



**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. <sup>Kent</sup>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,

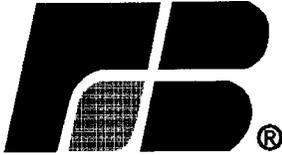
Randy N. Parker

Attachment

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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
- Stabing 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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