

SNAKE VALLEY ENVIRONMENTAL MONITORING AND MANAGEMENT

AGREEMENT

This Snake Valley Environmental Monitoring and Management Agreement (Agreement) is made and entered into between the State of Utah (Utah) and the Southern Nevada Water Authority (SNWA), a political subdivision of the State of Nevada. For convenience, at times herein Utah and SNWA are referred to individually as Party and collectively as Parties.

RECITALS

A. In October 1989, the Las Vegas Valley Water District (SNWA's predecessor-in-interest) filed Applications 54022 through 54030, inclusive, (hereinafter referred to as the "SNWA Applications") to appropriate the public groundwater of the State of Nevada in the Snake Valley hydrographic basin with points of diversion within the State of Nevada. SNWA proposes to develop and utilize these groundwater resources for municipal purposes outside of the Snake Valley hydrographic basin.

B. The Snake Valley hydrographic basin (Snake Valley or Snake Valley HB) lies within the boundaries of both the State of Utah and the State of Nevada.

C. In 2004, the United States Congress passed Pub. L. 108-424 establishing, among other things, the requirement that the States of Utah and Nevada reach an agreement regarding the division of water resources prior to any interbasin transfer from groundwater basins located within both States.

D. Concurrent with the execution of this Agreement, the States of Utah and Nevada have entered into an Agreement for Management of the Snake Valley Groundwater System (Utah-Nevada Agreement) in satisfaction of the requirements of Pub. L. 108-424 with respect to Snake Valley. The Utah-Nevada Agreement defines the water resource management responsibilities of the States of Nevada and Utah regarding the Snake Valley HB, and defines a framework for cooperation between the states on natural resource issues of mutual interest.

E. Prior to the execution of this Agreement, SNWA became a signatory party to the Conservation Agreement and Strategy for Least Chub (Bailey et al 2005) and the Conservation Agreement and Strategy for Columbia Spotted Frog (Bailey et al 2006) attached hereto as Appendices 4 and 5, respectively (Appendices 4 and 5 are collectively referred to herein as the "Conservation Agreements").

F. By entering into this Agreement, Utah and SNWA intend to define certain monitoring and management obligations that are complimentary to the obligations of the States of Utah and Nevada as set forth in the Utah-Nevada Agreement.

G. The Parties desire to establish a consultative process by which to manage the development of groundwater by SNWA within Snake Valley 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, and that the consultative process

envisioned and established by this Agreement will provide for monitoring the effects of any development by SNWA on the hydrologic, biologic and air resources, determining early warning indicators for decisions concerning potential management response actions, instituting a measured management response action, if necessary, and monitoring the effects of the response action to determine its efficacy and sufficiency or the need for further response actions.

H. Utah acknowledged at section 2.8 of the Utah-Nevada Agreement 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 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.

I. Nevada acknowledged at section 2.9 of the Utah-Nevada Agreement that the perennial yield doctrine that governs groundwater appropriation in Nevada generally allows for the appropriation of groundwater that is naturally discharged as phreatophytic evapotranspiration and/or some portion of the subsurface discharge. 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.

J. The Parties acknowledge that not all effects caused by the development of groundwater in Snake Valley are unreasonable, and that the process identified in this Agreement will evaluate the severity and relative importance of the identified effect in the consideration of the appropriate management response action, if any. The Parties also recognize that management actions will need to be coordinated with determinations made under the Utah-Nevada Agreement, though determinations made under each Agreement may have independent validity and effect.

K. The Parties intend, through the Management Committee and the Technical Working Group established herein, to collaborate on data collection and technical analysis, and shall rely on the best scientific information available in making determinations and recommendations required by, and necessary for, the implementation of this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants, terms and conditions herein contained, Utah and SNWA do agree as follows:

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:

1. Hydrologic Monitoring
2. Groundwater Chemical Monitoring
3. Regional Groundwater Flow Numerical Modeling
4. Ecological Modeling
5. Biological Monitoring Plan
6. Management Response and Operation Plan
7. Air Quality Protection Plan

2. Definitions. As utilized in this Agreement the following terms shall have the following meaning:

2.1. Initial Period. “Initial Period” shall mean the time period from the Effective Date of this Agreement through the first day of the Baseline Period, as defined herein.

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.

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.

2.4. Effective Date. “Effective Date” means the date that this Agreement is executed by and binding upon each of the Parties hereto.

3. Management Requirements.

3.1. Management Committee.

3.1.1 Creation and Purpose. The Parties shall create a Management Committee, to include two executive level principals from each of the Parties, within 30 days of the beginning of the Initial Period. The first purpose of the Management Committee is to review and approve, disapprove or modify recommendations from the Technical Working Group (TWG) constituted pursuant to section 3.2 of this Agreement. The Management Committee will convene as necessary upon the request of any member of the Management Committee. The second purpose is to negotiate a resolution in the event that the TWG cannot reach consensus on a recommendation concerning monitoring requirements, resource or other research needs, technical aspects of study design, interpretation of results, or appropriate management response actions.

The Utah representatives to the Management Committee shall coordinate efforts with the Snake Valley Aquifer Research Team established pursuant to Section 63C-12-101, *et seq.* of the Utah Code.

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

Management Committee cannot agree to a mutually acceptable course of action, including management response actions, then the Management Committee shall refer the issue to the Dispute Resolution Process set forth in section 13 of this Agreement.

3.2. Technical Working Group

3.2.1 Creation and Purpose. The Parties shall create and convene a multi-disciplinary Technical Working Group (TWG) within 60 days of the beginning of the Initial Period. The purpose of the TWG is to carry out the functions required of it under this Agreement, including reviewing, analyzing, and interpreting information collected under this Agreement, evaluating the results of related analyses, and making recommendations for management response actions and other items to the Management Committee. Membership of the TWG shall include two representatives from SNWA (Groundwater Resources Division, Environmental Resources Division) and three representatives from the State of Utah (Utah Geological Survey, Utah Division of Air Quality, Utah Division of Wildlife Resources). Each Party, at its sole discretion and cost, may invite such additional staff or consultants to attend, as each deems necessary.

3.2.2 Additional TWG Membership and Participation. To assist the TWG, the Parties may mutually agree to invite a representative of the Nevada and Utah State Engineer's Office to participate in the TWG. Furthermore, the Parties may mutually agree to invite other non-Party entities to assist and participate in the TWG as deemed necessary or appropriate.

3.2.3 Operation. The TWG shall meet as needed to carry out the tasks set forth for completion in this Agreement or as otherwise requested by any member of the TWG or as directed by the Management Committee.

The TWG shall strive for consensus in all determinations and recommendations. Specific tasks assigned to the TWG pursuant to this Agreement include:

1. Implementation and modification, as deemed necessary, of the biologic, hydrologic and air quality monitoring plans set forth in Appendices 1, 2 and 3, respectively;
2. Make recommendations to the Management Committee regarding the formulation, implementation and modification of the Management Response and Operation Plan set forth in section 5 of this Agreement;
3. Review data collection and quality assurance procedures, disseminate data and provide a scientific and technical forum to evaluate data and analyses, including hydrologic and ecologic parameters of the appropriate models and the results of model analysis;
4. Identify needs for additional data collection and scientific investigations;
5. Consider, as necessary, whether the modification of the initial boundaries of the monitoring areas is warranted as new data become available;

6. During the Operation Period, review SNWA proposed or ongoing pumping schedules in Snake Valley for both testing and production purposes;
7. Provide a forum for discussion to help develop agreement for prescribed courses of action on technical issues and make recommendations to the Management Committee;
8. Develop recommendations about monitoring, modeling, groundwater management, and mitigation, including but not limited to the addition, deletion, or replacement of monitoring wells, the frequency of data collection, and the types of monitoring, sampling, and testing to be conducted;
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; and
10. Other responsibilities as delegated by the Management Committee.

4. Monitoring Objectives.

The objectives of the monitoring program are to assemble, collect and analyze biological, hydrologic and air-quality data that improve the current understanding of baseline conditions and natural variation, and provide early detection of effects from SNWA and Existing Permitted User (EPU) groundwater withdrawals in Snake Valley. Data collected by this program will: 1) support assessments of groundwater-influenced ecosystems inhabited by sensitive or special-status species; 2) include measurements of groundwater-levels and spring discharges where effects may be attributed to groundwater development within Snake Valley; 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.

4.1. Monitoring Area Description.

The monitoring areas associated with this Agreement occur within a larger Area of Interest that includes the Upper Great Salt Lake Desert Flow System (GSLDFS). Within this Area of Interest, two specific areas have been delineated in which biological, hydrologic, and air-quality monitoring will be conducted. These areas are named "Tier I" and "Tier II" Monitoring Areas, respectively, and are depicted on Figure 1. Within the Tier I and Tier II Monitoring Areas are Key Areas of Biological Concern (KABCs), also depicted on Figure 1. These KABCs were identified to focus the monitoring approach, and were based on the presence of groundwater-influenced ecosystems inhabited by Species of Greatest Conservation Need identified in the Utah Comprehensive Wildlife Conservation Strategy (CWCS 2005) or contain phreatophytic vegetation susceptible to effects resulting from groundwater development.

4.1.1 The Tier I Monitoring Area includes a large part of the Snake Valley hydrographic area, extending from Miller Spring at the northern end of Snake Valley to the southern boundary of the Snake Valley hydrographic area. The Tier I Monitoring Area includes parts of Nevada and Utah adjacent to the SNWA proposed points of diversion, areas of current agricultural use, and KABCs. The Parties anticipate that effects to groundwater levels and groundwater-influenced ecosystems that may result from groundwater pumping by SNWA will

first occur within the Tier I Monitoring Area. Therefore, monitoring efforts will be greatest in the Tier I Monitoring Area and will include a higher density of monitoring sites, and greater scope and frequency of data collection to ensure early detection of effects resulting from SNWA groundwater withdrawals in Snake Valley.

Biologic, hydrologic, and air-quality monitoring requirements for the Tier I Monitoring Area are specified in this Appendixes 1, 2 and 3. Specific biologic, hydrologic, and air-quality parameters were selected for monitoring based on their susceptibility to be influenced by changing groundwater conditions.

4.1.2 The Tier II Monitoring Area extends to the east, north and south from the Tier I Monitoring Area, to adjacent areas including the northern part of Snake Valley (north of Miller Spring) and the hydrographic areas of Fish Springs Flat, Tule Valley, Pine Valley, and Wah Wah Valley. Because virtually no groundwater development has occurred in these areas and they are distant from the proposed SNWA points of diversion, monitoring in the Tier II Monitoring Area will be less intense with respect to the frequency of data collection and the density of monitoring sites. Tier II monitoring will be focused on Fish Springs Flat and Tule Valley which are thought to be hydraulically connected and potentially down-gradient from Snake Valley, where the proposed SNWA and current/future EPU pumping centers are located. Because these areas contain KABCs, biological monitoring will be included here, albeit at a lower level of intensity than in the Tier I Monitoring Area. Hydrologic monitoring efforts in these areas and in northern Snake Valley, Pine Valley, and Wah Wah Valley will be performed to establish background hydrologic conditions within the Upper GSLDFS.

Biologic, hydrologic, and air-quality monitoring requirements for the Tier II Monitoring Area are specified in Appendixes 1, 2 and 3.

4.2. General Monitoring Requirements.

The TWG is responsible for developing and implementing the monitoring plan. The Parties agree to work cooperatively in designing the specific biological, hydrologic, and air-quality monitoring networks set forth in Appendixes 1, 2 and 3 needed to achieve the Statement of Intent and complete the tasks set forth in section 3.2.2 of this Agreement.

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 (“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. In particular, the Parties recognize that the predictive capabilities of any groundwater or ecological models will improve as data and information is obtained through the development of groundwater over a period of years, and that early warning indicators may need to be refined or amended as this data becomes available. The Parties agree that the Operation Plan shall contain a defined process for the Management Committee to approve, as appropriate, updates to the Operation Plan as necessary to ensure the early warning indicators and management response actions are consistent

with the Recitals and Statement of Intent set forth above, and reflect the most current data and analysis available.

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;
2. A defined range of specific management response actions designed to avoid the indicated effects;
3. A defined range of specific management response actions designed to minimize the indicated effects;
4. A defined range of specific management response actions designed to mitigate the indicated effects;
5. A process for the TWG and Management Committee to review the early warning indicators when observed, review the criteria, and determine the appropriate management response action; and
6. A defined process to evaluate and monitor the success of all management response actions.

5.1.2 Early warning indicators and the range of specific avoidance, minimization and mitigation management response actions identified in the Operation Plan will be based on all relevant and available data.

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.

5.1.4 The Parties agree that if, during the Term of this Agreement, the State of Utah permits any Utah water rights with a point of diversion in Snake Valley to be exported and placed to beneficial use outside of the hydrographic basin boundaries of Snake Valley, then Utah will require the holder of the export permit(s) to comply with an operation plan that is substantially similar to the Operation Plan agreed to by the Parties to this Agreement. If Utah permits an interbasin transfer of Utah water rights from Snake Valley without enforcement of this section 5.1.4, then this entire Agreement shall be subject to termination for breach of a material term. If at any time while this Agreement remains in effect SNWA believes that Utah has permitted an interbasin transfer of Utah water rights from Snake Valley without enforcement of this section 5.1.4, the following process will be followed:

- a. SNWA shall provide notice to Utah of all information in the possession of SNWA that forms the basis of SNWA's belief that a breach of section 5.1.4 has occurred;

- b. Utah shall reply in writing to SNWA within 90 days of the receipt of notice and state whether Utah agrees or disagrees with SNWA's belief that a breach of section 5.1.4 has occurred;
- c. If Utah agrees that a breach of section 5.1.4 has occurred then Utah will have 120 days from the mailing of the notice to SNWA under section 5.1.4(b) to cure the breach;
- d. If Utah disagrees that a breach of section 5.1.4 has occurred or if for any reason SNWA is not satisfied with any cure instituted by Utah under section 5.1.4(c), then the Parties shall proceed to the Dispute Resolution Process outlined in section 13 of this Agreement and thereafter to any remedy available in law or in equity available to either Party;
- e. Non-enforcement by SNWA of the provisions of this section 5.1.4 for any period of years while this Agreement remains in effect shall not be deemed to waive SNWA's right to enforce this provision; and
- f. Nothing in this section 5.1.4 shall affect any valid contractual rights or obligations of the Parties set forth outside of this Agreement.

5.2 Initiation of Management Response Actions Pursuant to the Operation Plan.

During the Operational Period, the Management Committee shall utilize the Operation Plan to determine management response actions that are a measured and reasonable response to the scope, magnitude and extent of the identified effect caused by pumping from SNWA's groundwater production wells upon the hydrologic, biologic and air resources within or as a result of atmospheric transport from the Area of Interest.

Based upon the Parties understanding that development of groundwater by SNWA in the Snake Valley HB will result in changes to the existing hydrologic and biologic conditions and may potentially effect the air resources within or as a result of atmospheric transport from the defined Area of Interest, but that not all such changes are unreasonable, the Management Committee shall determine and execute management response actions that are a measured and reasonable response to the scope, magnitude and extent, large or small, of the identified effect. 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.

However, the Parties agree that no management response action may be selected which has 1) the effect of violating the letter or the spirit of the Conservation Agreements and Strategies for the Least Chub and Columbia Spotted Frog, or any successor agreement, or 2) otherwise 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, or 3) causes or contributes significantly to a violation of an applicable National Ambient Air Quality Standard (NAAQS) standard or Prevention of Significant Deterioration (PSD) increment.

Available management response actions include, but are not limited to, the following:

- Geographic redistribution of groundwater withdrawals;
- Reduction or cessation in groundwater withdrawals;
- Provision of consumptive water supply requirements using surface and/or groundwater sources;
- 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;
- Augmentation of water supply and/or acquisition of water rights for using surface and groundwater sources; and
- Other measures as agreed to by the Management Committee, or required by the Nevada State Engineer.

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 of this Agreement within one year of the beginning of the Baseline Period. If the TWG is unable to recommend a consensus Operation Plan within this timeframe, then the TWG shall submit to the Management Committee any alternative versions of the Operation Plan developed by members of the TWG. If the Management Committee cannot agree by consensus to one alternative or a combination of alternatives recommended by the TWG within 90 days, then the Parties agree that each of the alternatives submitted to the Management Committee by the TWG shall be submitted to a mutually-agreeable third party, who shall have up to one year for final selection among the submitted alternatives or a combination thereof. The alternatives selected by the third party shall be binding on the Parties. Final payment to the third party shall be conditional upon completion within the allotted year. The provisions of this section 5.3 shall apply only to the first version of the Operation Plan and shall not apply to any subsequent revision, modification or amendment of the Operation Plan. If for any reason mutually agreed upon third party does not produce a final version of the Operation Plan within one year of the submission of the alternatives by the Parties, then either Party can invoke the provisions of section 13 of this Agreement for resolution of the matter. The resolution of any dispute or disagreement concerning the revision, modification or amendment of the Operation Plan shall be governed by section 13 of this Agreement.

6. Data-Quality Requirements.

Data quality shall conform to applicable industry and scientific standard methods and protocols, unless otherwise agreed upon or defined by the TWG. All data will undergo Quality Assurance/Quality Control.

The TWG shall ensure that all measurement and data collection associated with the hydrologic monitoring networks is performed according to USGS established protocols, unless otherwise agreed-upon.

All air quality instrumentation shall be installed, calibrated and operated according to EPA established monitoring protocols (Quality Assurance Handbook for Air Pollution Measurement Systems, Vol. I, EPA-600/R-94/038a and Vol. II, EPA-454/B-08-003), unless otherwise agreed upon by the TWG. The collected air quality and meteorological data shall be reviewed and

validated on a quarterly basis. Records of the audits, data quality and data completeness shall be maintained and available to the TWG.

7. Data Reporting Requirements.

All data collected pursuant to this Agreement shall be fully and cooperatively shared among the Parties. SNWA shall develop and maintain a shared-data repository for the storage and retrieval of data and information collected pursuant to this Agreement. The monitoring reports specified in section 7.1, 7.2 and 7.3 will be posted on SNWA's website within one week of their annual transmission to the Nevada and Utah State Engineers' Office.

7.1 Biologic Data Reporting.

SNWA shall report the results of all monitoring and sampling pursuant to this Agreement in an annual monitoring report that shall be submitted to the Parties and the Nevada and Utah State Engineers' Office by no later than March 31 of each year that this Agreement is in effect.

7.2 Hydrologic Data Reporting.

Using data derived from groundwater-level measurements of all production, exploratory, and monitor wells identified in this Agreement, SNWA shall produce groundwater contour maps and water-level change maps for both the basin-fill and carbonate-rock aquifers at the end of baseline data collection, and annually thereafter at the end of each year of groundwater withdrawals by SNWA, or at a lesser frequency agreed-upon by the Parties.

Groundwater-level and water-production data shall be made available to the other Party within 90 calendar days of collection using the shared data-repository website administered by SNWA. Water-quality laboratory reports shall be made available to the other Party within 90 calendar days of receipt using the shared data-repository website administered by SNWA.

SNWA shall report the results of all monitoring and sampling pursuant to this Agreement in an annual monitoring report that shall be submitted to the Parties and the Nevada and Utah State Engineers' Office by no later than March 31 of each year that this Agreement is in effect. SNWA shall submit as part of its annual report a proposed schedule of groundwater withdrawals (testing and production) for the immediately succeeding two calendar years. Final monitoring and sampling data will be made available over the Internet via the USGS NWIS or other appropriate website throughout the duration of this Agreement.

7.3 Air-Quality Data Reporting.

Air quality and coincident meteorological parameters shall be sampled and reported continuously on an hourly average basis. The data collected shall be submitted hourly to Utah Division of Air Quality (UDAQ) and other interested Parties as determined by the TWG via cellular modem, satellite modem, radio or other electronic telemetry. Such data will be available on the UDAQ website in accordance with UDAQ's standard processes and procedures.

Quarterly reports of the quality assured air quality and meteorological data shall be submitted to the UDAQ. These reports shall include full electronic data sets of the quality assured air quality

and meteorological data in a format prescribed by the TWG. These reports shall also include summary tables and charts of: averaged air quality data comparable to the NAAQS, maximum data, mean data, data quality and completeness, and other information deemed important by the TWG.

8. Analytical Models.

8.1 Regional Groundwater Flow Numerical Modeling.

The Parties agree that groundwater flow system numerical modeling is a useful tool in the prudent management of basin-fill and regional carbonate-rock aquifer systems. Therefore, the Parties agree that this Agreement must include a suitable groundwater flow system numerical model(s). The Parties acknowledge that model results must be qualified based on a comparison of the accuracy of the model(s) and the capability of the model(s) to predict actual conditions. As the effects of groundwater withdrawals in Snake Valley on groundwater levels and spring flows are measured, refinement of the model(s) may be necessary to achieve better agreement with actual field measurements. Furthermore, the collection of additional hydrologic, geologic, geophysical, and geochemical data may indicate that modification of the conceptual and numerical model(s) of the regional groundwater flow system is warranted.

The Parties shall share all geologic, geophysical, hydrologic, and geochemical information collected in the Tier I and Tier II Monitoring Areas. These data shall be evaluated by the TWG for inclusion into the regional groundwater flow system numerical model(s).

SNWA shall maintain, update, and operate an agreed-upon groundwater flow system numerical model(s), in cooperation with the TWG. SNWA may subcontract this obligation to a third party. The cost of all modeling described herein shall be borne by SNWA.

Beginning at least one year prior to the end of the Baseline Period, SNWA shall provide model output in cooperation with the TWG for evaluation by the TWG in the form of input files, output files, drawdown maps, tabular data summaries, and plots of simulated water levels through time for the aquifer system, unless otherwise recommended by the TWG.

8.2 Ecological 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. Based upon the success of the ecological modeling effort being conducted by SNWA in Spring Valley, the TWG will evaluate the utility of an ecological model within Snake Valley during the Initial Period. If the TWG recommends and the Management Committee approves proceeding with an ecological modeling effort, the ecological model will be created in years one and two of the Baseline Period. During the remainder of the Baseline Period and throughout the Operational Period SNWA will maintain, update and operate an agreed-upon model in cooperation with the TWG.

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.

9. Change Applications.

In the future, SNWA may seek to change the points of diversion and rates of withdrawal within the Snake Valley HB for any quantities of groundwater permitted pursuant to the SNWA Applications. Prior to filing such change applications, SNWA shall consult with the TWG about the potential effects of any proposed changes.

10. Nevada State Engineer Proceedings.

The Parties agree that a copy of this Agreement shall be submitted by SNWA to the Nevada State Engineer at the commencement of any administrative proceedings regarding the SNWA Applications. At that time, SNWA shall request on the record that the State Engineer include the terms of this Agreement as part of the permit terms and conditions in the event that the Nevada State Engineer grants any of the SNWA Applications in total or in part.

11. Submission to Bureau of Land Management.

SNWA shall submit a copy of this Agreement to the Bureau of Land Management and request that it be included in any Environmental Impact Statement prepared for the "Clark/Lincoln/White Pine Counties Groundwater Development Project," or any other project related to the development of the SNWA Applications.

12. Funding.

Except as otherwise specifically set forth in this Agreement, any commitment of funding by Utah or SNWA in this Agreement, including specifically any monitoring or management response actions are subject to appropriations by the Utah Legislature or the governing body of the SNWA, as appropriate.

13. Dispute Resolution Process.

In the event the Management Committee cannot agree on a mutually acceptable course of action upon request from the TWG, a Disputes Review Board (Board) will be established within thirty (30) days notice by either Party to review that disagreement. The Board shall be comprised of one member selected by Utah, one member selected by SNWA, and a third member selected by the first two members. The Board members shall show no partiality to either Utah or SNWA; or have any conflict of interest.

For any dispute that is brought before the Board, the Board shall provide a list of written recommendations to Utah and SNWA to assist in the resolution of the disagreement within thirty (30) days of the initial meeting of the Board. Although the recommendations of the Board should carry great weight for both Utah and SNWA, they are not binding on either party. However, the written recommendations shall be admissible as evidence to the extent permitted by law in any subsequent legal proceeding arising under this Agreement, including any administrative hearing before the Nevada State Engineer. Notwithstanding the foregoing or any

contrary provision contained herein, either Party may bring an action in a court of competent jurisdiction to assert any claim arising out of this Agreement or otherwise. SNWA specifically agrees that SNWA will not assert that Utah lacks standing to bring any action related to the enforcement of this Agreement before the Nevada State Engineer, or in any court of competent jurisdiction in the State of Nevada.

14. Notices.

If notice is required to be sent by the Parties, the addresses are as follows:

If to Utah:
Executive Director
Utah Department of Natural Resources
594 West North Temple
PO Box 146300
Salt Lake City, UT 84114-6300

If to SNWA:
General Manager
Southern Nevada Water Authority
1001 S. Valley View Blvd.
Las Vegas, NV 89153

15. Modification of the Agreement.

The Parties may modify this Agreement by mutual written agreement.

16. Successors in interest.

The provisions of this Agreement shall be binding upon any successors in interest to the SNWA Applications and any permits, certificates or other water right derivative thereof.

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IN WITNESS WHEREOF, Utah and SNWA have fully executed this Agreement on this _____ day of _____, 2009.

Utah Department of Natural Resources
Michael R. Styler
Executive Director

Southern Nevada Water Authority
Patricia Mulroy
General Manager

Approved as to Form:

John J. Entsminger
SNWA Deputy General Counsel