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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 mention 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 filed data collected over a relatively short one-ear 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 publicallly [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	Rose Strickland	Steve Erickson

GBWN coordinators in Nevada and Utah

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

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.