nevada as well as between Utah and clean air advocacy groups whose position would be that Utah was not doing enough to protect public health.

If Nevada commits billions of dollars to begin the pumping and hundreds of thousands of new Nevada home owners become dependent on the water, realistically Utah will not be able to stop the pumping without a costly, possibly decades long court battle regardless of any agreement. Meanwhile the public health impacts would likely continue for the duration of the legal battle. When Los Angeles signed agreements regarding Owens Valley pumping, they were sued but continued pumping for 21 years while the case meandered through the courts.

Dust from Nevada would also carry with it economic, quality of life and aesthetic consequences that would likely broaden the state of Utah's legal exposure, possibly causing other parties to enter the dispute, like business entities. The ski industry is one of many examples of likely stakeholders. In sum, this agreement is not likely to prevent legal disputes, instead it is only likely to delay them, change the issues, make them more complex, increase the number of litigants and leave public health vulnerable for the duration of the legal process.

UPHE urges the governor's office to use its considerable influence to take an aggressive stand toward water conservation throughout the West. We see many opportunities to shape public behavior that would pay huge dividends in reducing our water consumption and obviate the need for water diversion projects like the Las Vegas pipeline. Other desert cities in the US and Australia have achieved much greater reductions in water consumption than Las Vegas and Utah should insist those reductions

precede any water diversion projects. In turn Utah should adopt those same practices to show Nevada that it in fact can be done. UPHE considers water conservation closely related to the protection of public health.

Our preceding comments stem from our medical expertise and concern for the health of all Utah residents. However, as citizens we also wish to speak up on behalf of those people in the rural farming communities and Goshute Reservation whose health and livelihoods will be put at even greater risk. How a society treats the most vulnerable and powerless among them is a reflection of its moral character. Utah should be setting an example of defending from exploitation, all its citizens, no matter who they are or where they live.

Sincerely,

Dr. Brian Moench
President, Utah Physicians for a Healthy Environment.

**STATEMENT OF REASONS FOR
MILLARD COUNTY'S OPPOSITION
TO THE AUGUST 13, 2009
PROPOSED AGREEMENT
BETWEEN UTAH AND NEVADA**

August 14, 2009

POINT 1 The Proposed Agreement Gives Away Too Much of Utah's Snake Valley Water.

A. The Claim to a 50/50 Overall Split is Incorrect.

- The Utah negotiators try to sell the Proposed Agreement as an even overall split of Snake Valley Ground Water, by posting these numbers:

To Utah:	Block 1 Water (allocated in or before 1989)	55,000 afy	total:	55,000 afy
	Block 2 Un-allocated Water (highest priority)	5,000 afy	total	60,000 afy
	Block 3 Un-Allocated Water (lowest priority)	6,000 afy	total	66,000 afy
To Nevada:	Block 1 Water (allocated in or before 1989)	12,000 afy	total	12,000 afy
	Block 2 Un-Allocated Water (highest priority)	36,000 afy	total	48,000 afy
	Block 3 Un-Allocated Water (lowest priority)	18,000 afy	total	66,000 afy

- But the 55,000 afy figure for Utah Block 1 water (highlighted above) is not right. Block 1 Utah water for use in Snake Valley amounts to only 35,000 afy, not 55,000 afy.
- Where does the 55,000 afy figure come from? It is a distortion because it includes 20,000 afy the Utah Engineer allocated for water rights in the Fish Springs National Wildlife Refuge ("Fish Springs"). But Fish Springs is *completely outside the Snake Valley Basin*.
- Again, Utah's Block 1 water in Snake Valley amounts to only 35,000 afy, not 55,000 afy.
- Therefore, the selling point that the Proposed Agreement gives Utah and Nevada an overall even split of groundwater to satisfy water rights in Snake Valley, *is simply not true*. It rests on the misleading and incorrect inclusion of 20,000 afy of Fish Springs water into the mix.
- The true numbers show that the Proposed Agreement gives Nevada a much more favorable overall split of Snake Valley available groundwater than 50/50:

Utah:	Block 1 Water (already allocated as of 1989)	<u>35,000 afy</u>	total:	35,000 afy
	Block 2 Un-allocated Water (highest priority)	5,000 afy	total	40,000 afy
	Block 3 Un-Allocated Water (lowest priority)	6,000 afy	total	46,000 afy
Nevada:	Block 1 Water (already allocated as of 1989)	12,000 afy	total	12,000 afy
	Block 2 Un-Allocated Water (highest priority)	36,000 afy	total	48,000 afy
	Block 3 Un-Allocated Water (lowest priority)	18,000 afy	total	66,000 afy

- 66,000 afy for Nevada vs. 46,000 afy for Utah represents a 59% to 41% split in Nevada's favor.**
- Including the 20,000 afy Fish Springs water in the equation should be rejected, because it gives the false impression that the overall split of Snake Valley groundwater is even, when it is not.

B. The Claim to a 50/50 Overall Split is Pointless.

- Even if the claim to a 50/50 overall split were correct (which it is not – see A), a raw 50/50 split does not achieve true equity between the states. Why not? Because the vast majority of Snake Valley irrigable and usable land *is situated in Utah*.
- To be truly equitable, the Proposed Agreement should divide all available Snake Valley groundwater between the States according to the number of acres of irrigable and usable Snake Valley ground in each State, i.e., acre foot of water/acre of usable Snake Valley land.
- A raw 50/50 overall split is inequitable because it ignores the huge disparity in Snake Valley land and land use between both states.

C. The Claim to An Overall 50/50 Split Is Swallowed By the Proposed Agreement's Unfair Split of Unused Water: 7 to 1 in Nevada's Favor for the First 41,000 afy; 3 to 1 in Nevada's Favor for the Remaining 24,000 afy.

- A 7 to 1 split of Block 2 unused water in Nevada's favor and a 3 to 1 split of Block 3 water in Nevada's favor is grossly inequitable no matter how it is analyzed.
- First of all in terms of land mass and growth potential, the ratio between the two states of irrigable and usable land in Snake Valley is clearly skewed towards Utah. This fact makes a 7 to 1 split of Block 2 water and a 3 to 1 split of Block 3 look anything but equitable.
- Secondly in terms of established use, the disparity in land mass between the states explains why 35,000 afy of groundwater was allocated in Utah and only 12,000 afy in Nevada. This nearly 3 to 1 disparity in Utah's favor reflects the geographic realities of the way Snake Valley sits in the two States.
- Against these geographical, historical and present contemporary realities, a proposed 7 to 1 split of Block 2 unused water in Nevada's favor, and a proposed 3 to 1 split of Block 3 unused water also in Nevada's favor, is an arbitrary and obviously politically driven groundless fiat that completely ignores self-evident notions of fairness and equity.
- Thirdly, even when tunnel vision focuses improperly on the sole fact that 60% of the precipitation in Snake Valley falls on the Nevada side compared to 40% on the Utah side, that still does not justify 7 to 1 and 3 to 1 unused water splits in Nevada's favor.
- Utah is treading into dangerous precedent by agreeing to such a grossly disproportionate split that ignores time honored notions of relative historical use, relative irrigable land mass, and relative potential for intra-basin development.

POINT 2: Utah Should Wait Before Signing an Agreement Until SNWA is Really Ready to Go Forward On Its Snake Valley Groundwater Applications.

Utah Should Not Cave on a Bluff; But Cave If and When SNWA Actually Shows Its Hand.

A. Utah is Under No Legal Obligation to Make an Agreement with Nevada.

- Congress cannot constitutionally force Utah to make this agreement with Nevada, not now, not ever. See the Tenth and Eleventh Amendments to the United States Constitution and Alden v. Maine, 527 U.S. 70 (1999) and its progeny.
- Moreover, Congress never intended in the 2004 Lincoln County Land Act to order Utah and Nevada around. Rather, the Act the provision was added to ensure that Nevada BLM would not allow an actual inter-basin water transfer until the two States actually made a satisfactory agreement, if and when they ever did so.
- But again, even if the Act were construed as a direct order for Utah and Nevada to make a deal, such an order is unconstitutional. See the point above.

B. Utah Should Be Under No Rush to Make an Agreement Now.

- Certainly there is no need for Utah to sign an agreement now. This latest maneuver for another delay – this time until 2019, merely fuels previous perceptions that SNWA is bluffing, is not ready to go through the Snake Valley hearing in 2011, and cannot move forward on the project for several more years with or without Utah's agreement.
- For purposes of analysis, SNWA either is bluffing and cannot get ready until 2019, or SNWA is not bluffing and is ready to prove its groundwater applications during the Snake Valley hearing scheduled for the Fall of 2011.
- Either way, Utah should wait at least until the scheduled round of Snake Valley ground water hearings in 2011, and do the agreement shortly before that hearing if SNWA shows by then it is not bluffing and will really go forward this time (SNWA has already caved and sought delays twice in the past year due to lack of rumored lack of readiness, funding, will, etc.).
- If SNWA proves to be bluffing again when 2011 rolls around, then Utah should just keep on waiting year after year for the time, if ever, when SNWA actually lays down its cards and goes forward with the hearing.

C. Utah Should Give Millard County the Courtesy as the Sole Protestant in Utah, to Have Primary Say In Handling SNWA's Effort to Hold its Groundwater Applications In Abeyance in the Snake Valley Groundwater Proceeding.

- 20 years' delay of the SNWA Snake Valley formal groundwater proceedings is long enough. If SNWA seeks one more delay, much less a ten year one, Millard County should be free to at least ask the Nevada Engineer to consider dismissing SNWA's applications without prejudice, allowing SNWA to re-file if it ever becomes ready, willing and able to proceed. Utah will undercut this procedural privilege ordinarily due a protestant in a groundwater application proceeding, if Utah enters an agreement blessing SNWA's desire to hold the applications in abeyance for 10 more years.
- By making a deal with SNWA to allow 20 year old groundwater applications to be held in abeyance another ten years in the Nevada Snake Valley groundwater proceeding, Utah is invading Millard County's province to determine its own fate as the sole protestant in the Nevada on the Utah side. Utah out of courtesy should let Millard should have primary say in Utah whether to challenge SNWA's plan to hold the applications in abeyance. After all, Millard County, not Utah, is the proper protestant here.

POINT 3 If the Interstate Agreement Fails to Divide up the Groundwater of the Entire Great Salt Lake Groundwater Flow System, But Instead Divides up Only Snake Valley, Then The BLM Will Not Have The Statutory Authority to Allow The Transport of Snake Valley Water to Las Vegas.

- The proposed agreement fails to divide up the water of the entire Great Salt Lake Groundwater Flow System. Therefore it fails to meet the clear language of section 301(e)(3) of the 2004 Lincoln County Land Act, which calls for an bi-state agreement that divides up the water of an interstate groundwater flow system, not a groundwater basin, before BLM may allow an inter-basin transfer out of Snake Valley.
- Whether the two states do such an agreement is their business. But the BLM will be subject to court challenge and injunction if it tries to permit the transfer of Snake Valley water based on an interstate agreement that divides up only Snake Valley water and falls short of dividing up the entire groundwater flow system like the Act so clearly requires.

Millard County's Concerns
With the Snake Valley Draft
Agreement

How Much Groundwater Rightly Belongs to
Each State?

Principle Number 1
Wet Water

- BARCASS says total recharge = 132,000 af/y
- But Utah & Nevada say it's: 108,000 af/y
- Millard County Agrees

Three Governing Principles

Five Important Facts

Principle Number 2,
Look Down *and* Up Stream

- Draft agreement: Look at Snake Valley
Only
(but they unofficially look downstream too)
- Millard County: Fine, Only Look at Entire
Groundwater Flow System
- Congress: Agree With Millard
County

Three Principles

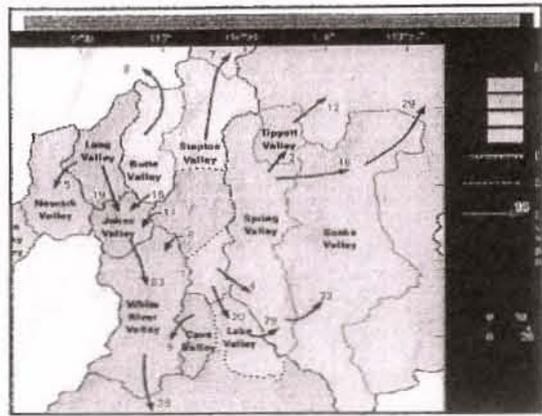
1. Focus on Water That's Wet
2. Account for Downstream And Upstream
Effects
3. Geography and History Rule

2004 PUBLIC LAW 108-424
Section 301(e)(3)

- "Prior to any transbasin *diversion* from
ground-water basins located within both
the State of Nevada and the State of
Utah, . . .

2004 PUBLIC LAW 108-424
Section 301(e)(3) (cont'd)

- . . . the State of Nevada and the State of Utah shall reach an agreement regarding the division of those interstate groundwater flow system(s) from which water will be diverted and used by the project."

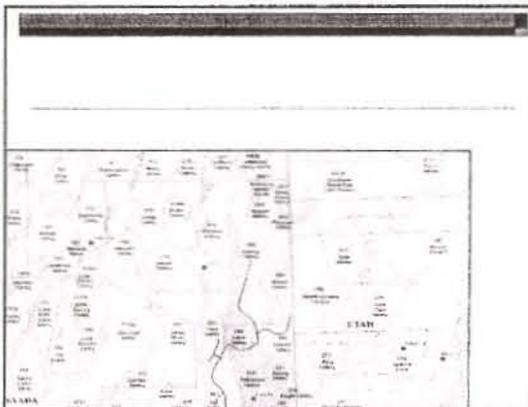


It's Not Rocket Science

- Before you divert from an interstate basin
- You divide the interstate flow system

Three Principles

1. Focus on Water That's Wet
2. Address Downstream And Upstream Effects
3. Geography and History Rule



Main Factor

Where is the Land That Depends on Groundwater?

1. Where is Groundwater Put to Beneficial Use for:
 - Crops, Pasture & Forage
 - Municipal
2. Where Does Nature Use Groundwater for:
 - Plants
 - Wildlife

Main Factor

Where is the Land That Depends on Groundwater?

1. Where is Groundwater Put to Beneficial Use for:
 - Crops, Pasture & Forage
 - Municipal
2. Where Does Nature Use Groundwater for:
 - Plants
 - Wildlife

Millard County Protest Paragraph 6

“the appropriation of the water . . will further threaten springs, seeps and phreatophytes which provide water and habitat critical to the use and survival of wildlife, grazing livestock and other surface existing uses.”

IN THE OFFICE OF THE STATE ENGINEER OF THE STATE OF NEVADA

Division of Agricultural Waters - 55544 ...
 District, Las Vegas Valley Water District, ...
 ...
 ...

Millard County Protest Paragraph 6

“the appropriation of the water . . will further threaten springs, seeps and phreatophytes which provide water and habitat critical to the use and survival of wildlife, grazing livestock and other surface existing uses.”

2. Upon information and belief, Protester asserts that there is an excessive unappropriated groundwater in Snake Valley to provide the water sought in Application No. 7212, and all other pending applications involving the utilization of surface and ground water from that basin.

3. Upon information and belief, Protester asserts that the appropriation of this water, when added to the already approved appropriations in dedicated areas in the Snake Valley Basin, will exceed the annual recharge and safe yield of the basin. Appropriation and use of this magnitude will lower the water table and decrease the quality of water from existing wells, cause negative hydraulic gradient influences, further cause other negative impacts and will adversely affect subsurface rights adverse to the public interest.

4. That the groundwater sought in Application No. 7212 interferes with existing water rights in the subject basin.

5. The granting or approval of the instant Application would modify water in use to lower existing water rights in the Snake Valley Basin in that it would exceed the safe yield of the subject basin and unnecessarily lower the static water level and decrease water quality.

6. That the appropriation of the water sought in the instant Application, when added to the other pending applications and to the already approved appropriations and dedicated uses in the Snake Valley Basin, will lower the static water level in Snake Valley Basin, will adversely affect the quality of the remaining ground water and will further threaten springs, seeps and phreatophytes which provide water and habitat critical to the use and survival of wildlife, grazing livestock and other surface existing uses.

Millard County Protest Paragraph 6

“the appropriation of the water . . will further threaten springs, seeps and phreatophytes which provide water and habitat critical to the use and survival of wildlife, grazing livestock and other surface existing uses.”



Groundwater Dependent Acres

Utah:	220,779	<u>84%</u>
Nevada	41,364	<u>16%</u>

Source: USGS Utah, Calculating BARCASS Data

Five Facts

- Discharge
- Historic Use
- Recharge
- Impacts to Fish Springs Downstream
- Impacts from Spring Valley Pumping Upstream

Discharge In Acre Feet of Water

Utah:	108,085	<u>82%</u>
Nevada	24,162	<u>18%</u>

Source: USGS Utah, Calculating BARCASS Data

Fact #1: Discharge

Two Ways to Look at It:

- Acres That Depend on Groundwater
- Acre Feet of Water Discharged on Those Acres

Fact #2: Historic Use

Depletion Based on 1989 or Earlier Groundwater Rights:

Utah:	35,000	<u>74%</u>
Nevada	12,000	<u>26%</u>

Source: Utah Negotiating Team

Fact #3, Recharge

Utah 40%

Nevada 60%

Source: Utah Negotiating Team

Spring to Snake Valley Interbasin Flow

Spring to Snake Valley Estimated Interbasin Flow: 49,000 af/y
(95% range 30,000 – 60,000)

33,000 around southern flank of Snake Range

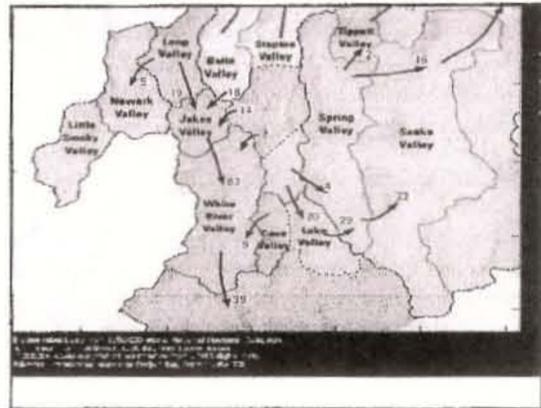
16,000 Further North

Source: BARCASS Figures 41, 46

Fact # 4 Re Downstream Impacts

To Protect Fish Springs Snake Valley Consumption Should Be Reduced 20,000 af/y

Source: Utah Negotiating Team



Fact #3 Re Upstream Impacts

Two Questions:

What is the Spring Valley to Snake Valley Interbasin Flow?

How much will Spring Valley Pumping Reduce that Flow?

Reduction to Interbasin Flow Caused By Spr. V. Pumping

Absent Further Scientific Study, Assume Interbasin Flow Will Drop 16,000 af/y

Which is Roughly Half of the Interbasin Flow South of the Snake Range

Five Facts - Review

Discharge	<i>Utah 82% / Nev. 18%.</i>
Historic Use	<i>Utah 74% / Nev. 26%</i>
Recharge	<i>Nevada 60% / Utah 40%</i>
Fish Springs Allowance:	
	<i>20,000 af/y</i>
Spring Valley Pumping Allowance:	
	<i>16,000 af/y</i>

Draft Agreement - The Actual - A Closer Look

	<u>Utah</u>	<u>Nevada</u>	
Allocated	35,000	12,000	
Unallocated	<u>5,000</u>	<u>36,000</u>	
Total	40,000	48,000	88,000
	45%	55%	
Spring V. Pump (16,000)			
Net	24,000		
(11,000 af deficit cuts into allocated water rights)			

Draft Agreement - Actual

	<u>Utah</u>	<u>Nevada</u>	
Allocated	35,000	12,000	
	74%	26%	
Unallocated	5,000	36,000	
	12%	88%	
Total	40,000	48,000	88,000
	45%	55%	

Draft Agreement - 108,000 af Forcing The 36,000 Nevada Number

	<u>Utah</u>	<u>Nevada</u>	
Allocated	35,000	12,000	
Fish Springs	20,000		
Spr. V. Pumping		16,000	
Unallocated		<u>36,000</u>	
Total		64,000	108,000

Draft Agreement - The Spin

	<u>Utah</u>	<u>Nevada</u>	
Allocated	55,000	12,000	
<i>(20,000 Fish Springs Allowance is Thrown In)</i>			
Unallocated	5,000	36,000	<i>7 to 1 Nev.</i>
Reserve, Dry	<u>6,000</u>	<u>18,000</u>	<i>3 to 1 Nev.</i>
Total	66,000	66,000	132,000
<i>(No Charge to Nevada For Spring Valley Pumping Impacts)</i>			

Draft Agreement - 108,000 af Forcing The 36,000 Nevada Number

	<u>Utah</u>	<u>Nevada</u>	
Allocated	35,000	12,000	
Fish Springs	20,000		
Spr. V. Pumping		16,000	
Unallocated		<u>36,000</u>	
Total	44,000	64,000	108,000

Draft Agreement - 108,000 af Forcing The 36,000 Nevada Number			
	<u>Utah</u>	<u>Nevada</u>	
Allocated	35,000	12,000	
Fish Springs	20,000		
Spr. V. Pumping		16,000	
Unallocated	<u>(11,000)</u>	<u>36,000</u>	
Total	44,000	64,000	108,000
	41%	59%	

Split 108,000 According to Historic Use		
	<u>Utah</u>	<u>Nevada</u>
74/26	79,920	28,080
Fish Springs	(20,000)	
Spr. V. Pumping		(16,000)
Already Allocated	<u>(35,000)</u>	<u>(12,000)</u>
Remaining for Allocation:	24,940	80

What is a Fair Split of the Wet Water?	
Draft Agmt.	<i>59/41 for Nevada?</i>
Discharge	<i>82/18 for Utah?</i>
Historic Use	<i>74/26 for Utah?</i>
Recharge	<i>60/40 for Nevada?</i>
Some other Average??	
Reduce Nevada's Allocation 16,000 to Account for Spring Valley Impacts?	

Split 108,000 Averaging Discharge & Historic Use		
	<u>Utah</u>	<u>Nevada</u>
78/22	79,920	23,760
Fish Springs	(20,000)	
Spr. V. Pumping		(16,000)
Already Allocated	<u>(35,000)</u>	<u>(12,000)</u>
Remaining for Allocation:	24,940	(4,240)

Split 108,000 According to Discharge		
	<u>Utah</u>	<u>Nevada</u>
82/18	88,560	19,440
Fish Springs	(20,000)	
Spr. V. Pumping		(16,000)
Already Allocated	<u>(35,000)</u>	<u>(12,000)</u>
Remaining for Allocation:	33,560	(8,560)

Split 108,000 According to Recharge		
	<u>Utah</u>	<u>Nevada</u>
40/60	43,200	64,800
Fish Springs	(20,000)	
Spr. V. Pumping		(16,000)
Already Allocated	<u>(35,000)</u>	<u>(12,000)</u>
Remaining for Allocation:	(11,800)	36,800

Split 108,000 Averaging Discharge & Recharge		
	Utah	Nevada
61/39	65,880	42,120
Fish Springs	(20,000)	
Spr. V. Pumping		(16,000)
Already Allocated	(35,000)	(12,000)
Remaining for Allocation:	10,880	14,120

Splits Under Draft Agreement (Utah/Nevada)

Reduce Budget to 88,000 af to protect Fish Springs, but make no allowance for Spring Valley Pumping: 45/55

Budget at 108,000, charge both states for inter-basin effects, but force 36,000 allocation to Nevada: 41/59

Either way, it eats 11,000 into Utah's senior water rights

Split 108,000 - Weighted Average 2x Discharge & 1x Recharge		
	Utah	Nevada
68/32	73,440	34,560
Fish Springs	(20,000)	
Spr. V. Pumping		(16,000)
Already Allocated	(35,000)	(12,000)
Remaining for Allocation:	18,440	6,560

Summary -- Range of Other Splits (Utah/Nevada)	
Discharge:	82/18
Historical use:	74/26
Avg. Discharge & Historical Use:	78/22
Recharge:	40/60
Avg. Discharge & Recharge:	61/39
Weighted Avg. 2x Discharge & 1x Recharge:	68/32
Avg. Discharge, Hist. Use, Recharge	65/35

Split 108,000 - Average Discharge Historic Use & Recharge		
	Utah	Nevada
65/35	70,200	37,800
Fish Springs	(20,000)	
Spr. V. Pumping		(16,000)
Already Allocated	(35,000)	(12,000)
Remaining for Allocation:	15,200	9,800

State Negotiating Team Urged Millard County to Support Draft Agreement. Reasons Given:

- Predictable, Matter is Settled
- Environmental Protections
- Ten Year Delay, Time For More Science
- Agreement Can be Changed if New Science Warrants It
- Can't Go to Court Until You're Harmed, By Then It's Too Late
- Contractual Remedy Process, Could do Worse in Court

Survey

Should Nevada Have to Account for Impacts from Spring Valley Pumping?

If so, how much: 16,000 af/y ___ Other ___

Survey (cont'd)

What is a Fair Split of Water (Utah/Nevada)

Weighted Avg. 2x Discharge & 1x Recharge:	68/32
Avg. Discharge, Hist. Use, & Recharge:	65/35

Survey (cont'd)

What is a Fair Split of Water (Utah/Nevada)?

Draft Agreement (No Acct for Spring Valley Pumping)	45/55
Draft Agreement (Acct for Spring Valley Pumping)	41/59

The End

Questions	Comments
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Survey (cont'd)

What is a Fair Split of Water (Utah/Nevada)?

Discharge:	82/18
Historical use:	74/26
Avg. Discharge & Historical Use:	78/22
Recharge:	40/60
Avg. Discharge & Recharge:	61/39



Utah Farm Bureau Federation

9865 South State Street, Sandy • Utah 84070-3205 • Fax: (801) 233-3030
www.fb.com/utfb

RANDY N. PARKER
CHIEF EXECUTIVE OFFICER
(801) 233-3040

September 30, 2009

Mr. Kent Jones
State Engineer/Division of Water Rights
Utah Department of Natural Resources
1594 West North Temple, Suite 220
Salt Lake City, UT 84114

Dear Mr. ^{Kent}Jones:

The Utah Farm Bureau Federation is the largest farm and ranch organization in the state representing more than 26,000 member families. Water is the lifeblood of agriculture and its availability will determine the success and/or failure of food producers in the Great Basin region.

Farm Bureau's interest in the Snake Valley Agreement is fundamental under the principles of western water law. Proven water rights held by farmers and ranchers within Snake Valley and even broader rights across Utah's West Desert could potentially be harmed by the trans-basin groundwater transfer proposed by Southern Nevada Water Authority (SNWA).

Thank you for the opportunity to offer testimony on the proposed agreement on the trans-basin transfer of Snake Valley groundwater.

Attached you will find a comprehensive statement that includes recommendations and Farm Bureau policy adopted by our delegates at the 2008 annual convention.

Farm Bureau looks forward to working with you as you incorporate comments and finalize the Utah – Nevada agreement on Snake Valley groundwater.

Sincerely,

Randy N. Parker

Attachment

RECEIVED

SEP 30 2009

WATER RIGHTS
SALT LAKE



UTAH DEPARTMENT OF NATURAL RESOURCES
Michael Styler, Executive Director

Statement of the
Utah Farm Bureau Federation
Randy N. Parker, CEO

Regarding

SNAKE VALLEY GROUNDWATER DRAFT AGREEMENT

The Utah Farm Bureau Federation is the largest farm and ranch organization in the state representing more than 26,000 member families. Water is the lifeblood of agriculture and its availability will determine the success and/or failure of food producers in the Great Basin region. Farm Bureau's interest in the Snake Valley Agreement is fundamental under the principles of western water law. Proven water rights held by farmers and ranchers within Snake Valley and even broader rights across Utah's West Desert could potentially be harmed by the trans-basin groundwater transfer proposed by Southern Nevada Water Authority (SNWA).

Thank you for the opportunity to offer testimony on the proposed agreement on the trans-basin transfer of Snake Valley groundwater.

First, the Utah Farm Bureau wants to complement DNR Executive Director Mike Styler, Utah State Engineer Kent Jones as well as other members of the Utah negotiating team for aggressively working to protect the sovereign waters of the state of Utah, agricultural interests and the fragile desert ecosystem when considering the SNWA application to pump groundwater from aquifers occupying the Utah-Nevada border or in close proximity.

History suggests that the Snake Valley aquifer is in balance based on long-term discharge and recharge. The SNWA proposal to extract groundwater and transfer it to Las Vegas will have a direct impact on Utah interests. Nevada and Utah are the two most arid of the 50 states. During times of drought, recognized impacts on the nearby landscape include springs drying up and plant life changing. Approved levels of agricultural pumping and the impacts of regional droughts could be just a precursor to the impacts of SNWA's trans-basin transfer proposal.

Water is the lifeblood of the arid west. Availability of water is critical to the farm and ranch families and their associated rural communities. Even the slightest lowering of the underground water resource adversely impacts farmers and ranchers. The increased pumping costs could render agriculture economically infeasible in the region.

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Utah agriculture continues to be an important economic engine providing jobs and local tax base. However, it is of greater importance to Utah rural communities like those located in Western Millard County. In the counties that could be harmed by the proposed SNWA pipeline, there is additional cultural and economic consideration.

The Farm Bureau, through its annual policy process, asks for "careful planning by municipalities when acquiring water rights or water stock when developing water resources and systems in order to reduce adverse impacts on agricultural and other water users." The establishment of the trans-basin transfer of Snake Valley water so closely associated with the rights of a neighboring state and its citizens is problematic.

Utah Farm Bureau policy is explicit regarding changes in points of diversion and water rights transfers. We recommend the Utah State Water Engineer "prohibit changes in points of diversion, water rights transfers and new well permits until the impact on existing water rights and surrounding areas has been determined." This protection is fundamental as the state of Utah considers an agreement to manage the Snake Valley groundwater system.

Issues of concern in the Draft Agreement:

3.0 Available Groundwater Supply

The USGS completed Basin and Range Carbonate Aquifer Study (BARCASS) study provides a baseline for groundwater sustainability at 132,000 acre feet annually. BARCASS appears to be flawed as noted by valley residents and professionals.

- When the farmers begin pumping to meet their summer irrigation needs, water levels quickly drop and artesian well dry up.
- The study period offers as its basis several "wet" years that directly impact the BARCASS sustainability model estimated at 132,000 acre feet annually.

4.0 Allocation and Management of Available Groundwater Supply

TABLE 1 – Allowed Amounts of Consumptive Use of Groundwater:

Allocated	Utah	55,000 afy
	Nevada	12,000 afy
Unallocated	Utah	5,000 afy
	Nevada	36,000 afy
Reserved	Utah	6,000 afy
	Nevada	18,000 afy

The Snake Valley aquifer lies largely in Utah, while much of the moisture for recharge is collected in the mountains located largely in Nevada. It has been suggested by SNWA that because recharge occurs from "Nevada" water, they should have greater right to it.

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This perspective, certainly intriguing yet contrary to western water law, suggests the Upper Basin States should receive a greater allocation of the Colorado River.

An analysis of Snake Valley and its connection to the aquifer that straddles the Utah-Nevada border merits discussion. More than 80 percent of the groundwater dependent land associated with the Snake Valley aquifer is located in Utah providing water for:

- Irrigating crops and pastures
- Rangeland for livestock grazing
- Dairy farming
- Municipal and domestic water use
- Artisan wells
- The broad desert ecosystem
- Stabling soils

The "allocated wet" water, as with the Colorado River Compact, has been established through historic law. At issue is the "unallocated wet" and the "reserve paper water" estimated in the 132,000 acre feet BARCASS. The historic legally proven water identified for protection in the Draft Agreement is 67,000 acre feet allocated 55,000 afy for Utah and 12,000 afy for Nevada.

- Of the 55,000 acre feet allocated to Utah, it appears that the negotiating team improperly carved out at Utah's expense 20,000 acre feet for Fish Springs National Wildlife Refuge creating an inequitable split of the remaining unallocated wet water resources.
- Recognizing that 84 percent of the groundwater dependent lands are located in Utah and only 16 percent in Nevada, the Draft Agreement as relates to unallocated wet water is heavily weighted to Nevada, and even adding in the unallocated paper, the scenario changes little.
- The unallocated wet water split at 7 to 1 in Nevada's favor suggests the future development benefits belong to Nevada.
- The proposed split in Table 1 is a dangerous precedent in an arid region where other interstate water challenges and negotiations are likely to arise.

REGIONAL AQUIFER

The Draft Agreement addresses the downstream impacts associated with the impacts of SNWA pumping on Fish Springs, however, the effects on Snake Valley water rights associated with downstream pumping in Spring Valley or Lake Valley are less apparent.

The United States Geological Survey in Fact Sheet 086-00 (August 2000) points out that this "Nation's groundwater is among its most important resources. It provides drinking water to urban and rural communities, supports irrigation and industry, sustains the flow of stream and rivers and maintains riparian and wetland ecosystems."

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It continues, "Groundwater resources in the Southwest are among the most overused in the United States. Natural recharge to aquifers is low and pumping in many areas has resulted in lowering of water tables. The consequences of large-scale removal of water from underground storage are becoming increasingly evident. These consequences include – land subsidence, loss of springs, streams, wetlands and associated habitat and degradation of water quality."

In later studies, USGS Fact Sheet 103-03 (November 2003), analysis indicates "increased ground-water pumping in south-central Arizona (Phoenix/Tucson) has resulted in water-level declines of between 300 and 500 feet. Land subsidence was noticed as early as the 1940's and a lower water table has adversely impacted vegetation. It analyzed the fast growing Las Vegas area reporting "In places, ground-water levels have declined by 300 feet ... these declines have caused springs to dry up and artesian wells to stop flowing."

Snake Valley – Spring Valley Hydrology

The hydrologic connection between Snake Valley and Spring Valley has been reported as significant. Recharge to the Snake Valley aquifer is tied directly to the groundwater recharge of Spring Valley. Groundwater flow estimates show that as much as sixty-percent of the recharge in the south end of Snake Valley is tied directly to its hydrologic connection with Spring Valley. The Nevada State Engineer has authorized the pumping of 40,000 acre feet of Spring Valley groundwater for use in Las Vegas, which could ultimately be ramped up to 60,000 acre feet.

- The Draft Agreement recognizes and protects Fish Springs from the impacts of downstream pumping, but makes no similar allowance for the likely impact to the Snake Valley uses.
- Pumping associated with Spring Valley and other downstream aquifers could interrupt the normal flow of groundwater across western Utah, adversely impacting regionally winter livestock grazing on Utah's West Desert.
- USGS is currently conducting additional studies aimed at better determining the impacts SNWA's Spring Valley will have on Snake Valley's hydrology.
- Protection of Fish Springs National Wildlife Refuge from adverse impacts of an inter-basin transfer is certainly a worthy goal, however it should not be budgeted in only at Utah's expense in the final Agreement.

6.0 Identification and Mitigation of Adverse Impacts to Existing Permitted Uses

Considerable attention is given in this section to provide an agreement that protects Utah from adverse impacts from the development and withdrawal of Snake Valley groundwater. In fact, there is probably no agreement between states that reaches this standard for protection of existing rights and the environment. Farm Bureau applauds Utah's negotiating team for the resulting Draft Agreement.

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However, the trans-basin transfer of thousands of acre feet of water resources brings with it a series of unknowns. First and foremost, groundwater recharge is directly associated with surface water. In a groundwater basin most water experts believe is in balance, ultimately, the removal of 10,000, 15,000 or 30,000 acre feet of water piped to Las Vegas will have an adverse impact.

There are a number of unanswered questions that require attention based on the provisions in the Draft Agreement:

- In this desert econ-system which includes farmers and ranchers, it will take a relatively long period of time for the adverse effects to show up.
- Once the damage to the groundwater basin occurs, mitigation will be difficult if it can be fixed.
- There is not a mechanism within the Draft Agreement that addresses the impacts to Utah related to the implementation of SNWA's groundwater development project and the interstate groundwater flow system.
- Does the Draft Agreement mitigation fund provide broad based remediation and performance requirements that will protect Utah interests in Snake Valley and broader groundwater flow system?

6.2 SNWA Assessment and Mitigation Provision

There appears to be a great amount of authority and discretion provided to SNWA in the Draft Agreement related to claims of adverse impacts:

1. The claimant files notice with SNWA providing pertinent information.
2. SNWA shall assess the claim.
3. SNWA shall verify if an adverse impact has occurred.
4. Provision for Interstate Panel.

The Draft Agreement might ultimately be strengthened through inclusion of an independent oversight committee to:

- Review the results of studies during the ten year period that the Nevada State Engineer has agreed to hold the SNWA groundwater applications.
- Identify and establish remediation and conflict policies to assist Utah and Nevada in conflict resolution.
- To act as the ultimate arbitrator in claims against SNWA.

Farm Bureau recognizes that reaching an agreement between the states of Utah and Nevada is preferable to the alternatives. We recommend efforts continue to this end. Noting that the Governor is only now appointing the Snake Valley Aquifer Advisory Council, originally called upon for input in the negotiation process, Farm Bureau

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recommends that the rushed deadline for signing the Agreement for Management of the Snake Valley Groundwater System be postponed to meet this obligation and take additional input. The Nevada State Engineer has set the Spring of 2011 as deadline for evidence submission and scheduling his Snake Valley hearing during the Fall of 2010.

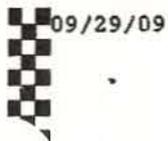
There continues to be unanswered questions related to the Draft Agreement:

- Recharge
- Hydrologic connections
- Ongoing drought
- Fair and equitable water split.

As required by Congress, a mutual agreement between Utah and Nevada is a worthy goal, but should be at the expense of Snake Valley's and Millard County's future.

In closing, there is one issue that complicates finalizing the agreement between the states of Utah and Nevada. The agreement calls for the immediate interruption of pumping at any point when it deemed detrimental to existing Snake Valley water rights, the environment or the sovereign rights of the state of Utah. If the Snake Valley project moves forward and the groundwater becomes part of the SNWA growth strategy for the Las Vegas metropolitan area, will they really shut down the pumps supplying water to tens of thousands of homes?

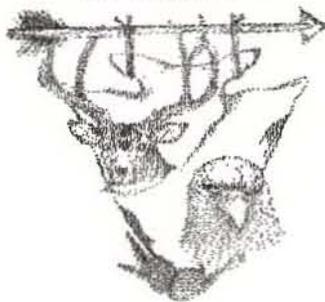
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**ELY SHOSHONE TRIBE**

16 SHOSHONE CIRCLE

FAX (775) 289-3156
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ELY, NEVADA 89301



September 28, 2009

Allen Biaggi, Director
Nevada Department of Conservation & Natural Resources
901 S. Stewart Street, Ste. 5001
Carson City, Nevada 89701

Dear Mr. Biaggi:

In reviewing the agreement/interstate compact between the States of Utah and Nevada regarding the management of interstate groundwater resources, Snake Valley, the Tribal Council submits the following:

1. Consultation with the Ely Shoshone Tribe, a Federally recognized sovereign nation, regarding this Interstate Compact was never established and in review of the proposed compact, the Tribe has been excluded from any meaningful oversight, management, mediation or technical review of the proposed action.
2. The Compact effects the Snake Valley groundwater basin located in both Nevada and Utah and that this basin includes our recognized sovereign nations ancestral homeland. The Ely Shoshone Tribe, now located in White Pine County, Nevada historically has a homeland encompassing a large area of Eastern and Northern Nevada, a substantial area of Southern Idaho, Western Utah and Southern California. The United States entered into a treaty on October 1, 1863, whereby creating a duty for the United States Government to entrust, protect and preserve the resources of the Ely Shoshone Indian territory for our benefit and use in perpetuity. This territory also encompasses Snake Valley in both Nevada and Utah.
3. It must be noted that we have standing to this issue. First established through comments the Tribe submitted on SNWA water applications 54022 through 54030 filed in October of 1989. The Tribe applied for and was denied cooperative agency status by the BLM in the related EIS process. The agreement/compact appears to facilitate SNWA's attempts to appropriate water from Snake Valley and pipe it to Las Vegas.
4. The Ely Shoshone Tribe has federally reserved water rights pursuant to the "Winters" doctrine as recognized in *Winters vs. United States*, 207 U.S. 564 (1908). See *Arizona v. California*, 373 U.S. 546 (1963). The Winters doctrine established that the creation of an Indian reservation impliedly reserves water rights to an Indian tribe sufficient for the present and future needs of the reservation. The reserved water of the Ely Shoshone Tribe, and other tribes who are located in or near Snake Valley, must be considered.

5. Our concerns are the cultural, hydrologic, biologic and air quality components of this action that we have been excluded from participation in. Our culture is derived from the characteristics of the environment for which we have lived for several millenniums. Our culture and language derives its existence from the food, shelter and oral history made possible from the water that nurtures our home. With the destruction of these flowing waters, all the things that made us a people will be destroyed. This obviously is a matter of grave "concern".
6. The springs found in this project area are the foundation of all life and define our culture. The Ely Shoshone Tribe, located in White Pine County, Nevada is a federally recognized Indian Tribe. The aboriginal territory of the Ely Tribe encompasses large areas of Eastern Nevada, and substantial portions of Southern Idaho and Southern California. The United States entered into a Treaty with the Ely Tribe on October 1, 1863, whereby creating a duty for the United States Government to entrust, protect and preserve the resources of the Ely Indian Reservation. The Ely Indian Reservation is located in the Steptoe Valley, which is adjacent to Snake Valley.
7. No provision exists to compensate the Ely Shoshone Tribe for any damages to the springs, plants or animals that inhabit or rely on these waters for their existence. These resources cannot be accurately valued because their loss will have cultural and environmental damages.
8. We have established a value for springs located in the Tier I and Tier II monitoring areas. They are as follows:

Tier I. A minimum of 50 million dollars per spring or riparian habitat.

Tier II. A minimum of 30 million dollars per spring or riparian habitat.

We recognize that these numbers are extremely low when the multiplier effect, an accounting of primary through tertiary and beyond economic multipliers including employment, urban growth, financial investment, taxation etc., is taken into consideration.

It is noted in the record that the Indian Claims Commission failed to include any financial compensation in the Western Shoshone Distribution Bill for any water rights within any of the hydrologic basins that SNWA has interest in that are included in territory addressed by the Ruby Valley Treaty.

9. We extend our concerns to the phreatophytes that exist surrounding the springs for they to provide food and shelter for the animals that inhabit the area. The proposed agreement cites the use of waters that are calculated to use the vegetative transpiration amount. If the capillary fringe, the soil region that provides water for transportation is lowered or in the agreements terms utilized, then the plants will die and all animal life that relies on the vegetation will also perish.

10. That by recognition of the above, the Ely Shoshone Tribe asks to participate in the oversight and administration of this Compact.
11. The Tribal Council has reviewed these concerns at a Council meeting held on September 28, 2009 and voted unanimously in support of this petition.

Sincerely,



Alvin S. Marques
Chairman

cc: Michael R. Styler, Executive Director, Utah Department of Natural Resources
Patricia Mulroy, General Manager, Southern Nevada Water Authority
File



GREAT BASIN WATER NETWORK
1755 E. Plumb Lane, Suite 170
Reno, NV 89502
(775) 786-9955

September 23, 2009

Allen Biaggi, Director
Nevada Dept. of Conservation and Natural Resources
901 S. Stewart St. #5001
Carson City, NV 89701

Mike Styler, Director
Utah Department of Natural Resources
Division of Water Rights
1594 West North Temple #220
Salt Lake City, UT 84114

Re: GBWN Comments on the Draft Utah-Nevada Agreement for the Management of Snake Valley Groundwater System and the Snake Valley Environmental Monitoring and Management Agreement

On behalf of the Great Basin Water Network ("GBWN"), we are submitting comments on the Draft Nevada/Utah Agreement for the Management of the Snake Valley Groundwater System and the Snake Valley Environmental Monitoring and Management Agreement ("Draft Agreement"). The GBWN is comprised of individuals, counties, Tribes, conservation and business groups, hunters, fishermen, and scientists who support the sustainable use of water. The GBWN works to protect the water resources of the Great Basin for current and future residents – human, animal, and plant. GBWN also works to ensure that decisions are made with caution, coherence, and based on the best scientific information without undue political and developer special interest pressure. In addition to these comments, GBWN is submitting the attached legal critique of the Draft Agreement and incorporates that critique by reference in these comments.

GBWN comments will affirm the goals of the Draft Agreement, express concerns about the negotiation process especially the lack of public input, demonstrate in some detail how the Draft Agreement fails to meet its goals and purposes, and provide some critical changes that are needed for the Draft Agreement to receive public support, especially by those whose lives are directly affected by the agreement.

The GBWN strongly supports the goals of the Draft NV/UT Shared Groundwater Agreement, the equitable division of groundwater in Snake, Hamlin, and Pleasant Valleys and the protection of existing water rights and the valleys' environment (sustainable use).

However, the GBWN is disappointed in the process used by both States to develop the Draft

GBWN Comments on the Draft Utah-Nevada Agreement

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Agreement as well as the rush to finalize a flawed agreement. Secret processes rarely result in good public policy decisions because major stakeholders are left out of the negotiations. In this case, the Confederated Tribes of the Goshute Indians were totally left out of the negotiations. There is also no role provided for the Utah Legislature's authorized Snake Valley Aquifer Advisory Commission in either the development or the implementation of the Draft Agreement. Nor is the Great Basin National Park mentioned in these agreements. Despite the problems with the process used to develop the Draft Agreement, we agree with Nevada and Utah negotiators who now support a transparent process for managing Snake Valley water cooperatively.

While we appreciate the extension of the comment period to September 30, 2009, we are concerned that the public has not had adequate opportunities to review a document which has taken over 4 years to develop, nor has the public had adequate opportunity to obtain documents related to the negotiation process. There has been no publicly stated rationale as to why the proposed Agreement must be "approved" by mid-October. We agree with the editors of the Deseret News who cautioned (September 20, 2009) against the sales pitch argument that the States have to sign now or the deal is off. Signing in mid-October would not provide for an adequate response by the negotiating team to public comments. Indeed, it would be extremely inappropriate for the public to be notified of the changes that were made in response to public comments at a rushed Agreement signing ceremony. Therefore, we request that you provide for a 30 day public review period of the Draft Agreement, once it is revised in response to public comments received before the September 30 deadline.

The GBWN believes that the Draft Agreement fails to meet any of its goals - equitable division of shared groundwater in Snake (and Hamlin and Pleasant) Valley, protection of existing permitted uses, and protection of the environment. Our concerns follow:

Equitable Division of Shared Groundwater:

In order for a division of shared groundwater to be equitable, the States must start with a reasonable amount of "available" groundwater. We do not believe it is good public policy to use an overestimate of available water, repeating this mistake as was done in the 1922 Colorado River Compact division among the 7 states, or in many over-appropriated valleys in Nevada and Utah. We agree with the negotiators' acknowledgment (Sec. 2.4) that "such (existing) information is insufficient to determine with precision the Available Groundwater Supply" or estimate the potential impacts of proposed SNWA pumping. The 132,000 afa available groundwater in Sec. 3.2 of the Draft Agreement is not a realistic number, but instead the highest estimate for evapotranspiration rates in Snake Valley. It is taken out of context of its origin, the 2007 BARCASS I study by the USGS, a study which received widespread criticism for its unreliability (including criticism by the States of Utah and Nevada). The USGS acknowledges in its 2009 "Draft Proposal to Refine Groundwater Discharge Estimates for Snake Valley, Nevada and Utah" the study's shortcomings and needs for refining unreliable numbers.

"Groundwater-discharge estimates developed during the Basin and Range carbonate-rock aquifer study (BARCASS: Welch and others, 2008) relied heavily on published ET rates. These published rates were measured at locations of similar climate and topography outside the study area and became the basis for formulating the likely range of ET rates associated with the vegetation and soil conditions found throughout the BARCASS area. Ranges later were assessed and modified with limited field data collected over a relatively short one-year period from five ET sites located in Spring Valley (3 sites) and White River Valley (2 sites) and a single

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site in Snake Valley.

Because of the relatively large size of Snake Valley and minimal local ET measurements, estimated groundwater discharge for this valley was documented in BARCASS as being the most uncertain of all basin discharge estimates. About 87% of the 275,000 acre discharge area in Snake Valley is desert shrubland dominated by greasewood and rabbitbrush. These areas account for about 70% of the 132,000 acre-ft of discharge estimated in BARCASS - an estimate that is about 52,000 acre-ft higher than reported in a previous reconnaissance-level study (Hood and Rush, 1965). The primary cause for the large difference in estimated total discharge between these two studies is the average groundwater discharge rate for desert shrubland: 0.39 ft/yr estimated in BARCASS compared to 0.20 ft/yr estimated in the reconnaissance study. Although this is a relatively small difference in discharge rates, the impact on total estimated groundwater discharge is significant because of the large area of application. For example, a change in the shrubland discharge rate for Snake Valley of only 0.10 ft/yr changes the total discharge estimate for the valley by about 24,000 acre-ft."

It is clear that the BARCASS estimated ET rate for desert shrubland is potentially double that of the actual historic ET rate in Snake Valley.

In addition, selecting the highest amount of possible groundwater discharge in a basin from one study violates the traditional procedures used by the Nevada State Engineer in state water hearings where evidence from expert witnesses using all of the available scientific information on recharge, discharge, perennial yield and carbonate flows is weighed before a ruling is made on applications for and/or protests on available water in a basin.

While P.L. 108-424 is cited in the introduction to the Draft Agreement, the law's actual language "prior to any transbasin diversion from ground-water basins located within both the State of Nevada and the State of Utah, the State of Nevada and the State of Utah shall reach an agreement regarding the division of water resources of those interstate ground-water flow system(s) from which water will be diverted and used by the project" does not specify an agreement solely regarding Snake Valley, but specifically refers to "interstate ground-water flow systems."

In addition, the Draft Agreement fails to disclose that the "Snake Valley" covered by the Agreement actually includes some or all of 3 basins - Snake, Hamlin, and Pleasant Valleys. In addition, Snake Valley numbers include an amount for Fish Springs, an area outside and downgradient of Snake Valley, but does not include Spring Valley an upgradient valley in Nevada or other valleys in Utah which may be contributing carbonate and/or alluvial groundwater flows to Snake Valley or receiving them. No breakout is given in the Draft Agreement of the water budgets for the 3 basins, how numbers for allocated, unallocated, or reserve water for the 3 basins were calculated, or how double-counting carbonate flows from up-flow basins was avoided in the calculations.

The Draft Agreement fails to provide, other than referring to the rushed and incomplete BARCASS study, a scientific rationale for the split of shared groundwater between Nevada and Utah listed in Table 1, nor how the amounts in the 3 categories were calculated. Previous studies show the 1960's Hood and Rush study of a perennial yield of 80,000 afa in all of Snake Valley to be split with 25,000 afa in Nevada and 65,000 afa in Utah (Knowland, 1986). There is also no equity in the potential distribution of pumping impacts between the 2 States or in proposed "mitigation" provided for pumping impacts in the 2 States.

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The Draft Agreement also fails to provide information on how the amounts in the 3 categories of water in Table 1 were derived and what kinds of water are included in each category, such as

- vested water rights,
- federal reserved water rights,
- reserved water rights for the Confederated Tribes of Goshute Indians,
- water for future growth in Snake Valley,
- water necessary to prevent adverse impacts to existing permitted uses.

While the Agreement requires monitoring data from groundwater pumping to be incorporated into a database and to be made available to the public, it fails to provide any information on the specifics, including what database would be used, who would manage the database, why only "measured groundwater withdrawals" information would be available publicly, how database information would be made available to the public, the costs for developing and managing such a database or who would cover the costs.

Sec. 1.3 states that the Available Groundwater Supply on which the division of shared groundwater in the Draft Agreement has been determined can be "subsequently determined through further study and agreement with the State Engineers of Utah and Nevada," but provides no details on what further studies would be considered, how the state engineers would determine available groundwater (by declaration or through state water hearings) nor how reduced estimates of available groundwater would be "shared" by the States. This omission likely will lead to serious future conflicts.

While the Draft Agreement makes many references in Sec. 2 and in other sections to a "reasonable" amount of drawdown which "necessarily impacts the existing hydrologic system and captures discharge available to phreatophytes, streams, and natural lakes," includes a goal to "minimize the injury to Existing Permitted Uses," and also a statement that Utah and SNWA agree that groundwater development will result in changes to the existing hydrologic and biologic conditions and may adversely affect air quality in Snake Valley and the defined Area of Interest, there are no findings or statements in the Draft Agreement that the States of Utah and Nevada recognize that the Snake Valley aquifer is finite and all available water may be used by prior water rights holders or may be necessary to sustain the hydrological and biological integrity of Snake Valley. The Draft Agreement ignores extensive existing data that the water table and spring flows in Snake Valley already are dropping due to current groundwater development, that endemic species are at risk from existing water uses, and that additional groundwater development will worsen existing water management problems in Snake Valley.

Sec. 2.5's statement on evaluating with certainty available groundwater is replete with vague undefined terms, including "evolving trends" in data collection regarding precipitation and recharge, "characterization of the underground physical environment," and the "sophistication of hydrologic estimation."

While Sec. 2.7 states the desire of both States to incorporate both presently available, ongoing and future studies and other information into the process for administering and managing groundwater development in Snake Valley, it provides no details on what studies are needed, their costs, how they would be funded, how "other information" would be collected and by whom, or how this information

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would be used to minimize or eliminate negative impacts.

Likewise, Sec.3.1 cites the intent of the States to use "BARCASS and other scientifically reliable reports, studies, or data collection" in revising estimates of available groundwater in Snake Valley, including SNWA data collection. Work undertaken by the USGS undergoes rigorous peer review, and all resulting final products remain in the public sector. These public sector products not only include the interpretive report, but also all data-input files and the calibrated modeling code. The Draft Agreement fails to require SNWA monitoring or other data to meet all applicable industry and scientific standard methods and protocols and to undergo Quality Assurance/Quality Control, without which its reliability or credibility cannot be determined. The Draft Agreement requires that "all data used or proposed to be used to revise estimates shall be shared between the States and be publically [sic] available for review," but provides no details on how and when data will be made public and how public review of this data will be incorporated into future determinations of available groundwater.

Sec. 4.6 cites the intent of the State Engineers to make some annual monitoring data public, to meet as needed, and to maybe hold a joint annual public meeting with all water users in Snake Valley to receive public input on the use and management of water there, but provides few specifics on how these actions would be implemented. Missing details include:

- whether State Engineer meetings are public or closed,
- what triggers these meetings,
- how often such meetings would be held - annually, biannually, every five or ten years
- how or whether public input would change either the Draft Agreement, its implementation, or future revisions of available groundwater estimates.

Nor does the Draft Agreement provide for annual disclosure of other pumping impacts, including reductions in spring flows, acreage of destruction of seeps, sub-irrigated meadows, and riparian areas, adverse impacts on existing permitted uses and "mitigation" proposed and/or implemented to address these adverse impacts.

Protection of Existing Permitted Uses

Secs. 1.1.(a) & (b) fail to provide a specific definition of adverse impacts caused by SNWA pumping to existing permitted users with water rights in wells or in spring flows, despite the fact that these are critical concerns to existing permitted users and despite the legal mandate to protect existing water rights. The Draft Agreement makes no distinction between adverse impacts which reduce productivity of wells from 1% to 10% to 50% or 100%. The definition of adverse impact is also conditioned on other undefined terms, including "demonstrated" (no specifics on what kind of demonstration is required, by whom and to whom) and "in a manner substantially similar (how substantially) and "to the well's historical production (no specifics on the required period of record). Likewise, the Draft Agreement provides no specifics on what adverse impacts to spring flow-based water rights mean, whether a 1%, 10%, 50% or 100% reduction. It also conditions adverse impacts on other undefined terms, including "demonstrated" (no specifics on what kind of demonstration is required, by whom and to whom) and "less than the historical supply" (no specifics on the required period of record for "historical" means).

Sec. 6 sets up a mandatory adversarial process in which existing permitted users in the Utah side of Snake Valley must contact, "prove" to SNWA that their senior water rights are being adversely

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impacted by SNWA pumping, request SNWA to provide "mitigation" for its adverse pumping impacts and if they disagree with SNWA determinations of adverse impacts or offers of mitigation, only then can petition the State Engineers to protect their water rights. The Draft Agreement appears to transfer the state engineers' legal mandates to protect senior water rights to a junior permittee and to unfairly put the burden of proof of adverse impacts on senior water rights holders, not on the junior permittee.

Sec. 6.3 sets up an Interstate Panel to resolve disputes between existing permitted water users and SNWA, but sets no timeframes for the Panel to take action to protect senior water rights holders from adverse pumping impacts.

No such process or opportunity for Existing Permitted Water users in Nevada to petition the Interstate Panel is provided by the Draft Agreement for adverse pumping impacts in Nevada or for direct petition to the Nevada State Engineer.

In Sec. 6.7, Nevada agrees to hold the SNWA Applications in abeyance through September 1, 2019, in order to allow additional hydrologic, biologic, and other data to be collected in Snake Valley. The Draft Agreement fails to specify

- what additional information would be collected during this 10 year delay,
- who would collect this data,
- whether the data would be required to be credible or reliable,
- how and when this data would be collected,
- the costs of this data collection or
- who would responsible for funding,
- whether and when the public would have access to this data and
- how this data would be used by the state engineer.

In addition, the 10 year delay extends the de facto stranglehold which the 1989 SNWA applications has had for 20 years on needed water appropriations for economic development in the Nevada side of Snake Valley.

Sec. 4.5 acknowledges the intent of the States to set up a monitoring data collection program in Snake Valley but fails to provide any information on how long monitoring will continue or how the monitoring plan will be implemented. This is a critical omission since adverse impacts from massive groundwater development in Nevada may not occur in Utah for years, perhaps after the SNWA project is completed (75 years according to SNWA spokesperson). In addition, while the Draft Agreement commits SNWA and the States of Utah and Nevada to fund the required monitoring program, it fails to provide any penalty or require any action if funding for monitoring is not provided.

Sec. 6.4 sets up a perpetual mitigation fund with an agreement by SNWA to maintain a minimum balance of \$3,000,000 "while SNWA maintains Groundwater development and withdrawal facilities in Snake Valley." Not only is \$3,000,000 clearly inadequate to mitigate the potential impacts caused by SNWA pumping, the Draft Agreement also fails to provide specific information about the operation of this mitigation fund, including where the funds would be held, by whom, and how the accounting for fund revenues and expenditures would be made and by whom. The Draft Agreement also does not provide for any SNWA commitment to mitigate adverse impacts once pumping ceases, even though adverse impacts may continue to occur before a new equilibrium is reached. Nor does the Draft

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Agreement provide for terms and conditions of the permit to apply to other parties who may supply and/or pipe Snake Valley groundwater to SNWA for exportation through the SNWA pipeline or who may supply water from valleys adjacent to Snake Valley to SNWA for "mitigation" of adverse pumping impacts in Snake Valley. The Draft Agreement also fails to provide any penalty for failure by SNWA to keep the required minimum \$3,000,000 balance.

Protection of the Environment of Snake Valley

While Sec. 2.10 of the Draft Agreement recognizes the desire of the States to allow for the development of maximum sustainable beneficial use, it fails to define what a "sustainable" beneficial use is, nor is this term defined in the States' water laws. Sec. 5.4 appears to define what "sustainable" is *not*, at least hydrologically, but the Draft Agreement offers no clue as to what "sustainable" means to existing permitted uses or to the environment in Snake Valley. Sec. 5.3 requires the state engineers before approving any groundwater permits to "reserved" water to determine if information "reasonably demonstrates that groundwater can be safely and sustainably withdrawn," but fails to provide definitions of any of these terms.

The Draft Agreement fails to provide a definition of "adverse impacts" (Sec. 1) to environmental resources in Snake Valley.

While the States in Sec. 4.8 agree to work cooperatively to "minimize environmental impacts and prevent the need for listing additional species under the Endangered Species Act," the section provides no details on protecting other environmental values in Snake Valley, including other animal and plant species, soil stability, and intact desert ecosystems. And while Sec. 7.1 requires the State of Nevada to appoint a representative to participate in the Columbia Spotted Frog Conservation Team and the Least Chub Conservation Team, the Draft Agreement does not disclose any state commitment to the conservation goals for these two at-risk species.

Sec. 2.7 provides for collection of data and other information "for administering and managing groundwater development in Snake Valley," but the Draft Agreement fails to consider the need for managing groundwater for other purposes, including healthy ecosystems, sustaining water-dependent cave ecosystems, seeps and sub-irrigated meadows on which native wildlife depend, the insects in streams on which the Bonneville cutthroat trout depend, and ensuring water necessary for the economic future of Snake Valley.

The Draft Agreement fails to provide a process for anyone to petition the state engineers to address adverse pumping impacts on the Snake Valley environment and/or require mitigation.

In Sec. 4.4 the States agree to jointly identify areas of concern that could be affected by groundwater development in Snake Valley, yet the section fails to provide any information on how this agreement would be implemented or whether the process would be secret or open to public input. The Draft Agreement fails to mention the Great Basin National Park.

Our previous questions about the need for long-term monitoring and mitigation of pumping impacts on existing permitted uses also apply to the agreement's empty mandate to protect environmental resources.

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Sec. 7.2 appears to limit the purpose of the Utah and SNWA the Snake Valley Environmental Monitoring and Management Agreement to "make informed determinations as to whether groundwater withdrawals have caused an adverse impact to an existing permitted use," but fails to show how implementing this agreement would protect the environment of Snake Valley. We don't believe that the Spotted Frog or the Least Chub fit the definition of "existing permitted uses."

Other flaws in the Draft Agreement:

Sec. 8.2 makes a reference to "the delivery of waters herein provided," but does not define this potential claim or controversy between the States.

Sec. 8.3 does not provide the length of time in which the Draft Agreement would be effective. Nor does it appear to bind SNWA's successors or potential future partners, if SNWA sells or buys its water applications or water rights to or from others.

Appendix C: Snake Valley Environmental Monitoring and Management Agreement between the state of Utah and SNWA

This Agreement suffers from many of the same problems as the Draft UT-NV Agreement does, including vague terms, interminable processes, pumping impacts assessments that go nowhere, a lack of secure funding, and that it is non-binding on SNWA successors. The "consultative" process envisioned by the M&M Agreement for SNWA and Utah to deal with pumping impacts in Utah resulting from SNWA groundwater development in Nevada appears to the GBWN as cumbersome, expensive, ineffective, reactive, and unenforceable.

This Agreement fails to disclose what authority the Technical Working Group and the Management Group set up under this M&M Agreement actually has over the operation of SNWA's water rights in Nevada.

This Agreement fails to provide for requiring its terms and conditions to apply to SNWA 's successors if SNWA sells its water applications and/or water rights to another party, or buys rights from others in the Valley

Sec. 4 of this Agreement appears to include the monitoring of existing permitted users groundwater withdrawals in Utah, despite the fact that existing permitted users are not signatory to this Agreement. This Agreement fails to explain how senior water rights holders in Utah are bound to the terms of this Agreement.

Sec. 5.1.3 appears to give the Management Committee with its 2 Utah and 2 SNWA members absolute discretion over implementing any or all parts of the M&M plan, regardless of the specific provisions of this Agreement, including early warning indicators, and the severity and relative importance of the pumping impacts. If this is correct, this Agreement is not enforceable.

Sec. 5.3 and Sec. 13 set up cumbersome, expensive, and lengthy processes in cases of disagreement by the Technical Working Group which will result in inevitable delays in any actions to address adverse impacts. These ineffective processes may also result in reversing SNWA commitments in Sec. 5.1.3 to protect endangered, threatened and sensitive species and in making recommendations by the

Management Committee non-binding on the signatories.

Sec. 8.1 provides for the mandatory inclusion of a regional groundwater flow numerical model in the M&M Agreement, but does not mandate its use in implementing the provisions of the Agreement.

Sec. 9 provides for SNWA consulting the State of Utah on changes in points of diversions and withdrawal rates, but not for the possibility of substantive changes caused by new locations or pumping rates to invalidate or require substantial changes to this Agreement.

Sec. 12 subjects the monitoring required in the M&M Agreement to appropriations by the SNWA Board and the Utah Legislature, but does not subject SNWA pumping/adverse impacts to these constraints.

This Agreement fails to require collection of baseline data collection or monitoring springs or wells or managing SNWA groundwater development and impacts in Nevada's Snake Valley. Without this information, Snake Valley cannot be managed as a whole groundwater basin. Likewise, endemic species occupy springs in Nevada which are subject to adverse impacts of SNWA pumping. Bonneville cutthroat trout depend on insects which depend on habitat in streams in or below the Great Basin National Park that were identified as "likely susceptible to groundwater withdrawal" in the publication: Elliott, P.E., D. A. Beck, and D. E. Prudic. 2006. Characterization of Surface-Water Resources in the Great Basin National Park Area and Their Susceptibility to Ground-Water Withdrawals in Adjacent Valleys, White Pine County, Nevada. USGS Scientific Investigations Report 2006-5099. Carson City, NV.

Necessary Changes to the Draft Agreement

The GBWN cannot support the Draft Agreement unless the following critical changes are made:

1. The final Agreement must be substantively responsive to public comments on the proposed Agreement
2. The scientifically unsupported 132,000 afa must be replaced with a more credible number, using existing and new hydrology studies over the next several years to come up with a more realistic estimate of available water in Snake Valley.
3. The final Agreement must be specific on the studies which are needed to better define groundwater water availability in Snake Valley, basin water budgets, and direction and amounts of carbonate flows, including two study proposals with which we are familiar:
 - **Utah USGS proposal: Assessment of groundwater flow paths, sources of water to springs and connection of basin-fill and carbonate aquifers in Snake Valley and surrounding basins, Utah and Nevada, June 2009.** This is a 3 year, \$376,800 study with results to be published in a USGS Scientific Investigations Report, PhD dissertation, and in a journal article. Data will be permanently archived in the USGS NWIS database where it will be publicly available, and models will also be archived and available.

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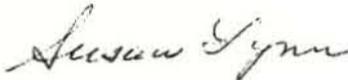
- **Nevada USGS proposal: Draft Proposal to Refine Groundwater Discharge Estimates for Snake Valley, NV and UT.** This is a 4 1/2 year \$1M study to refine current estimates of groundwater discharge by ET in Snake Valley, with data to be published in a USGS report and available on the web.
4. The final Agreement must replace the proposed NV/UT groundwater division in Table 1 with a more equitable split, many of which are being suggested in public comments on the Draft Agreement.
 5. The final Agreement must include a water settlement for the Confederated Tribes of the Goshute Indians.
 6. The final Agreement must include clearly defined terms.
 7. The final Agreement must make the adverse impacts/mitigation process in section 8 voluntary and put the burden of proof on SNWA that its pumping is not causing adverse impacts on the existing permitted users.
 8. The final Agreement must require that all data collected be required to meet industry and scientific standard methods and protocols and to undergo Quality Assurance/Quality Control.
 9. The final Agreement must require that all data collected as required by these Agreements be made accessible to the public, as soon as possible, but no later than 60 days after collection.
 10. The final Agreement and the Utah/SNWA Agreement must set triggers for specific responses to adverse impacts caused by SNWA pumping.
 11. The final Agreement must require 5 years of baseline studies of hydrologic, biologic, and air quality resources and monitoring in all of Snake Valley that include current, historical and newly collected data from normal, drought and wet years.
 12. The final Agreement must disclose the definitions of and calculations on the amounts of water included in Table 1 categories.
 13. The final Agreement must acknowledge the State Engineer's authority under Nevada state law to process junior water applications until the Snake Valley hearing is eventually scheduled or a provision should be added to the final Agreement specifically authorizing the Nevada state engineer to take this action in Snake Valley.
 14. The final Agreement must add a provision which binds SNWA's successors and potential future partners to the terms and conditions of the NV/UT Agreement and the M&M Agreement
 15. The final Agreement must add a provision which requires the owners or purveyors of any water from Snake Valley which is eventually transported in the SNWA pipeline be subject to the terms and conditions of the Agreement.
 16. The final Agreement must add a provision which requires the owners or purveyors of any water

used to mitigate adverse impacts of SNWA pumping in Snake Valley to be subject to the terms and conditions of the Agreement.

17. The final Agreement between Utah and SNWA, instead of a M&M program which reacts to adverse pumping impacts, must develop a program which will actually prevent adverse pumping impacts to sensitive resources in Snake Valley, including those in the Great Basin National Park.
18. The final Agreement must set up a public process for identifying Key Areas of Biological Concern and Key Biological Indicators in Snake Valley. It must acknowledge Great Basin National Park, its water-dependent caverns and its springs, streams, and riparian areas.
19. The final Agreement must add provisions which require suspension of SNWA water permits if either the SNWA mitigation fund balance drops below the \$3,000,000 minimum or funding for monitoring required by the NV/UT Agreement or the M&M Agreement is not provided by SNWA or the States of Nevada and Utah.
20. The final Agreement must not be finalized until the Snake Valley Aquifer Advisory Commission, mandated by the Utah Legislature, reviews it and is provided a role in its implementation.
21. The final Agreement must be signed by the States' governors.
22. A good Agreement takes time and input from everyone affected by this Draft Agreement. Some of these changes can be swiftly accomplished, but others will take longer.

Thank you for considering the comments of the Great Basin Water Network.

Sincerely,



Susan Lynn
GBWN coordinators in Nevada and Utah



Rose Strickland



Steve Erickson

ATTACHMENT

cc: Governor Jim Gibbons
Governor Gary Herbert
NV and UT Attorney Generals
NV and UT state legislators

**GREAT BASIN WATER NETWORK LEGAL CRITIQUE OF THE DRAFT AGREEMENT
FOR MANAGEMENT OF THE SNAKE VALLEY GROUNDWATER SYSTEM**

This memorandum contains the Great Basin Water Network's ("GBWN's") additional comments concerning specific legal deficiencies in the Draft Agreement for Management of the Snake Valley Groundwater System ("Draft Agreement"). These comments are incorporated by reference in GBWN's comprehensive comments on the Draft Agreement.

THE DRAFT AGREEMENT EFFECTIVELY IS AN INTERSTATE COMPACT, BUT IT DOES NOT COMPLY WITH THE LEGAL REQUIREMENTS FOR SUCH AN AGREEMENT, AND APPEARS TO UNNECESSARILY SUBJECT UTAH AND ITS CITIZENS TO NEVADA LAW:

- The Compact Clause of the U.S. Constitution, Article I, § 10, requires Congressional consent for all agreements between states that enhance the political power of the states in relation to the federal government. *U.S. Steel Corp. v. Multistate Tax Comm'n*, 434 U.S. 452, 459 (1978). The Draft Agreement is subject to the Compact Clause because it apportions an interstate groundwater aquifer, which the United States Supreme Court has held to be an article of interstate commerce subject to federal jurisdiction. *Sporhase v. Nebraska*, 458 U.S. 941 (1982). As such, an attempt to place burdens on or apportion the aquifer would have to be sanctioned by Congress in the form of an Interstate Compact pursuant to the Compact Clause of the United States Constitution. *See U.S. Steel Corp. v. Multistate Tax Comm'n*, 434 U.S. 452, 459 (1978). The federal interest in the Snake Valley aquifer is especially high given the presence of Great Basin National Park.
- This Agreement clearly does not comply with the requirements of the Compact Clause. Interstate compacts are creatures of federal law, *Cuyler v. Adams*, 449 U.S. 433, 440 (1981), and are under the jurisdiction of the U.S. Supreme Court. The Draft Agreement sets up a situation in which Nevada law as opposed to federal law governs disputes involving individuals, and the states agree to mediate disputes that arise between the states. Specifically, determinations of the Interstate Panel will be administered by the Nevada State Engineer, whose orders are subject to Nevada Law. Draft Agreement § 6.5. Further, if the states, through their state engineers, are unable to resolve controversies that arise under the agreement, "the signatories shall select a neutral mediator agreeable to both States who shall mediate the dispute." Draft Agreement § 8.2. The Agreement also creates a framework in which changes to the Agreement are to be made cooperatively, meaning that in effect, Nevada has a veto over decisions such as adjusting the available groundwater supply. *See* Draft Agreement §§ 1.3, 4.8; 5.4. This framework puts Utah at a serious disadvantage, one that it does not have to accept, especially given its strong position in a potential case before the U.S. Supreme Court under the Equitable Apportionment Doctrine (described below).

THE APPORTIONMENT OF GROUNDWATER IN SNAKE VALLEY UNDER THE AGREEMENT APPEARS TO BE SIGNIFICANTLY LESS FAVORABLE FOR UTAH THAN WOULD BE THE CASE UNDER THE FEDERAL EQUITABLE APPORTIONMENT DOCTRINE, WHICH WOULD ENTITLE UTAH TO A GREATER SHARE OF SNAKE VALLEY GROUNDWATER:

- Equitable apportionment is the doctrine of federal common law that governs disputes between states before the U.S. Supreme Court concerning their rights to an interstate water resource. *Colorado v. New Mexico*, 459 U.S. 176, 183 (1982) (citations omitted).
- Equitable apportionment generally favors current uses and established economies that depend

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on the waters in question. *Colorado v. New Mexico*, 459 U.S. at 187.

- In Snake Valley the equitable apportionment doctrine would favor Utah because the majority of Snake Valley is in Utah, most of the historic use in Snake Valley is in Utah, Snake Valley's water supply is limited and water tables already are decreasing, and the potential injury to existing Snake Valley uses is significant.
- Under equitable apportionment the location of the headwaters or source of recharge is irrelevant in considering the equities involved. *Colorado v. New Mexico*, 467 U.S. at 187 (citations omitted). Therefore, a 50/50 split of Snake Valley water appears to be considerably more generous to Nevada and less generous to Utah than federal law would consider appropriate, given the fact that the majority of land and historic use of groundwater in Snake Valley is in Utah.
- By the same token, under equitable apportionment principles future use should be split among the two states based on land area and current use, which again would weigh in favor of Utah receiving a larger quantity of water than Nevada.

THE DRAFT AGREEMENT'S ESTIMATE OF AVAILABLE GROUNDWATER SUPPLY IS IMPROPERLY PREMISED ON AN INFLATED AND UNCERTAIN BARCASS FIGURE:

- The available groundwater supply estimate borrowed from the BARCASS study is inappropriate to use as a baseline estimate in the Draft Agreement for two reasons.
- First, it is deceptively inflated because it does not account for and subtract interbasin inflow to Snake Valley from Spring Valley. BARCASS estimated that the amount of inflow to Snake Valley from Spring Valley is 49,000 afy. This inflow makes up a major portion of the BARCASS estimate of available groundwater supply in Snake Valley. But the Nevada State Engineer already has permitted Spring Valley to be fully appropriated by SNWA. Thus, SNWA already has been granted the right to pump groundwater from Spring Valley that presently flows into Snake Valley and makes up much of Snake Valley's available groundwater supply. So, the only prudent estimate to use from BARCASS would be 132,000 afy less the 49,000 of inflow from Spring Valley, which already has been accounted for in Nevada, resulting in a truer available groundwater estimate of **83,000 afy**. This double counting of inflow from Spring Valley highlights the reasoning behind the requirement in the 'Lincoln County Conservation, Recreation, and Development Act of 2004's ("Lincoln County Land Act") that any agreement encompass the entire interstate groundwater flow system from which the water is to be diverted. As written, the Draft Agreement does not comply with the Lincoln County Land Act, because the scope of the agreement is limited to Snake Valley, which is only part of the Great Salt Lake Desert Regional Flow System.
- Second, BARCASS itself cautions that its estimate of Snake Valley's annual discharge, or available groundwater supply, is highly uncertain and not reliable, conceding that it might well be 30,000 afy too high. USGS, Water Resources of the Basin and Range Carbonate-Rock Aquifer System, White Pine County, Nevada, and Adjacent Areas of Nevada and Utah, A Report to Congress, 62-63 (2007) [hereinafter "BARCASS"]. A conservative, more defensible starting point, then, would be no more than 102,000 afy rather than 132,000 afy. And that is *before* accounting for the interbasin inflow to Snake Valley from Spring Valley, which already has been fully appropriated in Nevada. In fact, the Draft Agreement itself concedes that the available groundwater supply for Snake Valley is uncertain, so uncertain that the Nevada State Engineer's hearing on Snake Valley will be postponed until 2019. It does not make sense to use such an admittedly uncertain, unreliable figure as the basis for calculating the amount of groundwater available for apportionment and apportioning it between the two states at this time.

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At the very least, the Agreement should eschew any commitment to a particular figure now and should lay out a more concrete and equitable method for adjusting the number at a later date. As written, Nevada has veto power over adjusting the available groundwater supply downward, leaving Utah with little recourse should additional scientific measurement and study confirm that 132,000 afy is inappropriately high.

AS WRITTEN, THE DRAFT AGREEMENT DOES NOT APPEAR TO COMPORT WITH THE UTAH GOVERNMENT'S PUBLIC TRUST DUTY TO PROTECT AND CONSERVE UTAH'S WATER RESOURCES FOR THE LONG-TERM BENEFIT OF UTAH CITIZENS:

- The State of Utah has an obligation to manage its groundwater, deemed a public resource by Utah statute, in trust for the Utah public's long-term benefit. The State may not bargain away this duty as it has done in the current Draft Agreement by: (1) assuming an unreasonably high available groundwater supply for Snake Valley as noted above; and (2) placing the burden of defending Utah water rights against appropriation by a Nevada entity on individual water rights holders under Nevada's law.
- The Agreement places the entire burden on existing water rights owners to demonstrate that SNWA has caused an adverse impact to their water rights. This is unfair. Since SNWA is the entity seeking the "new" water and creating *all* of the risk of harm to senior water rights owners, it is only fitting that SNWA should bear the risk it is foisting on Snake Valley. It should also be noted that SNWA is a gigantic government agency with billion-dollar budgets to work with, whereas the individual water rights owners in Snake Valley are hardworking ranchers, farmers, and businesspeople who do not have adequate funds to fight with SNWA. The easiest, simplest, and probably fairest way to do this is to create a rebuttable presumption that SNWA's pumping is the cause of any negative change, or impact, to the water rights of any existing water right in Snake Valley. SNWA would then have the opportunity and the burden of overcoming, or disproving, that presumption. Given the enormous disparity between the means and resources of SNWA, which are virtually limitless, and those of ordinary citizens with water rights, which are scant, this allocation of the burden of proof is far more just.
- SNWA also should bear the burden of proving that it is not the cause of harmful impacts to existing water rights because it is SNWA alone that is pushing for and will reap all the benefits of this project and these new appropriations, whereas it is the existing water users in the Valley who will bear the brunt of any harmful impacts caused by the project.
- Similarly, water rights holders should not have to negotiate with SNWA should impacts occur, but ought to be able to report the impacts directly to the interstate panel. As written, the Draft Agreement puts water rights holders at a significant disadvantage, because the agreement sets up a situation in which water rights owners must negotiate with SNWA before they may resort to the interstate panel should impacts occur. For the reasons stated above, this arrangement is unworkable as it places an undue burden on senior water rights holders by requiring them to bargain over their supposedly protected senior rights with an entity that has far superior resources and power.
- In addition to improperly placing the burden on senior water rights holders, the Draft Agreement does not give these water rights holders the tools with which to support their claims of impact to their water rights, thus making it even more difficult for them to prevail should SNWA's pumping impact their wells. Impacts are largely undefined by the Draft Agreement as is the monitoring vaguely referenced in sections 2.11 and 4.5-4.8 of the Agreement, and thus, the determination of impacts likely would be made on a case-by-case basis, putting individual water rights holders at a disadvantage and forcing them to bear the burden of an uncertain battle

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to protect their water rights. At a minimum, the Agreement must include specific concrete triggers that would be used to define impacts as well as a detailed method for measuring such impacts that would take the burden off individual water rights holders. Monitoring should be done by a third party at SNWA's expense. Finally, the Draft Agreement contains no provision for reimbursement to these water rights holders for the cost incurred in defending their water rights. Without financial support, it is unlikely that water rights holders will have the resources to defend their water rights against SNWA's pumping.

AS CURRENTLY WRITTEN, THE DRAFT AGREEMENT'S SCOPE IS TOO NARROW BECAUSE IT DOES NOT EXPLICITLY INCLUDE ALL WATER CONVEYED THROUGH SNWA'S PROPOSED PIPELINE REGARDLESS OF OWNERSHIP AND ALL PROJECT-RELATED WATER:

- As drafted, the Agreement covers only water permitted to SNWA under Snake Valley applications currently on file with the Nevada State Engineer. This creates an unacceptable loophole for SNWA to contract with other people or entities to acquire and export water from Snake Valley, raising the same risks for existing water rights holders and the environment in the Valley, without having to abide by the same commitments as it is bound to in relation to its own water rights. In addition, the Draft Agreement fails to acknowledge that water obtained and used by SNWA to mitigate harmful impacts it has caused in one part of Snake Valley may very well have harmful impacts on other parts of the Valley. In order to adequately protect the State of Utah and existing water rights holders in Snake Valley, and to ensure that the protections which the Agreement purports to provide will not be circumvented, the Agreement must expressly provide that all of SNWA's obligations under the Agreement apply to all water conveyed through SNWA's pipeline, regardless of ownership, and to all other project-related water, including water used for mitigation purposes. Expanding the Agreement's scope in this way is necessary to ensure that SNWA is not permitted to play a shell game with water rights to evade its responsibilities and that actual, meaningful mitigation takes place rather than a mere shifting of impacts from one part of Snake Valley to another part of the same valley or to other valleys.

UTAH SHOULD NOT SIGN THE AGREEMENT AS DRAFTED BECAUSE IT DENIES UTAH A VOICE IN WATER RIGHTS DECISIONS ON THE NEVADA SIDE OF THE BORDER THAT WOULD AFFECT AND THREATEN WATER RIGHTS ON THE UTAH SIDE OF THE BORDER:

- As drafted the Agreement allows Utah to play a part, along with Nevada through the bi-state review panel, on disputes concerning Utah water rights in the Utah portion of Snake Valley. But the Draft Agreement explicitly excludes Utah from having any say in decisions concerning Nevada water rights in the Nevada portion of Snake Valley, even though the interconnected nature of all groundwater in the basin ensures that those decisions will affect Utah water rights in Snake Valley, too. Thus, the Draft Agreement would give Nevada a say in the determination of questions concerning Utah water rights in Snake Valley, while depriving Utah of a corresponding say in the determination of questions concerning Nevada water rights in Snake Valley. That imbalance is patently unfair to Utah and Utah water rights holders in Snake Valley.

THE AGREEMENT MUST BE RE-DRAFTED BECAUSE IT PROVIDES ABSOLUTELY NO ACTUAL PROTECTION FOR THE ENVIRONMENT:

- Despite its anemic rhetoric about environmental protection, the Draft Agreement fails to

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provide for any actual concrete protection of the environment and undermines the possibility of environmental protection in at least two fundamental ways.

- To begin with, the agreement adopts an unreliable and unreasonably high estimate of Snake Valley's available groundwater supply as the available groundwater supply, setting the Valley up for excessive pumping by SNWA, which cannot help but cause devastating environmental harm. If anything, the highly speculative BARCASS estimate should be used only as the uppermost limit of any potentially available groundwater supply, and clear provision must be made for actually settling on a lesser amount. By all the parties' concession in the Draft Agreement, they simply do not have adequate data to set a reasonable estimate of available groundwater supply yet.
- The other way in which the Draft Agreement undermines the prospects for meaningful environmental protection is that it contains absolutely no provisions of its own for monitoring and mitigation of potential environmental harm caused by SNWA's pumping. Nor does the Agreement contain any concrete, specified standard, threshold, triggers, criteria, or goals for environmental protection or even for a monitoring and mitigation plan.
- Rather, the Draft Agreement shifts responsibility and accountability for all monitoring and mitigation, and environmental protection, to separate agreement between SNWA and Utah alone, which is attached as an appendix. By its nature this arrangement lessens Utah's ability to ensure that the environment will be protected. It also allows the State of Nevada to avoid any responsibility whatsoever for any environmental protection in Snake Valley. Further, this separate "Monitoring and Management Agreement" between SNWA and Utah largely mimics the toothless stipulated agreements that SNWA has bullied several federal agencies into in connection with its application in other valleys in Nevada. Like those illusory agreements this monitoring and management agreement lacks important specifics and essentially sets up nothing more than a so-called collaborative process in which SNWA will have a decisive seat on each committee that has to reach consensus before any decision can be made or any mitigation can occur.
- The result is that SNWA, an agency whose only objective is to obtain as much water as possible for southern Nevada, will be in a position to stall any decision or action from being taken if that decision or action would inconvenience SNWA.

THE DRAFT AGREEMENT IS DEFECTIVE BECAUSE THE GOSHUTES TRIBE WAS EXCLUDED FROM THE NEGOTIATIONS, AND THE AGREEMENT FAILS TO ACCOUNT FOR THE TRIBE'S CLAIMED WATER RIGHTS IN SNAKE VALLEY:

- The Goshutes Tribe was admittedly not included in the negotiation of this Agreement or apparently even consulted before the Agreement was drafted. This oversight opens up the Agreement to attack for its failure to account for or address the Goshute Tribe's assertion that it possesses significant water rights in Snake Valley under the *Winters* doctrine and other federal legal precedent. Before the parties responsibly can sign the Agreement purporting to apportion and manage the water resources of Snake Valley comprehensively, the Goshute Tribe must be consulted and account must be taken of any claimed tribal water rights in the Valley.

THE AGREEMENT AS DRAFTED WOULD UNDERMINE THE FEDERAL ENVIRONMENTAL REVIEW PROCESS:

- SNWA's pipeline project is subject to review and preparation of an Environmental Impact Statement (EIS) under the National Environmental Policy Act ("NEPA"). That review already is underway and an EIS is supposed to be produced for the entire project next year (2010). By

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establishing a ten year delay for further study and monitoring of groundwater and related resources in Snake Valley the Agreement undermines the EIS ability to properly analyze and address the Snake Valley portion of the project, either creating an unreasonable risk that the federal NEPA review process will be inadequate with regard to Snake Valley or that it will have to be redone after a decade of time has elapsed.

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Ivins City
55 N. Main
Ivins, UT 84738
(435) 628-0606
www.ivins.com

September 23, 2009

Honorable Gary R. Herbert
Utah Governor's Office
Utah State Capitol Complex
East Office Building, Suite E220
P. O. Box 142220
Salt Lake City, UT 84114-2220

Constituent Services
Office of the Governor
Date

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Dear Governor Herbert:

This letter is written on behalf of Ivins City to voice strong support for the SNAKE VALLEY AGREEMENT FOR MANAGEMENT OF THE SNAKE VALLEY GROUNDWATER SYSTEM ("Snake Valley Agreement") which is currently under public review.

As a participant in the Washington County Water Conservancy District Regional Agreement we share water resources across state lines and are dependent upon the ability to acquire Colorado River Water through the Lake Powell Pipeline Project. It is our hope that management of the Colorado River system can be performed through cooperative efforts represented by the Snake Valley Agreement.

It is respectfully requested that every action available be taken to ensure that the Snake Valley Agreement is promptly executed.

Sincerely,

A handwritten signature in cursive script that reads "Daren Barney".

R. Daren Barney
Mayor

Laurie L. Carson, Commissioner
Richard Carney, Commissioner
Gary Lane, Commissioner
MaLeene Makley, Commissioner
Gary Perea, Commissioner
JoAnn Malone, Ex-Officio Clerk of the Board

953 Campton Street
Ely, Nevada 89301
(775) 289-3065
Fax (775) 289-8860

White Pine County
Board of County Commissioners

September 23, 2009

Snake Valley Agreement
C/o Nevada Department of Conservation
and Natural Resources
Suite 5001
901 S. Stewart St.
Carson City, NV 89701

Attention: Allen Biaggi

Dear Mr. Biaggi:

The White Pine County Commission has reviewed the Utah/Nevada Agreement on the Use of Snake Valley Water. The County Commission continues to oppose the Groundwater Development Project because of the likelihood that it will result in negative environmental and economic impacts on our area. However, the White Pine County Commission believes that Snake Valley, its environment, and its residents are better protected by the presence of an agreement than they are without one. Although White Pine County supports the goals and basic concepts in the Draft Agreement, we feel there are critical issues with draft as proposed and it must be revised prior to final acceptance.

White Pine County has the following specific concerns with the Agreement:

Public Processes: There has been a lack of public process in the creation of the Draft Agreement and the Agreement does not ensure public participation in the review of comments, revisions, or implementation.

- 1) Meetings related to the Agreement, on-going evaluation, and implementation should be conducted according to the guidelines of the Nevada Open Meeting Law and the Utah Open and Public Meetings Act.
- 2) Any documentation and data used to make the determinations in the Agreement should be available for public review.
- 3) Future discussions to evaluate existing data and new studies and to modify the Agreement should be open to the public.

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- 4) Critical steps in the process to review, revise, and accept the Final Agreement should be conducted through Public Hearings and should include at least one hearing in Snake Valley.

Determination of Available Ground Water Supply: In the Draft Agreement, the division of water is based on the determination that there is 132,000 af/y in Available Ground Water Supply. This appears to be based on the theoretical findings in the BARCASS Study. This estimate is much higher than previous studies including the 1965 Hood and Rush analysis used by the Nevada Division of Water Resources. The Final Agreement either needs to consider other estimates of Available Ground Water Supply or a BARCASS 2 is required to provide the studies to support the assumption that there is 132,000 af/y available in Snake Valley.

Need and Procedure for Accepting Additional Data: The Draft Agreement identifies the concern that the data are insufficient. The County agrees with this determination and supports the segments of the Draft Agreement designed to allow additional data to be considered. The County has a concern about the process for identifying appropriate additional information to be considered. The Agreement refers to "Evolving Trends in Data Collection" and "On-going and Future Studies and Other Information." The County recommends that the Final Agreement be revised to define what is meant by "evolving trends in data collection" and to identify what "on-going studies" and what type of "other information" will be included. The Final Agreement should also detail the processes to be used in reviewing and accepting additional studies and other information to ensure its scientific basis and reliability. The County recommends reliance on USGS studies that are in progress or that may be commissioned to answer specific questions regarding the water resources available in Snake Valley. USGS has a well recognized peer review process and has demonstrated its credibility in conducting unbiased and independent scientific research. All additional information should be made available for public review and comment.

Need to Define Terms: The Draft Agreement uses terms that need additional definition including "Maximum Sustainable Beneficial Use," "Adverse Impacts," and "Adverse Impacts to an Existing Permitted Use." The County sympathizes with the difficulty in developing an agreement based on water law in two different states and the need to find terminology that will bridge the differences between the two. However, in using terminology that may not have legal definition in either state, the Final Agreement needs to be very careful to provide specific definitions and should specify thresholds, who will determine when those thresholds are exceeded, and the processes for making those determinations.

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Need to Define Authority and Responsibilities Under Nevada and Utah Water Law:
The Final Agreement needs to provide more detailed explanations of how the Agreement will work in conjunction with existing Nevada and Utah state statutes.

Include All Water Sources: The Final Agreement should include any and all water sources that may contribute to the 132,000 af/y. The BARCASS study indicates that water flows from south Steptoe Valley into Spring Valley and then into Snake Valley. It estimates that as much as 49,000 af/y may flow from Spring to Snake Valley. USGS is currently studying the flow of water from Spring Valley into Hamlin and then Snake Valley. The Draft Agreement includes Pleasant and Hamlin Valleys but does not reference Spring Valley. The Final Agreement should include analysis of the sources of water that may comprise the 132,000 af/y determined to be available in Snake Valley. It should include a discussion of the impacts of the Groundwater Development Project pumping and exportation of water from Spring Valley on the availability of water in Snake Valley as well as any impact it might have on Steptoe Valley.

Special Nature of Interbasin Transfers and Negative Impacts Caused by Water Exportation Through the Ground Water Development Project: The Final Agreement should acknowledge that Nevada law requires the State Engineer to take environmental conditions and potential for economic development of the host basin into account in decisions related to interbasin transfers. The Final Agreement should hold Southern Nevada Water Authority (SNWA) responsible for negative impacts on the environment, economic potential, or senior water rights holders in Snake Valley and in any other basin that might be contributing to the water available in Snake Valley.

Approval Process and Requirements on Parties to the Agreement: The Final Agreement should be signed by the Governors of Utah and Nevada rather than their designated department heads. The Final Agreement should identify the funding source for implementation of the agreement and require the two states to make commitments for any funding determined as their responsibility. White Pine County believes that SNWA should be held responsible for funding implementation of the provisions in the Draft Agreement. The Final Agreement should include a statement identifying the responsibilities of SNWA under the primary agreement and it should state that the agreement is binding on SNWA and its successors. The provisions of the Monitoring and Mitigation Agreement should be incorporated within the Final Agreement and should include a requirement that any owners or purveyors of water entering the pipeline are held responsible to the same terms and conditions as SNWA. If water rights in Snake Valley are awarded to SNWA, it should not be allowed to lease its water to any other entity unless that entity is required to adhere to the provisions of the Final Agreement and the Monitoring and Mitigation Agreement.

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Laurie L. Carson
September 23, 2009
Page 4

Ten Year Delay: The Agreement provides a ten year delay for action on the Southern Nevada Water Authority applications in Snake Valley. The County is concerned that this delay has a negative impact on the citizens of Snake Valley. The applications were filed by Las Vegas Valley Water District in 1989. The citizens of the Nevada portion of Snake Valley have been unable to secure water rights from the State Engineer for development of the municipal water system at Baker, expansion of existing operations, and new development for the past 20 years. If they are asked to wait another 10 years, the Agreement needs specific provisions for the State Engineer in Nevada to accept and consider requests for new water rights for legitimate uses.

Please take the comments of White Pine County and its Snake Valley residents into consideration in your process to revise the Draft Agreement, approve the Final Agreement, and implement the terms of the Agreement. The White Pine County Commission appreciates the opportunity to respond to the Draft Agreement and would be happy to work with you in an effort to revise the Draft to address the concerns of our citizens.

Thank you.

Sincerely,



Laurie L. Carson,
Chairman

cc: Governor Jim Gibbons
Governor Gary Herbert

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10960 South Jordan Gateway
P.O. Box 95850
South Jordan, UT 84095
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1-800-824-9198
Administrative Fax (801) 571-9481
Accounting Fax (801) 571-1641

September 22, 2009

Snake Valley Agreement
c/o Utah Department of Natural Resources
Division of Water Rights
1594 West North Temple, Suite 220
Salt Lake City, Utah 84114

RE: Comments on Proposed Snake Valley Agreement

Western AgCredit has a material interest in the management of water resources in the Snake Valley and throughout Utah and other areas in the Intermountain West. Western AgCredit is the largest agricultural lender in Utah and we have several customers whose operations are located in Snake Valley and who depend on the water resources in that area. We also finance some agricultural operations located in Eastern Nevada.

We are opposed to any plans to transfer material amounts of water out of the Snake Valley. We realize that this is a complicated issue because of the conflicting interests between Utah and Nevada and the unanswered questions regarding the rights of each state to control the water in Snake Valley. However, extreme care must be taken to avoid actions that could potentially 1) threaten the viability of existing water users with established water rights, 2) cause serious environmental damage to Snake Valley, and 3) impair air quality throughout the rural and urban areas east of Snake Valley. Based on the discussions and presentations in recent meetings, it seems that – with the exception of the Southern Nevada Water Authority – most interested parties are united in their opposition to piping water out of Snake Valley to the detriment of the valley and its residents.

We are supportive of the wise use of available water for agriculture and for sustainable development in the area where the water is located. These uses should be properly managed based on science and reliable data to determine the amount of water available in the groundwater basin. However, a much higher standard of reliability should be required of data and studies used to support any claim of “excess water” before it is appropriated for use outside of the groundwater basin.

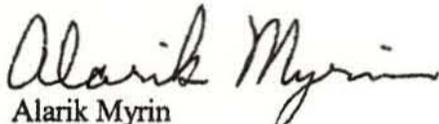
We recognize that there is a significant difference of opinion as to how to best protect Snake Valley, its residents and the citizens of Utah east of Snake Valley from the potentially devastating impact of excess allocation and withdrawal of groundwater in the valley. Utah’s negotiators who have worked over the past several years drafting the proposed Agreement for Management of the Snake Valley Groundwater System are of the opinion that the Agreement will be the best tool to assure appropriate allocations of the water and to protect existing water users. Other parties are

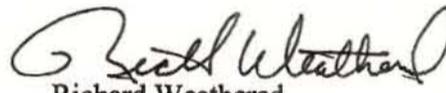
suggesting that the proposed Agreement be renegotiated and modified to better protect Snake Valley and Utah's interests. Others have the opinion that an acceptable negotiated agreement is almost impossible and that a lawsuit against Nevada, and ultimately a resolution by the courts, is the best strategy to accomplish the objectives.

We recognize that Western AgCredit does not have sufficient information to definitively conclude which of the strategies will bring the best results for Utah. It appears that all of the alternatives have some merit, but that each of them also has significant risk and uncertainty. However, we hope that each alternative will be carefully evaluated and the risks fully considered before a final decision is made. We also hope that there will not be a rush to select a course of action until many of the answered questions can be resolved. Throughout this process, we encourage you to focus on the objectives of 1) wise management of these important water resources and 2) avoiding actions that would result in seriously adverse, long-term consequences.

Thank you for the opportunity to comment on the proposed Agreement.

Sincerely,


Alarik Myrin
Board Chairman

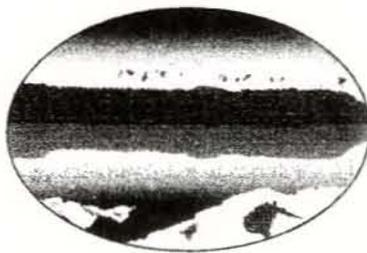

Richard Weathered
President & CEO

cc: Mr. Michael R. Styler, Executive Director ✓
Department of Natural Resources
PO Box 145610
Salt Lake City, Utah 84114-5610

Ronald W. Thompson
General Manager

Roberta McMullin
Secretary-Treasurer

Barbara G. Hjelle
*Assistant General Manager
Counsel*



**WASHINGTON COUNTY
WATER CONSERVANCY DISTRICT**

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Thomas Hirschi

September 3, 2009

Governor Gary R. Herbert
Utah State Capitol Complex
350 North State Street, Suite 200
P.O. Box 142220
Salt Lake City, UT 84114-2220

Fax No. 801-538-1528

Re: Snake Valley Agreement

Dear Governor Herbert:

The Washington County Water Conservancy District has a direct interest in ensuring peaceful relations between states that share water resources. Washington County shares water resources across state lines and is also highly dependent for its future prosperity upon the ability to acquire Colorado River Water, subject to the Colorado River Compacts, through the Lake Powell Pipeline Project. Accordingly, we are writing to express our support for the SNAKE VALLEY AGREEMENT FOR MANAGEMENT OF THE SNAKE VALLEY GROUNDWATER SYSTEM ("Snake Valley Agreement") now under public review. We strongly encourage you to take every available action to ensure that this Snake Valley Agreement is executed.

Attached are copies of two letters written to Governor Huntsman in 2005 and 2006, expressing our concerns about the efforts to prevent the negotiation and execution of a cooperative Snake Valley Agreement between the states of Utah and Nevada regarding the Snake Valley aquifer. The concerns expressed in those letters remain valid today. I would like to emphasize a few of the more salient points.

The Snake Valley Agreement recognizes certain facts that reveal the positive value of the terms of the Agreement. For example, the water that recharges the Snake Valley Groundwater Basin comes primarily from Nevada, there is excess unappropriated water in the basin that is available for appropriation under the laws of each state, and Southern Nevada Water Authority ("SNWA") has filed applications under applicable Nevada law. According to the best evidence available, of a total available supply of 132,000 acre feet per year ("afy"), only 62,000 afy has been allocated, leaving the balance to be allocated under the laws of each state as provided for in the Agreement.

More importantly, the Snake Valley Agreement provides protections for Utah water users that would not be otherwise available under the laws of either state. These protections include:

- A global plan for water use that ensures that Utah can continue to access water resources of the basin and limits Nevada from claiming all of the remaining water based upon the applicable law of prior appropriation
- An elaborate monitoring plan will be implemented to provide for gathering of data and sharing it with the public
- Water withdrawals in excess of 100 afy will be metered
- The states will work cooperatively, rather than each following applicable state law unilaterally without consideration of the other state's interests
- For new appropriation approvals in excess of 1,000 afy a Hydrologic Monitoring and Management Plan will be developed
- A portion of the 132,000 afy supply will be reserved from withdrawal until further scientific information is made available
- Prohibitions are established to avoid mining (overdrafting) of the groundwater, degradation of water quality or diminishment of the physical integrity of the basin
- A procedure is established to protect the existing permitted users from impacts of future development by SNWA including mitigation efforts such as paying for adding depth to wells or extra pumping costs arising from lowering of groundwater tables that can occur when aquifers are fully utilized to the extent of safe yield
- An appeal procedure is available to further protect water users
- A mitigation fund of at least \$3 million is established
- Protections are established for the Columbia Spotted Frog

None of these protections would be available to Utah water rights holders based upon established state law.

It is worthy of note that the water users of the state of Utah would not have the benefit of the Snake Valley Agreement, but for the passage of Public Law 108-424, which required the states to reach a Snake Valley Agreement (the "Act"). If this legislation, which was enacted through the efforts of Senator Reid of Nevada, were to be repealed, Utah would no longer be able to rely upon or obtain the added benefits listed above. Given the importance of the Snake Valley water development outlined below, I hope that those who are working so hard to undo many years of constructive negotiations will not be successful, because they may be those most harmed by the failure of this cooperative effort.

The Snake Valley water rights applications of the SNWA should be considered in historical context. The state of Nevada received an allocation of only 300,000 acre feet pursuant to the Colorado River Compact, far less than any other state. As a result of its limited allocation, followed by the subsequent urban development in southern Nevada, there has been pressure on the other Colorado basin states to accommodate more deliveries to Nevada from the Colorado River. While some accommodations have been made through water banking and exchanges, the

other six basin states, including Utah, have encouraged SNWA to undertake development of Nevada's intrastate water resources as a condition precedent to further accommodations from the other Colorado River basin states. This encouragement creates a reasonable expectation on the part of SNWA that the state of Utah would not unreasonably interfere with its efforts to obtain water rights through normal procedures under Nevada law. In fact, as outlined above, the state of Utah has obtained concessions from SNWA that reduce the rights it might otherwise have expected to enjoy under Nevada law.

Failure of the two states to reach a settlement apportioning their respective entitlements to the water in this groundwater basin will not make this matter go away. Snake Valley is an interstate body and each state is entitled to an equitable share. Absent an agreement, it appears Nevada may seek to repeal the requirement that the State Engineers reach an accord and perhaps repeal some of the other protections provided in the Act. If this were to happen, SNWA will undoubtedly request the Nevada State Engineer to take action of its Snake Valley groundwater applications. This could result in a drilling war in which the SNWA would undoubtedly be more aggressive. Further, if negotiations collapse, Utah may be faced with court litigation where Nevada seeks to have a court equitably apportion this resource between the states. This would result in time-consuming and very costly litigation with an uncertain result in the court. Traditionally, the parties are more effective in resolving such matters even when the parties reach an agreement where neither is fully satisfied with the results. Thus, it seems critical to Utah's public interest that negotiation be completed and the agreement executed by both states.

Finally, we believe that nobody benefits from rancorous disputes over water across state lines. Washington County can only benefit from continuance of the good will that has historically governed the relationships between states and water managers, working relationships that could be damaged if we diverge from sound management policy in accordance with applicable law and adopt positions influenced by highly publicized but inaccurate rhetoric generated by those with narrowly focused local interests. We hope to ensure that management of the Colorado and Virgin River systems continue to be performed through cooperative efforts, similar to the efforts culminating in and represented by the Snake Valley Agreement.

I encourage you to take any and every action available to you to ensure that the Snake Valley Agreement is executed without further undue delay. If you desire further information or I can be of any assistance to you, please do not hesitate to ask.

Very truly yours,

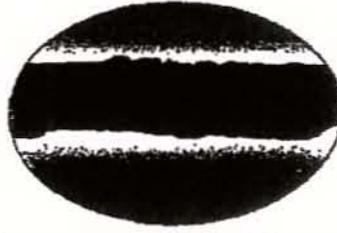

Ronald W. Thompson

Enclosures

Ronald W. Thompson
General Manager

Robertia McMullin
Secretary-Treasurer

Barbara G. Hjelle
*Assistant General Manager
Counsel*



**WASHINGTON COUNTY
WATER CONSERVANCY DISTRICT**

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June 8, 2006

Honorable Jon Huntsman, Jr.
Utah Governor's Office
Utah State Capitol Complex
East Office Building, Suite E220
PO Box 142220
Salt Lake City, Utah 84114-2220

Dear Governor Huntsman:

This letter is written to revisit the concerns expressed to you regarding the Snake Valley Water issues set forth in our letter dated October 12, 2005 (copy attached), and to delineate further the balance of interests which we believe supports the solutions we propose, as more fully set forth below.

As you are aware, the current situation in Utah, where it appears that little progress is being made towards an agreement with Nevada, may strain important relationships with our Nevada neighbors. Given our shared interests across a number of key issues –including along the Virgin River – I believe it is critical to work cooperatively.

We believe that this matter involves coming to a practical approach to apportionment of the water interests between the two states. There are numerous examples where two or more states claim an interest in the same interstate water resource. The United States Supreme Court has had opportunity to address this issue on a number of occasions. The Court has set forth the guiding principle that each state is entitled to a fair and equitable share of interstate water resource pursuant to the doctrine of "equitable apportionment."

This doctrine takes into account such matters as the existing rights in each state, the existing economies, future needs and such other matters to provide a basis for the equitable apportionment. While this doctrine has not yet been applied to a groundwater case, these considerations make sense and thus would likely apply.

The Court strongly favors the states negotiating their respective rights to the water source involved, rather than resorting to litigation. States may enter into an interstate agreement which would recognize the respective rights of each state and could provide for proper administration of the

Honorable Jon Huntsman, Jr.
June 8, 2006
Page 2

resource. Without such an agreement, the unfortunate situation arises that one state may simply move forward by approving water rights on its side of the border and thus allocate more than its equitable share of the resource, which is likely to make it more difficult to reach an agreement between the states.

For these reasons, we believe that the Snake Valley allocation should be resolved by agreement between the states.

In order to further elucidate our position, let's take a look at the hydrology of the Snake Valley aquifer.

The Snake Valley aquifer straddles the Utah/Nevada border and covers portions of Millard and Juab Counties in Utah. The Southern Nevada Water Authority ("SNWA") has filed applications to appropriate water from this aquifer to meet the growing needs of the Las Vegas area. This, of course, has created concern among the water users in Utah regarding their respective rights to water from this same aquifer.

Utah and Nevada are both appropriation doctrine states, and both prohibit mining of groundwater. Also, each state supports the principle of safe yield from the groundwater basin. Thus, these two states are well situated to negotiate an equitable apportionment of their respective rights to the Snake Valley aquifer. Congress recognized this when it passed the Lincoln County Conservation, Recreation and Development Act of 2004. This Act addresses the potential interstate groundwater issues relating to the Snake Valley aquifer, recognizing that nothing in it limits or supersedes existing rights under Utah or Nevada law. The statute appears to contemplate exactly the type of interstate agreement that would result in an equitable allocation of water between the two states and the management of the aquifer.

While we recognize that Utah needs to be aggressive and vigilant in seeking its fair and equitable share of the Snake Valley aquifer, it does not serve either state's interests to let the allocation issue fester. It would be unfortunate if Nevada has the impression that Utah is simply not willing to address the matter. This could lead to straining an important relationship which I know you have worked so hard to build.

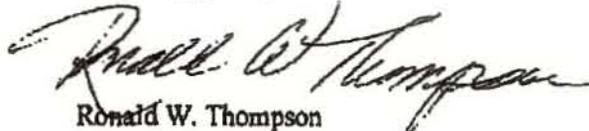
We believe it is in Utah's interest to proceed expeditiously with negotiations to resolve this issue, subject to completion of the necessary studies. Accordingly, we suggest that you authorize the Utah State Engineer and the Division of Water Resources, with oversight from the Governor's office, to proceed aggressively in discussions with the appropriate Nevada officials. The following points should be emphasized:

Honorable Jon Huntsman, Jr.
June 8, 2006
Page 3

- These discussions should be based on the hydrologic data currently available, while expediting any additional technical study that may be needed. Since this is a fairly remote aquifer, it is understandable that not all of the desirable hydrologic information is currently available for making a final decision regarding the apportionment of the water between the states. However, it should be possible to make at least a preliminary, conservative apportionment of a base amount of water that the state would be entitled to, with an agreement that this figure is not final and would be refined as additional hydrologic data is developed.
- This could be coupled with an agreement that only a conservative quantity of water would initially be allocated in Nevada taking into account the size of the basin in each state, the existing water rights in each state, and related matters.
- Any such preliminary agreement would be based on the expected safe yield of the aquifer, and each state would agree to prevent mining of the aquifer.
- An oversight or advisory committee could be created with a water user group from each state to monitor the situation and provide input regarding their concerns.
- There should be an agreement that, if impairment occurs by the use of water in the adjoining state, that impairment would be mitigated. Since Nevada is likely to be moving more aggressively in developing the resource than Utah, such an agreement should provide protection for Utah water users. It seems likely that Nevada would agree to this arrangement.
- The states should move forward to developing a comprehensive management plan for the basin that would be consistent with their respective interests and the protection of their water users.

We appreciate all you are doing for the State and are grateful for your attention to the water issues that are so critical to Washington County. We would be happy to discuss this matter with you in further detail at any time convenient to you.

Very truly yours,


Ronald W. Thompson
General Manager

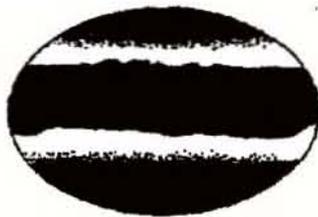
RWT/rm
Enclosure

cc: Neil Ashdown, Chief of Staff (w/encl.)
Lt. Governor Gary Herbert (w/encl.)
Mike Styler (w/encl.)

Ronald W. Thompson
District Manager

Roberta McMullin
Secretary-Treasurer

Barbara G. Hjelte
Counsel • Environmental Coordinator



**WASHINGTON COUNTY
WATER CONSERVANCY DISTRICT**

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October 12, 2005

Honorable Jon Huntsman, Jr.
Utah Governor's Office
Utah State Capitol Complex
East Office Building, Suite E220
PO BOX 142220
Salt Lake City, UT 84114-2220

Dear Governor Huntsman:

This letter is written to express our serious concerns about recent talk about the proposed transbasin diversion from ground-water basins in Lincoln and White Pine Counties in Nevada. It certainly appears that the discussion is being dominated by unreasonable fears, given the clear language of the "Lincoln County Conservation, Recreation, and Development Act of 2004" (the Act).

We cannot overemphasize the critical importance of maintaining a reasonable approach to this issue. If the efforts in Nevada are stymied by political hyperbole, unreasoned fears or unfounded opposition, comity among the states involved in the Colorado River Compact may be threatened and, more seriously, opposition to the Lake Powell Pipeline by Nevada and other states may endanger that project.

Let's keep in mind that the Act requires "a study to investigate ground water quantity, quality, and flow characteristics in the deep carbonate and alluvial aquifers of White Pine County, Nevada, and any groundwater basins that are located in White Pine County, Nevada, or Lincoln County, Nevada, and adjacent areas in Utah." The study must address relevant data; determine water storage, discharge and recharge in aquifers, including hydrogeologic and other controls; and depict aquifer systems, including the recharge and discharge areas. Until this study is done, there is insufficient information to determine what the impacts might be of a transbasin diversion project.

The legislation also requires that:

[p]rior to any transbasin diversion from ground-water basins located within both the State of Nevada and the State of Utah, the State of

Honorable Jon Huntsman, Jr.
October 12, 2005
Page 2

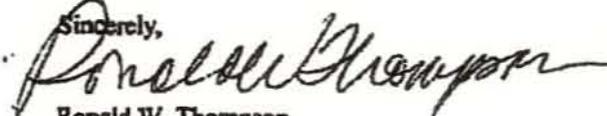
Nevada and the State of Utah shall reach an agreement regarding the division of water resources of those interstate ground-water flow system(s) from which water will be diverted and used by the project. The agreement shall allow for the maximum sustainable beneficial use of the water resources and *protect existing water rights.* [Emphasis added.]

It does not make sense for the irrational fears of 30 local farmers, prior to completion of the studies and agreements required by law, to generate unnecessary and ill-advised new policies or legislative initiatives, in particular when catering to such fears may imperil the Lake Powell Pipeline which will provide a critical water resource to up to half a million residents of Washington County as well as two other counties in southwestern Utah. The Lake Powell Pipeline will also allow the State to use a significant portion of its allocation of Colorado River Compact water and may yield potentially important environmental benefits in river flows.

The suggestion by some that this should be raised to a federal level is troubling because it would serve no useful interest to raise this to a level of a federal/state compact, rather than leaving it in the hands of people at the state level who have the expertise to understand these issues. We urge you to take every action necessary to allow the study to proceed in accordance with the Act, recognizing that the Act protects the broadest public interests in this matter and keeps the State of Utah in control of the outcome of this critical issue.

Thank you for your attention to this matter. If you have any questions, please do not hesitate to call on me.

Sincerely,



Ronald W. Thompson
General Manager

RWT:acj
Distribution List attached

cc: Washington County Commission
D. Larry Anderson
Mike Styler
Jerry Olds
Marcus Faust
Dallin Jensen
Fred Finlinson



<http://le.utah.gov>

Utah State Legislature

Senate • Utah State Capitol Complex • 320 State Capitol
PO Box 145115 • Salt Lake City, Utah 84114-5115
(801) 538-1035 • fax (801) 538-1414

House of Representatives • Utah State Capitol Complex • 350 State Capitol
PO Box 145030 • Salt Lake City, Utah 84114-5030
(801) 538-1029 • fax (801) 538-1908

September 16, 2009

Snake Valley Agreement
c/o Utah Department of Natural Resources
Division of Water Rights
1594 West North Temple, Suite 220
Salt Lake City, UT 84114

Dear Director Styler:

Thank you for the opportunity to submit comments on the proposed Agreement for Management of the Snake Valley Groundwater System (Agreement). As you know, our committee has been following this issue for the past few years and have considered multiple pieces of legislation to address it.

In August of 2006, committee members visited the Snake Valley area. We met with many citizens and listened to their concerns regarding the proposal to withdraw water from the Snake Valley. We consider this a critical issue, not only for the citizens within the Snake Valley area, but for the state as a whole.

In particular, we are concerned about the effect mining groundwater from the aquifer would have. Although Section 5.4 of the Agreement prohibits mining or overdrafting groundwater, the Agreement does not specifically address how mining would be determined and over what period of time.

Our committee is familiar with the controversy and difficulties associated with possible groundwater mining in other parts of the state and have visited the Beryl/Escalante Valley to witness and learn from these difficulties. It is challenging in Beryl Valley to tell exactly how much water is being mined or whether the drop in the water table is a local effect of adjacent wells. For example, there was a wide variety of water table readings between different wells that were tested.

Based on this experience, we request the addition of a few sentences in the middle of Section 5.4 of the agreement to include the following concept:

Before SNWA exports any groundwater from Snake Valley, the state engineers will establish and jointly agree upon:

- (1) the method that will be used to monitor and determine when groundwater mining is occurring;
- (2) the time period over which the mining determination will be made to distinguish mining from the natural fluctuation of the aquifer level;

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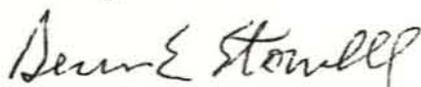
September 16, 2009
Page 2 of 2

- (3) the method that will be used to distinguish between groundwater mining, drought, and local interference between wells; and
- (4) the criteria that must be met before reductions in withdrawals are required.

We thank you for your consideration and respectfully request that you incorporate these suggestions into the Agreement.

Thank you for your efforts in this regard.

Sincerely,



Dennis E. Stowell, Senate Chair
Natural Resources, Agriculture,
and Environment Interim Committee



Roger E. Barrus, House Chair
Natural Resources, Agriculture,
and Environment Interim Committee

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CONFEDERATED TRIBES
of the
GOSHUTE RESERVATION

P.O. BOX 6104
IBAPAH, UTAH 84034
PHONE: (435) 234-1138
FAX: (435) 234-1162

**RESOLUTION OF THE GOVERNING BODY OF THE
CONFEDERATED TRIBES OF THE GOSHUTE RESERVATION**

RESOLUTION NO: 09-G-95

**Opposition to the Agreement between the State of Utah and the State of Nevada
regarding the Snake Valley Water Agreement.**

- WHEREAS, the Goshute Business Council is an Indian organization as defined under the Indian Reorganization Act of June 18, 1934, as amended and primarily operates and functions in accordance with terms and conditions of a Tribal Constitution and By-Laws, approved November 25, 1940, as amended and other duly adopted and approved Tribal Ordinances, Codes and Guidelines;
- WHEREAS, the Confederated Tribe of the Goshute Reservation is located partially within western Utah and partially within eastern Nevada, adjacent to the Snake Valley, and
- WHEREAS, the states of Utah and Nevada have entered into an agreement allocating the water rights for Snake Valley between Utah and Nevada, and
- WHEREAS, the Goshute Tribe has a vested interest in the Snake Valley Water Agreement as it will affect the Tribes water rights, and
- WHEREAS, Despite the fact that two members of the Confederated Tribes of the Goshute Reservation serve on the Snake Valley water board, the Goshute Tribe was not consulted by either the state of Utah or Nevada in reaching its agreement allocating the water in Snake Valley.

NOW THEREFORE BE IT RESOLVED THAT, the Confederated Tribes of the Goshute Reservation Business Council by passage of this Resolution adamantly oppose the Snake Valley Water Agreement entered into between the states of Utah and Nevada and for their failure to cooperate and consult with the independent and sovereign tribal nations affected by this agreement.

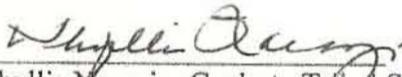
NOW, BE IT FURTHER BE RESOLVED THAT, the Goshute Business Council strongly urge the Governor of Utah to deny approval of the Snake Valley Water Agreement to protect the Utah natural resources and to protect the rights of the citizens of Utah.

C-E-R-T-I-F-I-C-A-T-I-O-N

I, the undersigned, as Chairman of the Goshute Business Council for the Confederated Tribes of the Goshute Reservation, hereby certify that the Goshute Business Council is composed of five (5) members of whom _____ (), constituting a quorum, were present at a meeting called and held on the 21st day of August, 2009, and that the foregoing resolution was adopted and approved by an affirmative vote of 4 FOR; 0 AGAINST; 0 ABSTAINED pursuant to the authority contained under Article VII, Section 1(a) of the Tribal Constitution and By-Laws, approved November 25, 1940.


Rupert Steele
Chairman Goshute Business Council

ATTEST:


Phyllis Naranjo, Goshute Tribal Secretary



United States Department of the Interior

OFFICE OF THE SOLICITOR
Pacific Southwest Region
2800 Cottage Way
Room E-1712
Sacramento, California 95825-1890

IN REPLY
REFER TO:

October 2, 2009

Via FederalExpress Mail and Email

Snake Valley Agreement
c/o Utah Department of Natural Resources
Division of Water Rights
1594 West North Temple, Suite 220
Salt Lake City, Utah 84114

Snake Valley Agreement
Nevada Department of Conservation and Natural Resources
Division of Water Resources
901 South Stewart Street, Suite 2002
Carson City, Nevada 89701

Re: Comments on the Agreement for Management of the Snake Valley Groundwater System between the States of Nevada and Utah (NV/UT Agreement) and the Snake Valley Environmental Monitoring and Management Agreement between the State of Utah and the Southern Nevada Water Authority (UT/SNWA Agreement).

To Whom it May Concern:

This letter presents comments from the United States Department of the Interior Bureaus (DOI Bureaus), Bureau of Land Management, Fish and Wildlife Service and the National Park Service, on the subject agreement.¹ DOI Bureaus commend the two states on the release of the Draft Agreement for Management of Snake Valley Groundwater System and support the concept of interstate coordination of groundwater resources. Our comments raise certain questions and

¹ The Bureau of Indian Affairs and the Confederated Tribes of the Goshute Reservation and other affected Tribes are still reviewing the Agreement and will provide their comments in a separate letter at a later date.

observations that we would like to bring to the States' attention for your consideration as you finalize the agreement. Below we raise certain general questions and observations and have provided additional more detailed comments in the attachment to this letter.²

In our review of the NV/UT Agreement, it is not clear how the Agreement addresses protection of non-consumptive beneficial uses of water that are not covered by a water right but that are none-the-less protected by state law. These beneficial uses of water include those necessary to protect various species that rely on a particular water source that could be impacted by the withdrawal of groundwater. In our reading of the NV/UT Agreement, the Agreement protects "Existing Permitted Uses" which are limited to consumptive uses of groundwater in Snake Valley Groundwater Basin pursuant to water rights granted or recognized by either State.³ If this reading is correct, the Agreement does not provide protection to those beneficial uses of water that are not covered by a water right that occur in one state and may be adversely affected by an appropriation in the other state.

The Agreement provides that the Nevada State Engineer will continue to address such adverse impacts to water rights in Nevada, which indicates that water-dependent resources in Nevada will continue to be protected under Nevada Law for appropriations in Nevada.⁴ What is not clear is whether the Agreement adequately addresses impacts to such water-dependent resources in Utah that may be impacted by a Nevada appropriation or water-dependent resources in Nevada that may be impacted by a Utah appropriation.

Additionally, we note that the NV/UT Agreement focuses on mitigating for adverse impacts once they occur instead of focusing on avoiding such impacts before they occur. For example, Section 6 of the Agreement requires SNWA to mitigate for an injury, not take actions to avoid such injury. This limitation in the NV/UT Agreement does not seem consistent with the intent of Appendix C of the Agreement, the UT/SNWA Agreement that provides for the monitoring and management of the Snake Valley groundwater system. In Section 1 of the UT/SNWA Agreement, the Parties agree to include early warning indicators in the monitoring program to indicate potential effects to the hydrologic, biologic and air resources caused by SNWA's pumping and to manage the system to initially avoid actions that cause the undesired effect,

² We understand that these comments will be considered by both Nevada and Utah even though provided after the stated deadline for comments of September 30, 2009. Please see attached email message sent to both States on September 30, 2009.

³ "Existing Permitted Uses" also expressly includes the water rights for the Fish Springs National Wildlife Refuge, although the specific amount of water allotted to the Refuge under the NV/UT Agreement is less than the total quantity of water rights held by the Refuge.

⁴ Under Nevada law, the Nevada State Engineer may not approve an application for the appropriation of groundwater if he determines that the appropriation, among other factors "threatens to prove detrimental to the public interest" and with respect to inter basin transfers of groundwater, that such appropriation is not "environmentally sound as to the basin from which water is exported." See NRS 533.370. Utah has similar provisions regarding the approval of applications to appropriate water. See Utah Code 73-3-8. These provisions of state law provide for the protection of water-dependent resources that are not covered by a water right but that may be adversely affected by a proposed appropriation in the state in which the resource is located.

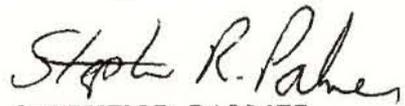
second to minimize the effect and last to mitigate. It is not clear if this important management program is carried through to the NV/UT Agreement to provide the necessary protections to existing water rights and water-dependent resources. The concept of "early warning" to avoid adverse impacts is especially critical in a groundwater system such as Snake Valley. We believe it is important to consider whether the concept of "Available Groundwater Supply" should be an absolute quantity that is available for consumptive use; or rather should it include the concept of avoiding adverse impacts to existing uses, even though this may result in less water being available for appropriation than the amount identified in the Agreement.

It is not clear to us whether the UT/SNWA Agreement includes monitoring, early warning indicators and management of responses for any adverse effects from SNWA's pumping on the hydrologic, biologic and air resources in both states, including those resources managed by or under the jurisdiction the DOI Bureaus. The Agreement does not appear to recognize that many of the "key areas of biological concern" and related resources and water rights are located on federal land. Because many of these resources are located on federal land, we recommend that representatives of the DOI Bureaus be regular standing members, although non-voting members, of the Technical Work Group. We also recommend that the DOI Bureaus be afforded the opportunity to participate in the numerical modeling described in Section 8.1. In addition, we recommend that the model development and use include oversight by the two states and other stakeholders, peer review and public comment and not preclude the use of other models that are suitable for analysis of the potential impacts from SNWA's pumping.

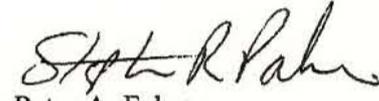
We also are unclear why the Tier I Monitoring Area was not expanded to include southern Spring Valley and the Interbasin Monitoring Zone of Hamlin Valley which are up gradient of and may be affected by SNWA pumping sooner than more distant portions of Snake Valley and has not integrated the monitoring in Snake Valley with the ongoing monitoring program for Spring Valley. It would be helpful if the Agreement addresses how this integration will be accomplished. Further, there appears to be an oversight in the Agreement in that it does not address monitoring of phreatophytic shrublands and areas containing saline and sodic soils. Monitoring of these resources is important because the loss of such vegetation and exposure of the soils could adversely affect the air quality which is an expressed concern in the Agreement.

We request that the States consider including in its expression of cooperation as provided in Section 4.8 of the NV/UT Agreement, to work cooperatively to manage the Snake Valley hydrologic basin and adjacent basins as a whole and consider related cumulative effects of that management. The DOI Bureaus welcome greater participation in the ongoing monitoring and management activities related to Snake Valley Groundwater Basin as referenced in these comments. We are pleased that the two states are diligently working to put into effect an agreement to address the beneficial use of water in Snake Valley and ask that you consider our concerns and comments in the process. Please contact, the undersigned with any questions regarding these comments.

Sincerely,



STEPHEN R. PALMER
Office of the Regional Solicitor
U.S. Department of the Interior
2800 Cottage Way, Room E-1712
Sacramento, CA 95825
Telephone: (916) 978-5683
Telefax: (916) 978-5694
Attorney for Bureau of Land Management
and U.S. Fish and Wildlife Service

For - 

Peter A. Fahmy
Office of the Solicitor
Division of Parks and Wildlife
Lakewood Unit
U.S. Department of the Interior
12795 W. Alameda Parkway, Suite 155A
Lakewood, CO 80228
Attorney for National Park Service

Attachments

Attachment to October 2, 2009 Letter- Expanded DOI Bureaus Comments on Agreement for Management of the Snake Valley Groundwater System

Comments on Agreement between Nevada and Utah

Page 1:

The following Agreement language could be contradictory:

1.1.b. In the case of Existing Permitted Uses for which the point of diversion is a spring, a reduction in spring flow to an amount less than the Existing Permitted Use, and that can be demonstrated to be *less than* the spring's historical supply. (*Italics added.*)

2.8 Utah acknowledges that the safe yield doctrine that governs Groundwater appropriation in Utah generally allows for the appropriation of Groundwater in a manner that is sustainable and *results in reasonable amount of drawdown* in the Groundwater aquifer. Such appropriations necessarily impact the existing hydrological system and captures discharge available to phreatophytes, streams, and natural lakes. (*Italics added.*)

Please clarify "historical supply" as it is used in 1.1.b. Specifically, does historical supply apply to instantaneous discharge or to annual volume? We are concerned discharges could be decreased for months at a time, which in turn may cause habitat destruction, but the appurtenant water rights may not be considered injured if the total yearly volume equals total annual historical use.

Page 2:

Please clarify that the water rights appurtenant to Fish Springs National Wildlife Refuge are allotted 20,000 acre-feet per year of the 55,000 acre-feet per year consumptive use of groundwater in Utah, which is what we interpret pursuant to 1.6 of the Agreement and the Sources and Uses spreadsheet posted on the Utah Division of Water Rights web page. Pursuant to 2008 communication from the Utah Division of Water Rights, Fish Springs NWR was allotted 25,000 consumptive acre-feet per year.

Page 3:

Section 2.5 in its discussion of the factors involved in accurately determining "Available Groundwater Supply" inadvertently neglects to include data about groundwater discharge.

Page 4:

Section 3.2 states the best Available Groundwater Supply value is 132,000 acre-feet per year. Section 3.1 states revision of this number may occur based on additional information. Please include in this section the method and procedure for this revision, as additional modeling is being performed by SNWA and United States Department of the Interior contractors. The DOI contractors anticipate initial model construction and simulations to be completed by December 2009. Currently, DOI contractors have some input values different from BARCAS, including estimates of Groundwater Evapotranspiration discharge values.

Section 4.2 allows for 24,000 acre-feet per year to be reserved. Subtraction of the amount reserved, 24,000 acre-feet per year, lowers the Available Groundwater Supply to 108,000 acre-feet per year. However, this value is still up to 28,000 acre-feet per year higher than prior published reports. Thus, we request this section include a discussion on how the value of 24,000 was selected. We have considered that the 24,000 acre-feet per year value may be due to the

large statistical uncertainty associated with the BARCAS estimate of groundwater evapotranspiration; however, the value does not appear to correlate to anything we can find in BARCAS.

Also, the reserved water shall not be granted by the State Engineers until it can be reasonably demonstrated that additional groundwater can be safely and sustainably withdrawn from Snake Valley and Allocated and Unallocated uses will not be unreasonably affected. However, the Nevada State Engineer's decision on Spring Valley pumping also orders a similar "ratcheting-up" of withdrawals. Specifically, after 10 years of pumping 40,000 acre-feet per year from Spring Valley, the Nevada State Engineer may allow SNWA to pump an additional 20,000 acre-feet per year from Spring Valley, finally reaching a total of 60,000 acre-feet per year. Thus, we suggest that the Agreement address how the Spring Valley and Snake Valley "ratcheting-up" scenarios are to be integrated. Specifically, if SNWA is allowed to pump up to 60,000 acre-feet per year from Spring Valley, will monitoring under the Spring Valley Stipulation occur for some length of time after this increase before there is any consideration of granting groundwater rights in the Reserved category in Snake Valley?

The allocation appears to overlook concerns with the distribution of pumping and associated impacts. More than 80% of water deemed unallocated or reserved has been assigned to Nevada, most of which will likely be withdrawn from the small part of Snake Valley defined by SNWA's proposed points of diversion between Baker and Big Spring. Intense pumping in this area likely will capture most of the recharge from the Snake Range that is the principle source of water for remaining areas of the valley. This seems to be inconsistent with the stated goal in 4.8 (f) that the States will work cooperatively to "manage the hydrologic basin as a whole."

Page 5:

We suggest Section 4.5 be re-written in order to include data which are not necessarily associated with groundwater withdrawals pursuant to water rights, such as monitoring data from springs and other groundwater discharge sites. We suggest:

The States agree that it is critical to incorporate monitoring data into a database on a timely basis to facilitate determinations of the Available Groundwater Supply and other work of the Technical Working Group (TWG) described in Appendix C. Both States agree to cooperate on data gathering and data sharing to better understand the geology and hydrogeology and the Available Groundwater Supply of Snake Valley. Data made available to the public and members of the TWG through the database should include groundwater level data from monitoring wells, measurements of spring discharge, and other information which may facilitate a better understanding of the geology and hydrogeology and the Available Groundwater Supply of Snake Valley. Included in this database should be information describing groundwater withdrawals and consumptive use (estimates compiled by the State Engineers) for water rights of record in Snake Valley and adjacent basins, or references for the latter.

Page 7:

Sections 6.3 states SNWA will initially have full authority to determine Adverse Impact to Existing Use and offer mitigation to the permit holder. We suggest there be a means to keep the State Engineer of Utah informed of conflicts immediately as they arise.

Section 6.3 also discusses use of the Interstate Panel to determine degree of harm and mitigation in the case of an Adverse Impact. In the case of federal or tribal real-property rights, however, it may not be appropriate or legally correct to have State representatives determine the outcome of a reduced federal or tribal real-property right.

Sections 6.3.a. and 6.3.b should include “hydrogeology” and “data and information from Spring Valley development, monitoring, and analyses” as information types.

Page 9:

Section 6.4 is silent on whether federal agencies, as holders of “Existing Permitted Uses” would be eligible to receive funds from the mitigation fund established by SNWA when those water rights are impacted. As one of the largest individual holders of water rights in Snake, BLM could potentially be asking for a sizable chunk of those funds. Others in Snake Valley may assume that those funds are intended for distribution to private parties who don’t have the resources available to a federal agency to address water supply problems.

Section 6.5 discusses “appropriate mitigation.” The paragraph should be expanded to state that the Interstate Panel will solicit input from applicable federal and tribal governments in order to determine what may be required to mitigate Adverse Impacts to federal and tribal trust resources.

Section 6.7 allows for the SNWA applications to be held in abeyance until at least September 1, 2019. We request that the Agreement also require SNWA to file their Changes in Point of Diversion at least 18 months before the hearing in order for us to produce more accurate modeling scenarios.

Comments on Appendix C to Nevada/Utah Agreement

Page 2

Page 2, Section 1 states the purpose of the Agreement is to establish monitoring plans, to define early warning indicators, and to manage responses for any effects SNWA groundwater pumping in Snake Valley may have on hydrologic, biological, or air resources of the State of Utah. Likewise, the activities of the Technical Working Group (TWG) and Management Committee are not intended to address the potential impacts of SNWA pumping on Nevada resources (those of Snake Valley, Nevada, and southern Spring Valley).

DOI agencies request the Agreement’s purpose be expanded to state the purpose of the agreement is to establish monitoring plans, to define early warning indicators, and to manage responses for any effects SNWA groundwater pumping in Snake Valley may have on hydrologic, biological, or air resources of the State of Utah and of federal and tribal trust resources in Utah and Nevada.

Page 4

Section 3.2.1 states the Technical Working Group is to be comprised of two representatives from SNWA and three representatives from the State of Utah. In addition, the SNWA and Utah may invite additional staff or consultants. Finally, SNWA and Utah may mutually agree to invite a

representative of the Nevada and Utah Engineers' Offices as well as other non-SNWA and non-Utah entities to assist. We suggest a member of the Nevada Department of Wildlife be added as well and that there be two members from the Utah Division of Wildlife Resources to balance the additional Nevada representative. We suggest this as Page 4, Section 4.4 states "the States agree to *jointly* identify acres of concern including, but not limited to.....wetlands, springs, and other riparian dependent resources that could be affected....." (Italics added.) As the TWG is currently proposed, there is no Nevada State representation for wildlife.

We also suggest the Agreement acknowledge the Monitoring Area (both Tier 1 and Tier 2) includes Key Areas of Biological Concern and resources that are on federal land (BLM, FWS, or NPS managed). Additionally, one of the primary goals of environmental monitoring is to try to prevent the need to list additional species under the Endangered Species Act. Coordination with the federal bureaus is important to ensure that issues with monitoring plan design, data analysis, data interpretation, and appropriateness of specific management and mitigation actions is coordinated early with the federal government, which is the largest landowner in this area. The monitoring and mitigation plans may not adequately address water rights and natural resource issues on federal lands. Representatives from DOI bureaus are involved with similar monitoring efforts in adjacent basins and can help coordinate efforts to ensure consistent approaches are utilized and regional-scale analyses are conducted. The federal bureaus request that they be regular standing members, although non-voting members, in the TWG, and other technical working groups that may be established under the agreement.

Page 5

Page 5, 4.1, Monitoring Area Description refers to the Area of Interest as the Upper Great Salt Lake Desert Flow System. We request the Upper Great Salt Lake Desert Flow System be defined in the agreement, and the Area of Interest include Spring Valley, particularly southern Spring Valley.

Pages 5 and 6

Section 4 discusses Monitoring Objectives. We note the Tier 1 monitoring area includes a large part of Snake Valley that is *within Nevada*, and yet there is *no biological monitoring proposed in Nevada other than what will be incorporated from the Spring Valley Stipulation*, and this only includes monitoring of *extreme southwest Snake Valley along Big Springs Creek*.

Additionally, many of the identified monitoring sites in *Utah* are *not early warning sites* (i.e., monitoring at these sites will document impacts to resources of concern, but will not serve as early warning). One of the primary objectives of the monitoring program is to provide early warning (through the selection of early warning indicators and early warning sites) of potential effects to Key Areas of Biological Concern in Utah. Some early warning may be provided through Spring Valley stipulation monitoring along Big Springs Creek/Lake Creek; however, there are several Points of Diversion that are north of Big Springs and there may be other areas in Nevada that could be monitored to provide early warning of impacts to Utah (e.g., *phreatophytic shrublands/wetland/meadow area in the Baker, Nevada area*). The monitoring program, and the

ability to meet the goal of providing early warning, is potentially incomplete without consideration of additional monitoring on the Nevada side of Snake Valley.

We cannot stress enough the importance of a complete and robust early warning monitoring network. Bredehoeft and Durbin, 2009, in *Ground Water Development – The Time to Full Capture Problem*, Ground Water, 2009, discuss the delayed response between the observation of an impact and its maximum effect as well as the long lag time between changing stress on a system (e.g. a reduction in pumping) and seeing an impact at a distant site (the recovery of groundwater levels). We are concerned if monitoring is limited to primarily targets sites of high water-right or species value, then by the time impacts are identified at those sites and suspect pumping is attenuated or ceased, the drawdown perturbations will still continue for some length of time and Adverse Impacts will further intensify.

In general, there appears to be little provision for monitoring of phreatophytic shrublands. Tier 1 biological monitoring includes sampling of phreatophytic vegetation south of Gandy Salt Marsh, and it is unclear if this means wetlands, meadows, or phreatophytic shrubland. Tier 2 biological monitoring does not specifically mention monitoring of vegetation communities or other habitat components for species of greatest conservation need. These valleys are dominated largely by phreatophytic shrublands. The agreement appears to overlook the potential impact of groundwater diversions on saline and sodic soils. If these soils are dried out, then current vegetation may be lost and it may not be possible to revegetate those soils with other plant communities. The result could be increased air particulate pollution. The agreement could include an objective to map all saline and sodic soils in Snake Valley, and to conduct studies concerning the response of those soils and their attendant vegetation when groundwater levels decline. There are several isolated locations in Snake Valleys where such soils have been dewatered, and these locations could provide study sites. In addition, it would be advisable at this time to install instrumentation on representative saline and sodic soils that can establish a baseline for soil moisture levels and soil chemistry. This is a large omission, especially considering the concern for impacts to air quality that might result by loss of this vegetation community type.

Finally, we request greater clarification as to what constitutes reasonable and unreasonable effects and reasonable and unreasonable mitigation. The Parties acknowledge the perennial yield doctrine that governs groundwater appropriation in Nevada. This doctrine allows for appropriation of groundwater which normally discharges through ET, spring discharge, or underflow to or from other basins. Yet, one of the goals of the Agreement is to establish mechanisms to counter groundwater withdrawal effects by initially avoiding actions leading to the effect, secondly, minimizing effects, and thirdly, mitigating the effects. We are still unclear how these two ideas will mesh. Is the Agreement stating any effect to Utah resources is unreasonable and must be avoided, minimized, or mitigated? Will the TWG be establishing criteria for what is a reasonable versus an unreasonable effect?

Page 10

Section 7.2 discusses hydrologic data reporting. Whereas SNWA should be responsible for developing and maintaining a shared-data repository and annual data reporting; TWG members, including SNWA members, should jointly or separately provide interpretations of monitoring and

other data, including the contouring of measured groundwater levels, preparation of water-level change maps, and any numerical groundwater flow model simulations or other evaluations of potential impacts or the efficacy of mitigation options. Such joint interpretations will relieve concerns of bias.

Page 11

Section 8.1 discusses regional groundwater flow numerical modeling. Whereas SNWA should be responsible for maintaining and updating at least one regional numerical groundwater flow model for the purposes of integrating and interpreting available information/data, anticipating potential impacts, and evaluating the efficacy of mitigation options, they should not be the sole operators of such a model. That is, the model maintained by SNWA should be readily available to other members of the TWG for use in performing analyses and providing the results of analyses to the Management Committee. Additional provisions should be specified for oversight, peer review, and public comment. Experience with other modeling efforts has shown these items are important in reducing unintended bias and gaining stakeholder confidence in model output. More important, other numerical groundwater flow models which are deemed suitable for analysis by one or more TWG members should also be used to the extent available or developed. Input and output files for these additional models/simulations should also be posted by SNWA on the shared-data exchange site for use by all members. Language to the effect that 'SNWA shall maintain, update, and operate an agreed-upon numerical groundwater flow model (or even several models), in cooperation with the TWG' conveys that modeling will be the sole domain of SNWA and should be amended.

Section 8.2 discusses ecological modeling. The TWG will evaluate the utility of ecological modeling within Snake Valley *during the "Initial Period"* (i.e., prior to start of the baseline period) based on the success of ecological modeling efforts being conducted in Spring Valley. However, ecological modeling in Spring Valley has yet to be approved by the management team for the Spring Valley Stipulation and we are unsure when such an effort will occur. If Spring Valley ecological modeling does occur, development and a complete understanding of its utility may not be realized during the "Initial Period" for Snake Valley. Thus, we suggest the wording be changed so that ecological modeling is not contingent upon the Spring Valley modeling.

Also, we suggest wording be added which commits SNWA to fund and maintain an ecological model throughout the entire Operational Period. In addition, SNWA is only committing \$500,000 to this effort during the baseline period. This amount of funding may not be sufficient to create a landscape level model that couples to the groundwater flow model nor maintain it over the baseline data-collection period.

Also, as in the case of data interpretation and the groundwater numerical model, SNWA should be responsible for maintaining any ecological model(s) on a shared-data exchange site, but they should not be the sole operators of such models.

Finally, please provide a definition for the Section 8.2 reference to a "sufficiently resolved hydrologic model."

USFWS comments appurtenant to Appendix 1

Page 2

Section 1.2 and its description of Tier 1 biological monitoring is confusing. It only mentions monitoring phreatophytic plant communities at one site (Gandy Salt Marsh), but vegetation could be monitored, if it is selected as a Key Ecological Attribute, to track habitat condition relative to SNWA groundwater development in other areas. It needs to be made clear that vegetation monitoring at other sites will occur (springs, wetlands, meadows), as this is more likely to be an early warning indicator than the monitoring of vertebrate species, and is more easily tied to impacts from groundwater withdrawal than population fluctuations in some vertebrate species, such as amphibians.

Also, Table 1.1 states that the California floater in Pruess Lake is being monitored as part of the Spring Valley Stipulation. This is not true. If it is important to monitor this species at Pruess Lake, it should be added in to the Snake Valley plan. In fact, there is no monitoring of any kind proposed for Pruess Lake under the Spring Valley Stipulation biological monitoring plan.

USFWS comments appurtenant to Appendix 2:

Page 1

The Tier I Monitoring Area should be expanded to include southern Spring Valley and the Interbasin Monitoring Zone of Hamlin Valley, which are upgradient of and may be affected sooner by SNWA pumping than some more distant portions of the Tier I/Snake Valley Monitoring Area. Whereas hydrologic data collection in the Interbasin Monitoring Zone of Hamlin Valley and southern Spring Valley is already provided for under the SNWA-DOI Spring Valley Stipulation, these data should be considered part of the Tier I dataset under this agreement and incorporated in interpretations. That is, these data will be collected in addition to that described in Section 1.1.1.2. Data within this expanded Tier I Monitoring Area should be interpreted by the TWG to implement the agreement.

The hydrologic monitoring plan may not adequately address water rights and natural resources on Federal lands. For instance, BLM holds water rights on springs (such as Kane Spring (Utah water right 18-406) and Needlepoint Spring (Utah water right 18-571)) that are in close proximity to proposed points of diversion. Such springs should be included in the monitoring plan. Including representatives of DOI bureaus on technical working groups and/or provisions for formal review of the monitoring plan designs by DOI bureaus would help ensure proposed monitoring adequately address issues on federal lands.

Page 4

Page 4, Section 1.1.2.1 refers to installing up to three monitoring wells in each of the Tier II hydrographic areas. For clarification, it would be helpful to state the areas are the northern portion of Snake Valley, Fish Springs Flat, Tule Valley, Wah Wah Valley, and Pine Valley.

USFWS comment appurtenant to Appendices 1 and 2

We request Appendices 1 and 2 add discussion regarding how the Snake Valley monitoring program will integrate with the Spring Valley monitoring program established under the DOI-

SNWA Spring Valley Stipulation. It is unclear how the monitoring being done under the Snake Valley agreement will ultimately integrate with the monitoring effort being undertaken for Spring Valley under the DOI-SNWA agreement. The Spring Valley Stipulation was not intended to cover Snake Valley withdrawals. Now that progress is being made to withdraw Snake Valley water, we feel there is a need for a more integrated, holistic approach to monitoring of the Upper GSLDFS inclusive of Spring Valley as there is groundwater moving from southern Spring Valley to southern Snake Valley via Hamlin Valley.

Also, Big Springs Creek/Lake Creek is identified as a conservation target under the Spring Valley stipulation. Any recommendations for management actions under the Agreement that has ramifications for this area should be coordinated with the technical working groups established under the Spring Valley Stipulation.

Print View

From: Michelle Hofmann <hofmann2000@comcast.net>
To: <snakevalley@utah.gov>
Date: Wednesday - September 30, 2009 8:16 PM
Subject: Utah Moms for Clean Air Public Comments Snake Valley Water Agreement

September 30, 2009

Utah Moms for Clean Air hereby submits its comments and objections to the proposed Agreement for Management of the Snake Valley Groundwater System. We submit that the agreement in its current form is insufficient to protect the health of Utahns and should be rejected.

Prior to any agreement, the State of Utah should undertake comprehensive studies of the potential impacts of export pumping on the ecological systems of Snake Valley, to determine the extent that any such draw would result in the drying of surface water of the Snake Valley, and forecast the resulting loss of vegetation and increase in airborne dust. The State's experts should determine, as accurately as possible, the potential for an adverse effect on Utah's air quality and human health.

If such studies conclude an export of water from the Snake Valley is reasonably expected to diminish Utah's air quality, the State of Utah should reject an agreement. If the studies conclude that some water may be safely extracted from the Snake Valley without adversely affecting Utah's air quality, only then should the State of Utah negotiate an agreement with the State of Nevada. Any agreement must contain stringent monitoring requirements and require that groundwater extraction will cease if adverse effects occur. The agreement must also provide for adequate security from the State of Nevada to provide for remediation of any adverse effects.

The lack of conservation mandates is of significant concern. Las Vegas consumes significantly more water per capita than other dry southwestern cities. Allowing Las Vegas to satisfy its water needs from dry rural areas hundreds of miles away simply encourages unsustainable growth that will lead to more water needs. Any agreement should require that Las Vegas more aggressively implement water conservation measures.

1. The Agreement is Premature, and Is Based on Unreliable and Incomplete Data

Section 301(e)(3) of the Lincoln County Conservation, Recreation, and Development Act of 2004, Pub. Law 108-424, provides:

Prior to any transbasin diversion from ground-water basins located

within both the State of Nevada and the State of Utah, the State of Nevada and the State of Utah shall reach an agreement regarding the division of water resources of those interstate ground-water flow system(s) from which water will be diverted and used by the project. The agreement shall allow for the maximum sustainable beneficial use of the water resources and protect existing water rights.

The State of Utah is not required to enter into an agreement with Nevada at this time, or at any specific time for the division of Snake Valley water. Rather, no water may be pumped by Nevada prior to an agreement.

As no time is required for an agreement, and indeed, the proposed Agreement delays until 2019 the time the Southern Nevada Water Authority (SNWA) may apply to draw water from the Snake Valley, the State of Utah should delay any agreement in order to spend the time necessary to comprehensively study the issue, and enter into an agreement only if it protects Utah's interests.

The states acknowledge there is incomplete information to determine the available groundwater supply in Snake Valley (Section 2.4), yet the proposed Agreement assumes the availability of 132,000 acre-feet per year and divides it between Utah and Nevada. (Sections 3.0, 4.2). The 132,000 AFY is derived from the BARCASS Study estimate of Snake Valley water discharge, which number is higher than any previous estimate. Numerous other studies estimate the discharge at 105-110,000 AFY. The high BARCASS number is subject to a confidence level of only 67%. Thus, the 132,000 AFY estimate of water availability in BARCASS is likely greatly overestimated. Utah should not accept this inflated number as a baseline for an agreement.

Further, BARCASS states that the recharge to the Snake Valley was only 110,000 AFY during this period. This appears to indicate the water table is already dropping, a situation that must be studied further prior to any agreement, and which would be exacerbated by any export pumping. The U.S. Geological Survey has cast doubt on a method of calculating available water by simply specifying that ground-water withdrawal should not exceed the rate of natural recharge. This "Water-Budget Myth" is an oversimplification of the information that is needed to understand the effects of developing a ground-water system. As human activities change the system, the components of the water budget (inflows, outflows, and changes in storage) also will change and must be accounted for in any management decision. Therefore a predevelopment water budget by itself is of limited value in determining the amount of ground water that can be withdrawn on a sustained basis. U.S. Geological Survey, Sustainability of Ground-Water Resources, Circular 1186.

According to the U.S. Geological Survey analysis, assuming available water even at the lower figure of 110,000 AFY may lead to unsustainable results. Assuming that 132,000 AFY are available is simply unreasonable.

The possibilities of droughts and climate change must also be considered in formulating long-term groundwater management plans. A collection of 19 climate models predict that the southwestern United States will dry significantly in the 21st Century, a transition that may already be under way. Seager, R. et al., 2007, Model Projections of an Imminent Transition to a More Arid Climate in Southwestern North America, Science, Vol. 316. no. 5828, pp. 1181 - 1184, May 2007. The forecasts show less precipitation and higher temperatures that will stress the already dry southwest.

Such drought and climate change may be evidenced by the fact that water levels in the Snake Valley already appear to be declining, as demonstrated by BARCASS's estimates that 132,000 AFY is discharged from Snake Valley while only 110,000 AFY was recharged in the same period.

The proposed Agreement also fails to account for a double counting of water resources. BARCASS indicates 49,000 AFY flows from Spring Valley in Nevada to the Snake Valley. The Nevada State Engineer has authorized SNWA to pump 40,000 AFY from the Spring Valley, which amount will be increased after ten years to 60,000 AFY. That pumping will necessarily affect the water flowing into Snake Valley, and will likely decrease the available discharge from Snake Valley.

2. The Agreement Would Allow Unsustainable Groundwater Drawdowns that May Severely Affect Utah's Air Quality.

The groundwater table in the Snake Valley and adjacent basins is close to the land surface throughout much of the area, and surfaces through springs, seeps, and wetlands. The water table supports soil-binding vegetation throughout the region. The current use of groundwater by farmers and ranchers in the Snake Valley basin results in discharge within the basin, thus supporting recharge of the groundwater system.

Even so, local use of the Snake Valley water resources by farmers and ranchers has dried some riparian areas and springs. Residents have reported that the water table has receded in recent years, and some residents of Snake Valley have had to drill new wells. (See statements of C. Garland, Callao, UT; G. Nielson, Delta, UT; A. Roper, Delta, UT.)

The proposed Agreement would allow groundwater pumping on a vast scale, for export outside the Snake Valley basin, hundreds of miles to Las Vegas. This export of Snake Valley water would upset the recharge to the groundwater system and will result in a one-for-one loss of water available for recharge. If export pumping from a water system continually exceeds water capture, water levels will never stabilize and the system will continue to be depleted. Bredehoeft, J. and Durbin, T. 2009, Ground Water Development "The Time to Full Capture, Ground Water, Vol. 47, No. 4, pp. 469-610, July-Aug. 2009.

As a result, there would be a gradual significant drawdown of the groundwater table, causing the loss of desert vegetation that binds the soil. The proposed Agreement acknowledges and apparently accepts this result: Groundwater appropriation in Utah "results in a reasonable amount of drawdown in the Groundwater aquifer. Such appropriations necessarily impact the existing hydrologic system and captures discharge available to phreatophytes, streams and natural lakes." (Section 2.8). "The majority of Groundwater appropriation within Nevada throughout the state's history has been premised upon the capture of Groundwater naturally discharged as phreatophytic evapotranspiration." (Section 2.9).

When the Snake Valley surface water dries up and the soil-binding vegetation dies, the resulting ecological damage could take hundreds or thousands of years to reverse. A "decline in groundwater levels could produce lasting and irreversible effects on both the agriculture and native vegetation of the Snake Valley. If the basin-fill aquifer is substantially dewatered, ground subsidence, cracking, and permanent degradation of its hydraulic properties may occur." Utah Geological Survey Investigation 254, March 2005.

The loss of soil-binding vegetation will leave billions of tons of

soil particles that will be available for airborne distribution. (R. Davis, P.G.). The dust will travel with the wind and air patterns to the populated areas of Snake Valley, and then to the heavily populated Wasatch Front. Such a result poses an unacceptable risk to the health of Utahns. According to the Utah Department of Environmental Quality:

“Fugitive dust is simply dust that is stirred up, creating an air quality problem. It is made up of fine particles called particulate matter, or PM. Because it irritates eyes and nasal tissue and seriously impacts the respiratory system, PM is a health concern. It also inhibits normal plant growth and development.”
<http://www.airquality.utah.gov/Permits/dust/index.htm>

The health effects of particulate matter pollution are well-documented. Particle pollution contains microscopic solids or liquid droplets that are so small they can get deep into the lungs and cause serious health problems. Numerous scientific studies have linked particle pollution exposure to respiratory illness, decreased lung function, asthma, development of chronic bronchitis, irregular heartbeat, heart attacks, and premature death in people with heart or lung disease.

While all individuals may experience temporary symptoms from exposure to elevated levels of particle pollution, vulnerable populations including children, older adults, and people with heart or lung diseases are the most susceptible to health effects from particle pollution exposure.

The impact of air pollution on children’s health is of grave concern to Utah Moms for Clean Air. Children do not choose to live in polluted areas, and it should be the State of Utah’s utmost priority to provide a clean and healthy environment for our children to grow and thrive. Studies have linked heightened PM pollution to not only increased respiratory ailments and disease in children, but also to increased infant mortality, miscarriage, lower IQs, and permanently diminished lung capacity.

State monitoring data demonstrates that the 24-hr standard for PM2.5 under the National Ambient Air Quality Standards (NAAQS) is routinely violated across much of the State’s monitoring network. The EPA has designated as nonattainment virtually the entire Wasatch Front urban corridor stretching from the Utah-Idaho border to central Utah. These counties contain 85% of Utah’s population, or more than 2.3 million people. The State of Utah has embarked on an effort to achieve attainment of the NAAQS for PM2.5.

Allowing a dewatered Snake Valley to become a potential significant source of airborne dust in the Wasatch Front could nullify Utah’s efforts to clean up our air and subject Utahns to further harmful health effects of air pollution. Despite this risk the State of Utah has not studied the anticipated drying up of the Snake Valley, the potential resulting dust, or the impact the dust may have on Utah’s air quality and human health. It is now accepted medical science that there is no safe level of PM pollution. Therefore any increase in dust pollution will affect the health of Utahns and is an unacceptable result.

Although the financial impacts of air pollution on the State are secondary to the human health impacts, it should be noted that air pollution is costly financially. Utah is spending significant sums to bring our air quality into compliance in terms of state monitoring and enforcement, and there costs incurred by industry and individuals in the form of pollution controls. The State and its population spend

vast sums on health care costs associated with respiratory illness, and businesses lose productivity through lost worker days. Failing to achieve NAAQS attainment after the remediation period would result in the loss of hundreds of millions of federal transportation dollars. Tourism and business investment in our state is adversely affected by air pollution. There are significant potential losses to the ski industry, as increased dust would have a detrimental impact on the snow pack.

Furthermore, the proposed Agreement fails to account for the hazardous materials known to be present in the West Desert soil. The Snake Valley (and much of Utah) is within the radioactive veil from above-ground nuclear bomb testing in Nevada from the 1950s through the early 1990s. The soil contains radioactive elements including plutonium, uranium, cesium and strontium. Minute quantities of these radioactive elements can cause chromosomal damage and cancer. The soil also contains mercury, which is emitted by coal-fired power plants, and by gold mines, several of which are located in Nevada. Exposure to even very small quantities of mercury causes neurological and brain damage.

There are examples of water diversion creating drying conditions and significant air pollution. In Central Asia, a massive irrigation scheme of the Aral Sea source waters caused the sea to dry up over the past 40 years, so that it is only 10% of its original size. The remaining concentrated salts and industrial waste residues have created a toxic dust that is blown for hundreds of miles throughout the Aral Sea region. Populations in nearby countries have experienced increased respiratory disease, cancers, and infant mortality. The loss of the seabed and the resulting pollution has also resulted in the elimination of ecosystems, the extinction of fish and wildlife, and widespread economic hardship and unemployment. The World Bank alone has spent at least \$470 million on remediation projects, and governments and international organizations are spending additional millions on the problem.

Similarly, in the United States in the early twentieth century, California diverted water from the Owens Valley in southeastern part of the state to satisfy Los Angeles's water needs. The resulting desiccation of the Owens water systems has created the single largest source of PM-10 dust in the United States, and what EPA has designated as the worst air quality in the nation. Dust from the dry lake bed is a significant health hazard to residents of Owens Valley and nearby areas. To date Los Angeles has spent more than \$60 million to restore the Owens Valley water systems and more than \$500 million to remediate the air quality of Owens Valley.[1]

Decades after these systems were desiccated, governments are spending hundreds of millions of dollars to remediate the damage, yet such efforts fail to undo the damage already done to human health.

3. The Agreement Fails to Protect Utah Against Adverse Effects of Pumping.

The proposed Agreement fails to provide that in the event of a serious consequence to the State of Utah, the groundwater pumping will stop. This is the most obvious and effective of mitigative measures, and must be included in any agreement. Any increase in particulate matter pollution should require a cessation of pumping. Furthermore, because there is a lag time between water table drawdown, the compromise and die-off of vegetation, and the release of dust, an agreement must provide for mitigative measures upon evidence that the water table is retreating such that vegetation will be compromised.

The proposed Agreement provides that SNWA shall establish a mitigation fund in the amount of \$3 million. That amount is wholly insufficient to mitigate adverse consequences from a large scale pumping operation which itself is expected to cost several billion dollars. As stated above, the remediation of Owens Valley and its airshed has cost more than \$600 million to date.

In summary, Utah Moms for Clean Air requests that the State of Utah reject the proposed Agreement for Management of the Snake Valley Groundwater System. The agreement wholly fails to protect the health of Utahns. There is no requirement that Utah enter into an agreement with Nevada, at this or any specific time. Thus, there is ample time for studies of the Snake Valley water system and the impact that water exports will have. An agreement should only be negotiated with the State of Nevada after comprehensive study of the expected impacts on Snake Valley ecosystems and the potential impacts on dust, air pollution, and Utah's air quality. Any agreement must require Las Vegas to aggressively reduce its water consumption to reduce its water demand on other ecosystems.

Thank you for considering these comments.

Sincerely,

Michelle Hofmann, MD, MPH

Cameron Cova

Co-Presidents, Utah Moms for Clean Air

[1] Timothy Durbin, former U.S. Geological Survey hydrogeologist, and former SNWA consultant, has stated "The Owens Valley is a model of what to expect." Las Vegas Sun, Quenching Las Vegas's Thirst: Part 5, June 29, 2008 (referring to SNWA's applications to export water from the Spring Valley, adjacent to Snake Valley).

**COMMENTS OF MILLARD COUNTY
REGARDING THE AUGUST 13, 2009 DRAFT ENTITLED
“AGREEMENT FOR MANAGEMENT
OF THE SNAKE VALLEY GROUNDWATER SYSTEM”**

(Hereafter the “draft agreement”)

1. Millard County disagrees with the draft agreement's 7 to 1 split of unallocated groundwater (36,000 af/y for Nevada, 5,000 af/y for Utah). That is grossly out of sync with the facts:
 2. **FACT:** USGS Utah has analyzed the BARCASS data and concluded that there are over 260,000 acres of land in Snake Valley which they say depend on groundwater to sustain all life found thereon (flora, fauna, human). That is 260,000 acres of springs, spring-fed riparian lands, groundwater fed meadows, croplands and pastures irrigated by farmers with well water, phreatophytic shrub communities that support public lands grazing, and towns and residences with their culinary water and sewer systems, **THAT ALL DEPEND EXCLUSIVELY ON THE GROUNDWATER OF SNAKE VALLEY.**
 3. **FACT:** USGS Utah has further determined from the BARCASS data that 84% of those 260,000 groundwater dependent acres **ARE LOCATED IN UTAH.**
 4. **FACT:** USGS Utah has further determined from the BARCASS data that 82% of Snake Valley groundwater that discharges annually through evapotranspiration (ET) **DISCHARGES IN UTAH.**
 5. **FACT:** In 1990, Millard County Commissioner Michael Styler stated in his written protest on behalf of Millard County, that the requested appropriation of groundwater “will further threaten springs, seeps and phreatophytes which provide water and habitat critical to the use and survival of wildlife, grazing livestock and other surface existing uses.” In other words, Commissioner Styler himself realized the necessity of standing up not just for allocated water rights but for desert flora and fauna that also depend on groundwater.
 6. **FACT:** According to the comparative reports of the Utah and Nevada negotiation teams, 76% of groundwater depletion in Snake Valley through water-rights based beneficial use **OCCURS IN UTAH.**
 7. **FACT:** The Utah Negotiating Team's website estimated that 40% of the Precipitation recharge to Snake Valley, **OCCURS IN UTAH.**
 8. **FACT:** The average of the Snake Valley discharge, historic use and recharge ratios still favors Utah over Nevada significantly: 65% to 35%.
 9. **FACT:** 20,000 af/y of the block 1 allocated groundwater which the draft agreement claims supposedly goes to the Utah side of Snake Valley, is never used in Snake Valley. Instead it passes through to Fish Springs Flat completely outside of Snake Valley.
 10. **FACT:** BARCASS estimates that 49,000 af/y of groundwater flows from Spring Valley to Snake Valley, with 33,000 af/y of that flow coming around the southern
-

flank of the Snake Range right in the path of upstream Spring Valley SNWA pumping plans, which the Nevada Engineer approved to eventually exceed 60,000 af/y. Yet the draft agreement makes no allowance for impacts to groundwater basin inflow due to anticipated SNWA Spring Valley pumping.

11. FACT: The 20,000 af/y set-aside for Fish Springs is a tacit admission by both negotiating teams that really only 88,000 af/y of wet water, not 108,000 af/y, is available for Snake Valley. And of that 88,000, Utah gets only 40,000 af/y (35,000 allocated + 5,000 unallocated) while Nevada gets 48,000 af/y (12,000 block 1 and 36,000 block 2).

12. FACT: Moreover, the Utah numbers in the preceding paragraph (and correspondingly the Nevada numbers) are an illusion, because no allowance is made for Spring Valley pumping impacts to Snake Valley interbasin inflow, which impacts could easily exceed 16,000 af/y annually (which is approximately half of the BARCASS estimated Spring to Snake Valley flow around the southern flank of the Snake Range).

13. FACT: Section 301(e)(3) of the U.S. Public Law 108-424 (commonly referred to as the 2004 Lincoln County Land Act) requires the draft agreement to address the entire Great Salt Lake Regional groundwater flow system, not just the Snake Valley basin:

“Prior to any transbasin *diversion* from *ground-water basins* located within both the State of Nevada and the State of Utah, the State of Nevada and the State of Utah shall reach an agreement regarding the *division* of those *interstate groundwater flow system(s)* from which water will be diverted and used by the project.” (Emphasis added)

14. FACT: The draft agreement does not constitute an agreement contemplated in the foregoing statutory language, because the draft agreement addresses only Snake Valley and not the entire Great Salt Lake Desert Regional Groundwater Flow System of which the Snake Valley hydrographic basin is only one part.

15. Those who are prone to support the draft agreement despite the gross inequity of the interstate groundwater split, pin their hopes on the illusion that the agreement mitigation and dispute resolution procedures will provide a quick enough remedy to stave off irreversible impacts to water rights and ecosystems, when compared to the length of time it takes to pursue a court remedy. FACT: by the time pumping impacts are noticed on the Utah side, it will be far too late to remedy them even under the draft agreement for two reasons, one social/political and one scientific:

Reason one: By the time adverse pumping impacts are noticed in Utah, billions of dollars will have been invested and spent on the Las Vegas pipeline and new pipeline-dependent Las Vegas area suburbs will have been established and entrenched. Turning off the pumps will be a political/social impossibility.

Reason two: Scientists say that replenishing the depleted water table (not to mention eliminating the contamination from the reverse flow of the salt playa near Callao) will take too long ere eco-system destruction in Snake Valley will be complete and virtually irreversible - along the lines of Owens Valley.

Thus the idea of a quick and effective fix available under the draft agreement is illusory, to put it generously.

16. FACT: A proper and fair water split that guards Utah's rightful water in the first place, not an after-the-harm stab at mitigation of harm that will surely follow the draft agreement's inequitable water split, is the only effective protection against the harm that will result from over-pumping of groundwater.

17. Not letting Nevada take Utah's fair share of its groundwater and thus limiting the ability of the Nevada engineer to award SNWA too much water in the first place, is the only sure defense. Everything else is a pipe (some say a "pipeline") dream.

18. Utah's only hope is a preventive one, not a curative one. THERE IS NO SUCH THING AS A CURATIVE SOLUTION IN THIS MATTER. YOU EITHER STOP THE GRAB OF UTAH'S RIGHTFUL WATER UP FRONT OR GET READY TO KISS THE SNAKE VALLEY AGRICULTURAL BASE AND ECO-SYSTEM GOOD BYE.

19. An agreement between the two states is the best option, but only if it is a fair and equitable one. It is hard to imagine Utah's faring worse before the Supreme Court than the outrageous 7 to 1 unallocated water split imposed on Utah under the draft agreement. Utah has nothing to lose and everything to gain before the Supreme Court when compared to this split. BUT AGAIN, THE MAIN POINT IS IT WILL BE FAR TOO LATE TO REVERSE THE DESTRUCTION EVEN UNDER THE DRAFT AGREEMENT.

20. Therefore, Utah should make the following counteroffer to Nevada:

Split the 108,000 of known wet water 65% for Utah and 35% for Nevada.
Itemization of the split:

Charge Utah 35,000 for senior water rights and 20,000 for Fish Springs, and give Utah 15,200 of block 2 water to reach a total of 70,200 af/y or 65% of the 108,000 af/y wet water.

Charge Nevada 12,000 for senior water rights, 16,000 to be held in suspension to adjusted up or down after Spring Valley pumping impacts are better understood, and give Nevada 9,800 of block 2 water to reach a total of 37,800 or 35% of the 108,000 af/y wet water. Give Nevada in addition all 24,000 af/y of the block 3 reserve.

This would make the overall split of Block 1, 2 and 3 of the 132,000 af/y equal to 53% Utah and 47% Nevada.

21. The draft agreement should include a disclaimer by Utah that even though Utah is signing it, Utah does not agree that it satisfies the requirements of the 2004 Lincoln County land act which require the two states to agree to a split of the entire interstate groundwater flow system as opposed to just the one Snake Valley groundwater basin. The draft agreement should also state that Utah does not waive its right to challenge for any reason an action of the BLM, SNWA or others regarding any permit or effort to cause the transbasin flow of water from Snake Valley, including the reason that such action by the BLM is inconsistent with the provisional authority Congress gave the BLM under Section 301(e)(3) of the 2004 Lincoln County Land Act.

22. Millard County as part of its continuing confidential discussions with the Governor's office, will submit a marked-up copy of the 8-13-09 Draft Agreement showing additional detailed proposed edits to that draft, in addition to the foregoing.

23. Finally, Millard County agrees with and urges careful consideration of the September 29, 2009 comments submitted by Eskdale Community. That community is located in the Millard County part of Snake Valley. As stated therein, the Eskdale comments "reflect the combined input from approximately 25 adult residents of the Eskdale Community and surrounding area in Snake Valley." This is an obviously important demographic for the Millard County portion of Snake Valley. The groundwater allocation recommended in the Eskdale comments is even more pro-Utah than Millard County's recommendation above. Nevertheless Millard County would strongly support the Eskdale proposed allocation as another reasonable and worthy analysis, were the State inclined to adopt and incorporate it into any counteroffer back to Nevada.

24. Submitted herewith are a number of other documents which relate to the development and explanation of Millard County's position. These documents are incorporated into and made a part of these comments and should be considered in connection herewith.

Millard County appreciates the opportunity to submit these comments. Millard County urges the State of Utah to not sign the draft agreement, but rather make a counteroffer to Nevada consistent with the comments herein.

The Draft Agreement – An Unfair Split That Imperils Utah Senior Water Rights

	<u>Utah</u>	<u>Nevada</u>	
Allocated	55,000	12,000	
Unallocated	5,000	36,000	7 to 1 Nev.
Spr. V. Pumping Give Away	<u>(16,000)</u>	<u>16,000</u>	
Total	44,000	64,000	108,000
	41%	59%	
Reserve	<u>6,000</u>	<u>18,000</u>	3 to 1 Nev.
Total	50,000	82,000	132,000
	38%	62%	



Millard County Proposes the State Make the
Following Counter-offer to Nevada:

Split the 108,000 af/y of Wet Water According to the
Average of the Valley's **Natural Discharge,**
Historic Use and **Recharge (65% Ut. 35% Nev.).**

Divide the **Regional Groundwater Flow System** as
Required by the Congressional Statute.

Suspend Part of Nevada's Share Due to **Spring Valley**
Pumping Impacts by 16,000 af/y, to be Adjusted
Down or Up Based on Eventual Proven Impacts.

Proposed Counter Offer:
Split 108,000 By Average of Discharge
Historic Use & Recharge (65% - 35% Utah)

	<u>Utah</u>	<u>Nevada</u>	
Already Allocated	35,000	12,000	
Fish Springs	20,000		
Spr. V. Pumping		16,000	
Unallocated	<u>15,200</u>	<u>9,800</u>	
Total Wet Water	70,200	37,800	108,000
	65%	35%	
Reserve		<u>24,000</u>	
Total Wet & Reserve	70,200	61,800	132,000
	53%	47%	



Clean Air Coalition

September 11, 2009

Mike Styler, Executive Director
Department of Natural Resources
Division of Water Rights
1594 West North Temple, Suite 220
SLC, UT 84114
snakevalley@utah.gov

Re: Snake Valley Agreement

Thank you for this opportunity to comment. Thank you for the proactive work to insert a Congressional requirement for Utah & Nevada to enter an agreement prior to any interstate transfer of ground waters.

Wasatch Clean Air Coalition supports the comments of the Utah Physicians for a Healthy Environment; and submits these additional comments.

I.

Cecil Garland, rancher, reports that springs are drying and the water table has dropped 10 feet in the Snake Valley. It seems obvious that the water withdrawals in the Snake Valley currently exceed the maximum sustainable use, and any additional extractions would be mining of groundwater as prohibited by 5.4.1.

On this basis, the agreement is improper because there is no available water for interbasin transfer.

II.

In the event that the agreement is signed by Utah, comments are given below for improvement to the agreement. These comments are not to be construed as a weakening of the conclusion in section I above, rather are intended as damage control in the almost inconceivable event that Utah facilitates in any way interbasin transfer of waters from Snake Valley.

III.

Many have legitimately objected to the long, SECRET negotiations that preceded the release of the draft agreement. There are many points in the agreement where the public should be involved or notified in a manner that would mitigate the unseemly secrecy surrounding the development of this agreement.

Re: 4.5 ...The States agree that all monitoring data collected will be shared and made available to the public.”

Comment: The manner of availability should be spelled out. Website link should be in the agreement. This data should be available to commenters now during this comment period. It should be possible for a commenter to easily find the information that Cecil Garland reports: drying springs & water table drop.

Re: 4.7 The State Engineers shall meter, ... quantity that exceeds 100 (one hundred) acre-feet per year and report said diversions on a calendar year basis.

Comment: This data should be circulated to subscribers to a list serve of interested parties.

Re: 5.3 Reserved - The State Engineers shall not grant any Groundwater withdrawal permits to extract Reserved Groundwater until the State Engineers agree information reasonably demonstrates that additional Groundwater can be safely and sustainably withdrawn from Snake Valley and that Allocated and Unallocated uses will not be unreasonably affected.

Comment: This agreement by the State Engineers should go out to public comment.

Re: 6.1 In the event SNWA is granted any permits pursuant to the SNWA Applications, SNWA agrees to provide public notice, at least one year prior to the export of Groundwater from Snake Valley...

Comment: This notice should be circulated to subscribers to a list serve of interested parties.

Re: Monitoring & Management Agreement

3.2. Technical Working Group

Comment: Meetings of this group should be public, subject to public notice, public agenda, public posting of minutes and record of decisions.

Re: Monitoring & Management Agreement 3.2.3.6. During the Operation Period, review SNWA proposed or ongoing pumping schedules in Snake Valley for both testing and production purposes;...

Comment: These pumping schedules should reviewed regularly, at least quarterly. These pumping schedules should be readily available for public inspection.

Re: Appendix 1: Biological Monitoring ... A detailed biological monitoring plan will be developed during the Initial Period and implemented and modified as appropriate throughout the Baseline Period and Operational Period...

Comment: This Plan should be subject to public comment and updates & reports related to this plan should be readily available for public inspection.

IV.

Re: 4.8 The States agree to work cooperatively to (a) resolve present or future controversies over the Snake Valley Groundwater Basin; (b) assure the quantity and quality of the Available Groundwater Supply, (c) minimize the injury to Existing Permitted Uses; (d) minimize environmental impacts and prevent the need for listing additional species under the Endangered Species Act, (e) maximize the water available for Beneficial Use in each State, and (f) manage the hydrologic basin as a whole.

Comment: Item (d) "minimize environmental impacts and prevent the need for listing additional species under the Endangered Species Act," should be moved to first priority.

V.

Re 6.4 In the event that any permits are issued to SNWA pursuant to the SNWA Applications, SNWA shall establish a mitigation fund ... \$3,000,000.

Comment: \$3 million seems an inadequate amount in light of the fact that damage caused by withdrawals of this fossil Snake Valley water will cause permanent impairment of the habitability of the valley.

VI.

Re. SNAKE VALLEY ENVIRONMENTAL MONITORING AND MANAGEMENT AGREEMENT

H. Utah acknowledged at section 2.8 of the Utah-Nevada Agreement that the safe doctrine that governs groundwater appropriation in Utah generally allows for the appropriation of groundwater in a manner that is sustainable and results in a reasonable amount of drawdown in the groundwater aquifer. Such appropriations necessarily impact the existing hydrologic system and captures discharge available to phreatophytes, streams and natural lakes.

Comment: "Reasonable" drawdown should be specified in a draft and subject to public comment. Tolerable impact on phreatophytes, streams and natural lakes should be defined and specified after public input.

VII.

2.2. Baseline Period. "Baseline Period" shall mean a time period of not less than five years immediately preceding the export of any groundwater by SNWA from Snake Valley. The Baseline Period will begin when SNWA provides notice to Utah.

Comment: The agreement to hold SNWA applications in abeyance thru 9/1/2019 should be entered in this agreement between Utah and SNWA. SNWA is not a signatory nor bound by the AGREEMENT FOR MANAGEMENT OF THE SNAKE VALLEY GROUNDWATER SYSTEM where the date is given.

VIII.

Re: 3.1.2 Operation. The Management Committee shall meet within 21 calendar days of notification from the TWG of a need for action, or notification from any member of the Committee, and shall reach a decision within 60 calendar days of TWG notification. If the

Comment: The remainder of the language is missing here. This document is incomplete.

IX.

Re: 3.2. Technical Working Group

3.2.1 Creation and Purpose. The Parties shall create and convene a multidisciplinary Technical Working Group... shall include two representatives from SNWA ...and three representatives from the State of Utah (Utah Geological Survey, Utah Division of Air Quality, Utah Division of Wildlife Resources).

Comment: A member of the Snake Valley Aquifer Research Team should be a full member of the TWG.

X.

Re: 6. During the Operation Period, review SNWA proposed or ongoing pumping schedules in Snake Valley for both testing and production purposes;...

Comment: A specific frequency for review should be specified in draft & subject to comment.

XI.

Re: Appendix 1: Biological Monitoring ... It is the intent of the Parties that the capital and operating costs of implementing biological monitoring plan components beyond the current UDWR effort will be primarily borne by SNWA.

Question: If Utah Legislature reduces the budget for the current UDWR effort, how is SNWA's obligation affected?

XII.

Comment: an appendix that contains acronyms would improve the document.

Thank you for your attention to these comments.

Peace,

Kathy Van Dame, Policy Coordinator
Wasatch Clean Air Coalition
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CONFEDERATED TRIBES
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Concerns on the Snake Valley Water Settlement

The following is an outline of concerns of the Confederated Tribes of the Goshute Reservation (hereinafter "Tribe") in response to the proposed Snake Valley Water Settlement (hereinafter "settlement") between Utah and Nevada.

Position on the settlement

- Executive and administrative precedence surrounding the reasoning of the settlement
- Violation of Federal judicial precedence, treaties, and Federal Trust Responsibilities

Summary of Concerns

I. THE SETTLEMENT IGNORES THE CONFEDERATED TRIBES OF THE GOSHUTE RESERVATIONS RESERVED WATER RIGHTS.

For over a century, it has been understood federal law that Indian Tribes have rights to large, but often still unquantified amounts of water. When Indian reservations are created, natural resources, including water sufficient to satisfy the purposes of the reservation, are reserved automatically.¹ As a result, tribal reserved water rights represent an "exception to the general rule that allocation of water is the province of the states."² Although waters are open to appropriation under the laws of various Western states, such laws do not have jurisdiction over of federal reservations.³ Unlike appropriative rights, Indian reserved water rights are not based on diversion and beneficial use, which are requisites to obtaining and maintaining a water permit under the appropriation system. Instead, under reserved rights, a sufficient amount of water is reserved to

¹ *Arizona v. California*, 373 U.S. 546, 600 (1963); *Winters v. United States*, 207 U.S. 564 (1908)

² *Cohen's Handbook of Federal Indian Law*, Felix Cohen, Sec. 19.01(1)

³ *Cappaert v. U.S.*, 426 U.S. 128, 143-145 (1976); *Fed. Power Comm'n v. Oregon*, 349 U.S. 435 (1955)

fulfill the purposes for which a reservation was established.⁴ The Tribes federally-reserved water rights have been completely ignored in the settlement.

II. MOST LIKELY, THERE IS SIGNIFICANT INTERBASIN TRANSFER BETWEEN THE TRIBES CURRENT WATER SOURCE IN THE DEEP CREEK BASIN WITH THE SNAKE VALLEY BASIN.

To the aforementioned points, in conjunction with its exploratory technical field investments, the Tribe can claim a current and substantial interest in the water assets in the Deep Creek Basin, and by numerous technical accounts, by way of inter basin transfer trends, whereby the Deep Creek Basin has a reasonable propensity to serve as a significant recharge/discharge source for the Snake Valley Basin, the Tribe also claims substantial interest in Snake Valley allocations.

Insofar as this interest is reasonably consequential to the Tribes' well-being, especially in economically trying times, the Tribe is unsatisfied by the unchecked tenacity of the settlement to immediately allocate rights without sufficient technical data assuring the protection of the Tribes' interests in the water assets in an adjoining basin. And while the Tribe was provided a comment period, the Tribe impresses that it should have been consulted prior to any comment period, given its sound status in the past, as an interested party. It was not consulted or otherwise considered in the development of the settlement to date, and therefore feels the agreement is inherently premature.

Additionally, an authentic comment period requires the free availability of information surrounding the topic under scrutiny. To date, neither Utah nor Nevada will release the records, upon explicit request, deliberating basis for the development of the settlement, and so the Tribe is paralyzed in efforts to provide calculated and informed comment of the settlement.

III. THE SETTLEMENT VIOLATES UTAH'S OWN ADMINISTRATIVE PROCEDURE ACCORDING TO THE RULING ON THE TRIBE'S REQUEST FOR AN APPROPRIATION.

The Tribe finds the proposed settlement especially troubling because it provides for a 200,000 acre/foot allocation on technical grounds it deemed insufficient to allocate 50,000 acre/feet, only months before the agreement. On June 23, 2009, application number 17-217 (A77473) was effectively rejected, citing a lack of sufficient technical data for an immediate allocation. The settlement cites the exact same studies and data as the Tribe's request, but finds it sufficient to allocate four times the amount requested by the Tribe. The Tribe's requests for reconsideration has been accepted, but given the clandestine nature of the settlement's development in relation to the order of multiple congruent events, the Tribe believes that perhaps the reconsideration has merely been granted on political grounds.

⁴ *Cohen's* at Sec. 19.01(1); *Winters v. U.S.*, 207 U.S. 564

Proposed Solution

Given the aforementioned elements, the Tribe respectfully requests the following:

- In a separate action, the State of Utah grant the Tribe's request for an immediate allocation of 30,000 Acre/Feet, representing a portion of the Tribe's federally recognized reserved water rights, which is consistent with the terms of the settlement.
- That the Tribe receive a graduated allocation of 5,000 acre/feet each additional year, not to exceed 50,000 Acre/Feet in total, at the same percentage-adjusted rates the settlement engages for testing and subsequent increase.

This agreement would allow the Tribe to protect its federally reserved water rights immediately while allowing the residents of the Deep Creek Basin to monitor any potential interbasin transfer.

The Tribe presumes, upon such an agreement, it has no apparent interest to further pursue any other applications or requests, and will immediately withdraw such items that exist to date. Further, it would guarantee all data and findings it earns from federal grant moneys, in turn made eligible by its state-affirmed water right, will be entirely and immediately available for the State of Utah to review as it pleases.

The Tribe feels such a request is reasonable and well within the realms of the technical and political position the state has taken with the settlement. It feels it presents a technically humble request and asks the state to make every effort to maintain an dialogue representative of genuine efforts to help the Tribe find resolve in its efforts to secure its nature resources interests.

4ac06f03.ntvMILLARD COUNTY COMMISSION PUBLIC HEARING
THE 8th DAY OF SEPTEMBER 2009
Millard County Fair Grounds, 187 S Manzanita, Delta, Utah

Public Hearing to discuss the Snake Valley Water Draft Agreement.

PRESENT: Kathy Y. Walker
Chairperson
Daron P. Smith
Commissioner
Bart A. Whatcott
Commissioner

Richard Waddingham
County Attorney
Marki Rowley
Deputy County Clerk

ALSO PRESENT: Mark Ward
Utah Association of Counties (U.C.) Attorney
Diane and Max Chipman
Las Vegas, NV
Dorothy Morrison
Columbus, OH
Julia Sharp
Delta, UT
Pam Layman
Oak City, UT
Fred S. Tolbot
Abraham, UT
Dough Turner
Southern, UT
James Kallin
Sutherland, UT
Clayton Jeffery
Delta, UT
Scott Anderson
Delta, UT
Linda Gillmor
Delta, UT
Amy Odonaghue
Deseret News
John and Anita Hansen
Garrison, UT
Clay H. Cummings
Fillmore, UT
Brian Allen
Fish Springs National Wildlife Ref., Dugway, UT
Dean Baker
Baker, NV
Marjorie S. Jenkins
Meadow, UT
Shermon Tolbert
Hinckley, UT
Jerald and Marlene Bates
Garrison, UT
Paul J. Stephenson
Delta, UT
Lavar Cox
Delta, UT
Shawn Gonder
Oak City, UT

Clyde and Nan Bunker
Delta, UT
Steve Walker
Delta, UT
Robins McPherson
Lynndyl, UT
Andy Nickle
Delta, UT
Patrick Painter
Nephi, UT
Paul Caso
Fillmore, UT
Betty Jo Western
Delta, UT
Jeanie Owens
Fillmore, UT
Dean Draper
Hinckley, UT
Steve Erickson
Salt Lake City, UT
Craig Greathouse
Delta, UT
Gary Perez
White Pine County Commissioner
Karl Jenkins
Meadow, UT
Kay Wheeler and Darwin Wheeler
Garrison, UT
Jerald Anderson
Garrison, UT
David Starlin
Eskdale, UT
Ed Uehling
Las Vegas, NV
Carrie C. Stephenson
Delta, UT
Layne Tolbert
Abraham, UT
Blaine Ipson
Delta, UT
Robert D. Nielson,
Lynndyl, UT
Russell Greathouse
Lynndyl, UT
Daniel Anderson
Oak City, UT
Gayle Bunker
Delta, UT
Beverly DeWyze
Delta, UT
Ladd Holman
Millard Co. Water Cons. Board, Leamington, UT
Ron Draper
Delta, UT
Wade Tolbert
CUPHD, Hinckley, UT
Ida L. Tolbert
Hinckley, UT
Jim Raufman
Black Rock, UT
Stephen W. Martin
Delta, UT

Emery Polelonema
 Six County AOG, Richfield, UT
 Todd Turner
 Delta, UT
 Jim Nickle
 Delta, UT
 Jolinda Nickle
 Delta, UT
 Megan Greathouse
 Lynndyl, UT
 John Keeler
 Manti, UT
 Cynthia Kaufman
 Black Rock, UT
 Leo Stott
 Meadow, UT
 Todd Thorne
 Six County AOG
 Deborah Callister
 SLC, UT
 Trent Wilde
 Millard County, UT
 Pete Shields and Shirlee Shields
 Delta, UT
 Ken Hill
 Wendover, UT
 Bob Meinhardt
 Delta, UT

PURSUANT TO AN AGENDA WHICH HERETOFORE HAD BEEN PROVIDED TO each member of the governing body, posted at the principal office of the Millard County Commission, posted on the Utah Public Notice Website, and provided to the Millard County Chronicle Progress, a newspaper of general circulation within Millard County, as required by law, the following proceedings were had:

Commissioner Walker called the meeting to order at 7:00 p.m. after a brief welcome and explanation of what the meeting will be about.

After a Presentation given by Mark Ward, UAC Attorney, Public comment was heard.

Lavar Cox, Hinckley Utah, asked why Southern Nevada Water Authority (SNWA) is part of the negotiating committee, when it is a water user. "Itâ€™s like having the fox in the henhouse." This agreement should be between two states, deciding what the historical use is. He said that SNWA needs to be out of the decision making. There should be an agreement between Utah and Nevada but it needs to be based on historical use. He wanted to know if this is a government for the people, of the people and by the people, or is it a government by politicians. If it is a government by the people, then the people have already spoken under historical use. They have said no to SNWA. White Pine County, Millard County and any resident in Snake Valley have said no. We need to pay attention to that particular "NO" because that is the historical use of those who use the water. He is very thankful for the work that the Millard County Commissioners have done on this.

He said that he talked to a representative from the state of Utah about having SNWA in the agreement process and they said that Nevada will not come to the table without them. Mr. Cox says he calls their bluff.

Paul Stephenson, Delta Utah, said that the presentation may have changed his mind on some of the things, but not all of them. He said that he has been thinking about this for sometime and has come to the conclusion, as most of the people have, that he does not want legalized theft of the water in the west

valley. He cannot imagine what was in the minds of the commission to allow an engineer from Nevada to make any decision regarding this matter. That makes him not trust this process from the start. This should have been done by qualified residents of another state, not of Utah or Nevada. Mr. Stephenson says that we need to get to work and find a way to stop the theft of the water. The County Commissioners, if they can, should stop all drilling if that water will be going into Nevada.

There are endangered species in the West Desert such as the Bonneville Trout. If the Sahara Club doesn't want to bring suit he says that we should start organizing and bring lawsuits right now. If we do nothing we will have no water in the west valley, leaving the area unhealthy to live in. The air will not be fit to breath. He has already noticed the amount of trees that have died. He says that Mud Lake has dried up as well.

He is also concerned with the pumping of the water that could cause the aquifer to decrease. He says that the rocks above the aquifer are kept up somewhat by the pressure of the spring. If you empty the springs there will be a big hole there. If this is done what will happen? Will the rocks move and cause earthquakes from Nevada to the Wasatch Front. Have they thought about that? Mr. Stephenson says we need to start calling and writing letters to the legislature until this thing is abandoned.

Steve Maxfield, Kanosh UT, said that he has gone through the professional papers and the empirical evidence that was included in the barcass study. There is no extra wet water to divide between the two states. In one of the professional papers from the 1995 United States Geological Survey (USGS) 1409D shows the basin and the inner-flow in question and puts it further out. It goes to Utah Lake and Great Salt Lake. This year we had a wet spring. Lake Powell came up 12 feet (ft). They thought it would come up 30 ft. They thought that Great Salt Lake would come up 1 ft but it went down 1 ft. We are talking about the water that is going underground. He called it the "underground Colorado River".

These rights and historic uses have already been transferred into interbasin. He thinks that we will have an impact of a minimum 20,000 acre feet a year (af/y) from Spring to Snake Valley. When we look at that, that is what will affect the historic use. As we are looking at Snake Valley and the wet water, the water isn't there. The pumping in Snake Valley has already drawn down the water table and has gone through transevaporation.

This agreement lacks the proper signatures of authority as well as the parties to the agreement. There is a provision in the agreement that states no third party can bring any action against this agreement. He questioned who this is protecting, the states, or the people. The people are the direct water users and this is our one chance to protect our water.

He thinks that definitions are the most overlooked damning thing in this document. He made comment on definitions 2-8 and 2-9. We are not talking about wet water that flows in the ditches that we are trying to give away. We are talking about water that plants, native and non-native, are using to survive, and water that is already allocated in other basins all the way into great basins. There isn't any water to split. He also has concerns with the transbasin flow, the mitigation, the right to farm and the people's rights as it is/ or isn't said in the agreement.

Megan Greathouse, Lynndyl Utah, said she has some doubt as to whether the water is there. She said that SNWA would have to wait ten years to develop the water, but at that point they would be able to develop 30,000 af/y. She thinks that if this is allowed it should be developed gradually not in that big of an acre amount. Their addendum to the contract allowed for ecological issues which include hydrologic studies every year or less if they agree upon it. This is given them a loophole to not monitor the groundwater situation as closely as it should be. Also, anyone that is adversely affected by water pumping, appeals to SNWA. There are things that are inherently wrong with that. They are the one getting the water and you are going to go to them and say, "You've hurt me help me". That will not be an affective method. There is an interstate board that you can go to beyond that, but at that point the damage may already be done.

She also thinks a \$3,000,000 mitigation fund, looking at the number of acres and talking legal battles doesn't allow adequate money to compensate.

John Keeler, Utah Farm Bureau, said that at this point there doesn't appear to be a pressing need for Utah to sign this agreement. The Nevada State Engineer has set Spring of 2011 as his evidence for submission deadline and the hearings on Snake Valley in the fall of 2011. With so many unanswered questions that have been talked about - recharge, hydrologic connection, on-going drought and fairness - Governor Herbert and the State of Utah Water Rights Officials should put this draft agreement on hold and insist on a more fair and equitable split for Utah. As Congress has mandated, an agreement between Utah and Nevada is a worthy goal, but not as an expense to Utah. Attached is a letter from the Utah Farm Bureau News.

John Hansen, Garrison Utah, said that the well that currently runs his home was drilled after 1989. According to page 5 of the agreement that talks about water rights prior to 1989 he will lose his water that runs to his house. He wanted to thank the Millard County Commissioners for the effort they have put forth in this matter. He said he doesn't like to speak against people but, he thinks that so far the state representatives have put this together "cowardly" and not standing up for the people that they represent. According to this agreement, Nevada wanted the water so they could grow more, and this stops all the growth in Utah because there is no more water to be taken. We have to be the ones to prove damage and that expense is all on us. If there is any damage then pumping should stop and SNWA should be the one proving that they haven't caused any damage, not us proving that they have caused damage. So far as he can see Las Vegas hasn't had to go through as many sacrifices as they have put us through. There are still a lot of lawns, parks, golf courses, swimming pools and all kinds of places that they could start making sacrifices, before they have to "rape" us up here. SNWA has full representation, the people and Snake Valley have no representation other than through the Commissioners and this shouldn't be the way.

Marge Jenkins, Meadow Utah, said that they came to a meeting here a couple of years ago that started off with a film presentation of all the wonderful aspects of Las Vegas and moving to Las Vegas. They commented that they would like to increase their housing by 15,000 new homes and told of all the wonderful recreational aspects, in particular, their 63 golf courses. We know that grass uses the greatest amounts of water. She thinks that if Las Vegas will cut down to about 10 golf courses then we could think about giving them water. Until they do, she says "No water"!

Pam Lyman, Oak City Utah, she wanted to make sure that everyone got a questionnaire.

Ron Draper, Delta Utah, said this is a complex issue. He came to this meeting to see what he could learn. He said that Millard County extends all the way out to Snake Valley and we need to do whatever we can to preserve our water rights for our county. We need water to do whatever we need to do; housing, residential use, commercial use and farming. He has a little bit of pessimism with Millard County having about 12,000 residents vs the millions of residents of Las Vegas. It seems like a very small David against a very large Goliath. Overall, he thinks that we need to do all that we can to preserve our Millard County water rights.

Ed Uehling, Las Vegas NV, said that he wanted to comment on the integrity of the SNWA and the Las Vegas Valley Water District. Several years ago they wanted to increase the sales tax because they said they were unable to raise the water rates. That was not true. Since they increased the sales tax, which produces about \$50,000 to \$100,000 a year for the water district, they have raised the water rates tremendously as well as the connection fees. Then during the first 6 months of the year they published several false advertisements, one of which

was, there is a drought in the Colorado River. There is not a drought in the Colorado River. There is 6,000,000 af/y. There is only a drought of common sense with brain cells and political will. Nevada is only supposed to get 300,000 af/y out of the Colorado River, but they are actually taking more and that is why the lake is going down. The rest of it goes to farms in Southern California and Arizona. They are using irrigation techniques that were used back in the times of the Romans which is a huge waste of water. There are many things that can be done to trade that water. They could build desalting plants on the ocean and trade with the city of San Diego and the city of Tijuana or the farms of the Imperial Valley. Doing this they would be able to get hundreds and thousands of af/y.

He says that he is very unhappy with the representation made by the SNWA. This agreement is not the only solution. At a meeting held in Las Vegas on August 20, 2009 there were 50-70 solutions presented. The director of the water district had her back to all the presenters and only looked at a few who complimented her. She refused to listen to any of the presenters and was incapable of expressing even one idea that was presented at the meeting. He says that it is very dangerous to make any agreement with SNWA.

Cecil Garland, Juab County, said that everyone is right on with what they are saying. He has worked with the water for 35 years. There is no surface water in Snake Valley. He finally got Mike Styler, Director of the Division of Natural Resources, to admit that. Boyde Clayton admitted as much, but he said "We've been using the water all this time, now it's Nevada's turn." Mr. Garland said that isn't what he thought the law was based on. He sees it this way: if there is no surface water in Snake Valley then all the water that is being pumped out is under valid water rights. If you start taking that water from Lake Valley to Step-Toe to Spring Valley to Snake Valley then that water will be taken from our water rights. He said that the greatest harm this agreement has done to the water users who are fighting against this, is an official declaration or a quasi-official declaration that somehow or another because water comes out as a resource or recharge it gives Nevada the right to 50% of the water. The water that they are talking of is "paper water, fictional water". When we talk about lowering the water table feet, we who live in Snake Valley, are talking about inches and inches hurt us and dry up springs! He had about 40 springs on his property. He remembered so well when he first came to his place how the springs flowed. The kids went swimming in the hole, now the springs have all dried up. The water table has fallen about 10 ft. The springs are drying up; the vegetation is also drying up and dying. He doesn't need computer models to tell him this because he already knows. This has to stop. If they are saying put it off for ten years, then put it off for the ten years. The problem is that in ten years Nevada will have all of its viable applications lined up and ready to go, and Utah will be standing there scratching their backside and picking their nose wondering what the heck happened. They will have nothing because options are what matters. Utah better not give up their options. If we give up our options we will have nothing.

Terri Marrasca, Baker Nevada, said that based on the science and Mark Ward's presentation, not only will the water table drop in Utah but there will be a back flow. If SNWA wants to pump as much water as they propose, the water that they pull out of the ground will have to not only come from lowering the table but from a back flow to feed that pumping. This analysis will come out in the near future. The agreement should have as much as a \$50,000,000,000 bond because in Owens Valley LA Water and Power had to put up \$551,000,000 to mitigate air problems and \$65,000,000 to restore the Owens River. The financial impact on Utah is so far more than \$3,000,000 which is supposed to be a fund that is re-fed. To guarantee Utah's protection, Las Vegas or SNWA should put up a huge amount of money that is guaranteed to Utah.

On the issue of trust, during the Spring Valley hearings and the time leading up to the hearings, Pat Mulroy, SNWA, had a campaign that said, "We are environmental stewards. We will protect the environment in Spring Valley." At the same time, SNWA lawyers went to the State Engineer of Nevada and said they

want to eliminate environmental considerations scenic and recreational values from the hearing. So you have this rhetoric that was discussed. Before that, SNWA says one thing, and in the meantime they go to the state engineers and say lets get rid of this stuff that we say in our add that we will protect. This is on the public record and we all understand what we are dealing with.

Clayton Jeffery, Delta Utah, said that water runs downhill and that seems to be our problem. Some of the things that are bothering him is that this agreement has three parts to it: Nevada, SNWA and Utah. It boils down to if Utah has an issue, it will be turned over to SNWA or Nevada. They are saying if you have an objection they will write it down and say okay you have had your say, so what. Its like "hooten in the wind". There needs to be some teeth in this thing, any fool knows that if you take water out of the bottom the top goes down. If we have to make an agreement we shouldnâ€™t be in any sweat to do it. This should be a tentative thing.

Shawn Gonder, Oak City Utah, said that this is going to set precedence for years to come on political water issues. Why canâ€™t I transfer water from Garrison to Oak City and drill a well, they are transferring water out of state from Snake Valley, Utah to Las Vegas, Nevada. He heard someone from Millard County say why are we fighting this water issue, this doesnâ€™t affect us anyway. It really does affect us. He feels that if Nevada wants the water then they should put up the bonds for the damages or the extension of the wells for Snake Valley. If they pump even 12,000 af of water from the lower aquifer that took thousands of years to form, it will affect all springs. Do we know how much af/y pumping affects Burbank, Fish Springs, Indian Peaks, etc. You can see over the years what happens when you stop recharging the water. It has caused a lot of slews to dry up.

Within the past year the Delbert Young place by Big Springs added more pivots and now Needle Point Spring on the mountain home range has dried up. Where is the excess water there.

Is Utah trying to make amends with Nevada so they can pipe Lake Powell to St. George and not have Nevada dispute that project. Why do you think Lake Powell and Lake Meadeâ€™s water level went down. Is there political movement of water to say that we need more water. He really thinks that Utah needs to handle this wisely because it will have a lasting affect.

Dorothy Morrison, Columbus Ohio, and a former Millard County resident said that the thirsty tentacles of the South West are already reaching into the Great Lakes area. This is a pivotal battle ground. She came to support this and encourage Utah to fight the fight.

Robert Nielson, Lynndyl Utah, agrees with what Clayton Jeffery said. Mr. Nielson served on the Millard County Water Conservatory District for 25 years; 18 of those years he was the president of the board. It seems strange to him that Nevada could take as much water as Utah. He took a class from the University of Utah taught by a water law attorney. The attorney very definitely stated that the water that is within the state of Utah belongs to Utah and the water that is in the State of Nevada belongs to Nevada. Far more of Snake Valley is in Utah than in Nevada, so far more of the water should be allotted to Utah.

Going back to Millard Countyâ€™s water history, his father was one of the first people to drill an irrigation well between Lynndyl and Leamington. When the Delta companies found out there was water along the river between Lynndyl and Delta, they immediately filed suit for ten large wells. Mr. Nielsonâ€™s father and the other farmers already had their permits filed and were already drilling. The state engineer at that time was Hubert Humphry. He was very definite that each party who was drilling a well only had 17 years to drill the well. They found out that in Millard County there are two stratas of water: the upper water strata and the lower water strata. The upper water strata only goes to about 650 ft. The lower water strata starts at about 700 ft and goes to as much as 1200 ft. The farmers of Lynndyl, Leamington and Oak City area came to

an agreement with the Delta farmers that Delta would not perforate their wells above 600ft and the farmers of Lynndyl, Leamington and Oak City would not perforate their well lower than 520ft. This was strictly adhered to by Hubert Humphry. He went to the point of having a representative from his office come out and inspect the perforation of the wells as they were drilled. The majority of the wells in the Lynndyl, Leamington, and Oak City are drawn from the upper water aquifer. They are adhering to what the state engineer had told them and they don't have any trouble with it. Mr. Nielsen wants to work out an agreement like this with Nevada so they will not be allowed to take more water than is allotted to them. This should all be worked out legally and there shouldn't be any big hurry to get it done right now. The people in the state offices shouldn't be in such a big hurry to settle and come to an unfortunate agreement.

Kane Hill, Partoun Utah, thanked the Commissioners for having the meeting and for all the work they have done. They are kind of an inspiration to all of us out there. So far the negotiations have been taken place in secret and haven't had public scrutiny. He wants to wire into the agreement throughout the monitoring that the data and the decisions that follow the data be public. Whenever they have a meeting they should allow the presence of the public, or at least get the minutes of the meeting publicized no later than 7 days after the meeting takes place. If the public could have a view of the process it would take it out of the realm of secrecy. Some places in the agreement say that Utah will pay certain costs and a few places that say SNWA will pay certain costs, if their board approves it. He thinks that it should be hardwired into the agreement that SNWA should pay all costs incurred in association with this agreement.

Gerald Anderson, Eskdale Utah, wanted to applaud the commissioners for the work they have done. He also liked the letter from the Farm Bureau. He said that it defines the people in Snake Valley. These are things that the negotiating team should of had access to and been given the chance to debate in public or at least get public input. The way this agreement is structured may protect the way of life as it is now, but it doesn't leave a future for Snake Valley. The water is already allocated. There is nothing left with which to do anything. If this agreement goes into effect the way it is stated, then there will be no additional future economic value for Millard County from Snake Valley. It will not be possible for Snake Valley to be more than it is today. Snake Valley has a tremendous amount of developable resources whether it is agriculture or tourism, but it has to have an environment that is attractable to potential economic development.

Allan Biadgy's statement was, "There won't be a green spot left in Snake Valley after this is done". That is a pretty clear indication of what the future of Snake Valley will be under this agreement, as it's stated. The agreement itself addresses the desire to establish an equitable and a cooperative arrangement for the administration of the water resources in Snake Valley. Mr. Anderson also said that the work Mark Ward presented gave us a new idea of what the term "equitable" really should mean when we talk about sharing resources. For that reason alone this agreement needs to be halted in its tracks. It has to be resurrected as a phoenix from its ashes or it has to be completely reformed as something that is equitable.

The second point is being cooperative. The level of cooperation of this agreement is among the signatory parties between the state of Nevada, the state of Utah, their natural resource departments, their state engineers and the proponent of taking the resource out of the valley. When SNWA is a signatory to the party they become a principal and we just can't get the elephant out of the room. The fact that it is cooperative for the agencies doesn't do anything for the people who live there.

One of his concerns with this agreement is, while it may accomplish nothing in terms of administering the resources or protecting the vegetation or any of the natural resource value of Snake Valley, it will create an administrative load on the people who live and work there now. From that standpoint alone, he doesn't

see enough in this agreement that it can stand on its own. He can't identify that it solves or addresses its own stated goals nor does it do anything of value for the people of Utah. He thinks that we should just step back.

Kathy Hill, North Snake Valley, thanked the commissioners for giving people the opportunity to talk about their concerns. She especially thanked Mark Ward for laying out the problems with the 50/50 split. There was one part that she feels was not looked at close enough and that is just the sheer science of letting Nevada access 36,000 af/y. Nature doesn't allow for that. It's like a bathtub that has been installed wrong and the drain end is upstream from the downstream.

They are going to try and capture water that is already being used for another purpose. The purpose right now is phreatophytes. Most of the phreatophytes are in north Snake Valley. Pumping water from the southern end will destroy the phreatophytes on the north end of Snake Valley as a result of ground water mining. The water is going to continue to draw down for several years after they stop the pumping.

There is not any protection in this agreement at all. There is some mitigation, but it is not protection for Utah water right users. She can foresee ranchers in Snake Valley losing all their water in their wells. There is mitigation by SNWA giving them paychecks. They will become on the dole by SNWA. They will pump our water down and then say they can bring in new water. She foresees that they will be waiting on the dole for SNWA and waiting for water trucks to bring them water. That is what this agreement allows and this is totally unacceptable.

Gary Perea, Baker NV, appreciates the work that Millard County has done. The good that this has done is it has brought people together that would not normally work together. The one thing he wants to touch briefly on is the allocations of water. He agrees with the residents of Snake Valley that there is no extra water. The water table is going down now. He would like to see in the agreement that both Utah and Nevada each get 10,000 af/y of unallocated water, then Utah gets 10,000af/y and Nevada gets 25,000 af/y of the reserved water. Utah and Nevada both have power over that water. 10,000 af/y is probably still too much but at least it will be a starting point, and would still give 10 years to look at the science. Neither state water engineer should be able to permit water in any given year of more than 1,000af/y. This will give at least 10 years to measure the withdrawal of that water. This should be a gradual step; not taking so much water all at once. There are positives and negatives to both having and not having an agreement.

Dean Draper, Hinckley Utah, says in reading the agreement as it is written now there are no teeth. There are will's and may's when there should be shall's. It is an unfunded agreement. There are no enforcements to be had as written. He talked of a town called Carigo that has a steam ship that once floated but now it is embedded in the lake covered with dust. The prospect of having all of that water drained from our valley would mean that Snake Valley would look like Sevier Lake.

An aspect of the agreement that was not considered was that SNWA has the propensity to buy ranches and file for water which they would allegedly have the right to move water from one basin to another. In the agreement to keep them from purchasing water existing allocated rights prior to 1989. If they had a willing seller to transfer that water down to the Lincoln County line. Interstate transfer of water is supposed to stop at the state line. This needs to be investigated and included in the agreement. There are rumors that there might be as much as 20,000 af of water already allocated in Snake Valley by Utah that could be up for sale. This needs to be investigated to see if there is some way to preclude it from transfer and have it addressed in the agreement. Those who have proposed this agreement have viewed this as a way to take SNWA applications for 50,000 af/y in the valley and drop it immediately to 36,000 af/y. That is a net loss of 14,000 feet right up front. If the state engineer of Nevada allocated 50% as set forth in the agreement and drops it to 18,000 af/y, the hydrologic studies would make it so they would have very little

to begin with. The idea being that "there is no extra water". The agreement is a good idea to protect both states but it needs to be redone and needs to address these other issues.

Dean Baker, Baker Nevada, thanked the Millard County Commission for the work they have done and how much they have supported the opposition of this pipeline. He has worked for 20 years on opposing this pipeline and will continue to do so. There is nothing about this agreement that makes him in favor of the pipeline or wanting to sale water. The only way that he will do this is if he has no other choice because of the laws. If you take Mark Ward's numbers and put them on this valley and Mudd Lake, Clear Lake, Flowell and all of those it would be an interesting comparison of the numbers. It has become totally acceptable to both states to draw that water level down. So neither one of those states could legally say that you can't lower the water table because any place you go to it has been lowered. The difference is that they built a city there, but to transfer the water out and still say that it is acceptable to draw it down is as wrong as it could be. There should be a huge effort by both states to have their legislatures limit drawdowns in exporting water. That view seems to be unable to get around. He virtually agrees with everything that has been said here. Whether it is better to have an agreement or not is still a very clear question in his mind. Having listened to all of what has been said here and what has been going on for two years, there is no potential for this to stay in negotiations with those people any longer. This had to get on the table and he totally disagreed with it not being on the table for all the time he was there. There was no use for it to go on any longer. Nobody knows if the numbers are right we just know that the water level is going down. If it is drawn down more it will have major impacts. The acceptability of taking the water somewhere else is the bad part. How we stop the pipeline and keep them for creating the impacts is a question in his mind.

There was no other comments made.



CONFEDERATED TRIBES
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Concerns on the Snake Valley Water Settlement

The following is an outline of concerns of the Confederated Tribes of the Goshute Reservation (hereinafter "Tribe") in response to the proposed Snake Valley Water Settlement (hereinafter "settlement") between Utah and Nevada.

Position on the settlement

- Executive and administrative precedence surrounding the reasoning of the settlement
- Violation of Federal judicial precedence, treaties, and Federal Trust Responsibilities

Summary of Concerns

I. THE SETTLEMENT IGNORES THE CONFEDERATED TRIBES OF THE GOSHUTE RESERVATIONS RESERVED WATER RIGHTS.

For over a century, it has been understood federal law that Indian Tribes have rights to large, but often still unquantified amounts of water. When Indian reservations are created, natural resources, including water sufficient to satisfy the purposes of the reservation, are reserved automatically.¹ As a result, tribal reserved water rights represent an "exception to the general rule that allocation of water is the province of the states."² Although waters are open to appropriation under the laws of various Western states, such laws do not have jurisdiction over of federal reservations.³ Unlike appropriative rights, Indian reserved water rights are not based on diversion and beneficial use, which are requisites to obtaining and maintaining a water permit under the appropriation system. Instead, under reserved rights, a sufficient amount of water is reserved to fulfill the purposes for which a reservation was established.⁴ For further detail in these and other

¹ *Arizona v. California*, 373 U.S. 546, 600 (1963); *Winters v. United States*, 207 U.S. 564 (1908)

² *Cohen's Handbook of Federal Indian Law*, Felix Cohen, Sec. 19.01(1)

³ *Cappaert v. U.S.*, 426 U.S. 128, 143-145 (1976); *Fed. Power Comm'n v. Oregon*, 349 U.S. 435 (1955)

⁴ *Cohen's* at Sec. 19.01(1); *Winters v. U.S.*, 207 U.S. 564

extremely consequential standing judicial precedence, treaties, and executive orders, please refer to Exhibit 1. The Tribes federally reserved water rights have been completely ignored in the settlement.

II. MOST LIKELY, THERE IS SIGNIFICANT INTERBASIN TRANSFER BETWEEN THE TRIBES CURRENT WATER SOURCE IN THE DEEP CREEK BASIN WITH THE SNAKE VALLEY BASIN.

To the aforementioned points, in conjunction with its exploratory technical field investments, the Tribe can claim a current and substantial interest in the water assets in the Deep Creek Basin, and by numerous technical accounts, by way of inter basin transfer trends, whereby the Deep Creek Basin has a reasonable propensity to serve as a significant recharge source for the Snake Valley Basin, the Tribe also claims substantial interest in Snake Valley allocations.

Insofar as this interest is reasonably consequential to the Tribes' well-being, especially in economically trying times, the Tribe is unsatisfied by the unchecked tenacity of the settlement to immediately allocate rights without sufficient technical data assuring the protection of the Tribes' interests in the water assets in an adjoining basin. And while the Tribe was provided a comment period, the Tribe impresses that it should have been consulted prior to any comment period, given its sound status in the past, as an interested party. It was not consulted or otherwise considered in the development of the settlement to date, and therefore feels the agreement is inherently premature.

Additionally, an authentic comment period requires the free availability of information surrounding the topic under scrutiny. To date, neither Utah nor Nevada will release the records, upon explicit request, deliberating basis for the development of the settlement, and so the Tribe is paralyzed in efforts to provide calculated and informed comment of the settlement.

III. THE SETTLEMENT VIOLATES UTAH'S OWN ADMINISTRATIVE PROCEDURE ACCORDING TO THE RULING ON THE TRIBE'S REQUEST FOR AN APPROPRIATION.

The Tribe finds the proposed settlement especially troubling because it provides for a 200,000 acre/foot allocation on technical grounds it deemed insufficient to allocate 50,000 acre/feet, only months before the agreement. On June 23, 2009, application number 17-217 (A77473) was effectively rejected, citing a lack of sufficient technical data for an immediate allocation. The settlement cites the exact same studies and data as the Tribe's request, but finds it sufficient to allocate four times the amount requested by the Tribe. The Tribe's requests for reconsideration has been accepted, but given the clandestine nature of the settlement's development in relation to the order of multiple congruent events, the Tribe believes that perhaps the reconsideration has merely been granted on political grounds.

Proposed Solution

Given the aforementioned elements, the Tribe respectfully requests the following:

- In a separate action, the State of Utah grant the Tribe's request for an immediate allocation of 20,000 Acre/Feet, representing a portion of the Tribe's federally recognized reserved water rights, which is consistent with the terms of the settlement.
- That the Tribe receive a graduated allocation of 5,000 acre/feet each additional year, not to exceed 50,000 Acre/Feet in total, at the same percentage-adjusted rates the settlement engages for testing and subsequent increase.

This agreement would allow the Tribe to protect its federally reserved water rights immediately while allowing the residents of the Deep Creek Basin to monitor any potential interbasin transfer.

The Tribe presumes, upon such an agreement, it has no apparent interest to further pursue any other applications or requests, and will immediately withdraw such items that exist to date. Further, it would guarantee all data and findings it earns from federal grant moneys, in turn made eligible by its state-affirmed water right, will be entirely and immediately available for the State of Utah to review as it pleases.

The Tribe feels such a request is reasonable and well within the realms of the technical and political position the state has taken with the settlement. It feels it presents a technically humble request and asks the state to make every effort to maintain an dialogue representative of genuine efforts to help the Tribe find resolve in its efforts to secure its nature resources interests.

EXHIBIT 1.

**MEMORANDUM IN SUPPORT OF THE CONFEDERATED TRIBES OF
THE GOSHUTE RESERVATIONS' CONCERNS AND PROPOSAL IN
RESPONSE TO THE SNAKE VALLEY WATER SETTLEMENT**

The federal government has a trust responsibility to Indian tribes to protect its resources which includes, but not limited to, protection of land, water, minerals, and children.¹ Specifically, water is clearly a resource covered under the federal trust responsibility protections. Congress has recognized the federal government's "trust responsibilities to protect Indian water rights and assist Tribes in the wise use of those resources." *Western Water Policy Review Act of 1992*, Pub. L. No. 102-575, title XXX, Sec. 30002(9), reprinted at 43 U.S.C. Sec. 371. The courts have invoked the trust responsibility to limit federal administrative action regarding Indian tribes, particularly in the context of administration of tribal property by the Department of Interior. *Manchester Band of Pomo Indians v. U.S.*, 363 F. Supp. 1238, 1245-1247 ((N.D. Cal. 1973). The courts have likewise used the trust responsibility to limit federal agencies conducting any federal government action relating to Indian tribes and to hold agency action to a higher standard for dealings with Indian tribes or resources. *Nance v. EPA*, 645 F.2d 701, 711 (9th Cir. 1981) ("[i]t is fairly clear that any Federal government action is subject to the United States'

¹ See *Cherokee Nation v. Georgia*, 30 U.S. 1, 17 (1831) (stating that the federal-tribal relationship is like that of a "ward to his guardian."); see also *Worcester v. Georgia*, 31 U.S. 515; See, e.g., Dep't of Justice Policy on Indian Sovereignty and Government-to-Government Relations with the Indian Tribes, available at www.usdoj.gov/otj/sovtrb.htm ("the Department shall be guided . . . by the United States' trust responsibility in the many ways in which the Department takes action on matters affecting Indian tribes"); 25 U.S.C. Sec. 458cc (Secretary of the Interior must encourage tribal self-governance by entering into agreements with tribes "consistent with the Federal Government's laws and trust relationship to and responsibility for the Indian people"); 25 U.S.C. Sec. 3701 (stating that "the United States has a trust responsibility to protect, conserve, utilize, and manage Indian agricultural lands consistent with its fiduciary obligation and its unique relationship with Indian tribes"); 25 U.S.C. Sec. 4043 (Special Trustee for American Indians must create a plan to "ensure proper and efficient discharge of the Secretary's trust responsibilities to Indian tribes and individual Indians"); 25 C.F.R. Sec 225.1 (Secretary of the Interior "continues to have a trust obligation to ensure that the rights of a tribe or individual Indian are protected in the event of a violation of the terms of any minerals agreement); 20 U.S.C. Sec. 7401 ("[i]t is the policy of the United States to fulfill the Federal Government's unique and continuing trust relationship with and responsibility to the Indian people for the education of Indian children").

fiduciary responsibilities toward the Indian tribe”); *Paravano v. Babbitt*, 70 F.3d 539, 545 (9th Cir. 1995). Through many acts of Congress and numerous decisions of the United States Supreme Court, the federal government “has charged itself with moral obligations of the highest responsibility and trust.” *Seminole Nation v. United States*, 316 U.S. 297 (1942). The standards of duty required of the United States government and its agencies as a trustee for tribes is “not mere reasonableness, but the highest fiduciary standards.” *Menominee Tribe v. United States*, 101 Ct. Cl. 10, 19-20 (1944). Therefore, the federal government and its agencies must be thorough and vigilant when it comes to protecting and advocating for tribes and tribal resources.

The majority of Indian tribes are not utilizing, to the full extent, their legal entitlement of reserved water rights. “For political and institutional reasons, the United States has failed to secure, protect, and develop adequate water supplies for many Indian tribes.” *Cohen’s*, at 1221 (citing National Water Comm’n, *Water Policies for the Future: Final Report to the President and to the Congress of the United States* 474-475 (1973) (stating that “In the history of the United States Government’s treatment of Indian tribes, its failure to protect Indian water rights for use on the reservations it set aside for them is one of the sorrier chapters.”)).

One important factor of the federal governments failure to protect Indian water rights is money. *Id.* Another factor is the impact of the Endangered Species Act (ESA), 16 U.S.C. Sec. 1531 et seq. *Id.* The ESA requires that before a federal agency authorizes, funds, approves or undertakes an activity that may adversely impact a threatened or endangered species or critical habitat, the Fish and Wildlife Service, or the National Marine Fisheries Service must determine the biological impacts of the proposed action. *Id.* Such impacts are assessed against a baseline of existing activities that already have an impact on the species. *Id.* Indian water rights, even if adjudicated or awarded as part of a settlement act, are not included in the baseline unless such

water rights are in actual use, which few tribal reserved rights are. Since vested or perfected non-Indian water rights form a part of the baseline, then the exercise of senior but unvested tribal water rights could be prohibited because of potential impacts on threatened or endangered species or habitat, while junior non-Indian rights are permitted to continue because they are part of the existing baseline. *Id.* This can pose a serious problem for unvested, but legally sound tribal reserved rights.

Another reason for the federal government's failure to develop and protect Indian water rights is due to conflicts of interest. The Department of the Interior is responsible for advancing and protecting the interests of the Indian tribes and for representing a variety of public interests in land and resources, which often compete with Indian water rights interests. *Id.* at 1223. However, when Congress represents both tribal and competing federal interests in water, such dual representation does not breach the federal trust responsibility of the tribe. *Nevada v. U.S.*, 463 U.S. 110, 135 (1983). In *Nevada*, which involved a conflict of interest, the Supreme Court Stated:

It may well appear that Congress was requiring the Secretary of the Interior to carry water on at least two shoulders when it delegated to him both the responsibility for the supervision of the Indian tribes and the commencement of reclamation projects in areas adjacent to reservation lands. But Congress chose to do this...the Government cannot follow the fastidious standards of a private fiduciary, who would breach his duties to his single beneficiary solely by representing potentially conflicting interests without the beneficiary's consent.

463 U.S. 110, 128 (1983). Therefore, if a tribe does not trust the federal government to adequately promote its interests, tribes can intervene in the water appropriation litigation. *White Mountain Apache Tribe v. Hodel*, 784 F.2d 9221, 924-925 (9th Cir. 1986); *New Mexico v. Aamodt*, 537 F.2d 1102, 1106 (10th Cir. 1976). In light of the above, the Tribe will have to determine whether the United States can adequately fulfill its fiduciary responsibility toward the

Tribe regarding its reserved water rights and utilize that decision in how to proceed.

A. “Winters’ Doctrine” Protects Tribal Reserved Rights

The vast majority of tribal rights to water arise under the implied reservation doctrine first promulgated in 1908 in *Winters v. United States*, 207 U.S. 564 (1908) *Cohen’s*, at 1171. In *Winters v. United States*, the United States Supreme Court ruled that tribal right to water was impliedly reserved in the agreement establishing the reservation. *Winters*, at 565. The policy of confining Indian tribes to reservations implied that the tribes would have the means, including water, to fulfill the federal government’s purpose of transforming them to hunters and gatherers to an agrarian, pastoral people. *Cohen’s*, at 1172. The creation of the reservation impliedly reserved water rights. *Winters v. U.S.*, 207 U.S. 564. This reserved water right vests on the date that Congress reserves the land, *Arizona v. California*, 373 U.S. 546, 600 (1963); and remains regardless of non-use. *Hackford v. Babbitt*, 14 F.3d 1457, 1461 (10th Cir. 1994). Therefore, pursuant to the “Winters Doctrine” Indian tribes, at the time their Congress reserved their lands, had enough water set aside by Congress for their present and future needs, and that those water rights are reserved in order to carry out the purposes for which the lands were set aside; and that such rights are paramount to water rights later perfected under state law. *Winters v. U.S.*, 207 U.S. at 576-577; see also *Arizona v. California*, 373 U.S. 546, 600-601 (1963).

Winters and *Arizona* established that Indian reserved rights to water are determined by federal, not state, law. *Cohen’s*, at 1174. Indian rights and interests in property are set forth and protected by federal law and state jurisdiction over Indian property interests within Indian country is preempted unless expressly authorized by Congress. *Oneida Indian Nation v. County of Oneida*, 414 U.S. 661, 667, 670 (1974); *Johnson v. M’Intosh*, 21 U.S. 543; *County of Yakima v. Confederated Tribes & Bands of the Yakima Indian Nation*, 502 U.S. 251 (1992) (however, see

analysis regarding McCarran Amendment, sec. 1 (2), *supra*. In fact, Congress has expressly recognized that state law is preempted regarding Indian water rights. 43 U.S.C. Sec. 371; 25 U.S.C. Sec. 1322(b); 28 U.S.C. Sec. 1369(b).

Winters and *Arizona* also established that the substance and scope of tribal water rights were determined by federal law. Other courts have also held that tribal water rights are “defined by federal, not state law.” *U.S. v. Adair*, 723 F.2d 1394, 1410-1411 & n. 19 (9th Cir. 1983); *Colville Confederated Tribes v. Walton*, 752 F.2d 397, 400 (9th Cir. 1985); *U.S. v. McIntire*, 101 F.2d 650, 654 (9th Cir. 1939); *Arizona v. San Carlos Apache Tribe*, 463 U.S. 545, 571 (1983); *Colo. River Water Conservation Dist. V. U.S.*, 424 U.S. 800, 813 (1976).

Implicit in the *Winters* Doctrine is that the exercise of tribal water rights has the potential to “disrupt” non-Indian water users because tribal reserved rights arise under federal law, and because they are often put to actual use after state appropriation rights are established. The impact on junior state appropriators, however, cannot operate to divest tribes of their federal water rights. *Cohen’s*, at 1175. In the *Winters* case, the non-Indian appropriators on the Milk River had been using the water for irrigation for some years prior to the tribal use, however the Court held that the tribes’ use was senior to, or had priority over, the junior state-law rights, and that the tribal rights could be asserted even though it would deprive the non-Indian irrigators of the water they had been using and on which they had been relying. *Winters v. U.S.*, 207 U.S. at 568-569. It is clear then, that “[f]rom its inception, then, the *Winters* doctrine contemplated that junior non-Indian users could [be forced to] forfeit their water [rights] when tribes asserted their reserved rights.” *Cohen’s*, at 1175. The impact on state water users is not a factor in the determination or scope of the federal law right to an implied reservation of water. *Colville Confederated Tribes v. Walton*, 752 F.2d 397, 405 (9th Cir. 1985); *New Mexico v. Aamodt*, 537

F.2d 1102, 1113 (10th Cir. 1976). In addition to the superiority of federal law, the Supreme Court in *Arizona* established that water is impliedly reserved to fulfill the purposes of the Indian reservations regardless of how those reservations were established. Therefore, reservations created by executive order or statute have the same water rights as those established by treaty or agreement. *Cohen's*, at 1176.

B. Date of Priority

Priority is arguably the most important element of the doctrine of prior appropriation. Western appropriation rights are ranked in chronological order, from the most senior to the most junior according to their priority dates. *Cohen's*, at 1179. First in time, first in right is the principle used by the court systems in quantifying water rights in the West and guarantees that in times of shortage, senior appropriators receive the full amount of their right before junior appropriators receive water from the same system. See *Colorado River Water Conservation Dist. v. U.S.*, 424 U.S.800, 805 (1976). Indian tribal water rights are affected by the date of priority. In order to mesh Indian water rights with the appropriation system used in the West, tribal reserved rights require priority dates to establish their seniority.

The priority date of tribal water rights depends on the type of water right involved and whether the use of the water existed before the establishment of the reservation. If water was reserved for uses or purposes that did not exist before the reservation was established, the priority dates is the date the reservation was established (whether the reservation was established through treaty or executive order). However, if water was reserved to continue an aboriginal practice, then the priority date is time immemorial. *Cohen's*, at 1179.

As a result, there are differing dates that the Goshute Tribe may use to determine the tribal priority date for *Winters* water rights including the date the Treaty with the specific tribe was signed or time immemorial.

Treaty Date

One scenario on which the Goshute Tribe could base its priority date is the treaty date, which is October 12, 1863. The Treaty with the Shoshoni-Goship (also known as the Treaty of Peace and Friendship or the Treaty of 1863) was entered into between the United States government and the Goshute Tribe in 1863.

Utilizing the priority date of 1863 based on the Tribe's treaty would give the Tribe water rights senior to any user in the Valley.

The *Winters* case ruled that the tribal right to water was impliedly reserved in the agreement establishing the reservation. The Treaty with the Shoshoni-Goship upon which the Tribe would base its priority date was a treaty of peace. The treaty did not formally create a reservation, however, it laid out, in detail, the "boundaries of the country claimed and occupied" by the Tribe and made a promise for a reservation to be formally established in the future.

Although the treaty did not formally create the reservation, it is still quite likely that the Tribe could date its priority back to the treaty date rather than the Executive Order date. This is because courts have held that *Winters* rights have a priority as of the date the United States *promised to create a reservation*, not the date on which the reservation boundaries were finally delineated. *State ex rel. Martinez v. Lewis*, 116 N.M. 194, 861 P.2d 235 244 (N.M. App. 1993) (hereinafter "*Martinez*"). In the *Martinez* case, the treaty at issue was a peace treaty, which did not directly involve the transfer of any land but which contained a promise of a future reservation. In holding that the Tribe's water rights could hold the treaty priority date, the Court

stated that “[a]ny contrary holding would be a crabbed interpretation of the dealings between the Indians and the United States, an interpretation the weight of authority teaches us to avoid . . . [and] the very *Winters* doctrine upon which Indian water rights are based.” *Id.* at 244.

Therefore, under *Martinez*, a peace treaty, or a treaty that promises to create a reservation but does not actually do so, is sufficient to secure a priority date according to the date of such treaty.

Like the treaty in *Martinez*, the Treaty with the Shoshoni-Goship was also a peace treaty. In addition to being a peace treaty it also delineated the boundaries in which the Goshute Shoshone Tribe was to reside and made a distinct promise of a future reservation. The Treaty with the Shoshoni-Goship states that the “boundaries of the country claimed and occupied” by the Tribe are “[o]n the north by the middle of the Great desert; on the west by Steptoe Valley; on the south by the Tooele or Green Mountains; and on the east by Great Salt Lake, Tuilla, and Rush Valleys.” *Treaty with the Shoshoni-Goship*, Article 5. The Treaty further makes a promise of a formal reservation: “[t]he said bands agree that whenever the President of the United States shall deem it expedient for them to abandon the roaming life which they now lead, and become settled as herdsmen or agriculturists, he is hereby authorized to make such reservation for their use.” *Id.* at Art. 6. The treaty also refers to the Tribe as “hunters or herdsman.” *Id.* at Art. 7.

Further, regarding the treaty, the Tribe has stated the following:

October 12, 1863, Tabby, Autosome, Tints-pa-gin and Harry-nap, the designated chiefs of the Shoshone-Goship Tribe, signed a “Treaty of Peace and Friendship” at Tale (Tooele) Valley. This treaty required that we give up our wandering and live on a reservation and that the Government would compensate us for the destruction of game. The treaty was ratified by Congress and signed into law on January 17, 1865 by President Abraham Lincoln. The federal government and Mormon Church organized Indian farms for our people near Ibapah, Utah. We farmed and adopted much of the white mans culture, some of us even adopted his religion. A permanent reservation was established south of Ibapah in 1914.

<http://www.goshutetribes.com>. It is clear then, that although the treaty did not formally designate the legal boundaries of the Reservation, that it established general reservation boundaries to which the tribe was confined and that it contemplated that the Tribe would convert to an agricultural society, including agriculture, irrigation, and herding, and made the promise of a future reservation. Under *Martinez*, therefore, the Goshutes have a strong argument that its priority date begins on the treaty date.

Further, the Indian law canons of construction, which require all agreements, treaties, statutes and executive orders to be construed liberally in favor of tribes and also require any ambiguities in a treaty or other agreement or law to be construed in favor of the Indians, support a treaty priority date.

Time Immemorial

Another scenario by which the Goshute Tribe could measure its priority date is under the doctrine of time immemorial. Tribal water rights reserved for purposes that predate the creation of the reservation, such as aboriginal uses, carry earlier priority dates. Many traditional or aboriginal tribal uses, practices and customs required water and if such uses, practices and customs were confirmed by the document that created the reservation, the right to water for such purposes continues with a priority date of time immemorial. *U.S. v. Adair*, 723 F.2d 1394, 1414 (9th Cir. 1983); *State ex rel. Greely v. Confederated Salish and Kootenai Tribes of the Flathead Reservation*, 712 P.2d 754, 764 (Mont. 1985). For example, water reserved to maintain fisheries for tribes historically engaged in or dependent on fishing has a priority date of time immemorial.

Priority Date Assessment for Utah and Nevada

a. Utah

Although Utah began keeping records of its surface water rights in 1903 and ground water rights in 1935, water used before such dates can be established by filing a “diligence claim” with the Utah Division of Water. <http://www.waterrights.utah.gov/wrinfo/default.asp>. Many of the rights held by current water rights’ users in the Deep Creek Valley date back to 1880. However, the Tribe’s treaty predates many of the water rights for the ranchers in the deep creek valley.

b. Nevada and Southern Nevada Water Authority

The Nevada Division of Water Resources is responsible for administering and enforcing Nevada water law, including the adjudication and appropriation of groundwater and surface water in the state. The administrative head of this division is the State Engineer, whose office was created by the Nevada Legislature in 1903. The purpose of the 1903 legislation was to “account for all of the existing water use according to priority.” http://water.nv.gov/Water%20Rights/Water%20Law/state_role.cfm.

The State Engineer’s Office was established and began issuing permits in 1903. *Email from Robert H. Zeisloft, P.E., Section Chief, Surface Water and Adjudication Sections, Nevada Division of Water Resources to Beth Parker, Goshute Tribal Attorney, June 1, 2009.* However, “claims of vested rights continue to be filed with [the] office even today. These are filed to establish “claims” on the use of water prior to 1903 for surface water sources, and are just that, claims, until the particular source is adjudicated.” *Id.*

The 1903 act was amended in 1905 to set out a method for appropriation of water not already being put to a beneficial use. It was not until the passage of the Nevada General Water Law Act of 1913 that the Nevada Division of Water Resources was granted jurisdiction over all wells tapping artesian water or water in definable underground aquifers. The 1939 Nevada

Underground Water Act granted the Nevada Division of Water Resources total jurisdiction over all groundwater in the state.” http://water.nv.gov/Water%20Rights/Water%20Law/state_role.cfm.

The Southern Nevada Water Authority (hereinafter “SNWA”) is a coalition of five water conservancy districts in Southern Nevada. In April 2007, Nevada State Engineer Terry Taylor authorized SNWA to pump up to 40,000 acre-feet of water annually from the aquifer that lies underneath Spring Valley, west of Great Basin National Park. SNWA also wants to take groundwater out of Snake Valley, on the Utah-Nevada border and pump the water through a 285-mile pipeline to southern Nevada. SNWA had requested 91,000 acre-feet annually.

The Goshute Tribe has and continues to oppose SNWA’s proposals because of the likelihood that SNWA’s actions would have a negative impact on the Tribe’s reserved rights to water. On January 18, 2008, the Goshute Tribe sent a formal request to the BLM seeking cooperating agency status in the BLM’s Environmental Impact Statement (“EIS”) of SNWA’s proposals. The Bureau of Land Management denied the Goshute’s request to become a cooperating agency. In affirming the decision of the Nevada BLM Director, the Interior Board of Land Appeals stated that a decision granting or denying a request to become a cooperating agency under NEPA is within the discretionary authority of the lead agency (BLM). It also stated that although the United States owes a general trust responsibility to Indian tribes, this responsibility does not impose a duty beyond complying with applicable statutes and regulations and that even though Goshute Reservation’s groundwater may be affected by the project, such effects do not give Goshute jurisdiction by law.

Because of the BLM’s refusal to allow the Tribe to participate as a cooperating agency,

the Tribe is prepared to take the following steps. First the Tribe will comment, during the comment period, on all possible aspects of the Draft EIS. The Tribe will then file a motion to reconsider with the Interior Board of Land Appeals. If the Tribe's request is denied again, then it is prepared to seek judicial review.

Currently, SNWA is on a timeline to miss a Scheduling Order deadline. On October 28, 2008, the Nevada State Engineer issued Interim Order No. 2 and a Scheduling Order which set the date for the public hearing on SNWA's applications to appropriate groundwater in the Snake Valley for September 29, 2009. As part of the Scheduling Order, SNWA was supposed to develop a hydrologic groundwater model and present specific results of that model to the State Engineer. Concurrently, SNWA has been working with the BLM to prepare an EIS (to which the BLM denied the Tribe cooperating agency status). SNWA wants to address the model and the EIS at the same hearing. However, SNWA has stated that it will not be able to complete the modeling effort, which was supposed to be completed by June 19, 2009 so it could be used in the September hearing. As a result of its failure to meet the deadline, SNWA is requesting an additional year to allow it to complete modeling efforts. *Ltr. From Kay Brothers, Deputy General Manager, Engineering and Operations of SNWA to Jason King, Acting State Engineer, State of Nevada, March 30, 2009.*

Now that the June 19, 2009 deadline has passed, the Tribe should request that SNWA's application for groundwater in the Snake Valley be denied due to SNWA's failure to comply with the Scheduling Order.

Laurie L. Carson, Commissioner
Richard Carney, Commissioner
Gary Lane, Commissioner
RaLeene Makley, Commissioner
Gary Perea, Commissioner
JoAnn Malone, Ex-Officio Clerk of the Board

953 Campton Street
Ely, Nevada 89301
(775) 289-3065
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White Pine County Board of County Commissioners

September 23, 2009

Snake Valley Agreement
C/o Nevada Department of Natural Resources
Division of Water Rights
1594 West North Temple, Suite 220
901 S. Stewart St.
Salt Lake City, UT 84114

Attention: Mike Styler

Dear Mr. Styler:

The White Pine County Commission has reviewed the Utah/Nevada Agreement on the Use of Snake Valley Water. The County Commission continues to oppose the Groundwater Development Project because of the likelihood that it will result in negative environmental and economic impacts on our area. However, the White Pine County Commission believes that Snake Valley, its environment, and its residents are better protected by the presence of an agreement than they are without one. Although White Pine County supports the goals and basic concepts in the Draft Agreement, we feel there are critical issues with draft as proposed and it must be revised prior to final acceptance.

White Pine County has the following specific concerns with the Agreement:

Public Processes: There has been a lack of public process in the creation of the Draft Agreement and the Agreement does not ensure public participation in the review of comments, revisions, or implementation.

- 1) Meetings related to the Agreement, on-going evaluation, and implementation should be conducted according to the guidelines of the Nevada Open Meeting Law and the Utah Open and Public Meetings Act.
- 2) Any documentation and data used to make the determinations in the Agreement should be available for public review.
- 3) Future discussions to evaluate existing data and new studies and to modify the Agreement should be open to the public.

- 4) Critical steps in the process to review, revise, and accept the Final Agreement should be conducted through Public Hearings and should include at least one hearing in Snake Valley.

Determination of Available Ground Water Supply: In the Draft Agreement, the division of water is based on the determination that there is 132,000 af/y in Available Ground Water Supply. This appears to be based on the theoretical findings in the BARCASS Study. This estimate is much higher than previous studies including the 1965 Hood and Rush analysis used by the Nevada Division of Water Resources. The Final Agreement either needs to consider other estimates of Available Ground Water Supply or a BARCASS 2 is required to provide the studies to support the assumption that there is 132,000 af/y available in Snake Valley.

Need and Procedure for Accepting Additional Data: The Draft Agreement identifies the concern that the data are insufficient. The County agrees with this determination and supports the segments of the Draft Agreement designed to allow additional data to be considered. The County has a concern about the process for identifying appropriate additional information to be considered. The Agreement refers to "Evolving Trends in Data Collection" and "On-going and Future Studies and Other Information." The County recommends that the Final Agreement be revised to define what is meant by "evolving trends in data collection" and to identify what "on-going studies" and what type of "other information" will be included. The Final Agreement should also detail the processes to be used in reviewing and accepting additional studies and other information to ensure its scientific basis and reliability. The County recommends reliance on USGS studies that are in progress or that may be commissioned to answer specific questions regarding the water resources available in Snake Valley. USGS has a well recognized peer review process and has demonstrated its credibility in conducting unbiased and independent scientific research. All additional information should be made available for public review and comment.

Need to Define Terms: The Draft Agreement uses terms that need additional definition including "Maximum Sustainable Beneficial Use," "Adverse Impacts," and "Adverse Impacts to an Existing Permitted Use." The County sympathizes with the difficulty in developing an agreement based on water law in two different states and the need to find terminology that will bridge the differences between the two. However, in using terminology that may not have legal definition in either state, the Final Agreement needs to be very careful to provide specific definitions and should specify thresholds, who will determine when those thresholds are exceeded, and the processes for making those determinations.

Need to Define Authority and Responsibilities Under Nevada and Utah Water Law:

The Final Agreement needs to provide more detailed explanations of how the Agreement will work in conjunction with existing Nevada and Utah state statutes.

Include All Water Sources: The Final Agreement should include any and all water sources that may contribute to the 132,000 af/y. The BARCASS study indicates that water flows from south Steptoe Valley into Spring Valley and then into Snake Valley. It estimates that as much as 49,000 af/y may flow from Spring to Snake Valley. USGS is currently studying the flow of water from Spring Valley into Hamlin and then Snake Valley. The Draft Agreement includes Pleasant and Hamlin Valleys but does not reference Spring Valley. The Final Agreement should include analysis of the sources of water that may comprise the 132,000 af/y determined to be available in Snake Valley. It should include a discussion of the impacts of the Groundwater Development Project pumping and exportation of water from Spring Valley on the availability of water in Snake Valley as well as any impact it might have on Steptoe Valley.

Special Nature of Interbasin Transfers and Negative Impacts Caused by Water

Exportation Through the Ground Water Development Project: The Final Agreement should acknowledge that Nevada law requires the State Engineer to take environmental conditions and potential for economic development of the host basin into account in decisions related to interbasin transfers. The Final Agreement should hold Southern Nevada Water Authority (SNWA) responsible for negative impacts on the environment, economic potential, or senior water rights holders in Snake Valley and in any other basin that might be contributing to the water available in Snake Valley.

Approval Process and Requirements on Parties to the Agreement: The Final Agreement should be signed by the Governors of Utah and Nevada rather than their designated department heads. The Final Agreement should identify the funding source for implementation of the agreement and require the two states to make commitments for any funding determined as their responsibility. White Pine County believes that SNWA should be held responsible for funding implementation of the provisions in the Draft Agreement. The Final Agreement should include a statement identifying the responsibilities of SNWA under the primary agreement and it should state that the agreement is binding on SNWA and its successors. The provisions of the Monitoring and Mitigation Agreement should be incorporated within the Final Agreement and should include a requirement that any owners or purveyors of water entering the pipeline are held responsible to the same terms and conditions as SNWA. If water rights in Snake Valley are awarded to SNWA, it should not be allowed to lease its water to any other entity unless that entity is required to adhere to the provisions of the Final Agreement and the Monitoring and Mitigation Agreement.

Laurie L. Carson
September 23, 2009
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Ten Year Delay: The Agreement provides a ten year delay for action on the Southern Nevada Water Authority applications in Snake Valley. The County is concerned that this delay has a negative impact on the citizens of Snake Valley. The applications were filed by Las Vegas Valley Water District in 1989. The citizens of the Nevada portion of Snake Valley have been unable to secure water rights from the State Engineer for development of the municipal water system at Baker, expansion of existing operations, and new development for the past 20 years. If they are asked to wait another 10 years, the Agreement needs specific provisions for the State Engineer in Nevada to accept and consider requests for new water rights for legitimate uses.

Please take the comments of White Pine County and its Snake Valley residents into consideration in your process to revise the Draft Agreement, approve the Final Agreement, and implement the terms of the Agreement. The White Pine County Commission appreciates the opportunity to respond to the Draft Agreement and would be happy to work with you in an effort to revise the Draft to address the concerns of our citizens.

Thank you.

Sincerely,



Laurie L. Carson,
Chairman

cc: Governor Jim Gibbons
Governor Gary Herbert

Print View

From: Randy Parker <Randy.Parker@fbfs.com>
To: <snakevalley@utah.gov>
CC: Leland Hogan <Leland.Hogan@fbfs.com>, <saosguthorpe@aol.com>
Date: Wednesday - September 30, 2009 12:46 PM
Subject: Snake Valley Groundwater Draft Agreement

UTAH DEPARTMENT OF NATURAL RESOURCES
Michael Styler, Executive Director

Statement of the
Utah Farm Bureau Federation
Randy N. Parker, CEO
September 30, 2009

Regarding

SNAKE VALLEY GROUNDWATER DRAFT AGREEMENT

The Utah Farm Bureau Federation is the largest farm and ranch organization in the state representing more than 26,000 member families. Water is the lifeblood of agriculture and its availability will determine the success and/or failure of food producers in the Great Basin region. Farm Bureau's interest in the Snake Valley Agreement is fundamental under the principles of western water law. Proven water rights held by farmers and ranchers within Snake Valley and even broader rights across Utah's West Desert could potentially be harmed by the trans-basin groundwater transfer proposed by Southern Nevada Water Authority (SNWA).

Thank you for the opportunity to offer testimony on the proposed agreement on the trans-basin transfer of Snake Valley groundwater.

First, the Utah Farm Bureau wants to complement DNR Executive Director Mike Styler, Utah State Engineer Kent Jones as well as other members of the Utah negotiating team for aggressively working to protect the sovereign waters of the state of Utah, agricultural interests and the fragile desert ecosystem when considering the SNWA application to pump groundwater from aquifers occupying the Utah-Nevada border or in close proximity.

History suggests that the Snake Valley aquifer is in balance based on long-term discharge and recharge. The SNWA proposal to extract groundwater and transfer it to Las Vegas will have a direct impact on Utah interests. Nevada and Utah are the two most arid of the 50 states. During times of drought, recognized impacts on the nearby landscape include springs drying up and plant life changing. Approved levels of agricultural pumping and the impacts of regional droughts could be just a precursor to the impacts of SNWA's trans-basin transfer proposal.

Water is the lifeblood of the arid west. Availability of water is critical to the farm and ranch families and their associated rural communities. Even the slightest lowering of the underground water resource adversely impacts farmers and ranchers. The increased pumping costs could render agriculture economically infeasible in the region. Utah agriculture continues to be an important economic engine providing jobs and local tax base. However, it is of greater importance to Utah rural communities like those located in Western Millard County. In the counties that could be harmed by the proposed SNWA pipeline, there is additional cultural and economic consideration.

The Farm Bureau, through its annual policy process, asks for careful planning by municipalities when acquiring water rights or water stock when developing water resources and systems in order to reduce adverse impacts on agricultural and other water users. The establishment of the trans-basin transfer of Snake Valley water so closely associated with the rights of a neighboring state and its citizens is problematic.

Utah Farm Bureau policy is explicit regarding changes in points of diversion and water rights transfers. We recommend the Utah State Water Engineer prohibit changes in points of diversion, water rights transfers and new well permits until the impact on existing water rights and surrounding areas has been determined. This protection is fundamental as the state of Utah considers an agreement to manage the Snake Valley groundwater system.

Issues of concern in the Draft Agreement:

3.0 Available Groundwater Supply

The USGS completed Basin and Range Carbonate Aquifer Study (BARCASS) study provides a baseline for groundwater sustainability at 132,000 acre feet annually. BARCASS appears to be flawed as noted by valley residents and professionals.

Â· When the farmers begin pumping to meet their summer irrigation needs, water levels quickly drop and artesian well dry up.

Â· The study period offers as its basis several wet years that directly impact the BARCASS sustainability model estimated at 132,000 acre feet annually.

4.0 Allocation and Management of Available Groundwater Supply

TABLE 1 Allowed Amounts of Consumptive Use of Groundwater:

Allocated	Utah	55,000 afy
	Nevada	12,000 afy
Unallocated	Utah	5,000 afy
	Nevada	36,000 afy
Reserved	Utah	6,000 afy
	Nevada	18,000 afy

The Snake Valley aquifer lies largely in Utah, while much of the moisture for recharge is collected in the mountains located largely in Nevada. It has been suggested by SNWA that because recharge occurs from Nevada?

water, they should have greater right to it.

This perspective, certainly intriguing yet contrary to western water law, suggests the Upper Basin States should receive a greater allocation of the Colorado River.

An analysis of Snake Valley and its connection to the aquifer that straddles the Utah-Nevada border merits discussion. More than 80 percent of the groundwater dependent land associated with the Snake Valley aquifer is located in Utah providing water for:

- Â· Irrigating crops and pastures
- Â· Rangeland for livestock grazing
- Â· Dairy farming
- Â· Municipal and domestic water use
- Â· Artisan wells
- Â· The broad desert ecosystem
- Â· Stabling soils

The "allocated wet" water, as with the Colorado River Compact, has been established through historic law. At issue is the "unallocated wet" and the "reserve paper water" estimated in the 132,000 acre feet BARCASS. The historic legally proven water identified for protection in the Draft Agreement is 67,000 acre feet allocated 55,000 afy for Utah and 12,000 afy for Nevada.

Â· Of the 55,000 acre feet allocated to Utah, it appears that the negotiating team improperly carved out at Utah's expense 20,000 acre feet for Fish Springs National Wildlife Refuge creating an inequitable split of the remaining unallocated wet water resources.

Â· Recognizing that 84 percent of the groundwater dependent lands are located in Utah and only 16 percent in Nevada, the Draft Agreement as relates to unallocated wet water is heavily weighted to Nevada, and even adding in the unallocated paper, the scenario changes little.

Â· The unallocated wet water split at 7 to 1 in Nevada's favor suggests the future development benefits belong to Nevada.

Â· The proposed split in Table 1 is a dangerous precedent in an arid region where other interstate water challenges and negotiations are likely to arise.

REGIONAL AQUIFER

The Draft Agreement addresses the downstream impacts associated with the impacts of SNWA pumping on Fish Springs, however, the effects on Snake Valley water rights associated with downstream pumping in Spring Valley or Lake Valley are less apparent.

The United States Geological Survey in Fact Sheet 086-00 (August 2000) points out that this "Nation's groundwater is among its most important resources. It provides drinking water to urban and rural communities, supports irrigation and industry, sustains the flow of stream and rivers and maintains riparian and wetland ecosystems."

It continues, "Groundwater resources in the Southwest are among the most overused in the United States. Natural recharge to aquifers is low and pumping in many areas has resulted in lowering of water tables. The consequences of large-scale removal of water from underground storage are becoming increasingly evident. These consequences include " land subsidence, loss of springs, streams, wetlands and associated habitat and degradation of water quality."

In later studies, USGS Fact Sheet 103-03 (November 2003), analysis indicates "increased ground-water pumping in south-central Arizona (Phoenix/Tucson) has resulted in water-level declines of between 300 and 500 feet. Land subsidence was noticed as early as the 1940's and a lower water table has adversely impacted vegetation. It analyzed the fast growing Las Vegas area reporting "In places, ground-water levels have declined by 300 feet " these declines have caused springs to dry up and artesian wells to stop flowing."

Snake Valley " Spring Valley Hydrology

The hydrologic connection between Snake Valley and Spring Valley has been reported as significant. Recharge to the Snake Valley aquifer is tied directly to the groundwater recharge of Spring Valley. Groundwater flow estimates show that as much as sixty-percent of the recharge in the south end of Snake Valley is tied directly to its hydrologic connection with Spring Valley. The Nevada State Engineer has authorized the pumping of 40,000 acre feet of Spring Valley groundwater for use in Las Vegas, which could ultimately be ramped up to 60,000 acre feet.

Â. The Draft Agreement recognizes and protects Fish Springs from the impacts of downstream pumping, but makes no similar allowance for the likely impact to the Snake Valley uses.

Â. Pumping associated with Spring Valley and other downstream aquifers could interrupt the normal flow of groundwater across western Utah, adversely impacting regionally winter livestock grazing on Utah's West Desert.

Â. USGS is currently conducting additional studies aimed at better determining the impacts SNWA's Spring Valley will have on Snake Valley's hydrology.

Â. Protection of Fish Springs National Wildlife Refuge from adverse impacts of an inter-basin transfer is certainly a worthy goal, however it should not be budgeted in only at Utah's expense in the final Agreement.

6.0 Identification and Mitigation of Adverse Impacts to Existing Permitted Uses

Considerable attention is given in this section to provide an agreement that protects Utah from adverse impacts from the development and withdrawal of Snake Valley groundwater. In fact, there is probably no agreement between states that reaches this standard for protection of existing rights and the environment. Farm Bureau applauds Utah's negotiating team for the resulting Draft Agreement.

However, the trans-basin transfer of thousands of acre feet of water resources brings with it a series of unknowns. First and foremost, groundwater recharge is directly associated with surface water. In a groundwater basin most water experts believe is in balance, ultimately, the removal of 10,000, 15,000 or 30,000 acre feet of water piped to Las Vegas will have an adverse impact.

There are a number of unanswered questions that require attention based on the provisions in the Draft Agreement:

Â· In this desert econ-system which includes farmers and ranchers, it will take a relatively long period of time for the adverse effects to show up.

Â· Once the damage to the groundwater basin occurs, mitigation will be difficult if it can be fixed.

Â· There is not a mechanism within the Draft Agreement that addresses the impacts to Utah related to the implementation of SNWA's groundwater development project and the interstate groundwater flow system.

Â· Does the Draft Agreement mitigation fund provide broad based remediation and performance requirements that will protect Utah interests in Snake Valley and broader groundwater flow system?

6.2 SNWA Assessment and Mitigation Provision

There appears to be a great amount of authority and discretion provided to SNWA in the Draft Agreement related to claims of adverse impacts:

1. The claimant files notice with SNWA providing pertinent information.
2. SNWA shall assess the claim.
3. SNWA shall verify if an adverse impact has occurred.
4. Provision for Interstate Panel.

The Draft Agreement might ultimately be strengthened through inclusion of an independent oversight committee to:

Â· Review the results of studies during the ten year period that the Nevada State Engineer has agreed to hold the SNWA groundwater applications.

Â· Identify and establish remediation and conflict policies to assist Utah and Nevada in conflict resolution.

Â· To act as the ultimate arbitrator in claims against SNWA.

Farm Bureau recognizes that reaching an agreement between the states of Utah and Nevada is preferable to the alternatives. We recommend efforts continue to this end. Noting that the Governor is only now appointing the Snake Valley Aquifer Advisory Council, originally called upon for input in the negotiation process, Farm Bureau recommends that the rushed deadline for signing the Agreement for Management of the Snake Valley Groundwater System be postponed to meet this obligation and take additional input. The Nevada State Engineer has set the Spring of 2011 as

deadline for evidence submission and scheduling his Snake Valley hearing during the Fall of 2010.

There continues to be unanswered questions related to the Draft Agreement:

Â· Recharge

Â· Hydrologic connections

- À· Ongoing drought
- À· Fair and equitable water split.

As required by Congress, a mutual agreement between Utah and Nevada is a worthy goal, but should be at the expense of Snake Valley's and Millard County's future.

In closing, there is one issue that complicates finalizing the agreement between the states of Utah and Nevada. The agreement calls for the immediate interruption of pumping at any point when it deemed detrimental to existing Snake Valley water rights, the environment or the sovereign rights of the state of Utah. If the Snake Valley project moves forward and the groundwater becomes part of the SNWA growth strategy for the Las Vegas metropolitan area, will they really shut down the pumps supplying water to tens of thousands of homes?

Utah Farm Bureau Federation
9865 South State Street
Sandy, UT 84070

Tel: 801.233.3040

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House of Representatives *State of Utah*

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SALT LAKE CITY, UTAH 84114-5030 • (801) 538-1029

Constituent Services
Office of the Governor
Date

SEP 28 2009

September 24, 2009

The Honorable Gary R. Herbert
Governor of the State of Utah
350 North State Street, Suite 200
Salt Lake City, UT 84114-2220

Dear Governor Herbert:

We would like to share with you our concerns regarding the Snake Valley Agreement, an agreement that will have a vast and far-reaching impact.

We feel that more time is needed to research and understand the effect that this decision will have on the land and for those who live on and work the land. We agree with the Natural Resources Interim Committee that a more deliberative process would be beneficial. We are pleased to hear that you will be consulting with the advisory committee. This will allow information-gathering from all sides of the issue, including the critically needed scientific research and data.

Issues that concern us are:

- The impact of lowered water table to Utah farmers and ranchers. This could create a flow of water from the Great Salt Lake into the aquifer, causing contamination of the groundwater.
- The majority of the groundwater is in Utah, while the source is primarily in Nevada. Nevada believes that they should have greater access, because the water comes from their mountains. Water law supports the rights of the state where the water is held. With Nevada's suggestion, other waterways and their water users could be impacted, such as the Colorado River.
- The piping of water from Spring Valley already has a depleting effect on Snake Valley.
- The loss of groundwater could create loss of vegetation, thus allowing the contaminated soil to be blown eastward.
- We are concerned about the potential negative impact on our air quality and possible resulting litigation because of it.
- The scientific research is critical for sound decision-making. Time is needed to complete this important component.

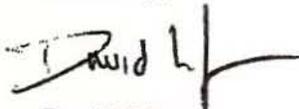
Governor Gary Herbert
September 24, 2009
Page 2

- The Nevada Engineer has set their state's evidence submission deadline for Spring 2011, thus, allowing time for Utah to research and gather more information on the effects of this agreement. Utah should take advantage of this opportunity to fully research the implications of this decision.

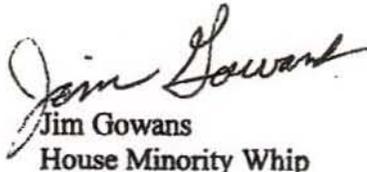
We ask for your consideration in creating a climate of careful and thoughtful deliberation by delaying the signing of the agreement to allow for this to occur.

We would be happy to talk with you further about our concerns.

Sincerely,



David Litvack
House Minority Leader



Jim Gowans
House Minority Whip



Carol Spackman Moss
House Assistant Minority Whip



Jennifer Seelig
House Minority Caucus Manager



Utah Medical Association

September 28, 2009

To Whom it May Concern,

The Utah Medical Association considers it the obligation of physicians to be advocates for the protection of the public's health. In that regard, we would like to express concerns with the proposed agreement between Utah and the Southern Nevada Water Authority (SNWA) regarding the management of the Snake Valley groundwater system. The pressures of population growth and climate related stress already impact water use throughout the West and water diversion projects with environmental and human health impacts require close scrutiny to insure sufficient protection of the public's health. Unfortunately, this agreement, in its current form, does not accomplish this goal.

Though it is commendable that Utah and the SNWA have committed themselves to working together to monitor and manage environmental impacts of future water diversion projects in the region, there is insufficient detail in the environmental monitoring plan to suggest that, should adverse impacts occur, appropriate action will be taken. The proposed monitoring and management process is remarkably nonspecific and subject to significant manipulation. With the bulk of the expense of monitoring born by the SNWA (and subject to appropriations by the governing body of the SNWA), conflicts of interest abound.

It is our understanding that, as long as discharge and recharge of the aquifer are comparable, there will not be a significant decline in groundwater levels. Based on the proposed agreement, this is a big assumption. The States acknowledge in the agreement that "information is insufficient to determine with precision the Available Groundwater Supply," yet despite this uncertainty, the agreement goes on to allocate a very precise available groundwater supply of 132,000 afy. It is unreasonable to make specific allocations of groundwater before the available ground water supply can be determined with more precision.

Based on the limited information that is available, underground water levels in the Snake Valley already appear to be dropping. In fact, a \$6 million federally commissioned study of water resources in the region (BARCASS) demonstrated that this is indeed the case—even before the SNWA taps into the groundwater supply. The Snake Valley has the highest annual discharge in the region at 132,000 afy, however, only 110,000 afy recharged in the same period. To date, there has been no study examining the impacts of additional pumping on this underground water resource. Additionally, there is widespread skepticism on the part of many highly regarded and well qualified biologists, geologists and hydrologists about whether substantial water can be withdrawn from the aquifers of Eastern Nevada and Western Utah without significantly impacting the groundwater supply.

Physicians who care for and about the people of Utah

According to the Utah Geologic Survey (UGS Investigation 254, March 2005), a “decline in groundwater levels could produce lasting and irreversible effects on both the agriculture and native vegetation of the Snake Valley. If the basin-fill aquifer is substantially dewatered, ground subsidence, cracking, and permanent degradation of its hydraulic properties may occur.” West Desert phreatophytes serve a critical role in public health protection by anchoring desert soil and preventing dust storms. By definition, the perennial yield doctrine that governs groundwater appropriation in Nevada would displace water currently consumed by plants with groundwater withdrawals for human use. By definition, the plants would get less water and would presumably dry up, significantly impacting the dust problem and air quality in the region and anywhere downwind.

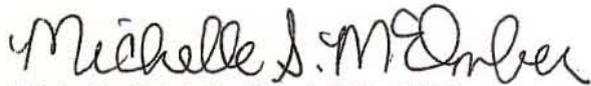
The potential air quality impacts pose significant health concerns and despite efforts outlined in the agreement to monitor air quality in the region, it is the opinion of the Utah Medical Association that the current agreement is unlikely to protect the public’s health for several reasons:

1. There is no specificity about what concentration levels, frequency or duration of particulate matter increases would trigger a management response according to the terms of the agreement. As stated in the agreement (Appendix C.5.1.3.), even if adverse impacts were to be identified, “nothing [shall] require that any specific management response action be implemented.”
2. The lag time between when phreatophytes become compromised and when air quality impacts are seen could result in damage to native vegetation that may be irreversible, perpetuating health threats of poor air quality even if water diversion activities cease.
3. Using the National Ambient Air Quality Standards (NAAQS) as the means of determining public health protection is inadequate. It is now accepted medical science that there is no air pollution threshold below which health effects are not seen. That means any increase in dust pollution from the West Desert will have public health consequences in Utah regardless of whether it exceeds the NAAQS.
4. There are unique threats in the soil in the West Desert that will have potentially profound impacts on public health beyond particulate matter. Mercury, erionite (asbestos like mineral that causes mesothelioma cancer), radioactive elements from a history of above ground nuclear testing, and fungal spores that cause Valley Fever (coccidioidomycosis) are all in high concentrations in surface soils in Nevada. These are some of the most toxic substances known and yet this agreement does nothing to assess or mitigate these health risks.

Should this agreement move forward in its current form, the residents, farmers and ranchers in West Desert farming communities and on the Goshute Reservation would see their health and livelihoods put at risk. Indeed, adverse health and quality of life impacts may be spread throughout the State. It is particularly concerning that the Confederated Tribes of the Goshute Reservation did not have any input into the agreement, despite being a Sovereign Nation. Water is an essential and precious resource. The agreement provides no mention of conservation

measures nor appropriate land use planning that can be effectively supported by the available natural resources. At this time, the Utah Medical Association does not see any way that Utah can enter into the current agreement with the SNWA without jeopardizing the health and quality of life of its own citizens.

Sincerely,

A handwritten signature in black ink that reads "Michelle S. McOmber". The signature is written in a cursive style with a large, stylized initial "M".

Michelle S. McOmber, MBA, CAE
Executive Vice President/CEO
Utah Medical Association



GREAT BASIN WATER NETWORK
1755 E. Plumb Lane, Suite 170
Reno, NV 89502
(775) 786-9955

September 23, 2009

Allen Biaggi, Director
Nevada Dept. of Conservation and Natural Resources
901 S. Stewart St. #5001
Carson City, NV 89701

Mike Styler, Director
Utah Department of Natural Resources
Division of Water Rights
1594 West North Temple #220
Salt Lake City, UT 84114

Re: GBWN Comments on the Draft Utah-Nevada Agreement for the Management of Snake Valley Groundwater System and the Snake Valley Environmental Monitoring and Management Agreement

On behalf of the Great Basin Water Network (“GBWN”), we are submitting comments on the Draft Nevada/Utah Agreement for the Management of the Snake Valley Groundwater System and the Snake Valley Environmental Monitoring and Management Agreement (“Draft Agreement”). The GBWN is comprised of individuals, counties, Tribes, conservation and business groups, hunters, fishermen, and scientists who support the sustainable use of water. The GBWN works to protect the water resources of the Great Basin for current and future residents – human, animal, and plant. GBWN also works to ensure that decisions are made with caution, coherence, and based on the best scientific information without undue political and developer special interest pressure. In addition to these comments, GBWN is submitting the attached legal critique of the Draft Agreement and incorporates that critique by reference in these comments.

GBWN comments will affirm the goals of the Draft Agreement, express concerns about the negotiation process especially the lack of public input, demonstrate in some detail how the Draft Agreement fails to meet its goals and purposes, and provide some critical changes that are needed for the Draft Agreement to receive public support, especially by those whose lives are directly affected by the agreement.

The GBWN strongly supports the goals of the Draft NV/UT Shared Groundwater Agreement, the equitable division of groundwater in Snake, Hamlin, and Pleasant Valleys and the protection of existing water rights and the valleys' environment (sustainable use).

However, the GBWN is disappointed in the process used by both States to develop the Draft Agreement as well as the rush to finalize a flawed agreement. Secret processes rarely result in good public policy decisions because major stakeholders are left out of the negotiations. In this case, the Confederated Tribes of the Goshute Indians were totally left out of the negotiations. There is also no role provided for the Utah Legislature's authorized Snake Valley Aquifer Advisory Commission in either the development or the implementation of the Draft Agreement. Nor is the Great Basin National Park mentioned in these agreements. Despite the problems with the process used to develop the Draft Agreement, we agree with Nevada and Utah negotiators who now support a transparent process for managing Snake Valley water cooperatively.

While we appreciate the extension of the comment period to September 30, 2009, we are concerned that the public has not had adequate opportunities to review a document which has taken over 4 years to develop, nor has the public had adequate opportunity to obtain documents related to the negotiation process. There has been no publicly stated rationale as to why the proposed Agreement must be "approved" by mid-October. We agree with the editors of the Deseret News who cautioned (September 20, 2009) against the sales pitch argument that the States have to sign now or the deal is off. Signing in mid-October would not provide for an adequate response by the negotiating team to public comments. Indeed, it would be extremely inappropriate for the public to be notified of the changes that were made in response to public comments at a rushed Agreement signing ceremony. Therefore, we request that you provide for a 30 day public review period of the Draft Agreement, once it is revised in response to public comments received before the September 30 deadline.

The GBWN believes that the Draft Agreement fails to meet any of its goals - equitable division of shared groundwater in Snake (and Hamlin and Pleasant) Valley, protection of existing permitted uses, and protection of the environment. Our concerns follow:

Equitable Division of Shared Groundwater:

In order for a division of shared groundwater to be equitable, the States must start with a reasonable amount of "available" groundwater. We do not believe it is good public policy to use an overestimate of available water, repeating this mistake as was done in the 1922 Colorado River Compact division among the 7 states, or in many over-appropriated valleys in Nevada and Utah. We agree with the negotiators' acknowledgment (Sec. 2.4) that "such (existing) information is insufficient to determine with precision the Available Groundwater Supply" or estimate the potential impacts of proposed SNWA pumping. The 132,000 afa available groundwater in Sec. 3.2 of the Draft Agreement is not a realistic number, but instead the highest estimate for evapotranspiration rates in Snake Valley. It is taken out of context of its origin, the 2007 BARCASS I study by the USGS, a study which received widespread criticism for its unreliability (including criticism by the States of Utah and Nevada). The USGS acknowledges in its 2009 *"Draft Proposal to Refine Groundwater Discharge Estimates for Snake Valley, Nevada and Utah"* the study's shortcomings and needs for refining unreliable numbers.

"Groundwater-discharge estimates developed during the Basin and Range carbonate-rock aquifer study (BARCASS: Welch and others, 2008) relied heavily on published ET rates. These published rates were measured at locations of similar climate and topography outside the study area and became the basis for formulating the likely range of ET rates associated with the vegetation and soil conditions found throughout the BARCASS area. Ranges later were assessed and modified with limited field data collected over a relatively short one-year period"

from five ET sites located in Spring Valley (3 sites) and White River Valley (2 sites) and a single site in Snake Valley.

Because of the relatively large size of Snake Valley and minimal local ET measurements, estimated groundwater discharge for this valley was documented in BARCASS as being the most uncertain of all basin discharge estimates. About 87% of the 275,000 acre discharge area in Snake Valley is desert shrubland dominated by greasewood and rabbitbrush. These areas account for about 70% of the 132,000 acre-ft of discharge estimated in BARCASS - an estimate that is about 52,000 acre-ft higher than reported in a previous reconnaissance-level study (Hood and Rush, 1965). The primary cause for the large difference in estimated total discharge between these two studies is the average groundwater discharge rate for desert shrubland: 0.39 ft/yr estimated in BARCASS compared to 0.20 ft/yr estimated in the reconnaissance study. Although this is a relatively small difference in discharge rates, the impact on total estimated groundwater discharge is significant because of the large area of application. For example, a change in the shrubland discharge rate for Snake Valley of only 0.10 ft/yr changes the total discharge estimate for the valley by about 24,000 acre-ft."

It is clear that the BARCASS estimated ET rate for desert shrubland is potentially double that of the actual historic ET rate in Snake Valley.

In addition, selecting the highest amount of possible groundwater discharge in a basin from one study violates the traditional procedures used by the Nevada State Engineer in state water hearings where evidence from expert witnesses using all of the available scientific information on recharge, discharge, perennial yield and carbonate flows is weighed before a ruling is made on applications for and/or protests on available water in a basin.

While P.L. 108-424 is cited in the introduction to the Draft Agreement, the law's actual language "prior to any transbasin diversion from ground-water basins located within both the State of Nevada and the State of Utah, the State of Nevada and the State of Utah shall reach an agreement regarding the division of water resources of those interstate ground-water flow system(s) from which water will be diverted and used by the project" does not specify an agreement solely regarding Snake Valley, but specifically refers to "interstate ground-water flow systems."

In addition, the Draft Agreement fails to disclose that the "Snake Valley" covered by the Agreement actually includes some or all of 3 basins - Snake, Hamlin, and Pleasant Valleys. In addition, Snake Valley numbers include an amount for Fish Springs, an area outside and downgradient of Snake Valley, but does not include Spring Valley an upgradient valley in Nevada or other valleys in Utah which may be contributing carbonate and/or alluvial groundwater flows to Snake Valley or receiving them. No breakout is given in the Draft Agreement of the water budgets for the 3 basins, how numbers for allocated, unallocated, or reserve water for the 3 basins were calculated, or how double-counting carbonate flows from up-flow basins was avoided in the calculations.

The Draft Agreement fails to provide, other than referring to the rushed and incomplete BARCASS study, a scientific rationale for the split of shared groundwater between Nevada and Utah listed in Table 1, nor how the amounts in the 3 categories were calculated. Previous studies show the 1960's Hood and Rush study of a perennial yield of 80,000 afa in all of Snake Valley to be split with 25,000 afa in Nevada and 65,000 afa in Utah (Knowland, 1986). There is also no equity in the potential distribution of pumping impacts between the 2 States or in proposed "mitigation" provided for pumping impacts in

the 2 States.

The Draft Agreement also fails to provide information on how the amounts in the 3 categories of water in Table 1 were derived and what kinds of water are included in each category, such as

- vested water rights,
- federal reserved water rights,
- reserved water rights for the Confederated Tribes of Goshute Indians,
- water for future growth in Snake Valley,
- water necessary to prevent adverse impacts to existing permitted uses.

While the Agreement requires monitoring data from groundwater pumping to be incorporated into a database and to be made available to the public, it fails to provide any information on the specifics, including what database would be used, who would manage the database, why only "measured groundwater withdrawals" information would be available publicly, how database information would be made available to the public, the costs for developing and managing such a database or who would cover the costs.

Sec. 1.3 states that the Available Groundwater Supply on which the division of shared groundwater in the Draft Agreement has been determined can be "subsequently determined through further study and agreement with the State Engineers of Utah and Nevada," but provides no details on what further studies would be considered, how the state engineers would determine available groundwater (by declaration or through state water hearings) nor how reduced estimates of available groundwater would be "shared" by the States. This omission likely will lead to serious future conflicts.

While the Draft Agreement makes many references in Sec. 2 and in other sections to a "reasonable" amount of drawdown which "necessarily impacts the existing hydrologic system and captures discharge available to phreatophytes, streams, and natural lakes," includes a goal to "minimize the injury to Existing Permitted Uses," and also a statement that Utah and SNWA agree that groundwater development will result in changes to the existing hydrologic and biologic conditions and may adversely affect air quality in Snake Valley and the defined Area of Interest, there are no findings or statements in the Draft Agreement that the States of Utah and Nevada recognize that the Snake Valley aquifer is finite and all available water may be used by prior water rights holders or may be necessary to sustain the hydrological and biological integrity of Snake Valley. The Draft Agreement ignores extensive existing data that the water table and spring flows in Snake Valley already are dropping due to current groundwater development, that endemic species are at risk from existing water uses, and that additional groundwater development will worsen existing water management problems in Snake Valley.

Sec. 2.5's statement on evaluating with certainty available groundwater is replete with vague undefined terms, including "evolving trends" in data collection regarding precipitation and recharge, "characterization of the underground physical environment," and the "sophistication of hydrologic estimation."

While Sec. 2.7 states the desire of both States to incorporate both presently available, ongoing and future studies and other information into the process for administering and managing groundwater development in Snake Valley, it provides no details on what studies are needed, their costs, how they would be funded, how "other information" would be collected and by whom, or how this information

would be used to minimize or eliminate negative impacts.

Likewise, Sec.3.1 cites the intent of the States to use "BARCASS and other scientifically reliable reports, studies, or data collection" in revising estimates of available groundwater in Snake Valley, including SNWA data collection. Work undertaken by the USGS undergoes rigorous peer review, and all resulting final products remain in the public sector. These public sector products not only include the interpretive report, but also all data-input files and the calibrated modeling code. The Draft Agreement fails to require SNWA monitoring or other data to meet all applicable industry and scientific standard methods and protocols and to undergo Quality Assurance/Quality Control, without which its reliability or credibility cannot be determined. The Draft Agreement requires that "all data used or proposed to be used to revise estimates shall be shared between the States and be publically [sic] available for review," but provides no details on how and when data will be made public and how public review of this data will be incorporated into future determinations of available groundwater.

Sec. 4.6 cites the intent of the State Engineers to make some annual monitoring data public, to meet as needed, and to maybe hold a joint annual public meeting with all water users in Snake Valley to receive public input on the use and management of water there, but provides few specifics on how these actions would be implemented. Missing details include:

- whether State Engineer meetings are public or closed,
- what triggers these meetings,
- how often such meetings would be held - annually, biannually, every five or ten years
- how or whether public input would change either the Draft Agreement, its implementation, or future revisions of available groundwater estimates.

Nor does the Draft Agreement provide for annual disclosure of other pumping impacts, including reductions in spring flows, acreage of destruction of seeps, sub-irrigated meadows, and riparian areas, adverse impacts on existing permitted uses and "mitigation" proposed and/or implemented to address these adverse impacts.

Protection of Existing Permitted Uses

Secs. 1.1.(a) & (b) fail to provide a specific definition of adverse impacts caused by SNWA pumping to existing permitted users with water rights in wells or in spring flows, despite the fact that these are critical concerns to existing permitted users and despite the legal mandate to protect existing water rights. The Draft Agreement makes no distinction between adverse impacts which reduce productivity of wells from 1% to 10% to 50% or 100%. The definition of adverse impact is also conditioned on other undefined terms, including "demonstrated" (no specifics on what kind of demonstration is required, by whom and to whom) and "in a manner substantially similar (how substantially) and "to the well's historical production (no specifics on the required period of record). Likewise, the Draft Agreement provides no specifics on what adverse impacts to spring flow-based water rights mean, whether a 1%, 10%, 50% or 100% reduction. It also conditions adverse impacts on other undefined terms, including "demonstrated" (no specifics on what kind of demonstration is required, by whom and to whom) and "less than the historical supply" (no specifics on the required period of record for "historical" means).

Sec. 6 sets up a mandatory adversarial process in which existing permitted users in the Utah side of Snake Valley must contact, "prove" to SNWA that their senior water rights are being adversely

impacted by SNWA pumping, request SNWA to provide "mitigation" for its adverse pumping impacts and if they disagree with SNWA determinations of adverse impacts or offers of mitigation, only then can petition the State Engineers to protect their water rights. The Draft Agreement appears to transfer the state engineers' legal mandates to protect senior water rights to a junior permittee and to unfairly put the burden of proof of adverse impacts on senior water rights holders, not on the junior permittee.

Sec. 6.3 sets up an Interstate Panel to resolve disputes between existing permitted water users and SNWA, but sets no timeframes for the Panel to take action to protect senior water rights holders from adverse pumping impacts.

No such process or opportunity for Existing Permitted Water users in Nevada to petition the Interstate Panel is provided by the Draft Agreement for adverse pumping impacts in Nevada or for direct petition to the Nevada State Engineer.

In Sec. 6.7, Nevada agrees to hold the SNWA Applications in abeyance through September 1, 2019, in order to allow additional hydrologic, biologic, and other data to be collected in Snake Valley. The Draft Agreement fails to specify

- what additional information would be collected during this 10 year delay,
- who would collect this data,
- whether the data would be required to be credible or reliable,
- how and when this data would be collected,
- the costs of this data collection or
- who would responsible for funding,
- whether and when the public would have access to this data and
- how this data would be used by the state engineer.

In addition, the 10 year delay extends the de facto stranglehold which the 1989 SNWA applications has had for 20 years on needed water appropriations for economic development in the Nevada side of Snake Valley.

Sec. 4.5 acknowledges the intent of the States to set up a monitoring data collection program in Snake Valley but fails to provide any information on how long monitoring will continue or how the monitoring plan will be implemented. This is a critical omission since adverse impacts from massive groundwater development in Nevada may not occur in Utah for years, perhaps after the SNWA project is completed (75 years according to SNWA spokesperson). In addition, while the Draft Agreement commits SNWA and the States of Utah and Nevada to fund the required monitoring program, it fails to provide any penalty or require any action if funding for monitoring is not provided.

Sec. 6.4 sets up a perpetual mitigation fund with an agreement by SNWA to maintain a minimum balance of \$3,000,000 "while SNWA maintains Groundwater development and withdrawal facilities in Snake Valley." Not only is \$3,000,000 clearly inadequate to mitigate the potential impacts caused by SNWA pumping, the Draft Agreement also fails to provide specific information about the operation of this mitigation fund, including where the funds would be held, by whom, and how the accounting for fund revenues and expenditures would be made and by whom. The Draft Agreement also does not provide for any SNWA commitment to mitigate adverse impacts once pumping ceases, even though adverse impacts may continue to occur before a new equilibrium is reached. Nor does the Draft Agreement provide for terms and conditions of the permit to apply to other parties who may supply

and/or pipe Snake Valley groundwater to SNWA for exportation through the SNWA pipeline or who may supply water from valleys adjacent to Snake Valley to SNWA for "mitigation" of adverse pumping impacts in Snake Valley. The Draft Agreement also fails to provide any penalty for failure by SNWA to keep the required minimum \$3,000,000 balance.

Protection of the Environment of Snake Valley

While Sec. 2.10 of the Draft Agreement recognizes the desire of the States to allow for the development of maximum sustainable beneficial use, it fails to define what a "sustainable" beneficial use is, nor is this term defined in the States' water laws. Sec. 5.4 appears to define what "sustainable" is *not*, at least hydrologically, but the Draft Agreement offers no clue as to what "sustainable" means to existing permitted uses or to the environment in Snake Valley. Sec. 5.3 requires the state engineers before approving any groundwater permits to "reserved" water to determine if information "reasonably demonstrates that groundwater can be safely and sustainably withdrawn," but fails to provide definitions of any of these terms.

The Draft Agreement fails to provide a definition of "adverse impacts" (Sec. 1) to environmental resources in Snake Valley.

While the States in Sec. 4.8 agree to work cooperatively to "minimize environmental impacts and prevent the need for listing additional species under the Endangered Species Act," the section provides no details on protecting other environmental values in Snake Valley, including other animal and plant species, soil stability, and intact desert ecosystems. And while Sec. 7.1 requires the State of Nevada to appoint a representative to participate in the Columbia Spotted Frog Conservation Team and the Least Chub Conservation Team, the Draft Agreement does not disclose any state commitment to the conservation goals for these two at-risk species.

Sec. 2.7 provides for collection of data and other information "for administering and managing groundwater development in Snake Valley," but the Draft Agreement fails to consider the need for managing groundwater for other purposes, including healthy ecosystems, sustaining water-dependent cave ecosystems, seeps and sub-irrigated meadows on which native wildlife depend, the insects in streams on which the Bonneville cutthroat trout depend, and ensuring water necessary for the economic future of Snake Valley.

The Draft Agreement fails to provide a process for anyone to petition the state engineers to address adverse pumping impacts on the Snake Valley environment and/or require mitigation.

In Sec. 4.4 the States agree to jointly identify areas of concern that could be affected by groundwater development in Snake Valley, yet the section fails to provide any information on how this agreement would be implemented or whether the process would be secret or open to public input. The Draft Agreement fails to mention the Great Basin National Park.

Our previous questions about the need for long-term monitoring and mitigation of pumping impacts on existing permitted uses also apply to the agreement's empty mandate to protect environmental resources.

Sec. 7.2 appears to limit the purpose of the Utah and SNWA the Snake Valley Environmental

Monitoring and Management Agreement to "make informed determinations as to whether groundwater withdrawals have caused an adverse impact to an existing permitted use," but fails to show how implementing this agreement would protect the environment of Snake Valley. We don't believe that the Spotted Frog or the Least Chub fit the definition of "existing permitted uses."

Other flaws in the Draft Agreement:

Sec. 8.2 makes a reference to "the delivery of waters herein provided," but does not define this potential claim or controversy between the States.

Sec. 8.3 does not provide the length of time in which the Draft Agreement would be effective. Nor does it appear to bind SNWA's successors or potential future partners, if SNWA sells or buys its water applications or water rights to or from others.

Appendix C: Snake Valley Environmental Monitoring and Management Agreement between the state of Utah and SNWA

This Agreement suffers from many of the same problems as the Draft UT-NV Agreement does, including vague terms, interminable processes, pumping impacts assessments that go nowhere, a lack of secure funding, and that it is non-binding on SNWA successors. The "consultative" process envisioned by the M&M Agreement for SNWA and Utah to deal with pumping impacts in Utah resulting from SNWA groundwater development in Nevada appears to the GBWN as cumbersome, expensive, ineffective, reactive, and unenforceable.

This Agreement fails to disclose what authority the Technical Working Group and the Management Group set up under this M&M Agreement actually has over the operation of SNWA's water rights in Nevada.

This Agreement fails to provide for requiring its terms and conditions to apply to SNWA 's successors if SNWA sells its water applications and/or water rights to another party, or buys rights from others in the Valley

Sec. 4 of this Agreement appears to include the monitoring of existing permitted users groundwater withdrawals in Utah, despite the fact that existing permitted users are not signatory to this Agreement. This Agreement fails to explain how senior water rights holders in Utah are bound to the terms of this Agreement.

Sec. 5.1.3 appears to give the Management Committee with its 2 Utah and 2 SNWA members absolute discretion over implementing any or all parts of the M&M plan, regardless of the specific provisions of this Agreement, including early warning indicators, and the severity and relative importance of the pumping impacts. If this is correct, this Agreement is not enforceable.

Sec. 5.3 and Sec. 13 set up cumbersome, expensive, and lengthy processes in cases of disagreement by the Technical Working Group which will result in inevitable delays in any actions to address adverse impacts. These ineffective processes may also result in reversing SNWA commitments in Sec. 5.1.3 to protect endangered, threatened and sensitive species and in making recommendations by the Management Committee non-binding on the signatories.

Sec. 8.1 provides for the mandatory inclusion of a regional groundwater flow numerical model in the M&M Agreement, but does not mandate its use in implementing the provisions of the Agreement.

Sec. 9 provides for SNWA consulting the State of Utah on changes in points of diversions and withdrawal rates, but not for the possibility of substantive changes caused by new locations or pumping rates to invalidate or require substantial changes to this Agreement.

Sec. 12 subjects the monitoring required in the M&M Agreement to appropriations by the SNWA Board and the Utah Legislature, but does not subject SNWA pumping/adverse impacts to these constraints.

This Agreement fails to require collection of baseline data collection or monitoring springs or wells or managing SNWA groundwater development and impacts in Nevada's Snake Valley. Without this information, Snake Valley cannot be managed as a whole groundwater basin. Likewise, endemic species occupy springs in Nevada which are subject to adverse impacts of SNWA pumping. Bonneville cutthroat trout depend on insects which depend on habitat in streams in or below the Great Basin National Park that were identified as "likely susceptible to groundwater withdrawal" in the publication: Elliott, P.E., D. A. Beck, and D. E. Prudic. 2006. Characterization of Surface-Water Resources in the Great Basin National Park Area and Their Susceptibility to Ground-Water Withdrawals in Adjacent Valleys, White Pine County, Nevada. USGS Scientific Investigations Report 2006-5099. Carson City, NV.

Necessary Changes to the Draft Agreement

The GBWN cannot support the Draft Agreement unless the following critical changes are made:

1. The final Agreement must be substantively responsive to public comments on the proposed Agreement
2. The scientifically unsupported 132,000 afa must be replaced with a more credible number, using existing and new hydrology studies over the next several years to come up with a more realistic estimate of available water in Snake Valley.
3. The final Agreement must be specific on the studies which are needed to better define groundwater water availability in Snake Valley, basin water budgets, and direction and amounts of carbonate flows, including two study proposals with which we are familiar:
 - Utah USGS proposal: **Assessment of groundwater flow paths, sources of water to springs and connection of basin-fill and carbonate aquifers in Snake Valley and surrounding basins, Utah and Nevada**, June 2009. This is a 3 year, \$376,800 study with results to be published in a USGS Scientific Investigations Report, PhD dissertation, and in a journal article. Data will be permanently archived in the USGS NWIS database where it will be publicly available, and models will also be archived and available.
 - Nevada USGS proposal: **Draft Proposal to Refine Groundwater Discharge Estimates**

for Snake Valley, NV and UT. This is a 4 1/2 year \$1M study to refine current estimates of groundwater discharge by ET in Snake Valley, with data to be published in a USGS report and available on the web.

4. The final Agreement must replace the proposed NV/UT groundwater division in Table 1 with a more equitable split, many of which are being suggested in public comments on the Draft Agreement.
5. The final Agreement must include a water settlement for the Confederated Tribes of the Goshute Indians.
6. The final Agreement must include clearly defined terms.
7. The final Agreement must make the adverse impacts/mitigation process in section 8 voluntary and put the burden of proof on SNWA that its pumping is not causing adverse impacts on the existing permitted users.
8. The final Agreement must require that all data collected be required to meet industry and scientific standard methods and protocols and to undergo Quality Assurance/Quality Control.
9. The final Agreement must require that all data collected as required by these Agreements be made accessible to the public, as soon as possible, but no later than 60 days after collection.
10. The final Agreement and the Utah/SNWA Agreement must set triggers for specific responses to adverse impacts caused by SNWA pumping.
11. The final Agreement must require 5 years of baseline studies of hydrologic, biologic, and air quality resources and monitoring in all of Snake Valley that include current, historical and newly collected data from normal, drought and wet years.
12. The final Agreement must disclose the definitions of and calculations on the amounts of water included in Table 1 categories.
13. The final Agreement must acknowledge the State Engineer's authority under Nevada state law to process junior water applications until the Snake Valley hearing is eventually scheduled or a provision should be added to the final Agreement specifically authorizing the Nevada state engineer to take this action in Snake Valley.
14. The final Agreement must add a provision which binds SNWA's successors and potential future partners to the terms and conditions of the NV/UT Agreement and the M&M Agreement
15. The final Agreement must add a provision which requires the owners or purveyors of any water from Snake Valley which is eventually transported in the SNWA pipeline be subject to the terms and conditions of the Agreement.
16. The final Agreement must add a provision which requires the owners or purveyors of any water used to mitigate adverse impacts of SNWA pumping in Snake Valley to be subject to the terms

and conditions of the Agreement.

17. The final Agreement between Utah and SNWA, instead of a M&M program which reacts to adverse pumping impacts, must develop a program which will actually prevent adverse pumping impacts to sensitive resources in Snake Valley, including those in the Great Basin National Park.
18. The final Agreement must set up a public process for identifying Key Areas of Biological Concern and Key Biological Indicators in Snake Valley. It must acknowledge Great Basin National Park, its water-dependent caverns and its springs, streams, and riparian areas.
19. The final Agreement must add provisions which require suspension of SNWA water permits if either the SNWA mitigation fund balance drops below the \$3,000,000 minimum or funding for monitoring required by the NV/UT Agreement or the M&M Agreement is not provided by SNWA or the States of Nevada and Utah.
20. The final Agreement must not be finalized until the Snake Valley Aquifer Advisory Commission, mandated by the Utah Legislature, reviews it and is provided a role in its implementation.
21. The final Agreement must be signed by the States' governors.
22. A good Agreement takes time and input from everyone affected by this Draft Agreement. Some of these changes can be swiftly accomplished, but others will take longer.

Please find attached to this document a memorandum "Great Basin Water Network Legal Critique of the Draft Agreement for Management of the Snake Valley Groundwater System."

Thank you for considering the comments of the Great Basin Water Network.

Sincerely,

/s/

/s/

/s/

Susan Lynn
GBWN coordinators in Nevada and Utah

Rose Strickland

Steve Erickson

ATTACHMENT

cc: Governor Jim Gibbons
Governor Gary Herbert
NV and UT Attorney Generals
NV and UT state legislators

GREAT BASIN WATER NETWORK LEGAL CRITIQUE OF THE DRAFT AGREEMENT FOR MANAGEMENT OF THE SNAKE VALLEY GROUNDWATER SYSTEM

This memorandum contains the Great Basin Water Network's ("GBWN's") additional comments concerning specific legal deficiencies in the Draft Agreement for Management of the Snake Valley Groundwater System ("Draft Agreement"). These comments are incorporated by reference in GBWN's comprehensive comments on the Draft Agreement.

THE DRAFT AGREEMENT EFFECTIVELY IS AN INTERSTATE COMPACT, BUT IT DOES NOT COMPLY WITH THE LEGAL REQUIREMENTS FOR SUCH AN AGREEMENT, AND APPEARS TO UNNECESSARILY SUBJECT UTAH AND ITS CITIZENS TO NEVADA LAW:

- The Compact Clause of the U.S. Constitution, Article I, § 10, requires Congressional consent for all agreements between states that enhance the political power of the states in relation to the federal government. *U.S. Steel Corp. v. Multistate Tax Comm'n*, 434 U.S. 452, 459 (1978). The Draft Agreement is subject to the Compact Clause because it apports an interstate groundwater aquifer, which the United States Supreme Court has held to be an article of interstate commerce subject to federal jurisdiction. *Sporhase v. Nebraska*, 458 U.S. 941 (1982). As such, an attempt to place burdens on or apportion the aquifer would have to be sanctioned by Congress in the form of an Interstate Compact pursuant to the Compact Clause of the United States Constitution. *See U.S. Steel Corp. v. Multistate Tax Comm'n*, 434 U.S. 452, 459 (1978). The federal interest in the Snake Valley aquifer is especially high given the presence of Great Basin National Park.
- This Agreement clearly does not comply with the requirements of the Compact Clause. Interstate compacts are creatures of federal law, *Cuyler v. Adams*, 449 U.S. 433, 440 (1981), and are under the jurisdiction of the U.S. Supreme Court. The Draft Agreement sets up a situation in which Nevada law as opposed to federal law governs disputes involving individuals, and the states agree to mediate disputes that arise between the states. Specifically, determinations of the Interstate Panel will be administered by the Nevada State Engineer, whose orders are subject to Nevada Law. Draft Agreement § 6.5. Further, if the states, through their state engineers, are unable to resolve controversies that arise under the agreement, "the signatories shall select a neutral mediator agreeable to both States who shall mediate the dispute." Draft Agreement § 8.2. The Agreement also creates a framework in which changes to the Agreement are to be made cooperatively, meaning that in effect, Nevada has a veto over decisions such as adjusting the available groundwater supply. *See* Draft Agreement §§ 1.3, 4.8; 5.4. This framework puts Utah at a serious disadvantage, one that it does not have to accept, especially given its strong position in a potential case before the U.S. Supreme Court under the Equitable Apportionment Doctrine (described below).

THE APPORTIONMENT OF GROUNDWATER IN SNAKE VALLEY UNDER THE AGREEMENT APPEARS TO BE SIGNIFICANTLY LESS FAVORABLE FOR UTAH THAN WOULD BE THE CASE UNDER THE FEDERAL EQUITABLE APPORTIONMENT DOCTRINE, WHICH WOULD ENTITLE UTAH TO A GREATER SHARE OF SNAKE VALLEY GROUNDWATER:

- Equitable apportionment is the doctrine of federal common law that governs disputes between states before the U.S. Supreme Court concerning their rights to an interstate water resource. *Colorado v. New Mexico*, 459 U.S. 176, 183 (1982) (citations omitted).
- Equitable apportionment generally favors current uses and established economies that depend

- on the waters in question. *Colorado v. New Mexico*, 459 U.S. at 187.
- In Snake Valley the equitable apportionment doctrine would favor Utah because the majority of Snake Valley is in Utah, most of the historic use in Snake Valley is in Utah, Snake Valley's water supply is limited and water tables already are decreasing, and the potential injury to existing Snake Valley uses is significant.
 - Under equitable apportionment the location of the headwaters or source of recharge is irrelevant in considering the equities involved. *Colorado v. New Mexico*, 467 U.S. at 187 (citations omitted). Therefore, a 50/50 split of Snake Valley water appears to be considerably more generous to Nevada and less generous to Utah than federal law would consider appropriate, given the fact that the majority of land and historic use of groundwater in Snake Valley is in Utah.
 - By the same token, under equitable apportionment principles future use should be split among the two states based on land area and current use, which again would weigh in favor of Utah receiving a larger quantity of water than Nevada.

THE DRAFT AGREEMENT'S ESTIMATE OF AVAILABLE GROUNDWATER SUPPLY IS IMPROPERLY PREMISED ON AN INFLATED AND UNCERTAIN BARCASS FIGURE:

- The available groundwater supply estimate borrowed from the BARCASS study is inappropriate to use as a baseline estimate in the Draft Agreement for two reasons.
- First, it is deceptively inflated because it does not account for and subtract interbasin inflow to Snake Valley from Spring Valley. BARCASS estimated that the amount of inflow to Snake Valley from Spring Valley is 49,000 afy. This inflow makes up a major portion of the BARCASS estimate of available groundwater supply in Snake Valley. But the Nevada State Engineer already has permitted Spring Valley to be fully appropriated by SNWA. Thus, SNWA already has been granted the right to pump groundwater from Spring Valley that presently flows into Snake Valley and makes up much of Snake Valley's available groundwater supply. So, the only prudent estimate to use from BARCASS would be 132,000 afy less the 49,000 of inflow from Spring Valley, which already has been accounted for in Nevada, resulting in a truer available groundwater estimate of **83,000 afy**. This double counting of inflow from Spring Valley highlights the reasoning behind the requirement in the 'Lincoln County Conservation, Recreation, and Development Act of 2004's ("Lincoln County Land Act") that any agreement encompass the entire interstate groundwater flow system from which the water is to be diverted. As written, the Draft Agreement does not comply with the Lincoln County Land Act, because the scope of the agreement is limited to Snake Valley, which is only part of the Great Salt Lake Desert Regional Flow System.
- Second, BARCASS itself cautions that its estimate of Snake Valley's annual discharge, or available groundwater supply, is highly uncertain and not reliable, conceding that it might well be 30,000 afy too high. USGS, Water Resources of the Basin and Range Carbonate-Rock Aquifer System, White Pine County, Nevada, and Adjacent Areas of Nevada and Utah, A Report to Congress, 62-63 (2007) [hereinafter "BARCASS"]. A conservative, more defensible starting point, then, would be no more than 102,000 afy rather than 132,000 afy. And that is *before* accounting for the interbasin inflow to Snake Valley from Spring Valley, which already has been fully appropriated in Nevada. In fact, the Draft Agreement itself concedes that the available groundwater supply for Snake Valley is uncertain, so uncertain that the Nevada State Engineer's hearing on Snake Valley will be postponed until 2019. It does not make sense to use such an admittedly uncertain, unreliable figure as the basis for calculating the amount of groundwater available for apportionment and apportioning it between the two states at this time.

At the very least, the Agreement should eschew any commitment to a particular figure now and should lay out a more concrete and equitable method for adjusting the number at a later date. As written, Nevada has veto power over adjusting the available groundwater supply downward, leaving Utah with little recourse should additional scientific measurement and study confirm that 132,000 afy is inappropriately high.

AS WRITTEN, THE DRAFT AGREEMENT DOES NOT APPEAR TO COMPORT WITH THE UTAH GOVERNMENT'S PUBLIC TRUST DUTY TO PROTECT AND CONSERVE UTAH'S WATER RESOURCES FOR THE LONG-TERM BENEFIT OF UTAH CITIZENS:

- The State of Utah has an obligation to manage its groundwater, deemed a public resource by Utah statute, in trust for the Utah public's long-term benefit. The State may not bargain away this duty as it has done in the current Draft Agreement by: (1) assuming an unreasonably high available groundwater supply for Snake Valley as noted above; and (2) placing the burden of defending Utah water rights against appropriation by a Nevada entity on individual water rights holders under Nevada's law.
- The Agreement places the entire burden on existing water rights owners to demonstrate that SNWA has caused an adverse impact to their water rights. This is unfair. Since SNWA is the entity seeking the "new" water and creating *all* of the risk of harm to senior water rights owners, it is only fitting that SNWA should bear the risk it is foisting on Snake Valley. It should also be noted that SNWA is a gigantic government agency with billion-dollar budgets to work with, whereas the individual water rights owners in Snake Valley are hardworking ranchers, farmers, and businesspeople who do not have adequate funds to fight with SNWA. The easiest, simplest, and probably fairest way to do this is to create a rebuttable presumption that SNWA's pumping is the cause of any negative change, or impact, to the water rights of any existing water right in Snake Valley. SNWA would then have the opportunity and the burden of overcoming, or disproving, that presumption. Given the enormous disparity between the means and resources of SNWA, which are virtually limitless, and those of ordinary citizens with water rights, which are scant, this allocation of the burden of proof is far more just.
- SNWA also should bear the burden of proving that it is not the cause of harmful impacts to existing water rights because it is SNWA alone that is pushing for and will reap all the benefits of this project and these new appropriations, whereas it is the existing water users in the Valley who will bear the brunt of any harmful impacts caused by the project.
- Similarly, water rights holders should not have to negotiate with SNWA should impacts occur, but ought to be able to report the impacts directly to the interstate panel. As written, the Draft Agreement puts water rights holders at a significant disadvantage, because the agreement sets up a situation in which water rights owners must negotiate with SNWA before they may resort to the interstate panel should impacts occur. For the reasons stated above, this arrangement is unworkable as it places an undue burden on senior water rights holders by requiring them to bargain over their supposedly protected senior rights with an entity that has far superior resources and power.
- In addition to improperly placing the burden on senior water rights holders, the Draft Agreement does not give these water rights holders the tools with which to support their claims of impact to their water rights, thus making it even more difficult for them to prevail should SNWA's pumping impact their wells. Impacts are largely undefined by the Draft Agreement as is the monitoring vaguely referenced in sections 2.11 and 4.5-4.8 of the Agreement, and thus, the determination of impacts likely would be made on a case-by-case basis, putting individual water rights holders at a disadvantage and forcing them to bear the burden of an uncertain battle

to protect their water rights. At a minimum, the Agreement must include specific concrete triggers that would be used to define impacts as well as a detailed method for measuring such impacts that would take the burden off individual water rights holders. Monitoring should be done by a third party at SNWA's expense. Finally, the Draft Agreement contains no provision for reimbursement to these water rights holders for the cost incurred in defending their water rights. Without financial support, it is unlikely that water rights holders will have the resources to defend their water rights against SNWA's pumping.

AS CURRENTLY WRITTEN, THE DRAFT AGREEMENT'S SCOPE IS TOO NARROW BECAUSE IT DOES NOT EXPLICITLY INCLUDE ALL WATER CONVEYED THROUGH SNWA'S PROPOSED PIPELINE REGARDLESS OF OWNERSHIP AND ALL PROJECT-RELATED WATER:

- As drafted, the Agreement covers only water permitted to SNWA under Snake Valley applications currently on file with the Nevada State Engineer. This creates an unacceptable loophole for SNWA to contract with other people or entities to acquire and export water from Snake Valley, raising the same risks for existing water rights holders and the environment in the Valley, without having to abide by the same commitments as it is bound to in relation to its own water rights. In addition, the Draft Agreement fails to acknowledge that water obtained and used by SNWA to mitigate harmful impacts it has caused in one part of Snake Valley may very well have harmful impacts on other parts of the Valley. In order to adequately protect the State of Utah and existing water rights holders in Snake Valley, and to ensure that the protections which the Agreement purports to provide will not be circumvented, the Agreement must expressly provide that all of SNWA's obligations under the Agreement apply to all water conveyed through SNWA's pipeline, regardless of ownership, and to all other project-related water, including water used for mitigation purposes. Expanding the Agreement's scope in this way is necessary to ensure that SNWA is not permitted to play a shell game with water rights to evade its responsibilities and that actual, meaningful mitigation takes place rather than a mere shifting of impacts from one part of Snake Valley to another part of the same valley or to other valleys.

UTAH SHOULD NOT SIGN THE AGREEMENT AS DRAFTED BECAUSE IT DENIES UTAH A VOICE IN WATER RIGHTS DECISIONS ON THE NEVADA SIDE OF THE BORDER THAT WOULD AFFECT AND THREATEN WATER RIGHTS ON THE UTAH SIDE OF THE BORDER:

- As drafted the Agreement allows Utah to play a part, along with Nevada through the bi-state review panel, on disputes concerning Utah water rights in the Utah portion of Snake Valley. But the Draft Agreement explicitly excludes Utah from having any say in decisions concerning Nevada water rights in the Nevada portion of Snake Valley, even though the interconnected nature of all groundwater in the basin ensures that those decisions will affect Utah water rights in Snake Valley, too. Thus, the Draft Agreement would give Nevada a say in the determination of questions concerning Utah water rights in Snake Valley, while depriving Utah of a corresponding say in the determination of questions concerning Nevada water rights in Snake Valley. That imbalance is patently unfair to Utah and Utah water rights holders in Snake Valley.

THE AGREEMENT MUST BE RE-DRAFTED BECAUSE IT PROVIDES ABSOLUTELY NO ACTUAL PROTECTION FOR THE ENVIRONMENT:

- Despite its anemic rhetoric about environmental protection, the Draft Agreement fails to

provide for any actual concrete protection of the environment and undermines the possibility of environmental protection in at least two fundamental ways.

- To begin with, the agreement adopts an unreliable and unreasonably high estimate of Snake Valley's available groundwater supply as the available groundwater supply, setting the Valley up for excessive pumping by SNWA, which cannot help but cause devastating environmental harm. If anything, the highly speculative BARCASS estimate should be used only as the uppermost limit of any potentially available groundwater supply, and clear provision must be made for actually settling on a lesser amount. By all the parties' concession in the Draft Agreement, they simply do not have adequate data to set a reasonable estimate of available groundwater supply yet.
- The other way in which the Draft Agreement undermines the prospects for meaningful environmental protection is that it contains absolutely no provisions of its own for monitoring and mitigation of potential environmental harm caused by SNWA's pumping. Nor does the Agreement contain any concrete, specified standard, threshold, triggers, criteria, or goals for environmental protection or even for a monitoring and mitigation plan.
- Rather, the Draft Agreement shifts responsibility and accountability for all monitoring and mitigation, and environmental protection, to separate agreement between SNWA and Utah alone, which is attached as an appendix. By its nature this arrangement lessens Utah's ability to ensure that the environment will be protected. It also allows the State of Nevada to avoid any responsibility whatsoever for any environmental protection in Snake Valley. Further, this separate "Monitoring and Management Agreement" between SNWA and Utah largely mimics the toothless stipulated agreements that SNWA has bullied several federal agencies into in connection with its application in other valleys in Nevada. Like those illusory agreements this monitoring and management agreement lacks important specifics and essentially sets up nothing more than a so-called collaborative process in which SNWA will have a decisive seat on each committee that has to reach consensus before any decision can be made or any mitigation can occur.
- The result is that SNWA, an agency whose only objective is to obtain as much water as possible for southern Nevada, will be in a position to stall any decision or action from being taken if that decision or action would inconvenience SNWA.

THE DRAFT AGREEMENT IS DEFECTIVE BECAUSE THE GOSHUTES TRIBE WAS EXCLUDED FROM THE NEGOTIATIONS, AND THE AGREEMENT FAILS TO ACCOUNT FOR THE TRIBE'S CLAIMED WATER RIGHTS IN SNAKE VALLEY:

- The Goshutes Tribe was admittedly not included in the negotiation of this Agreement or apparently even consulted before the Agreement was drafted. This oversight opens up the Agreement to attack for its failure to account for or address the Goshute Tribe's assertion that it possesses significant water rights in Snake Valley under the *Winters* doctrine and other federal legal precedent. Before the parties responsibly can sign the Agreement purporting to apportion and manage the water resources of Snake Valley comprehensively, the Goshute Tribe must be consulted and account must be taken of any claimed tribal water rights in the Valley.

THE AGREEMENT AS DRAFTED WOULD UNDERMINE THE FEDERAL ENVIRONMENTAL REVIEW PROCESS:

- SNWA's pipeline project is subject to review and preparation of an Environmental Impact Statement (EIS) under the National Environmental Policy Act ("NEPA"). That review already is underway and an EIS is supposed to be produced for the entire project next year (2010). By

establishing a ten year delay for further study and monitoring of groundwater and related resources in Snake Valley the Agreement undermines the EIS ability to properly analyze and address the Snake Valley portion of the project, either creating an unreasonable risk that the federal NEPA review process will be inadequate with regard to Snake Valley or that it will have to be redone after a decade of time has elapsed.



**SALT LAKE
COUNTY**

PETER M. CORROON
Salt Lake County Mayor

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801 / 468-2500
801 / 468-3535 fax

September 29, 2009

Mr. Mike Styler
Utah Department of
Natural Resources
PO Box 145610
1594 W. North Temple
Salt Lake City, UT 84114-5610

Dear Mr. Styler:

Thank you for this opportunity to make comment on the Snake Valley Water Authority Draft agreement. We appreciate the time and effort you and your staff put into this process. Your dedication is apparent.

After review of the agreement, Salt Lake County has several comments regarding the agreement as currently drafted. These comments fall into two categories. First, the impact the loss of water could have on Salt Lake County's air quality and, second, the impact it could have on areas in the Snake Valley.

Air Quality

Salt Lake County has struggled with air quality over the past 20 years. The State of Utah continues to issue "Air Alert" days because of the impact hazardous air has on our citizen's health. For this reason, it is important to Salt Lake County that air quality weigh heavily in the decision making process. Though the agreement addresses air quality in an unprecedented manner, we believe that additional steps must be taken in the agreement to protect against any air quality deterioration.

First, the County believes that a single air monitoring system is insufficient to determine the actual impact particulates from this project may have on the Salt Lake Valley. We would encourage the negotiating team to at least double the number of monitoring systems to a minimum of two. Second, the County is concerned that the agreement specifically excludes third party interests, denying Salt Lake County the standing to enforce the agreement's terms and conditions. Third, with a focus only on *owners of existing permitted uses* of groundwater, there are limits to the impact and mitigation component of the agreement. We believe that the agreement should be expanded to include impacts to other "regional" environmental resources, i.e., ambient air quality. Fourth, the County is concerned that if the agreement is finalized and the Snake Valley segment is put on "hold" until 2019, it will be necessary for the BLM to complete the pending project EIS limited to Nevada in order to approve the permits for the pipeline rights-of-way. It will not be possible to include Snake Valley in the overall project EIS due to the extension of time under the agreement. If the EIS is completed for the Nevada side of the project only, regional air quality impacts in Utah may not be considered in a subsequent EIS limited to Utah.

Millard County/Snake Valley Impacts

Salt Lake County is also concerned with the potential impacts this agreement as currently drafted could have on Millard County, the farmers and ranchers in the Snake Valley and the flora and fauna native to the area. Millard County contends, and we agree, that too much water is being given to Nevada through this agreement, to support the more than 220,000 acres of groundwater dependant land in the Utah portion of the valley. We believe it is unfair to provide Nevada with 36,000 af/y and Utah with only 5,000 af/y, when the predominant acreage, discharge and use are in Utah. Further, if allocating portions of water deplete the water table, these waters may be irreversibly lost to agricultural and natural use. Depleting the water source will dramatically disrupt the areas way of life and could extinguish the beauty of this area. We encourage the negotiating team to reconsider the allocations provided in the agreement and provide a much smaller portion for Nevada's use.

Thank you for your time. Please feel free to contact us should you have thoughts or concerns.

Regards,



Peter M. Corroon
Salt Lake County Mayor



Joe Hatch
Salt Lake County Council, Chair

Print View

From: "Carol Jeffers" <cjeffers@westminstercollege.edu>
To: <snakevalley@utah.gov>
Date: Wednesday - September 30, 2009 10:22 AM
Subject: draft agreement between Utah and Nevada

The letter of concern and comments by the directors of the GREAT BASIN WATER NETWORK, Allen Biaggi Mike Styler, is a well thought out and informed statement with which I agree. As a resident of Salt Lake City, I am concerned about overuse of the aquifer under the desert that lies between the two states. Much more study is necessary before an agreement is signed. The public comment period needs to be extended. Water is a precious resource that is likely to become even more precious as global warming becomes more of a threat, as models by climatologists predict. If water resources are delegated to the various projects that are planned before it is clear exactly what the impacts of such projects would be, very poor outcomes are likely for all. Rather than increase the input of water to places such as Las Vegas, long term visions of what is sustainable for growth in such places ought to be defined. Maybe the city has reached its limit in population growth and further zoning should be implemented. In any case, agreements and negotiations between the states concerning water allocation should be held off until studies that define the impacts are complete.

Carol Jeffers
3683 Carolyn Street
Salt Lake City, UT 84106

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Print View

From: Ilene Mecham <ilene577@hotmail.com>
To: <snakevalley@utah.gov>, ilene mecham <ilene@utahpta.org>, Tyler Slack <tslack@gmail.com>, Cheryl Phipps <cphipps1787@msn.com>, Gainell Rogers <gainell@utahpta.org>, natalie gordon <natalie@utahpta.org>
Date: Wednesday - September 30, 2009 10:08 AM
Subject: Snake Valley Agreement

To Whom it May Concern:

Utah PTA neither supports nor opposes the Snake Valley Water agreement. However, 136,000 surface acres of Trust lands lie within the boundaries of the Snake Valley. Utah PTA requests that due diligence be done to ensure that this agreement does not negatively affect the value of these lands now or in the future. The lands belong to the Children of the State of Utah.

Sincerely,

Ilene Mecham
Utah PTA President

**Salt Lake County's Comments
Proposed Snake Valley Agreement**

Comments on the Proposed Agreement

A. Additional Air Monitoring Requirements

1. Regional Air Quality Impacts.

The air quality and meteorological data referred to in Appendix 3 of the environmental agreement refers to monitoring in the *Snake Valley airshed*. Due to concerns regarding wind blown dust caused by soil erosion, air quality monitoring baselines must be established and regional air quality impacts outside of the Snake Valley airshed must be evaluated.

2. Location of Air Quality Monitoring Stations.

Appendix 3, refers to an evaluation of regional air transport using data from “*existing* air quality stations along the Wasatch Front.” The problem with this approach is that the existing monitoring stations are primarily used for measuring auto emissions for the motor vehicle inspection and maintenance program. The existing monitoring stations are not located in areas which may be affected by dust from Snake Valley, including the Wasatch Canyon areas. It will, therefore, be necessary to install additional monitoring stations in Salt Lake County to gather baseline meteorological data and measure particulate impacts in areas likely to be affected.

B. The Agreement Specifically Excludes Third Party Interests

1. Mitigation is limited to owners of existing permitted uses.

The parties to the management agreement are the State of Utah, the State of Nevada and the Southern Nevada Water Authority (“SNWA”). SNWA’s involvement in the agreement is limited to the mitigation of impacts to “owners of existing permitted uses” (water rights) as provided for in Section 6.0 of the agreement. Counties which may be affected by the agreement are not parties.

2. Third parties do not have standing to enforce the agreement.

The management agreement provides in Subsection 8.4, that it is not a contract for the benefit of third parties. Furthermore, the agreement provides that third parties have no cause of action to enforce any of the provisions of the agreement. Counties and others in Utah who may be affected by the agreement have no cause of action to enforce the terms of the agreement.

3. The environmental monitoring and management agreement is limited to Utah and SNWA.

The parties to the Environmental Monitoring and Management Agreement, to be entered into concurrently with the Management Agreement, and attached as Appendix C, include only the State of Utah and the Southern Nevada Water Authority. Counties which may be affected by the agreement are not parties and cannot enforce the terms of the agreement.

4. The authority of the dispute resolution panels is limited.

Paragraph 6.3 of the agreement provides for a dispute resolution panel. The purpose of the panel is, however, *limited* to hearing disputes arising between SNWA and an owner of an existing permitted use (a water right). Paragraph 6.4 of the agreement establishes a \$3,000,000.00 mitigation fund. The purpose of the fund is to mitigate “adverse impacts.” Adverse impacts are, however, defined as negative project impacts on existing “permitted uses (water rights) not impacts to other public or private interests.

Paragraph 13 of the Environmental Monitoring and Management Agreement establishes a dispute resolution process. The authority of the board is limited, however, to disputes between the Management Committee (*see*, subparagraph 3.1.1 “creation and purpose”) and the Technical Working Group (*see*, subparagraph 3.2.1 “creation and purpose”). The Board is limited to making non-binding recommendations. Paragraph 8.2 of the agreement provides for the mediation of controversies *between the states* under the agreement.

5. Separate agreement among the State of Utah and Counties.

The Environmental Monitoring and Management Agreement should contain specific provisions for the counties to seek enforcement of the terms and conditions. In the alternative, a separate agreement should be entered into among the State of Utah and the counties to require the state to take action to enforce the terms and conditions of the agreements if necessary to protect their interests.

C. Impact and Mitigation Limitations

1. The Environmental Monitoring and Management Agreement is primarily limited to protecting impacts to *owners of existing permitted uses* of groundwater. Potential impacts to other public resources should also be protected. Mitigation measures should also be included for other public resources.

2. The environmental management agreement is primarily limited to monitoring impacts to groundwater in the “area of interest” defined as the Snake Valley hydrographic area. Impacts to other public resources outside of Snake Valley hydrographic area should also be considered.

3. The management agreement must be expanded to include impacts to other “regional” environmental resources such as ambient air quality. Appropriate measures to mitigate potential regional air quality impacts should be specifically incorporated in the environmental management agreement.

D. Segmentation of the Project EIS Should Not Occur

“Segmentation” is defined as the division of the environmental review of an action so that various activities or stages of a project are addressed as though they are independent, unrelated activities. Except in special circumstances, considering only a part or a segment of an overall action (project) is contrary to the intent of the National Environmental Policy Act (“NEPA”). Paragraph 11 of the environmental monitoring and management agreement states that a copy of the agreement will be submitted to the BLM for inclusion in the project EIS. SNWA intends, however, to proceed with the water applications in Nevada (pending with the Nevada State Engineer for Spring Valley, Coyote Spring, Delamar, Cave, and Dry Lake) and the application pending with the BLM for a pipeline right-of-way across public lands in Nevada.¹

If the agreement is finalized and the Snake Valley segment is put on “hold” until 2019, it will be necessary for the BLM to complete the pending project EIS limited to Nevada in order to approve the permits for the pipeline rights-of-way. It will not be possible to include Snake Valley in the overall project EIS due to the extension of time under the agreement.

Salt Lake County diligently pursued “cooperating agency” in the BLM’s EIS for the pipeline right of way across public land. In support of its request for cooperating agency status, the County claimed “jurisdictional authority” and “special expertise” due to the potential for regional air quality impacts. If the EIS is completed for the Nevada side of the project only, regional air quality impacts in Utah may not be considered in a subsequent EIS limited to Utah.

¹ Las Vegas Review Journal, August 21, 2009, “Pipeline Receives Go-Ahead.”

Juab County

The "Key" County of Utah

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DeEtte Worthington
Tele. (435) 623-3420

September 29, 2009

Re: Proposed Snake Valley Water Agreement

To Whom It May Concern:

Juab County has been heavily involved in the issues arising from the Southern Nevada Water Authority Applications for pumping water from Snake Valley. This proposal causes deep concern to our elected officials, many residents of the entire county and specifically to the residents of Snake Valley.

Officials of the County have attended many meetings and made numerous trips to Snake Valley to survey the apparent water situation and meet with residents of the valley who would be directly impacted by any mistake in allocation of the groundwater that they depend on for their livelihood and indeed their very lives.

A physical inspection of the Snake Valley Areas does make one wonder about the availability of additional water in the area. Long time seeps and springs are drying up and distress to vegetation is obvious and widespread. However, we acknowledge that Nevada certainly has rights in the Valley and that the Utah negotiating team has worked hard to provide an agreement to give some certainty, controls, and monitoring of the groundwater there.

We do agree with the comments made by Governor Herbert at the meeting we attended in Delta on September 25, 2009 when he said he believes that we need an agreement. We do need an agreement but need to make sure it is the **best** agreement that we can get.

We applaud the diligence of the negotiating team and their willingness to spend time explaining the agreement and answering questions about the draft agreement. We participated in over eight hours of questions and discussion with Boyd Clayton and others which was extremely helpful and very much appreciated.

Officials from Juab County along with residents of the Snake Valley, officials from the Division of Water Rights, Division of Wildlife Resources, Officials of Air Quality and others have spent over 8 hours of line by line analysis of the entire agreement and Juab County is mostly pleased with the Environmental, Biological Hydrologic, and Air Quality monitoring agreements but think another very close look needs to be given them and we have included some specific recommendations concerning them.

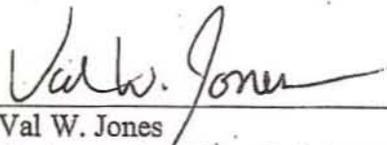
The agreement has to do an excellent job of preventing negative impacts to Snake Valley. The area is fragile and we fear that any attempt to correct detrimental impacts would be too late to save the basin. Scientists say that replenishing the depleted water table and reverse flow of the salt playa near Callao will take too long, ere eco-system destruction in Snake Valley will be complete and virtually irreversible. The only hope for a continuation of what we know now as Snake Valley is to prevent negative impacts.

Again we need to make sure the agreement is the **absolute best** agreement we can reach. Listed below are some suggestions to help make that happen.

1. Much discussion has taken place regarding the proposed divisions of water. We realize much time and energy has been expended concerning the proposed split in the agreement but believe that at least one more attempt needs to be made. Rather than being repetitive by outlining the details here we refer to the proposed amount as presented by Millard County and endorse those recommendations.
2. In the main agreement it does not appear that anyone else who may put water into this pipeline would be bound by this agreement. This should be clearly and specifically spelled out. This is intended to be a very long-term agreement and we have to address possibilities not spelled out today such as SNWA selling water etc.
3. Page 4 of 14 2nd paragraph under 3.2.3 states "The TWG shall strive for consensus in all determinations and recommendations." This needs to be clarified i.e. how long do they strive before action can proceed, what are the options if consensus is not reached, or can one member bring the process to a stand-still?
4. Item 8.2 of the main agreement is confusing. Our question is "why is it even there?"
5. In keeping with stopping not mitigating impacts, 4.8 item c should begin with the word "protect" not "minimize."
6. On page 5 of 14 in the Environmental Agreement item 4. 3) Should read "include water quality parameters" without the current wording which says **certain** water quality parameters.

7. Page 9 of 14 5.4 it appears the first sentence is missing an "of" between creation and the Operating Plan.
8. Page 12 of 14 #10 "Nevada State Engineer Proceedings." We need to insure that the terms and provisions of this agreement are made binding on any possible 3rd parties. It may not prove to be necessary but now is the time to do our best to cover all the bases.
9. Page 12 of 14 #13 "Dispute Resolution" second paragraph. The decisions of the board should be bonding until overturned by a court or the Nevada Engineer. Again in the context of preventing negative impacts the outlined process could be a very prolonged one which may lead to severe impacts.
10. Appendix 1: Biological Monitoring page 1 of 1 section 1.2. Perhaps we should also include potential invasive species.
11. In Appendix 3: Air Quality monitoring Page 1 of 2 in the Air Quality Monitoring 1.1.1, there are definitely two different soil types in Snake Valley. We strongly believe that SNWA should be required to establish two monitoring stations within Snake Valley.

We appreciate this opportunity to comment on the proposed agreement and hope you will carefully consider our comments along with others received.



Val W. Jones
Chairman, Juab Board of Commissioners

VWJ:gg

**ESKDALE COMMUNITY (UTAH) COMMENTS ON THE
DRAFT AGREEMENT FOR MANAGEMENT OF THE SNAKE VALLEY
GROUNDWATER SYSTEM**

September 29, 2009

These comments are intended to improve the possibility of reaching an agreement between the states of Utah and Nevada which will indeed be both equitable in allocation of the groundwater resource shared by the two states, and cooperative in its implementation and application to the water rights holders in both states, the residents of Snake Valley, and those affected by the availability and use of groundwater.

This agreement must stand the tests of time, changing state governments, changes in the resource itself and the scientific understanding gained through further study, as well as defend the groundwater resource from damage, intentional or otherwise, by uses inconsistent with the natural characteristics of the flow system.

Sufficient definition of the situations addressed by the Agreement must be included to allow existing residents and water rights holders to assess the potential impact of this Agreement on their individual situation over time.

If such an Agreement is desirable to the States, it should be crafted without regard to the possible applications for use of the groundwater resource to be allocated and protected. It should focus on the function, history, and future of Snake Valley.

Agreement Page 1—Preamble

1. The Agreement should be solely between the states of Utah and Nevada as PL-108-424 requires. The Agreement from the outset presumes the granting of groundwater rights to SNWA as the major water rights user in Snake Valley. The provisions assigned to SNWA as a responsible party should be placed in a separate Appendix as is the case with Appendix C. The main agreement should stand between the states even if SNWA were to withdraw their applications in Snake Valley.
2. The applicable provisions in PL-108-424 should be quoted in the introduction rather than relegated to an appendix, particularly if they are the compelling reason for the Agreement.
3. The Agreement does not satisfy the requirement of PL-108-424 with regard to the ***“interstate ground-water flow system(s) from which water will be diverted...”***, since it only addresses the Snake Valley Basin. The basin is not separable from the flow system. This leaves the Agreement vulnerable to legal challenge.
4. The Agreement does not avoid an “equitable apportionment action” if it fails to equitably divide the resource (see comments on 4.2 Table 1).

Section 1--Definitions

1.1.a—“Adverse Impact” needs further definition.

...“and that can be demonstrated to negatively affect that well’s ability to produce Groundwater in a manner substantially similar to the well’s historical production;”

- “Substantially similar” should apply to the production methodology used (spring collection box, cased well, windmill, etc.).
- “Historical production” should be defined as the production characteristics (capacity) at the proof of the resource. This is not equivalent to the “Baseline” information mentioned elsewhere.

1.1.b—“Adverse Impact” needs further definition

“...the spring’s historical production;”

- “Historical production” is not equivalent to the “Baseline” information mentioned elsewhere.

1.3—The process for modification of the allocation and changes to other provisions in the Agreement must be described in more detail, using the investigations and analysis currently underway by USGS, UGS and any others as examples. This process must offer public comment on any proposed changes and specify the approval process.

1.4—“Beneficial Use” for groundwater for “hydropower generation” should be limited to springs. The terms “basis, measure and limit” of a water right should be defined in application. Beneficial uses should be stated to be of equal priority by the State Engineers.

1.5—“Groundwater Mining” should be included in the definitions.

1.6—“Existing Permitted Uses” should included a reference to Spring Valley as a contributing factor to Snake Valley in their flow system. Just as Fish Springs is associated with Snake Valley groundwater flows, Spring Valley contributions should be included. **Add “and SNWA water rights granted in Spring Valley” to the end of the paragraph.**

1.9—A map of the Great Salt Lake Desert Flow System (BARCASS summary page 5 or equivalent) should be included in Appendix B denoting the relative position and interrelationship of Snake Valley to the other basins in this Flow System. The border between Utah and Nevada should be identified on all maps and charts of the area.

Section 2--Findings

2.4—Add **“This Agreement is based on the information contained in the USGS BARCASS Report required by PL-108-424 (Lincoln County Lands Act).”** after the last sentence.

2.6—Modify

- 2.6 Recharge of the Groundwater supply in the Snake Valley Groundwater Basin occurs primarily within Nevada and is historically inconsistent. Groundwater discharge and Consumptive Use has historically occurred primarily in Utah.

2.8—Safe Yield Doctrine and effects (Utah)

- The Utah Safe Yield Doctrine should be included in an Appendix or stated here.
- Groundwater removal beyond Safe Yield constitutes “Water Mining”.

- “Reasonable amount of drawdown” should be discussed by examples appropriate to the situation in Snake Valley.
- The statement **“Such appropriations necessarily impact the existing hydrologic system and captures discharge available to phreatophytes, streams and natural lakes.”** is not part of the Safe Yield Doctrine and it does not necessarily follow that in Utah water may explicitly be denied to phreatophytic vegetation. This statement implicitly accepts Nevada’s doctrine (see 2.9) and *de facto* changes Utah water rights administration without regulation.
- Add **“Nothing in Sections 2.8 or 2.9 shall be construed to limit or set limits for any available Adverse Impact remedies or any required Monitoring and Mitigation activities.”**

2.9—Perennial Yield Doctrine (Nevada)

2.9 Nevada acknowledges that the perennial yield doctrine that governs Groundwater appropriation in Nevada generally allows for the appropriation of Groundwater that is discharged through natural evapotranspiration processes and/or some portion of the subsurface flow to adjacent basins.

- This doctrine can not be used to allocate shared groundwater between Spring and Snake Valleys because Nevada cannot limit its exercise to the area within its boundaries.
- This phrase is inconsistent with the BARCASS analysis, which considered the flows between basins to be significant, sometimes controlling. Within a particular basin in this flow system, small appropriations are not material to the flows which pass through, but the anticipated removals from Spring Valley are large compared to the interbasin flow to Snake Valley and cannot be ignored. Double counting can only be avoided by reserving a significant amount of interbasin flow from Spring Valley at both interbasin flow areas.

The majority of Groundwater appropriation within Nevada throughout the state’s history has been premised upon the capture of Groundwater naturally discharged as phreatophytic evapotranspiration.

- This doctrine is applicable only to the Nevada side of Snake Valley. LCLA clearly states that nothing in the Act will affect either state’s water laws. This doctrine cannot be applied in Utah.

Sections 2.8 and 2.9 are should be removed, because they blur the line between the administrative rights and duties of the State Engineers in the application of their respective state’s laws. This again leaves the Agreement vulnerable to legal challenge.

Add finding 2.13:

2.13 The States acknowledge that groundwater has been and is being appropriated in Snake Valley. Utah has identified approximately 35,000afy depletion for such rights prior to the filing of the above SNWA applications, and approximately 4,500 afy depletion for such rights filed after that time. Nevada has identified approximately 12,000afy depletion for such rights prior to the filing of the above SNWA applications, and approximately ???? afy depletion for such rights filed

after that time. The appropriated rights have been identified by each State, and will be adjusted as prior and vested rights and claims are presented and verified.

- Almost 3000afy of Nevada rights issued after 1989 are identified on the Nevada Water Rights database for a single entity. We have no information to support the total appropriations in Nevada. Each state must verify their claims by category to existing water rights before any allocation is acceptable.

Section 3—Available Groundwater Supply

This section is based on the definition in 1.3

3.1—The “process of revising estimates” must be in more detail, and must provide for public comment, not just public review.

3.2—Reword:

3.2 Based on the best currently available data (BARCASS), the States agree that the Available Groundwater Supply as of the date of this Agreement is 132,000 afy. This estimate is highly uncertain, and is restricted in its allocation for appropriation by the States.

Section 4—Allocation and Management of Available Groundwater Supply

Table 1—Revise Allocation

- This allocation is totally artificial and unnatural. It considers only the source of recharge, not historical use, natural characteristics distribution (ET, distribution of uses and outflows), or interbasin sources and uses and their associated impacts.
- The need to reach a 50/50 allocation is political and transparent, and does not respect the natural function of the groundwater flow system.
- Utah is charged with 20,000afy to protect outflows through Fish Springs (not located in Snake Valley), but Nevada reserves nothing to protect Snake Valley interbasin flow from Spring Valley (estimated at 39,000afy in BARCASS) from water export through export rights of from 40,000afy to 60,000+afy already granted to SNWA.
- So-called Unallocated water in Utah is in fact consumed by existing post-SNWA rights (junior to SNWA filing date), effectively closing Utah’s portion, while subjecting Utah to providing the ET necessary to provide Nevada’s share, *de facto* accepting Nevada water law in Utah.

Recommendation:

1. Reserve the uncertain portion of the BARCASS discharge estimate at the outset. BARCASS was performed during the wettest year in the area since 1982-83. ET measurements were singular and not representative, either in area or in plant health. BARCASS recharge estimates are the highest of any of the studies done to date in the area. **At least 25,000afy should be reserved from any allocation pending improved characterization of these factors.**

2. Revise the remaining allocation based on the factors the Supreme Court would use if an "Equitable Apportionment Action" were filed. Consider historical use, discharge (including ET), and recharge. Recharge is the least significant component in determining equitable apportionment. **Discharge is the BARCASS number chosen to allocate, so allocation to the states should be on the same basis.**
3. Reserve a portion of the Spring Valley interbasin flows to Snake Valley depicted by BARCASS. One-half of the total flows would amount to 24,500afy. For equity with the Fish Spring reserve amount, **use 20,000afy**. This will also address the issues of
 - a. potential SNWA removal from the headwaters of the basin flow,
 - b. preferential removal from depths below the outflows to the Great Salt Lake, and
 - c. concentrated, rather than distributed, removals of large quantities on a continuous (not seasonal) basis.
4. Reduce each state's allocated amount by the reserves in 3 above. Subtract any existing water rights depletion amounts from each state's allocation to determine groundwater available to appropriate for each state.

This approach is similar in concept to that developed by Millard County in their comments to the Utah Legislature Interim Committee.

Blended allocation of all factors:

Total to Allocate: 132,000 – 25,000 (for uncertainty in BARCASS) = 107,000 afy
 Discharge 65% Utah, 35% Nevada

	Utah	Nevada	Total
Allocated:	69,000	38,000	107,000
Reserved—Fish Springs	-20,000		40,000
Reserved—Spring Valley Flows		-20,000	
Existing Depletion	-39,500	-(12,000+3,000?)*	-54,500
Remaining to Appropriate	9,500	3,000	12,500
BARCASS Reserve (40/60?)	10,000	15,000	25,000
Total	79,000	53,000	132,000

* This amount is unknown at this time, but we know of at least 2520 afy at one location.

Amounts reserved for Fish Springs and for Spring Valley flows into Snake Valley, as well as the BARCASS Reserve, can be released by the State Engineers as described in Section 5.3 when research confirming its availability is developed.

This allocation methodology is conservative, respects the natural characteristics of the groundwater system, and allows for a future in Snake Valley. It does not "make a hole" for SNWA as a criteria for allocation.

4.6—The State Engineers *will* hold a joint annual public meeting with Nevada and Utah water users in the Snake Valley area to receive public input as to use and management of the water resource. *Such a public meeting will be held the first two years after the Agreement is signed, and each year after the beginning of the Baseline Data Collection Period.*

4.7—100 afy is unworkable. It is not low enough to monitor the small wells at Knudsen's property in Nevada, which together could yield 720 afy (individually 90afy). Any aggregated point of delivery should be specified for monitoring. An established record of output vs. power consumption could serve as a basis for electric pumps. The cost of monitoring will be a burden both in time and money for the multiple small wells historically used in Snake Valley.

4.8—(c) PL-108-424 requires the Agreement to “protect existing water rights”, not “minimize injury to Existing Permitted Uses”. See 5.4.

4.8--(e) & (f): “maximize the water available for Beneficial Use in each State” and “manage the hydrologic basin as a whole” are inconsistent goals, since each State has different criteria for maximizing available groundwater. They in fact conflict, because any allocation which is not in concert with the natural function of the basin system can not be managed as a whole—underground diversion is not available for redistribution of flow as it is with surface water. This provision again requires Utah to accept the maximization criteria of Nevada, since ET from Utah is required to achieve Nevada's goals.

Section 5—Categories of Available Groundwater Supply

General: There is no reason to differentiate between pre-SNWA rights and post-SNWA rights. The concept that Nevada has issued no rights during that period is nullified by their own records. Utah should not be held retroactively liable for the situation of another sovereign state through its own actions. Historical use favors Utah, and the fact that political influence halted the Nevada application process should never burden Utah.

An equitable allocation (see above) eliminates any need for such a division into “senior” and “junior” to SNWA. Seniority is determined within each state according to its own administrative rights and laws, which are not to be abridged by this Agreement. Nevada can choose to administer its rights with reference or deference to SNWA's applications as it sees fit.

This Agreement is between the States of Utah and Nevada, and its terms should not be defined by or grant preference to a third party applicant for rights in one of the States beyond the terms of its separate Agreements with the States.

Accordingly:

- Section 5.1 should be retitled “**Existing Permitted Uses**” and reworded without regard to October 17, 1989. Change in all subsequent references.
- Section 5.2 should be retitled “**Unappropriated**” and reworded without regard to October 17, 1989. Change in all subsequent references.
 - (a) All applications for “Unappropriated” water should require and be held to a Development and Proof plan and schedule.
 - (b) Require that all wells be equipped with access ports of *not greater than one inch* to allow the measurement of the *static* water levels therein. *Observations in such wells will be coordinated with normal operations to avoid interruptions in use.*

- *(c) Nothing in this Agreement shall guarantee access for observations without the permission of the owner or operator of such facilities.*

5.4 (3)—“diminishment of the physical integrity of the Groundwater Basin” should be defined by example appropriate to Snake Valley.

5.4—Last sentence: In the event these consultations conclude that withdrawals exceed the redetermined Available Groundwater Supply, the State Engineers are to take action to reduce withdrawals by priority *within each state* such that Consumptive Use in each state is limited to the redetermined Available Groundwater Supply.

Section 6--Identification and Mitigation of Adverse Impacts to Existing Permitted Uses

Sections 6.1 through 6.6 should be transferred to a separate Agreement (Appendix) to be signed by both States. They are a procedure based on the presumption of granted water rights, and should not be part of this Agreement.

Sections 6.7 and 6.8 should be included in a section between 5.2 “Unappropriated” (described above) and 5.3 “Reserved” entitled “Pending Applications for Unappropriated Groundwater”.

6.7 content—Specify whether and when investigative drilling by SNWA would be permitted pursuant to its applications.

6.8 content—This section implies that Utah expertise would be considered a “friend of the Nevada State Engineer” and might not be available to Utah protestants in presenting expert evidence on a particular issue not advantageous to Nevada or SNWA. This provision appears to insert the Utah State Engineer as party to the SNWA applications process. More detail explanation is necessary.

7.0 Environmental Programs

The contents of Section 7.2 should be included in the SNWA Appendix Agreement along with sections 6.1 through 6.5 (above).

7.2 content—This section should be generalized to reference cooperative “Monitoring and Management” (not Mitigation) activities to determine Adverse Impacts from activities in Snake Valley due to actions by water rights holders in each state. The SNWA Adverse Impact Agreement Appendix should be referenced as a particular potential remedy.

All exporters of groundwater from Snake Valley must be held to the same standard by the Agreement. Private owners who sell rights or water through some device (either physical or legal) other than SNWA must be governed by the same requirements SNWA is subjected to.

8.0 General Provisions

8.2(d)—“the delivery of waters herein provided” has no prior reference or connection. A definition or reference to a preceding section is necessary to understand the purpose of this provision.

Any material “adjustments” to the terms of the Agreement, including changes to allocations or provisions affecting water rights holders, must be subject to public review and comment. The resolution of the mediated issue must be made public.

8.4—This section is impotent if SNWA is the reason for any of the Agreement’s provisions. The Agreement must stand without any third party involvement or concurrence.

8.5—The process for amendment and modification should be described.

Modify the signature page to include only Nevada and Utah approvals.

APPENDIX ? (To be signed by Utah, Nevada and SNWA)—

Comments Embedded and Following

SNWA Agreement for Identification and Mitigation of Adverse Impacts to Existing Permitted Uses

1. In the event SNWA is granted any permits pursuant to the SNWA Applications, SNWA agrees to provide public notice, at least one year prior to the export of Groundwater from Snake Valley and at least once each quarter following the commencement of such export, that any owner of an Existing Permitted Use may notify SNWA of a claim to an Adverse Impact to its water right due to Groundwater withdrawals by SNWA. Such public notice shall be published in any newspapers of general circulation in Snake Valley, SNWA's website and such other reasonable means of publication as may be requested by the State Engineers.

2. Any owner of an Existing Permitted Use who believes that development or withdrawal of Groundwater by SNWA has caused an Adverse Impact to its Existing Permitted Use may notify SNWA that the permit owner claims an Adverse Impact and shall provide any pertinent information that supports their claim of Adverse Impact. Whenever such notification is made, SNWA shall assess the claimed Adverse Impact, verify that an Adverse Impact has occurred or is likely to occur, and propose options to mitigate any verified Adverse Impact. Upon receipt of notice of a claimed Adverse Impact, SNWA shall:

a. Within 10 business days of receipt of notice, provide qualified staff to meet in person with the permit owner if the well(s) or spring(s) that are the point of diversion of the Existing Permitted Use are not currently producing sufficient water to meet the immediate needs of the permit owner. The location of such meeting shall be the point of diversion of the Existing Permitted Use unless otherwise agreed by both parties. If an Adverse Impact is determined by SNWA to have occurred or be likely to occur, SNWA shall make an offer, binding on SNWA, to the owner of an Existing Permitted Use to mitigate the Adverse Impact; or

b. If the well(s) or spring(s) that are the point of diversion of the Existing Permitted Use are currently producing sufficient water to meet the immediate needs of the permit owner, within 30 days of receipt of notice SNWA shall determine whether either an Adverse Impact has occurred based upon information provided by the permit owner or whether a site visit or other additional information is necessary to make such a determination. If an Adverse Impact is determined by SNWA to have occurred or be likely to occur, it shall make an offer, binding on SNWA, to the owner of the Existing Permitted Use to mitigate the Adverse Impact.

Mitigation options that may be offered shall include, but shall not be limited to:

1. Redistributing Groundwater withdrawals geographically;
2. Reducing or ceasing Groundwater withdrawals at specific points of diversion;

3. Deepening of well(s), repairing or replacing pumps and other infrastructure, and reimbursing for increased pumping costs;
4. Providing alternate water supplies;
5. Augmenting water supply for senior rights and resources using surface and Groundwater sources; and
6. Other measures as agreed to by SNWA and the owner of the Existing Permitted Use.

Comment: Mitigation in sparsely populated areas is often not feasible, beyond buying the property, as alternate sources of water are not available. This process simply allows SNWA to eliminate reports of Adverse Impacts and possibly acquire downstream rights. More specific options should be developed which consider the location and timing of Adverse Impacts in the varied distribution of Snake Valley water rights holders' places of operation and residence. This needs to be a plan, not just a proposal.

c. Within 10 business days from either: 1) a determination that no Adverse Impact has occurred or will occur; or 2) a rejection by any owner of an Existing Permitted Use of SNWA's final offer to mitigate any claimed Adverse Impact, SNWA shall notify both State Engineers of such determination or rejection and shall provide all pertinent details in writing.

3. The States agree to establish an Interstate Panel composed of the State Engineers or their designees and such members of each State Engineer's staff as they deem appropriate to hear disputes arising between an owner of an Existing Permitted Use in Utah and SNWA. Whenever the owner of the Existing Permitted Use and SNWA cannot agree regarding the occurrence of an Adverse Impact or upon the appropriate mitigation for an Adverse Impact, the Interstate Panel shall consider the matters in dispute. The Interstate Panel shall not consider and shall have no jurisdiction over claims of Adverse Impacts from SNWA's Groundwater development and withdrawal in Snake Valley for an Existing Permitted Use in Nevada. Any issues regarding claims of Adverse Impacts to Nevada water rights shall continue to be overseen by the Nevada State Engineer pursuant to the laws of Nevada.

a. When considering whether pumping from a SNWA Groundwater well is having an Adverse Impact upon a water right in Utah, the Interstate Panel may consider the following:

1. The construction of respective wells, including:
 - a. Depth of the well
 - b. Diameter of the well
 - c. Screen intervals
 - d. Slot size
 - e. Age of the well
 - f. Location of saturated strata
 - g. Pump location
 - h. Maintenance history
2. The distance between the respective wells
3. Priority dates of the respective water rights
4. Baseline data for the respective wells, including

- a. Pumping history
 - b. Water level history
- 5. Baseline data for the area, including:
 - a. Pumping history and distribution
 - b. Water levels and water level variability
- 6. Groundwater gradient
- 7. Water quality
- 8. Locations of other wells in the area and their associated amounts and frequency of pumping
- 9. Climatic conditions, e.g. drought year
- 10. Geology
- 11. Likelihood of hydrologic connectivity between the respective wells
- 12. Occurrence of impact to or from other wells in the area
- 13. Recent seismic activity
- 14. Any other information determined relevant to the situation
- b. When considering whether pumping from a SNWA Groundwater well is having an Adverse Impact on the spring supply of a water right in Utah, the Interstate Panel may consider the following:
 - 1. Distance between the well and the spring
 - 2. Geology
 - 3. Likelihood of hydrologic connectivity between the well and the spring
 - 4. Baseline flow rates
 - 5. Groundwater gradient
 - 6. Water quality
 - 7. Recent seismic activity
 - 8. Recent manmade activity
 - 9. Locations of other wells in the area and their associated amounts and frequency of pumping
 - 10. Occurrence of impact to or from other wells in the area
 - 11. Climatic conditions
 - 12. Any other information determined relevant to the situation.

Comment: Most residents of Snake Valley do not have the technical background or professional resources to engage in this process. An advocate must be provided for the claimant to level the playing field. Otherwise, the claimant can be either stonewalled or baffled by “techno-babble” from professionals.

The laundry list of items for consideration is most beneficial to SNWA because it delays the process, offering multiple opportunities to object and depreciate the claim. For example, who will determine if seismic activity is the cause of the problem or the effect of destabilization from pumping? Meanwhile, water is still being exported from Snake Valley and the claimant has no relief.

The list should be reduced to a statement that “the Interstate Panel will apply the criteria and hydrologic analysis used by the State Engineer to evaluate Adverse Impacts according to State Law”.

4. In the event that any permits are issued to SNWA pursuant to the SNWA Applications, SNWA shall establish a mitigation fund sufficient to accomplish the mitigation of any reasonably anticipatable Adverse Impact, which shall be maintained throughout the tenure of the permit. In no event will the balance of the mitigation fund be reduced below \$3,000,000 while SNWA maintains Groundwater development and withdrawal facilities in Snake Valley.

5. The Interstate Panel shall determine whether an Adverse Impact has occurred. In the case of the occurrence of an Adverse Impact, the Interstate Panel shall determine the appropriate mitigation. The determination of the Interstate Panel shall be administered by the Nevada State Engineer. The process for any challenge or review of an order of the Nevada State Engineer shall be determined by the laws of Nevada.

6. The processes described in sections 2 through 5 may be exercised at the election of the owner of an Existing Permitted Use and shall not preclude such person's right to pursue any and all other remedies available to any party in law or in equity.

7. Concurrently with the execution of this Agreement, Utah and SNWA have entered into an agreement entitled the Snake Valley Environmental Monitoring and Management Agreement ("Environmental Agreement") attached hereto as Appendix C. The Parties agree to work together to coordinate management activities conducted pursuant to this Agreement and monitoring and management activities conducted pursuant to the Environmental Agreement in order to make informed determinations as to whether Groundwater withdrawals have caused an Adverse Impact to an Existing Permitted Use.

Add a signature page to reflect Nevada, Utah and SNWA representatives.

Comments on the Adverse Impact Agreement

- All terms of this Adverse Impact Agreement are subject to the terms of the overall Agreement.
- The minimum Mitigation Fund balance will increase by \$2,000,000 for each year of the Operational Period from a **\$5,000,000 beginning balance** to reflect the time lag between groundwater removal and recovery from cumulative impacts, as well as the magnitude over time of large-scale groundwater removal. Even this amount is insufficient to address an environmental impact on the scale of Snake Valley, but provides initial funds to address the costs of beginning mitigation delayed by legal battles as seen in Owens Valley, California.
- SNWA will immediately pay claims submitted for less than \$10,000 by any party in any calendar year after submission of the supporting documentation.
- Claims for less than \$1,000,000 in any calendar year will be broken into "Critical" and "Negotiated" sections.
 1. Critical items are impacts which affect the current operations and economics of the affected water rights holder or impacted party, and are limited to \$100,000 per submission.

2. SNWA will immediately pay the Critical portion of the claim after submission of the supporting documentation.
 3. Negotiated items include future or continuing impacts requiring mitigation or settlement, and will be subject to the Adverse Impact process above.
- Claims exceeding \$1,000,000 will be referred to the Interstate Panel.
 - The burden of proof of No or Reduced adverse impact will fall on SNWA once operations have begun, either continuous or intermittent.
 - All purveyors of water to SNWA's pipeline system (wherever located—Utah or Nevada) from Snake Valley are subject to this procedure, and SNWA will include such terms in any and all contracts and purchase agreements. SNWA will be liable for unpaid claims costs incurred by its suppliers for Adverse Impact claims.
 - Any export of Snake Valley groundwater within Utah shall be subjected to equivalent requirements, either separately funded or in conjunction with SNWA's efforts.
 - Adverse Impacts to water quality and availability for domestic supplies and community water companies (Shiloah Wells in EskDale, UT and Baker GID in Baker, NV) will be addressed immediately without consideration of costs, and will address both immediate and long-term solutions which satisfy the State's water quality requirements for such providers.
 - This process should be available to Nevada water rights holders as well. Their impacts are no less real and their resources no greater than those in Utah.

Comments on Appendix C—Snake Valley Environmental Monitoring and Management Agreement

General Comments:

1. The nature of SNWA's plan to remove large quantities of groundwater from deep wells renders this entire concept ineffective, since the effects observed by the monitoring program will be unmanageable after detection, except for impacts close to the pumping locations.

- Pumping will be from preferential locations in the headwaters of the principal recharge areas.
- Pumping will occur at depths which require long time frames to observe and which will occur at great distances from the source.
- Management and mitigation are Band-Aid solutions to address symptoms, since the causes are already established. (See "*Ground Water Development—Time to Full Recovery*" by J. Bredehoeft and T. Durbin, GROUND WATER, July-August 2009).
- Current groundwater use in Snake Valley occurs in widely distributed areas in a seasonal pattern. SNWA's pumping will fundamentally change the dynamics of the groundwater system, affecting the predictability of impacts and the effectiveness of management and mitigation strategies.
- Pumping at depths greater than the basin outflows masks the immediate effects of groundwater removal and delays the application of mitigation strategies. An equitable approach would be to restrict SNWA to pumping from the same aquifer levels as other water rights holders in the area.
- Pumping from depths below the "shelving" layers which separate the lower aquifer from the surface water table over large areas (as seen in North Steptoe Valley) changes the recharge response from its historical patterns.

2. This "M&M" Agreement contains no commitment to action or funding by any of the parties. State legislatures are not required to fund their portion of the M&M, and SNWA's budget must be approved by its governing Board, which changes with time.

The "elephant in the room" with SNWA's proposed project has always been "Who has the 'OFF' switch?"

A procedure for termination of Operations and requirements for continuing mitigation must be included when required actions are not completed by the parties. This may require SNWA to provide bridge funding to support State actions.

This M&M Agreement can not relieve SNWA of any actions under Federal law for environmental remediation, either air, water, or ecological in nature. The actions related to these issues are discretionary under the Agreement, and would require legal action to force compliance.

3. Any change in Points of Diversion will require a modification of the M&M plan and reopen the Baseline Data Collection Period process if not already performed.

4. A cost estimate of the projected costs to each party should be included with this Agreement, just as a Fiscal Note accompanies proposed legislation.

Specific Comments:

Recitals should reference the Main Agreement, not restate it. Sections H, I, J are particular examples, and repetitions should be removed from them.

2.2—the “Baseline Period” is not considered equivalent to “historical production”.

3.1—Management Committee:

- Section 3.1.2 is incomplete in the Draft Agreement
- Section 13 (Dispute Resolution Process) should be move to Section 3.3 as it applies solely to the Management Committee and its relationship to the TWG.
- Issues in dispute related to observed impacts should require the cessation of pumping in the disputed area, pending action through the Dispute Resolution process. This provides incentive for the dispute to be resolved, since the desired benefit of pumping has been withheld. Lessons from Owens Valley are instructive here.
- The Management Committee is not held to any standard of performance or responsibility. Its activities should be the subject of a formal Annual Review by the State Engineers. This review should include a report of the issues raised and their disposition.

3.1.1—Local resident representation must be included for the Utah SVAAC to adequately represent the affected areas. Time must be provided for this Council to seek local input concerning issues and disputes.

4.1.1—Tier I Monitoring Area

- A broader Tier I area is necessary to detect the possibility of impacts from changes to groundwater system dynamics. USGS maps indicate much more diverse vegetative and soils distribution. The maps and the plans should be updated.
- The proposed monitoring for Tier I must take into account the time delay between pumping and observable impacts.
- A continuous monitoring plan for phreatophyte health must be included as an early warning system for all parts of Snake Valley. See comments above.
- Analysis of Snake Valley by sub-basin is more appropriate as a basis for monitoring, since it reflects the different groundwater and geologic characteristics as opposed to an “average” approach which can not target potential problem areas.

5.2—Geographic redistribution has the effect of masking the overall groundwater system impacts until they are unavoidable. Its intent is to continue pumping from as many locations as possible until the system is in such condition that it obviously cannot support further withdrawals.

The Agreement must address at what point SNWA will be required to cease operations. Limits for reduction in flows, numbers or percents of locations impacted, or some other measurable standard must be defined.

6.—Data-Quality Requirements—USGS should conduct a quality-assurance audit on an annual basis.

7.2—A mechanism to identify data associated with individual locations should be included for water rights holders to evaluate current data collected in their area.

8.1—USGS should conduct an annual audit of the Regional Flow Model and report to the States and SNWA.

Summary Comments:

It is unlikely that the State Engineers by themselves will be able to withstand the political pressures brought to bear to continue pumping once water is flowing into the pipeline, regardless of the impacts. Reduced groundwater flows and associated environmental degradation will become the new "normal".

If this Agreement is not strong enough to define and control the process for any exporting of water from Snake Valley, no amount of monitoring and "management" will save it from the same fate as Owens Valley.

The objective of the Agreement in total must be to prevent irreversible damage to the groundwater-based environment of Snake Valley rather than allow a flawed scheme to proceed and try to "control" impacts over which we have no control.

Snake Valley residents form a diverse but closely-connected social fabric. We are not characterized by the numbers associated with individual water rights, but by our common interest in living as we do in Snake Valley. Inequitable allocation of the water which is the source of life in Snake Valley tears at this fabric.

It is not obvious that this Agreement **as drafted** is preferable to an equitable apportionment action before the Supreme Court of the United States. However, agreement and cooperation is always the best solution to shared interest, as long as one party has not exerted its self-interest over the other.

The urgency to sign this Agreement is political in nature, not scientific. Studies are currently proposed and underway which can improve our understanding and definition of the resource to be shared. Wisdom dictates that sufficient time be taken to consider the potential benefits of additional studies and create a cooperative Agreement that is conservative in nature and confident in understanding the possible outcomes.

Significant effort has been expended by both the States and by SNWA to create a basis for sharing the groundwater in Snake Valley. The potential exists for this Agreement to be revised to reflect equitable apportionment. It is EskDale Community's hope that such a result can be achieved for the benefit of both the States, its residents, and the future of Snake Valley.

Note: These comments reflect the combined input from approximately 25 adult residents of the EskDale Community and surrounding area in Snake Valley.

Harvey L. Hutchinson, RCE

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Alpine, Utah, 84004
801-756-4446
westernh20@msn.com

September 30, 2009

Constituent Services
Office of the Governor
Date

SEP 30 2009

Gary R. Herbert, Governor
Utah State Capitol Complex
350 North State Street, Suite 200
PO Box 142220
Salt Lake City, UT 84114-2220

Dear Governor,

Enclosed is an updated statement on my assessment of the impact the proposed agreement between Utah and Nevada sharing water in the Snake Valley will have on Utah State School and Institutional Trust Lands.

Yours truly,



Harvey L. Hutchinson, RCE

Enc

Utah – Nevada Snake Valley Water Sharing Agreement Cannot Take School Trust Lands VESTED Water Rights without Compensation

I. THE SCHOOL TRUST LANDS HAVE VESTED WATER RIGHTS THAT THE STATES OF UTAH AND NEVADA CANNOT REMOVE WITHOUT COMPENSATION

1. **In the Law Case: Commissioner of Public Lands for the State of New Mexico v. State of New Mexico ex. rel. State Engineer, et.al., On Petition for a Writ of Certiorari to the Court of Appeals Of the State Of New Mexico.** The question presented to the Supreme Court was: Whether the New Mexico Commissioner of Public Lands may claim federal reserved water rights with respect to lands Congress reserved from the federal public domain, and granted to the State of New Mexico subject to a strict, federal enforceable trust, to support public education and for other related purposes specified by Congress. **Their answer was no. I also concur with this decision.**

The question that was never asked in this case is, did the patents issued by the United States ever transfer any water rights with them to the State of Utah School and Institutional Trust Land Administration? The answer to this question is no, they did not discuss this question. I suppose the reason is that no one ever asked the question !

I will try to answer this question in the following discussion.

2. **The Utah - Nevada Snake Valley Water Sharing agreement is Illegal unless it includes Compensation for the Taking of School Trust Lands Vested Water Rights.** As proposed, the agreement is illegal because **all** of the stake holders are not a party to it. The State of Utah School and Institutional Trust Lands Administration is trustee of more than 140 sections of land with vested water rights by patents. These SCHOOL TRUST LANDS are mostly made up of Sections 2, 16, 32, and 36 in each township, and comprise over 100,00 acres of land in the Snake Valley. (See enclosed map.) As proposed, the loss of ground water from these sections of land would greatly reduce the value of the SCHOOL TRUST LANDS and would not comply with the Utah Enabling Act of 1894. To comply with this 1894 Act, the United States Congress deeded certain lands including vested water rights to the State of Utah for "School Trust Lands," mandating that money from these lands be used for the education of the children of the State of Utah.

3. **The School Trust Land Patents Conveyed the Vested Water Rights to the State of Utah School and Institutional Trust Lands Administration.** The following quotes from some of the patents that conveyed lands from the United States to the Utah State School Trust Lands Administration (SCHOOL TRUST LANDS) explain and convey the rights, priority and conditions transferred with the School Trust Lands:

“The area described contains 1,948.39 acres, according to the Official Plat of the Survey of the said Land, on file in the Bureau of Land Management:

NOW, THEREFORE, KNOW YE, that the UNITED STATES OF AMERICA, in consideration of the premises, and in conformity with the said Act of Congress of June 21, 1934, and as evidence of the title which was granted to and vested in the State of Utah to the above described lands on January 4, 1896 for the support of common schools, as aforesaid, and in confirmation of such title for such purpose.”

The lands were vested in the State of Utah for the education of the children. The word “vested” is important not only at this point, but is used in federal land laws to describe a specific type of water right as discussed further below.

As included in the patent, the only purpose for these School Trust Lands is to make money to be used for the purpose of financing schools and education and is in accordance with the language of the Utah Enabling Act. Quoting the patent further:

“HAS GIVEN AND GRANTED, and by these presents DOES GIVE AND GRANT, unto the said State of Utah, and to its assigns the lands above described; TO HAVE AND TO HOLD the same, together with **all** the rights, privileges, immunities, and appurtenances, of whatsoever nature thereunto belonging, unto the said State of Utah and to its assigns **forever**;”

The word “all” in the above patent language indicates that “all” rights were given to the SCHOOL TRUST LANDS. The language of the patent is not “all rights except water rights.” That includes water rights the United States vested in these lands to accomplish their purpose of supporting the schools of the State of Utah. The sections of land given to the SCHOOL TRUST LANDS had not previously been patented (given or claimed by anyone). Each section deeded was owned entirely by the United States and no part of it (land, water, minerals) had ever been claimed by anyone. Each section was given with “all the rights, privileges, immunities, and appurtenances of whatsoever nature thereunto belonging” to the State of Utah to be used in the financing of the common schools.

Further, Section 20 of the State of Utah Enabling Act of 1894 contains language that cancelled any United States laws that would conflict with the rights transferred to the

SCHOOL TRUST LANDS. Section 20 also cancelled then existing Territorial Laws and pre-empted later State Laws that might conflict with the rights on SCHOOL TRUST LANDS? The patent reads further:

“...subject to any “vested and accrued water rights” for mining, agricultural, manufacturing, or other purposes, and rights to ditches and reservoirs used in connection with such water rights as may be “recognized and acknowledged by the local customs, laws, and decisions of courts;” and there is reserved from the lands hereby granted a right of way thereon for ditches or canals constructed by the authority of the United States.”

The statement in the patent “subject to any vested and accrued water rights” is significant on three points: (1) It is the language of Sec. 9 of the federal Act of July 26, 1866, (2) it sets the priority date of the School Trust Lands vested water rights to the effective date of the creation of the State of Utah (January 4, 1896), and (3) it mentions two different types of rights: vested and accrued. The dictionary states vested rights are **A. Settled, complete, or absolute; without contingency. Said of property or a right. B. Having unqualified present or future possession of a property or right.** Accrued means to become enforceable or permanent.

There were no water rights that had accrued or vested to anyone on sections 2, 16, 32 and 36 and/or in lieu sections before the lands were transferred to the State Trust Lands. Thus, the water rights were vested with the land. Later laws cannot divest the State Trust Lands of the its rights, privileges, immunities, and appurtenances and vested water rights it received when it received the lands unless they are paid for.

The next phrase in the patent also comes from the Act of July 26, 1866 reading: “recognized and acknowledged by the local customs, laws, and decisions of courts,” The “local customs” would be the State Engineer, the “laws” would be the Utah Enabling Act of 1894, and decisions of courts vested all rights, privileges, immunities, appurtenances (See the same wording in the enclosed Patents #1225306 dated 12 April 1962; #1226305 dated 12 April 1962; and #1226307 dated 12 April 1962). The import of these patent clauses sets the priority date for the School Trust Lands vested water rights to that of the effective date of reservation, which is January 4, 1896.

As evidence that the actions of the United States in patenting lands to the SCHOOL TRUST LANDS has been consistent for more than a hundred years, I have enclosed Patent #43-2001-0014 and 43-2001-0018 dated 19 January 2001. The language in these patents is the same as the language in earlier patents. I quote:

“NOW KNOW YE, that there is, therefore, granted by the UNITED STATES, unto the State of Utah, School and Institutional Trust Lands Administration, the lands described above; TO HAVE AND TO HOLD the said lands with all the rights, privileges, immunities, and appurtenances, of whatsoever nature, thereunto belonging, unto State of

Utah, School and Institutional Trust Lands Administration, and to its successors and assigns, forever; and . . .”

No right was left out of these patents from the United States. The word ALL includes everything the United States had— even the water rights. (Copies of the Patents are enclosed.)

4. **School Trust Land water rights cannot be removed from any School Trust Lands without conveyance by actual deed and without compensation for the water rights removed.** In 1967, in the case *C Lassen v. Arizona Highway Dept.* the United States, the Supreme Court decided that the School Trust Lands Administration must be fairly compensated for any sale, lease, or use of any right or part of their lands. I quote:

The Enabling Act unequivocally demands both that the trust receive the full value of any lands transferred from it, and that any funds received be employed only for the purposes for which the land was given. First, it requires that before trust lands or other products are offered for sale they must be “appraised at their true value,” *C Lassen v. Arizona Highway Dept.* 395 U.S. 458 (1967)

Thus, full value must be received for any water rights removed from State School Trust lands and the State of Utah has no trustee power to convey away these rights without full compensation.

5. **School Trust Lands do not belong to the State of Utah, but to the School Trust Lands for education of children and cannot be conveyed by the State of Utah by agreement or otherwise.** The Supreme Court’s strong statement about paying for any resource taken from the TRUST LANDS requires full value to be paid to the TRUST LANDS. However, the State of Utah claims that all water in the State is theirs and should be adjudicated by the State Engineer. The State of Utah DID NOT compensate the TRUST LANDS for the water deeded to it by the United States in the 1894 Enabling Act – therefore they do NOT own the water rights on the TRUST LANDS – neither the surface water nor the ground water. By State law appurtenant water rights can only be transferred by actual deed. Utah Code Ann. 73-1-10. That conveyance must be by the STATE SCHOOL TRUST LANDS, and cannot be conveyed by the State of Utah. The proposed contract if entered into as is would use the rights, privileges, immunities, and appurtenances of whatsoever nature embedded in the STATE TRUST LANDS with no compensation. That is against the intent of the Utah Enabling Act of 1894 and cannot be done without deed from the STATE SCHOOL TRUST LANDS.

6. **The State of Utah legislature cannot pass laws claiming the state owns the waters that have previously been conveyed by the United States to the State School Trust Lands.** The State School Trust Lands water rights received from the

United States by Patents cannot be taken away by any act of the Utah Legislature. All water rights received by anyone subsequent to the transfer of such rights by the United States to the State School Trust Lands are inferior to the State School Trust Lands.

7. **If the TRUST LANDS do not receive fair compensation for the vested appurtenant water rights on its lands, Utah's school children will be required to ILLEGALLY subsidize the Las Vegas water supply with their education money.**

II. COMPENSATION TO THE SCHOOL TRUST LAND FUND

About How Much Compensation Should the School Lands Receive?

- A. If one acre-foot of consumptive water were used on one acre of these TRUST LANDS to grow a bio-fuel crop such as switch grass, and then the grass sold for making bio-fuel, the revenue would be approximately \$1000 per acre per year.
- B. Do the TRUST LANDS have the right to lease their land or rights on the land? They do with proper compensation.
- C. How much is land with an acre-foot of water on it worth in Las Vegas? To answer that, I will give a personal example.

In 1970, my boss took me out in the California Desert and we stopped on the road at the edge of Metropolitan Water District of Southern California's border. He said the land outside the District's border was worth \$5,000 per acre, while the land just across the street inside the District's border was worth \$250,000 per acre. Why? Because that land had water on it. Today the water makes the lands even more valuable in Las Vegas.

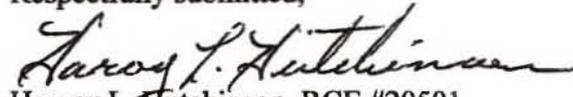
In my opinion, compensation of AT LEAST \$1000 per acre-foot of water per year indexed for inflation to the TRUST LANDS should be received.

- III. CONCLUSION.** The Utah – Nevada Snake Valley Water Sharing Agreement cannot be entered into by the State of Utah unless Compensation is provided to the State School Trust Lands. Otherwise, millions of dollars will be lost from the Utah educational system.

I urge the Governor to not sign the Snake Valley Agreement without providing for the school children of Utah.

I urge the Governor to determine that the lands transferred to the State School Trust Lands from the United States by Patents includes water rights appurtenant thereto which water rights will provide significant additional funding for the education of the children of Utah

Respectfully submitted,



Harvey L. Hutchinson, RCE #20501

194 E. Paradise Ln.

Alpine, Utah, 84004

(801-756-4446)

(westernh20@msn.com)

Copies to:

The Governor of the State of Utah

The State Water Engineer

The State School Trust Lands Director

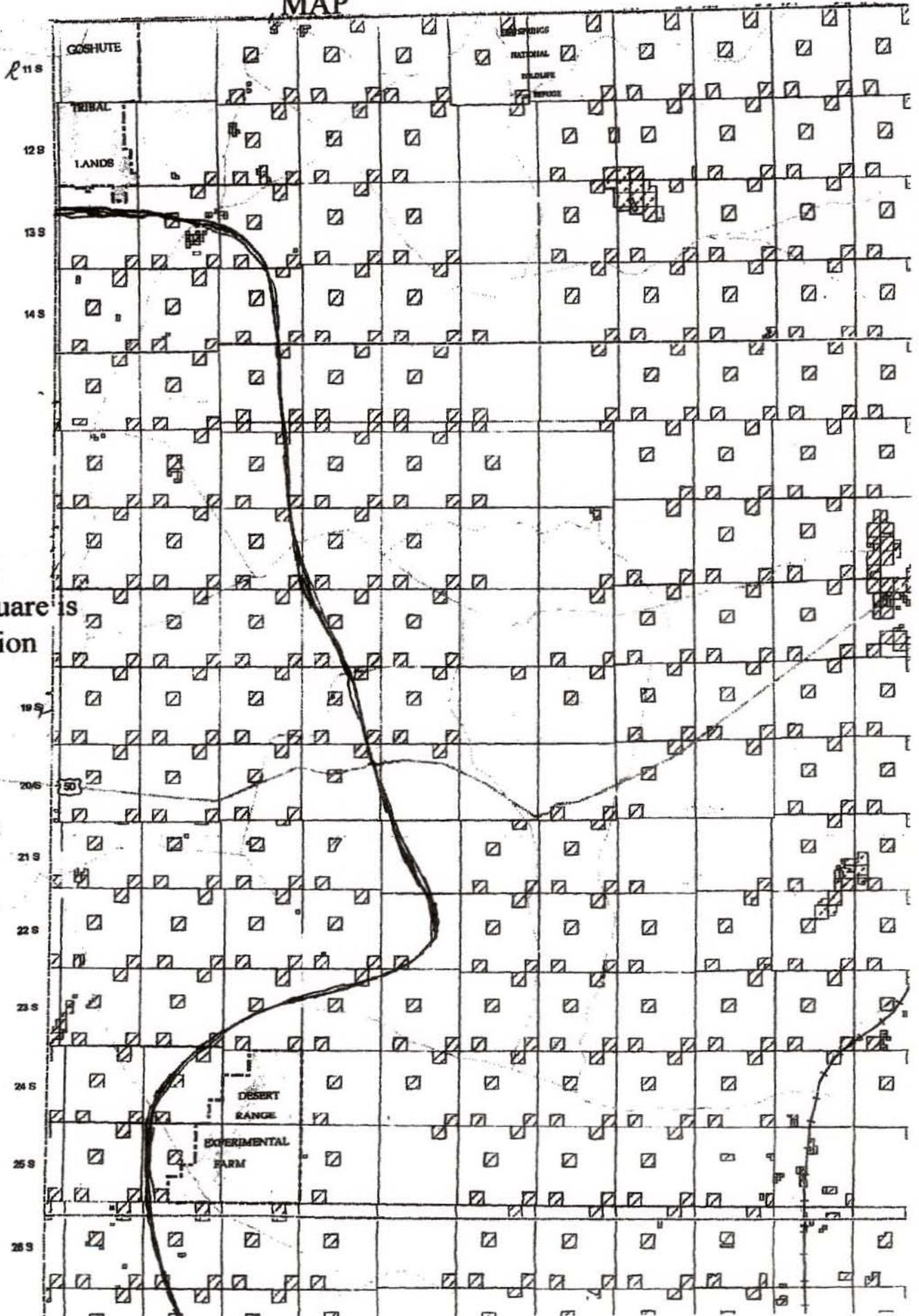
The State School Trust Lands Attorney

The State PTA

The Utah Division of Natural Resources

The Deseret News

MAP



Snake Valley Utah Trust Lands
Blue Square is one section

Entry of School Lands
Date *April 12 1962*
By *W. H. ...*

Utah 07674-D(3)

4-1040
(October 1958)

The United States of America,

To all to whom these presents shall come, Greeting:

WHEREAS, There are now deposited in the Bureau of Land Management of the United States, an application by the State of Utah and a decision of the Land Office at Salt Lake City, Utah, directing that a patent issue to the State of Utah under the provisions of the Act of Congress approved June 21, 1934 (48 Stat. 1185), entitled "An Act Authorizing the Secretary of the Interior to issue patents to the numbered school sections in place, granted to the States by the Act approved February 22, 1889, by the Act approved January 25, 1927 (44 Stat. 1026), and by any other Act of Congress," for the following numbered school section lands in place, granted for the support of common schools and the title to which vested in the State of Utah under the Act of July 16, 1894 (28 Stat. 107), upon its admission into the Union on January 4, 1896 (29 Stat. 876):

Salt Lake Meridian, Utah.
T. 6 S., R. 22 E.,
Sec. 2, Lots 1, 2, 3, 4. S $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$;
Sec. 16, S $\frac{1}{2}$ NW $\frac{1}{4}$, S $\frac{1}{2}$;
Sec. 32, All;
Sec. 36, All.

The area described contains 1,948.39 acres, according to the Official Plat of the Survey of the said Land, on file in the Bureau of Land Management:

NOW, THEREFORE, KNOW YE, That the UNITED STATES OF AMERICA, in consideration of the premises, and in conformity with the said Act of Congress of June 21, 1934, and as evidence of the title which was granted to and vested in the State of Utah to the above described lands on January 4, 1896 for the support of common schools, as aforesaid, and in confirmation of such title for such purpose, HAS GIVEN AND GRANTED, and by these presents DOES GIVE AND GRANT, unto the said State of Utah, and to its assigns the lands above described; TO HAVE AND TO HOLD the same, together with all the rights, privileges, immunities, and appurtenances, of whatsoever nature thereunto belonging, unto the said State of Utah and to its assigns forever; subject to any vested and accrued water rights for mining, agricultural, manufacturing, or other purposes, and rights to ditches and reservoirs used in connection with such water rights as may be recognized and acknowledged by the local customs, laws, and decisions of courts; and there is reserved from the lands hereby granted a right of way thereon for ditches or canals constructed by the authority of the United States.

IN TESTIMONY WHEREOF, the undersigned authorized officer of the Bureau of Land Management, in accordance with the provisions of the Act of June 17, 1948 (62 Stat. 476), has, in the name of the United States, caused these letters to be made Patent, and the Seal of the Bureau to be hereunto affixed.

GIVEN under my hand, in the District of Columbia, the TWELFTH day of APRIL in the year of our Lord one thousand nine hundred and SIXTY-TWO and of the Independence of the United States the one hundred and EIGHTY-SIXTH.

For the Director, Bureau of Land Management.

By *Ruth W. Talley*
Chief, Patents Section.

Patent Number 1226306



The United States of America,

To all to whom these presents shall come, Greeting:

WHEREAS, There are now deposited in the Bureau of Land Management of the United States, an application by the State of Utah and a decision of the Land Office at Salt Lake City, Utah, directing that a patent issue to the State of Utah under the provisions of the Act of Congress approved June 21, 1934 (48 Stat. 1185), entitled "An Act Authorizing the Secretary of the Interior to issue patents to the numbered school sections in place, granted to the States by the Act approved February 22, 1889, by the Act approved January 25, 1927 (44 Stat. 1026), and by any other Act of Congress," for the following numbered school section lands in place, granted for the support of common schools and the title to which vested in the State of Utah under the Act of July 16, 1894 (28 Stat. 107), upon the acceptance of the Plats of Survey by the Bureau of Land Management on the dates hereinafter stated:

State of Utah
 Utah County Register
 Page 414
 Date 1894-10-1962
 93579
 By Utah State

Salt Lake Meridian, Utah.

T. 3 S., R. 22 E.,
 Sec. 2, All;
 Sec. 16, SE $\frac{1}{4}$ SE $\frac{1}{4}$;
 Plat accepted May 5, 1908.

T. 4 S., R. 22 E.,
 Sec. 2, Lots 1, 2, 3, 4, S $\frac{1}{2}$ N $\frac{1}{2}$, S $\frac{1}{2}$;
 Plat accepted April 11, 1908.

T. 1 S., R. 24 E.,
 Sec. 2, Lots 3, 4, S $\frac{1}{2}$ NW $\frac{1}{4}$, W $\frac{1}{2}$ SW $\frac{1}{4}$;

T. 1 S., R. 25 E.,
 Sec. 2, Lots 2, 3, 4, S $\frac{1}{2}$ N $\frac{1}{2}$, S $\frac{1}{2}$;
 Sec. 16, NW $\frac{1}{4}$;
 Plats accepted June 10, 1899.

T. 8 S., R. 15 E.,
 Sec. 36, All;

T. 9 S., R. 15 E.,
 Sec. 2, Lots 1, 2, 3, 4, 5, S $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, S $\frac{1}{2}$;
 Sec. 36, All;

T. 8 S., R. 16 E.,
 Sec. 32, All;
 Sec. 36, All;

Patent Number **1226305**

The United States of America,

To all to whom these presents shall come, Greeting:

Fee Paid *12.00*
County Records
Page *421*
State of Utah
Book *1191*
Date *March 1963*
Entry No. *93581*

WHEREAS, There are now deposited in the Bureau of Land Management of the United States, an application by the State of Utah and a decision of the Land Office at Salt Lake City, Utah, directing that a patent issue to the State of Utah under the provisions of the Act of Congress approved June 21, 1934 (48 Stat. 1185), entitled "An Act Authorizing the Secretary of the Interior to issue patents to the numbered school sections in place, granted to the States by the Act approved February 22, 1889, by the Act approved January 25, 1927 (44 Stat. 1026), and by any other Act of Congress," for the following numbered school section lands in place, granted for the support of common schools and the title to which vested in the State of Utah under the Act of January 25, 1927 (44 Stat. 1026), upon the date of the Act:

Salt Lake Meridian, Utah.

T. 3 S., R. 22 E.,

Sec. 16, N $\frac{1}{2}$, N $\frac{1}{2}$ S $\frac{1}{2}$, S $\frac{1}{2}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$;

Sec. 32, All;

Sec. 36, W $\frac{1}{2}$.

The area described contains 1,560.00 acres, according to the Official Plat of the Survey of the said Land, on file in the Bureau of Land Management:



Patent Number **1226307**

NOW, THEREFORE, KNOW YE, That the UNITED STATES OF AMERICA, in consideration of the premises, and in conformity with the said Act of Congress of June 21, 1934 and as evidence of the title which was granted to and vested in the State of Utah to the above described lands on January 25, 1927, for the support of common schools, as aforesaid, and in confirmation of such title for such purpose, HAS GIVEN AND GRANTED, and by these presents DOES GIVE AND GRANT, unto the said State of Utah, and to its assigns the lands above described; TO HAVE AND TO HOLD the same, together with all the rights, privileges, immunities, and appurtenances, of whatsoever nature thereunto belonging, unto the said State of Utah and to its assigns forever; subject to any vested and accrued water rights for mining, agricultural, manufacturing, or other purposes, and rights to ditches and reservoirs used in connection with such water rights, as may be recognized and acknowledged by the local customs, laws, and decisions of courts; and there is reserved from the lands hereby granted a right-of-way thereon for ditches or canals constructed by the authority of the United States.

IN TESTIMONY WHEREOF, the undersigned officer of the Bureau of Land Management, in accordance with section 1 of the act of June 17, 1948 (62 Stat., 476, 43 U. S. C. sec. 15), has, in the name of the United States, caused these letters to be made Patent, and the Seal of the Bureau to be hereunto affixed.

GIVEN under my hand, in the District of Columbia, the TWELFTH day of APRIL in the year of our Lord one thousand nine hundred and SIXTY-TWO and of the Independence of the United States the one hundred and EIGHTY-SIXTH.

For the Director, Bureau of Land Management.

By Ruth W. Talley
Chief, Patents Section.

RECORD OF PATENTS: Patent Number 1226307

WHEN RECORDED: RETURN TO:
UTAH SCHOOL & INSTITUTIONAL
TRUST LANDS ADMINISTRATION
675 East 500 South, Suite 500
Salt Lake City, UT 84102

Form 1860-9
(January 1988)

The United States of America

To all to whom these presents shall come, Greeting:

UTU-79162-FD

WHEREAS,

State of Utah, School and Institutional Trust Lands Administration

is entitled to a land patent pursuant to Section 206 of the Act of October 21, 1976 (90 Stat. 2756; 43 U.S.C. 1716) as amended by the Act of August 20, 1988 (102 Stat. 1086-1094; 43 U.S.C. 1716, 1740), and pursuant to the Utah West Desert Land Exchange Act of 2000, Public Law 106-301 (114 Stat. 1059), for the following described land in Millard County:

IPP Block
Salt Lake Meridian, Utah

Parcel #1113
T. 15 S., R. 6 W.,
Sec. 19, E $\frac{1}{2}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$.
Containing 360.00 acres, more or less, of surface and minerals.

Parcel #1114
T. 15 S., R. 6 W.,
Sec. 20, All.
Containing 640.00 acres, more or less, of surface and minerals.

Parcel #1115
T. 15 S., R. 6 W.,
Sec. 21, All.
Containing 640.00 acres, more or less, of surface and minerals.

Parcel #1116
T. 15 S., R. 6 W.,
Sec. 22, All.
Containing 640.00 acres, more or less, of surface and minerals.

Parcel #1117
T. 15 S., R. 6 W.,
Sec. 23, All.
Containing 640.00 acres, more or less, of surface and minerals.

Patent Number 43-2001-0014

0013255
Bk 00360 Ps 00267-00276
MILLARD COUNTY RECORDER- CONNIE K HANSEN
2001 JAN 24 10:12 AM FEE \$4.00 BY JIG
REQUEST: STATE OF UTAH

TU-79162-FD

Parcel #1143

T. 16 S., R. 5 W.,

Sec. 7, Lots 1-4, E $\frac{1}{2}$, E $\frac{1}{2}$ W $\frac{1}{2}$ (All).

Containing 644.00 acres, more or less, of surface and minerals.

Parcel #1144

T. 16 S., R. 5 W.,

Sec. 8, N $\frac{1}{2}$, SW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$.

Containing 520.00 acres, more or less, of surface and minerals.

Parcel #1145

T. 16 S., R. 5 W.,

Sec. 9, NW $\frac{1}{4}$ NW $\frac{1}{4}$.

Containing 40.00 acres, more or less, of surface and minerals.

Parcel #1146

T. 16 S., R. 5 W.,

Sec. 18, Lots 1-4, NE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$.

Containing 442.40 acres, more or less, of surface and minerals.

Parcel #1147

T. 16 S., R. 5 W.,

Sec. 19, Lots 1-4.

Containing 160.80 acres, more or less, of surface and minerals.

The above parcels aggregate 14,505.12 acres, more or less of surface and minerals, and 9 $\frac{1}{2}$ of minerals only.

NOW KNOW YE, that there is, therefore, granted by the UNITED STATES, unto **State of U School and Institutional Trust Lands Administration**, the land described above; TO HAVE AND the said land with all the rights, privileges, immunities, and appurtenances, of whatsoever nature, t belonging, unto **State of Utah, School and Institutional Trust Lands Administration**, and to its s and assigns, forever; and

EXCEPTING AND RESERVING TO THE UNITED STATES:

A right-of-way thereon for ditches and canals constructed by the authority of the United S August 30, 1890 (43 U.S.C. 945).

860-10
(1988)

J-79162-FD

Domestic livestock grazing use by Ray Edward Lyman, as holder of grazing permit No. 43311/ Sugarville Allotment (#04409). The right of the permittee to graze livestock pursuant to the terms and conditions of their permit and this clause shall expire on 1/31/2007. Annual fees based on 131 acre months (AUMs) for grazing use of subject permit in an amount to coincide with the authorized grazing fees as published annually in the Federal Register, shall be paid to the Patentee.

Further subject to all applicable provisions of that certain Utah West Desert Land Exchange Act, Public Law 106-301 (114 Stat. 1059).



IN TESTIMONY WHEREOF, the undersigned authorized officer of the Bureau of Land Management, in accordance with the provisions of the Act of June 17, 1906 (34 Stat. 476), has, in the name of the United States, caused these letters to be made and the Seal of the Bureau to be hereunto affixed.

GIVEN under my hand, in Salt Lake City, Utah
the Nineteenth day of January
in the year of our Lord two thousand and One of the Independence
of the United States the two hundred and Twenty-Fifth

By Sally Wisely
Sally Wisely
State Director

File Number 43-2001-0014

01/32/05 Bk 00360 Pg

WHEN RECORDED, RETURN TO:
UTAH SCHOOL & INSTITUTIONAL
TRUST LANDS ADMINISTRATION
675 East 500 South, Suite 500
Salt Lake City, UT 84102

Form 1860-9
(January 1988)

The United States of America

To all to whom these presents shall come, Greeting:

UTU-79162-FD

WHEREAS,

State of Utah, School and Institutional Trust Lands Administration

is entitled to a land patent pursuant to Section 206 of the Act of October 21, 1976 (90 Stat. 2756; 43 U.S.C. 1716) as amended by the Act of August 20, 1988 (102 Stat. 1086-1094; 43 U.S.C. 1716, 1740), and pursuant to the Utah West Desert Land Exchange Act of 2000, Public Law 106-301 (114 Stat. 1059), for the following described land in Millard County:

Oak City Block
Salt Lake Meridian, Utah

Parcel #1148
T. 17 S., R. 5 W.,
Sec. 11, SW $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$.
Containing 80.00 acres, more or less, of surface and minerals.

Parcel #1149
T. 17 S., R. 5 W.,
Sec. 12, Lots 5-9, SW $\frac{1}{4}$ SW $\frac{1}{4}$.
Containing 259.73 acres, more or less, of surface and minerals.

Parcel #1150
T. 17 S., R. 5 W.,
Sec. 13, Lots 4-6, 11, 12, SE $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$.
Containing 333.61 acres, more or less, of surface and minerals.

Parcel #1151
T. 17 S., R. 5 W.,
Sec. 14, SW $\frac{1}{4}$ NE $\frac{1}{4}$, W $\frac{1}{2}$, W $\frac{1}{2}$ SE $\frac{1}{4}$.
Containing 440.00 acres, more or less, of surface and minerals.

Patent Number **43-2001-0018**

RECORDED BY 02350 BY 0077-0000
MILLARD COUNTY RECORDS - CORNER 7 0436
2001 JAN 24 10:15 AM FEE \$1.00 BY 1
COUNTY STATE OF UTAH

UTU-79162-FD

Parcel #1178
T. 18 S., R. 5 W.,
Sec. 10, N½.
Containing 320.00 acres, more or less, of surface and minerals.

Parcel #1179
T. 18 S., R. 5 W.,
Sec. 11, Lots 1-6, S½NW¼, N½S½.
Containing 486.69 acres, more or less, of surface and minerals.

Parcel #1180
T. 18 S., R. 5 W.,
Sec. 12, Lots 1-8, S½ (All).
Containing 641.79 acres, more or less, of surface and minerals.

Parcel #1181
T. 19 S., R. 4 W.,
Sec. 4, Lots 1-3, 5-8, 10-12.
Containing 374.54 acres, more or less, of surface and minerals.

The above parcels aggregate 13,626.41 acres, more or less of surface and minerals.

NOW KNOW YE, that there is, therefore, granted by the UNITED STATES, unto State of Utah, School and Institutional Trust Lands Administration, the land described above; TO HAVE AND TO HOLD unto the said land with all the rights, privileges, immunities, and appurtenances, of whatsoever nature, thereunto in anywise belonging, unto State of Utah, School and Institutional Trust Lands Administration, and to its successors and assigns, forever; and

EXCEPTING AND RESERVING TO THE UNITED STATES:

1. A right-of-way thereon for ditches and canals constructed by the authority of the United States, August 30, 1890 (43 U.S.C. 945).

SUBJECT TO:

1. Those rights for a reservoir, granted to Central Utah Water Company, its successors and assigns by right-of-way number SL-027231, pursuant to the Act of March 3, 1891 (30 Stat. 404), as to the NE¼NE¼, SE¼SW¼, Section 15; SE¼, Section 21; W½NW¼, Section 22; W½NE¼, Section 23; SE¼NW¼, NE¼SW¼, Section 33, T. 17 S., R. 5 W., (Parcels #1152-1154, 1158, 1159);
2. Those rights for a material site, granted to the Federal Highway Administration, by right-of-way number UTU-029783, pursuant to Section 307 of the Act of October 21, 1976 (90 Stat. 2766; 43 U.S.C. 1630) and the Act of August 27, 1958, as amended, Sections 107(d) and 317 of Title 23 of the United States Code (72 Stat. 885.892 and 916), as to Lot 8 and 9, Section 12, T. 17 S., R. 5 W., (Parcel #1181).

43-2001-0018

00132556 24 00360 Pa 00301

.1860-10
(1988)

U-79162-FD

Further subject to all applicable provisions of that certain Utah West Desert Land Exchange Act of 2000, Public Law 106-301 (114 Stat. 1059).



IN TESTIMONY WHEREOF, the undersigned authorized officer of the Bureau of Land Management, in accordance with the provisions of the Act of June 17, 1948 (52 Stat. 476), has, in the name of the United States, caused these letters to be made Pa the Seal of the Bureau to be hereunto affixed.

GIVEN under my hand, in Salt Lake City, Utah
the Nineteenth day of January
in the year of our Lord two thousand and One of the Independence
of the United States the two hundred and Twenty-Fifth

By Sally Wisely
Sally Wisely
State Director

Document Number 43-2001-0018

Print View

From: Ken Hill <kenhill184083@gmail.com>
To: <snakevalley@utah.gov>
Date: Wednesday - August 19, 2009 7:03 AM
Subject: extended comment period

Because of the importance of these agreements and because of their complexity and because this is the time when many Snake Valley residents are involved in intense farming activities that may prevent adequate study of the agreements -- I request that the comment time be extended from 30 days to 90 days.

Ken Hill
550 HC 61
Wendover, UT 84083-9604
435 693 3120

--

\o/ \o/

Let everything that has breath praise the Lord - Psalm 150:6

\o/ \o/

Print View

From: Michele B <mburkett2@gmail.com>
To: <snakevalley@utah.gov>
Date: Wednesday - August 19, 2009 8:11 AM
Subject: Snake Valley-comment period

I am writing to urge that the comment period be extend regarding the water controversy known as Snake Valley. With such important decisions being made

I think it is prudent to give this matter more time for review.

Thanks for your consideration.

Michele Burkett

Mesquite, NV

Print View

From: <Borderinn@aol.com>
To: <snakevalley@utah.gov>
Date: Wednesday - August 19, 2009 9:58 AM
Subject: Comment Period

Mr. Biaggi,

As you witnessed this week, the people of Snake Valley are a thoughtful group who are trying their best to educate themselves about the Utah/Nevada agreement. We would appreciate it very much if the comment period could be extended to 90 or even 60 days.

Thank you.

Denys Koyle

Print View

From: rupert steele <rupertsteele@goshutetribe.com>
To: Allen Biaggi <snakevalley@water.nv.gov>
CC: Mike Styler <snakevalley@utah.gov>
Date: Thursday - August 20, 2009 6:17 PM
Subject: Extension of comment period for Snake Valley water agreement

I am requesting an extension of the 30-day comment period on the Snake Valley Water Agreement. 30-days is not enough time for the NV/UT citizens to review the available hydrological studies and provide a quality comment that may assist in your decision making. There is no need to "rush" this, after all the hearings will not be heard until 2010.

Please consider this request seriously. Thanks for your attention.

September 1, 2009

Boyd Clayton
Deputy State Engineer
P.O. Box 146300
Salt Lake City, UT 84114-6300

Dear Mr. Clayton:

Thank you for your prompt response to my inquiry regarding the Snake Valley aquifer. I was able to attend the public meeting on August 18th, and have examined the material you provided (which I greatly appreciate). As I continue to have concerns about this agreement, I am responding to your letter, with copies to Gov. Herbert, Mike Styler, and Steve Erickson of Great Basin Water Network. I would request clarification on these questions before this agreement is signed.

My concerns, in no particular order, are:

1. I understand the mandate from 2004 for a cooperative agreement (Public Law 108-424). I have not seen where a deadline was made in that mandate. So why does this feel like it is being rushed through? The draft was agreed to and released on August 13th. Public meetings were held August 17th thru August 20th. Only one week? And most public meetings were held during the day on work days. This is very little time for anyone to become informed on the draft agreement or make arrangements to attend the meetings. Public input is only being taken until Sept. 14th. Only one month to study a 38-page document and submit comment! It would appear that public input is not really wanted.
2. The release had statements by both Mike Styler and Allen Biaggi that this agreement protects "the way of life" of "existing water rights owners in both states". This agreement as I understand, protects water rights only for owners prior to 1989. What will happen to the people who have been living in Snake Valley for many years and depend on water availability to survive, but who were unfortunate enough to come after 1989?
3. The press release states that the agreement is based on "Available Groundwater Supply" of 132,000 afy. This figure comes from the BARCASS study and the release states that "this study represents the best scientific data currently available". My research shows that results of this study are

widely disputed. I've seen reliability figures for this study at 40-67%. Even if we take the higher number, is 67% good enough? The Benefits of a Utah/Nevada Agreement on the Allocation and Management of the Snake Valley Aquifer, which was explained in detail at the public meeting in Salt Lake, and copy of which you included in the packet sent to me, states that there is disagreement on the BARCASS study and that Utah "has not been comfortable" with the BARCASS figures (page 3, paragraph 6). Mike Styler stated, during the Salt Lake meeting, that BARCASS was not the basis for the figures agreed upon in the draft. And yet, in the very next section of said document "Components of the Agreement" outlines three category of water (allocated water, unallocated water, and reserved water) which all totals up to 132,000 afy - exactly the amount from the disputed BARCASS study! If Utah "is not comfortable" with this study, why are we signing this agreement based on it? And why did Mike Styler repeatedly assure meeting attendees that BARCASS was not used when clearly it is?

4. The agreement presupposes "excess" water in the Snake Valley. If this were true, why is Snake Valley an arid desert and not a swamp land?
5. A representative from the Goshute Indian Tribe attended the Salt Lake public meeting. Snake Valley is home to the Goshutes, as well as other Native Americans. Since these tribes are a Sovereign Nation, how do Utah and Nevada have the right to make any agreement that affects these people without making them equal parties? According to Mike Styler, the 1922 Colorado Water agreement eventually had to be amended to include Mexico, which was also beneficiary of the Colorado River. Why make this agreement now which ignores the obvious rights of the Native American tribes?
6. The Benefits of a Utah/Nevada Agreement on the Allocation and Management of the Snake Valley Aquifer, page 8, section IV incorrectly characterizes the Snake Valley situation as a dispute between Utah water users and Nevada water users. The people of Snake Valley, whether residents of Utah or Nevada, are united in their opposition to this agreement. This is not and never has been a Utah versus Nevada dispute. This dispute is Snake Valley versus SNWA. Only a week before this agreement was announced, I was in Baker, Nevada. There is just as much opposition on that side of the state line as on this. I was not able to attend the public meeting in Baker, but I'm willing to bet the feeling there was exactly the same as it was in Salt Lake. The only thing that Utah and Nevada need to agree on is that no water will be pumped out of Snake Valley. The final statement in the document states that "the Agreement fairly

divides the Snake Valley aquifer whether or not the SNWA project is built". If not for the SNWA project, there would be no need to divide the aquifer water at all.

7. In the public meeting, resident Chip Haskell voiced concern about funding for the environmental monitoring called for in the agreement. With a fluctuating economy, and state budgets that change with new administrations, there is no guarantee that funding will always be available to carry out the required monitoring. Mr. Biaggi stated that if monitoring could not be accomplished, the Nevada State Engineer "may" require pumping to cease. I asked (and don't feel I got a real answer) why the agreement can't be changed to state that the Nevada Engineer "will" require pumping to cease in that event. I still think that is a reasonable change.
8. Lehman Cave lies within the Snake Valley. This beautiful, geographic wonder is one of the few (or is it the only?) known "living" caves. This cave is living and growing because of the ground water coming in. Stalactites and stalagmites take years to grow even a fraction of an inch. How will it be possible to measure the negative impact on Lehman Cave in the event of pumping? Considering this impact to a National Forest Service property, have the feds signed off on this agreement?
9. Both Mike Styler and Allen Biaggi admitted that there will be impact should pumping be done from Snake Valley. I can't see anything but negative impact, other than the benefits to SNWA and Las Vegas developers. If the impact is bound to be negative, who gets to decide what is acceptable negative impact? Aren't you really saying that it's okay for the people and lands of Snake Valley to be damaged if it benefits Las Vegas?
10. The presentation at the Salt Lake public meeting mentioned other valleys within Nevada that are currently being pumped to provide Las Vegas water. What has been the impact of that pumping? Are those valleys livable and useable now? Has anyone been monitoring the environmental impact of pumping there? I understand that Snake Valley has already been impacted because of pumping from neighboring Spring Valley. Are those effects being counted in the allocations of Utah/Nevada water in this agreement? If it is agreed that a specific amount of Snake Valley water "belongs" to Nevada, aren't they already receiving a portion of it through the Spring Valley pumping? What is Owens Valley? I keep seeing the statement "remember Owens Valley". If there is a tale of woe there, have we studied it to be sure we aren't repeating it in Snake Valley?

11. Utah's west desert has long been looked upon as expendable, whether as a dumping ground for nuclear waste or a testing ground for the military. The people who live there are seldom taken into consideration before these projects are put forth. Now it's their water that's being threatened. When you take water, you take vegetation and wildlife.
12. I have seen requests being made by some groups to make the negotiations for this agreement public. Will that be done and if not, why? It would certainly alleviate the great mistrust the residents have about SNWA and the true intentions of the parties involved. Is there any tradeoff for, say, Lake Mead to accept a lower water level to make more available water for Lake Powell water to help St. George developers in exchange for pumping water from Snake Valley to help Las Vegas? It may sound preposterous to some, but if there have not been any deals made, why not prove it just to reassure those who feel like they've been "sold out"?
13. If only water users prior to 1989 are being considered, is it the property or the people? Many of the current water rights owners are elderly. When they pass on, do those rights pass to their children who may inherit the land? Or is this provision just so that SNWA can eventually get the water they want when all these people are finally gone? The representative from the Goshutes said his people feel like they are being counted as extinct already. It feels like SNWA is just waiting for the others to be extinct as well. I have seen the toll that stress has taken on these people as they see their way of life threatened by this "water grab". I have no doubt that is helping to hasten the hoped for "extinction".
14. I have spent so many happy times in Partoun, fishing Trout Creek, riding horses in Pleasant Valley, visiting and admiring the accomplishments of the people of Eskdale, touring Lehman Caves, vacationing at Hidden Canyon, hiking Goshute Canyon to visit old mining sites, following the Pony Express route, searching for geodes and arrowheads, swimming in Warm Creek. I love the beauty of that land. I love the friends and family I have, on both sides of the state line. Mike Styler is the man studying the issues and looking out for Utah's interest. In the Salt Lake public meeting, he could not even correctly pronounce the name Partoun. So how much has he really looked at their needs? Is there any person on the committee that worked out this deal that lives or has lived in Snake Valley?

While I know people who have been fighting the SNWA "water grab" for years, I am a newcomer to this issue. I really became interested after my recent trip to

Baker, NV, so these questions have really only come to me in the past 3-4 weeks. I wish I had gotten involved sooner. I hope that before this agreement is made into a "done deal", it can be reworked and tightened up to really protect the Snake Valley. I truly believe that the only way to do that is to prevent any pumping of water out of that valley.

Thank you for your time.

Sincerely,

Marian Fowden
5556 Toscana Way
Herriman, UT 84096
m.fowden@gmail.com

cc: Governor Gary Herbert
Utah State Capital Complex
PO Box 142220
SLC, UT 84114-2220
snakevalley@utah.gov
info@greatbasinwaternetnetwork.org

Print View

From: <STEVE.PALMER@sol.doi.gov>
To: <snakevalley@utah.gov>, <snakevalley@water.nv.gov>
Date: Wednesday - September 30, 2009 5:32 PM
Subject: Agreement for Management of the Snake Valley Groundwater System-Comments

To whom it may concern:

On behalf of the Department of the Interior Bureaus (Bureau of Indian Affairs, Bureau of Land Management, Fish and Wildlife Service and the National Park Service), I am letting you know that the DOI Bureaus intend to provide comments on the subject Snake Valley Agreement, but are not able to do so by today's deadline for comments. We respectfully request that the States of Nevada and Utah accept our comments which we intend to provide to each of you as soon as possible.

We thank you in advance for considering our comments when submitted. If you have any questions in this regard, please contact me. Thank you.

Stephen R. Palmer
Assistant Regional Solicitor
Office of the Regional Solicitor
Sacramento, California
916-978-5683

Print View

From: David Salm <sonofsalm@gmail.com>
To: <snakevalley@utah.gov>
Date: Saturday - September 19, 2009 6:26 PM
Subject: water costs

hi,

what is the cost of water per acre foot in the snake valley?

thank you

david salm

Print View

From: <Rpmccomas@aol.com>
To: <snakevalley@utah.gov>
CC: <pegmcentee@sltrib.com>
Date: Wednesday - September 30, 2009 5:01 PM
Subject: Re: Status of Snake Valley Aquifer

Dear Governor Herbert-----As referenced in today's Tribune OPINION (OUR VIEW) Editorial page A14, we appreciate the opportunity to contact you for

considering a citizen's viewpoint about this irreplaceable hence invaluable resource of the Beehive State----Attached is a copy of our posture about Southern Nevada Water Authority's (SNWA) proposed pipeline that we registered with the Tribune on August 26th---- While we respect your pragmatic approach and the Tribune's expressed support for you and the legislature to establish an Aquifer Advisory Council to evaluate the pros and cons of the current SNWA proposal as it affects the long term interests of Utah, we deem this resource as a non-negotiable Utah asset for the following reasons:

* The negative physical impact of the pipeline proposal is explicitly outlined in the attachment.

* Subject to further research as embodied with the Council's mission, they and you will learn that a majority of Nevada residents in bordering Elko, White Pine, and Lincoln Counties (Goshute, Spring, and Lake Valleys), which geographically share the aquifer's reservoir are vociferous and steadfast

opponents of the SNWA proposal for the same reasons forwarded by Utah folks----Las Vegas is somewhat reviled by this population and signs and stickers that say "Will Rogers never met Harry Reid" are abundant in these areas, especially in Ely.

* Legal consequences suggested by our Department of Natural Resources (DNR) are suppositions, i..e. speculative which are effectively countermanded by the comprehensive and cogent article written by the President of Utah's Physicians for a Healthy Environment (Dr. Brian Moench) and published in the Tribune's September 28th edition in the OPINION section (page A11).

* There are disastrous precedents to the environmental health (and economic) issues here, involving both humanity and biota that were unforeseen (or ignored by relevant authorities) with the decimation of Owens River Valley by Los Angeles in now the nation's most populous state and the downwind

poisoning derived from programmed testing of lethal chemical and nuclear weaponry in the Great Basin.

* An outpouring of well-founded antipathy and outrage has originated from an exemplary cross-section of Utah residents ranging from notable entities of environmentalists, media columnists, academia, county administrators, legal and medical professionals, ranchers, farmers and small business people of the Great Basin, National Wildlife overseers, and a myriad of concerned citizens as ourselves.

* As previously mentioned, it is pragmatic to make a well considered investigation and decision concerning a neighboring state's aspirations which affect its purported economic well-being yet this proposal is detrimental to Utah in any shape or context and is not the ultimate or only solution to accommodating uncontrolled proliferation of residential and commercial growth in Las Vegas akin to malignant cancer besetting the region.

* Another viable solution is available to SNWA which is cited in the attachment, i.e. import seawater from the Pacific Ocean via a pipeline to a desalinization facility in Clark County ala the improvising Israelis-----Our utilities are financially able to construct 1,000+ mile pipelines for transporting oil or natural gas and there is no explicable deterrent for SNWA not to fulfill their voracious thirst for water by this method.

In conclusion and notwithstanding the Council's input, we believe your eventual polite repudiation of the SNWA proposition is warranted due to the foregoing reasons that permanently classify Utah's precious Great Basin gift as off limits and thus non-negotiable for disturbing its present physical and ancient character.

Sincerely-----Gail and Robert McComas
4511 South Gilead Way
Salt Lake City, UT 84124

Print View

From: Natalie Parker <angelfire_np@mac.com>
To: <snakevalley@utah.gov>
Date: Wednesday - September 30, 2009 4:36 PM
Subject: snake valley water

While I neither support nor oppose the Snake Valley Water agreement, I am concerned about the 136,000 surface acres of Trust lands that lie within the boundaries of the Snake Valley. I am requesting that due diligence be done to ensure that this agreement does not negatively affect the value of these lands now or in the future. The lands belong to the Children of the State of Utah. Please help to ensure the lands will be here for future generations.

Sincerely,

Natalie Parker
Parent and PTA Member

4ac06f8b.ntv

Harvey Hutchinson
Western Water LLC
Professional Engineer, General Manager
194 E Paradise Lane
Alpine, UT 84004
801-368-2695
westernh20@msn.com

September 8, 2009

Harvey Hutchinson of Western Water LLC has identified Millard County as a potential Bio-Fuel Center with hundreds of thousands of acres of fuel crops. SITLA land in Millard, Juab, Iron and Beaver Counties (Western Side) but primarily in Snake Valley area. In looking for water rights, Mr. Hutchinson found that SITLA has water rights that are "apertinant" to associated SITLA land.

Western Water's concern is that water associated with SITLA ground on the West Desert has not been considered by Utah in water totals.

Harvey Hutchinson will sue the State Trust Fund Trustee for mismanagement if SITLA water on West Desert is not considered in the water totals.

Print View

From: Terry Marasco <tmarasconrm@natural-resource-mgt.com>
 To: <snakevalley@utah.gov>, <snakevalley@water.nv.gov>
 Date: Sunday - September 27, 2009 12:19 PM
 Subject: Comment RE UTVN Agreement DUST ISSUE

Comment to UT/NV Agreement

Submitted to snakevalley@utah.gov This e-mail address is being protected from spambots. You need JavaScript enabled to view it , snakevalley@water.nv.gov

Terry Marasco tmarasconrm@natural-resource-mgt.com

Dust storms spread deadly diseases worldwide

Dust storms like the one that plagued Sydney are blowing bacteria to all corners of the globe, with viruses that will attack the human body. Yet these scourges can also help mitigate climate change.

A dust storm blankets Sydney's iconic Opera House at sunrise. Photograph: Tim Wimborne/Reuters

Huge dust storms, like the ones that blanketed Sydney twice last week, hit Queensland yesterday and turned the air red across much of eastern Australia, are spreading lethal epidemics around the world. However, they can also absorb climate change emissions, say researchers studying the little understood but growing phenomenon.

The Sydney storm, which left millions of people choking on some of the worst air pollution in 70 years, was a consequence of the 10-year drought that has turned parts of Australia's interior into a giant dust bowl, providing perfect conditions for high winds to whip loose soil into the air and carry it thousands of miles across the continent.

It followed major dust storms this year in northern China, Iraq and Iran, Pakistan, Saudi Arabia, Afghanistan, east Africa, Arizona and other arid areas. Most of the storms are also linked to droughts, but are believed to have been exacerbated by deforestation, overgrazing of pastures and climate change.

As diplomats prepare to meet in Bangkok tomorrow for the next round of climate talks, meteorologists predict that more major dust storms can be expected, carrying minute particles of beneficial soil and nutrients as well as potentially harmful bacteria, viruses and fungal spores.

"The numbers of major dust storms go up and down over the years," said Andrew Goudie, geography professor at Oxford University. "In Australia and China they tailed off from the 1970s then spiked in the 1990s and at the start of this decade. At the moment they are clearly on an upward trajectory."

Laurence Barrie is chief researcher at the World Meteorological Organisation (WMO) in Geneva, which is working with 40 countries to develop a dust storm warning system. He said: "I think the droughts [and dust storms] in Australia are a harbinger. Dust storms are a natural phenomenon, but are influenced by human activities and are now just as serious as traffic and industrial air pollution. The minute particles act like urban smog or acid rain. They can penetrate deep into the human

body."

Saharan storms are thought to be responsible for spreading lethal meningitis spores throughout semi-arid central Africa, where up to 250,000 people, particularly children, contract the disease each year and 25,000 die. "There is evidence that the dust can mobilise meningitis in the bloodstream," said Barrie.

Higher temperatures and more intense storms are also linked to "valley fever", a disease contracted from a fungus in the soil of the central valley of California. The American Academy of Microbiology estimates that about 200,000 Americans go down with valley fever each year, 200 of whom die. The number of cases in Arizona and California almost quadrupled in the decade to 2006.

Scientists who had thought diseases were mostly transmitted by people or animals now see dust clouds as possible transmitters of influenza, Sars and foot-and-mouth, and increasingly responsible for respiratory diseases. A rise in the number of cases of asthma in children on Caribbean islands has been linked to an increase in the dust blown across the Atlantic from Africa. The asthma rate in Barbados is 17 times greater than it was in 1973, when a major African drought began, according to one major study. Researchers have also documented more hospital admissions when the dust storms are at their worst.

"We are just beginning to accumulate the evidence of airborne dust implications on health," said William Sprigg, a climate expert at Arizona University.

The scale and range of some recent dust storms has surprised scientists. Japanese academics reported in July that a giant dust storm in China's Taklimakan desert in 2007 picked up nearly 800,000 tonnes of dust which winds carried twice around the world.

Dust from the Gobi and Taklimakan deserts is often present over the western United States in the spring and can lead to disastrous air quality in Korean, Japanese and Russian cities. It frequently contributes to the smogs over Los Angeles. Britain and northern Europe are not immune from dust storms. Dust blown from the Sahara is commonly found in Spain, Italy and Greece and the WMO says that storms deposit Saharan dust north of the Alps about once a month. Last year Britain's Meteorological Office reported it in south Wales.

Some scientists sought to attribute the 2001 foot-and-mouth outbreak to a giant storm in north Africa that carried dust and possibly spores of the animal disease as far as northern Britain only a week before the first reported cases.

The scale and spread of the dust storms has also surprised researchers. Satellite photographs have shown some of the clouds coming out of Africa to be as big as the whole land mass of the US, with a major storm able to whip more than a million tonnes of soil into the atmosphere. Sydney was covered by an estimated 5,000 tonnes of dust last week, but the WMO says Beijing was enveloped by more than 300,000 tonnes in one storm in 2006. "The 2-3 billion tonnes of fine soil particles that leave Africa each year in dust storms are slowly draining the continent of its fertility and biological productivity," said Lester Brown, director of the Earth Policy Institute research group in Washington DC. "Those big storms take millions of tonnes of soil, which takes centuries to replace."

Brown and Chinese scientists say the increased number of major dust storms in China is directly linked to deforestation and the massive increase in numbers of sheep and goats since the 1980s, when restrictions on herders were removed. "Goats will strip vegetation," said Brown. "They ate everything and dust storms are now routine. If climate change leads to a reduction in rainfall, then the two trends reinforce themselves." China is planting tens of millions of trees to act as a barrier to the advancing desert.

However, research increasingly suggests that the dust could be mitigating climate change, both by reflecting sunlight in the atmosphere and fertilising the oceans with nutrients. Iron-rich dust blown from Australia and from the Gobi and Sahara deserts is largely deposited in oceans, where it has been observed to feed phytoplankton, the microscopic marine plants that are the first link in the oceanic food chain and absorb large amounts of carbon dioxide. In addition, the upper layers of the rainforest in

Brazil are thought to derive much of their nutrient supply from dust transported across the Atlantic from the Sahara.

Just as scientists struggle to understand how dust is affecting climate, evidence is growing that another airborne pollutant, soot, is potentially disastrous. Minute particles of carbon produced by diesel engines, forest fires and the inefficient burning of wood in stoves is being carried just like dust to the remotest regions of the world.

A study by the United Nations Environment Programme has just concluded that the pollutant has played a major part in shrinking the Himalayan glaciers and has helped to disrupt the south Asian monsoon.

"Soot accounts from 10% to more than 45% of the contribution to global warming," said Achim Steiner, director of the UN's environment programme. "It is linked to accelerated losses of glaciers in Asia because soot deposits darken ice, making it more vulnerable to melting."

Terry Marasco
Natural Resources Project Management
POB 69, Baker NV 89311
775.293.0189
www.natural-resource-mgt.com

"I manage the process that identifies and brings together stakeholders, expertise, and funding sources to address current and future water and other natural resource challenges for communities, businesses, non-profits, and governments.â€œ

Harvey Hutchinson
Western Water LLC
Professional Engineer, General Manager
194 E Paradise Lane
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September 8, 2009

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Western Water's concern is that water associated with SITLA ground on the West Desert has not been considered by Utah in water totals.

Harvey Hutchinson will sue the State Trust Fund Trustee for mismanagement if SITLA water on West Desert is not considered in the water totals.

Print View

From: Ken Hill <kenhill184083@gmail.com>
To: <snakevalley@utah.gov>
Date: Monday - September 28, 2009 5:18 PM
Subject: UT-NV agreement -- delayed GRAMA request should delay comment deadline

The comment period should be extended because a GRAMA request for documents underlying the agreement was at first denied then granted only a few days before the ending of the comment period. This has had the effect of denying possibly crucial information needed to properly evaluate the agreement. The comment period should be extended an additional 30-60 days to allow for proper analysis of this new information.

Ken Hill
Partoun
550 HC 61
via Wendover, UT 84083-9604

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\o/ \o/

Let everything that has breath praise the Lord - Psalm 150:6

\o/ \o/

Print View

From: "ms. Squaw" <mssquaw@hotmail.com>
To: <snakevalley@utah.gov>, <snakevalley@water.nv.gov>
Date: Tuesday - September 29, 2009 6:32 AM
Subject: Snake Valley Water Agreement Protest

September 27, 2009

snakevalley@utah.gov
snakevalley@water.nv.gov

REF: Comment on Agreement
for Management

of the Snake
Valley Groundwater System

Section 301(e)(3) of the 2004
Lincoln County land act requires
the draft agreement to address
the entire Great Salt Lake Regional
groundwater flow system, not
just the Snake Valley basin.

The draft agreement violates this
statutory mandate because it
addresses only Snake Valley and not
the entire regional flow system.

Delaine Spilsbury

Hotmail® has ever-growing storage! Don't worry about storage limits.
http://windowslive.com/Tutorial/Hotmail/Storage?ocid=TXT_TAGLM_WL_HM_Tutorial_Storage_062009

Print View

From: SARA HART VIRDEN <s.virden@utah.edu>
To: "snakevalley@utah.gov" <snakevalley@utah.gov>
Date: Wednesday - September 30, 2009 11:31 AM
Subject: No to SnakeValley Pipeline!

The West's addiction to growth and development is disgusting and selfish. What will happen 40, 60, 80 years from now when we have ravaged the land, drained all the aquifers, and brought millions more people out West? Our current generation of youth will have to deal with catastrophic disasters in the West if we do not immediately stop thinking of our short term profits and quick fixes and start planning responsibly for the future. It is time we start valuing the principles of the great environmentalists of our past such as, Thomas Jefferson, Chief Seattle, George Perkins Marsh, John Wesley Powell and Theodore Roosevelt. These great and influential men of America understand and advocated for the preservation and intrinsic value of our water and land as well as our responsibility to uphold these natural resources for our future generations. All of these men plus many more knew the value and preciousness of the American West and all pushed for its protection against urban development and private ownership. If it weren't for Theodore Roosevelt standing up against all of his peers and the public for national land reserves in the West, our national parks would not exist today and current generations of people would have to pay private land owners a lot of money to get even a glimpse of what our West once was. It was the insight of this one man, who was able to look outside the political, social attitudes and conditions of the time, and make educated and forward thinking decisions that have allowed us to still be able to enjoy the natural landscape of the American West. I challenge all in favor of this pipeline to do what Theodore Roosevelt did in the early 1900's, and look beyond the here and now, beyond the immediate attitudes and possibilities of today, and think progressively about the potential and probable needs, desires, and conditions of generations 100 years from now. It may be hard to have concern for those who aren't even born yet but I am very glad that some great men and women of the past, such as Theodore Roosevelt, did because you and I matter, and so do future generations of Americans. Days of manifest destiny are gone, it is time we start looking for sustainable alternatives in the West, lead the way in progressive policies, and develop a culture that can sustain itself for centuries to come.

Sincerely,

Sara Virden

"By properly managing the environment, "higher order" humans could ensure their survival as a species at the same time ensuring the survival of other species... through "enlightened self-interest", an educated public will find an ethical basis for a new relationship between humans and the land." -George Perkins Marsh

Print View

From: troy anderson <buildingeye@gmail.com>
To: <snakevalley@utah.gov>
Date: Wednesday - September 30, 2009 11:30 AM
Subject: snake valley pipeline!!!

May I begin to say that the Las Vegas Metropolitan area has no right to more water, because the area should not be there in the first place. Throughout westward expansion it is easily observed that settlements, towns, and cities were established in regions and places that could support such settlements. Las Vegas continues to go against the grain of which mother nature has intended. That dust bowl is not intended to gulp the water it does, nor support the growing population. I must also mention that Las Vegas residents need to become more educated on their water consumption and preservation practices. Let the Las Vegas area spend less money on education than the billions required for the pipeline. As the Great Basin and the west desert of Utah are already dry, I cannot imagine the reprecussions of draining the water table underneath. Please do not allow this to happen, as we do not want to discover problems with our state, while Las Vegas builds more and more golf courses, fountains, and ponds.

Thank you,

Troy Anderson
Salt Lake City, UT

Print View

From: "Robb, Gaylord (IHS/PHX)" <gaylord.robb@ihs.gov>
To: <snakevalley@utah.gov>
Date: Tuesday - September 29, 2009 11:44 AM
Subject: "And the first shall be last"

I fail to understand how the public servants of the State of Utah can be so amiable to allowing water to be taken out of an aquifer partially in Utah and pumped into a completely different water basin. Using that water within the same basin from which it is pumped should be a hard and fast rule.

The first people in Utah who used that water for agrarian purposes can't seem to get the State to turn loose of one drop. The Paiute Indians were growing crops in the Indian Peaks area of Beaver County before Europeans ever came into this area and they still can't get a water adjudication agreement. SNWA comes into the picture and right away there is talk of them getting 52,000 acre feet. For 30 years the Paiute Tribe has been requesting that the State recognize their water right but only to be ignored or denied.

I thought water law in Utah followed the "first in time, first in right" rule. The Paiute Indians ancestral home land covered all of Southern Utah and their aboriginal water right has never been abrogated. The State continues to deny its citizens yet bows to the request of its neighbor state. This is not good. The agreement should not be signed and Utah should allow its native people their true rights to water for their land.

Thank you,

Gaylord Robb

Economic Development Director

Paiute Indian Tribe of Utah

440 N. Paiute Drive

Cedar City, UT 84721

435 586 1112

435 559 3687 cell

<<http://www.utahpaiutes.org/>> <http://www.utahpaiutes.org>