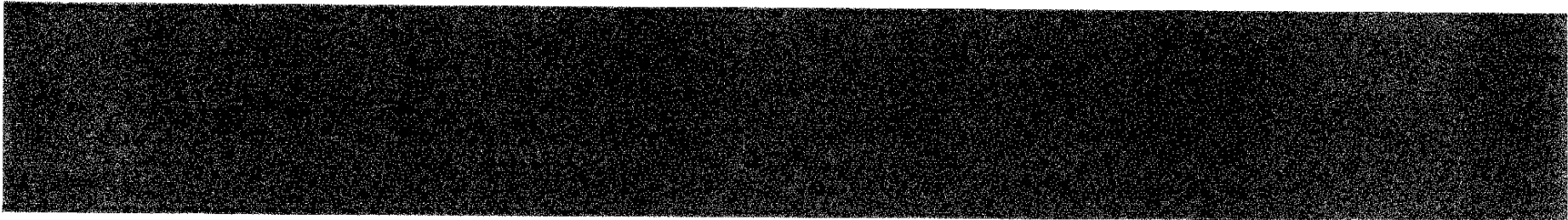


Introduction

- **Stipulation with DOI Bureaus signed January 7, 2008; submitted to the State Engineer January 25, 2008**
- **Agreement between SNWA and four bureaus of the Department of the Interior:**
 - Bureau of Indian Affairs
 - National Park Service
 - Fish and Wildlife Service
 - Bureau of Land Management
- **Stipulation with Moapa Band of Paiutes signed January 9, 2008; submitted to the State Engineer January 18, 2008**



Federal Stipulation

Common Goals

The common goals of the Parties to the federal stipulation are to:

- **Manage the development of any groundwater rights permitted to SNWA in Dry Lake, Delamar, and Cave Valleys without causing injury to Federal Water Rights and/or unreasonable adverse effects to Federal Resources and Special Status Species within the Area of Interest.**
- **Includes taking actions that protect and recover those Special Status Species that are currently listed pursuant to the ESA and avoiding listing of currently non-listed Special Status Species.**

Technical Review Panel, Biologic Resources Team, & Executive Committee

- **Spring Valley stipulation established cooperative processes related to SNWA's groundwater development project**
- **Technical Review Panel (TRP) and Executive Committee (EC) processes are expanded to DDC**
- **Biologic Resources Team (BRT) created for DDC**

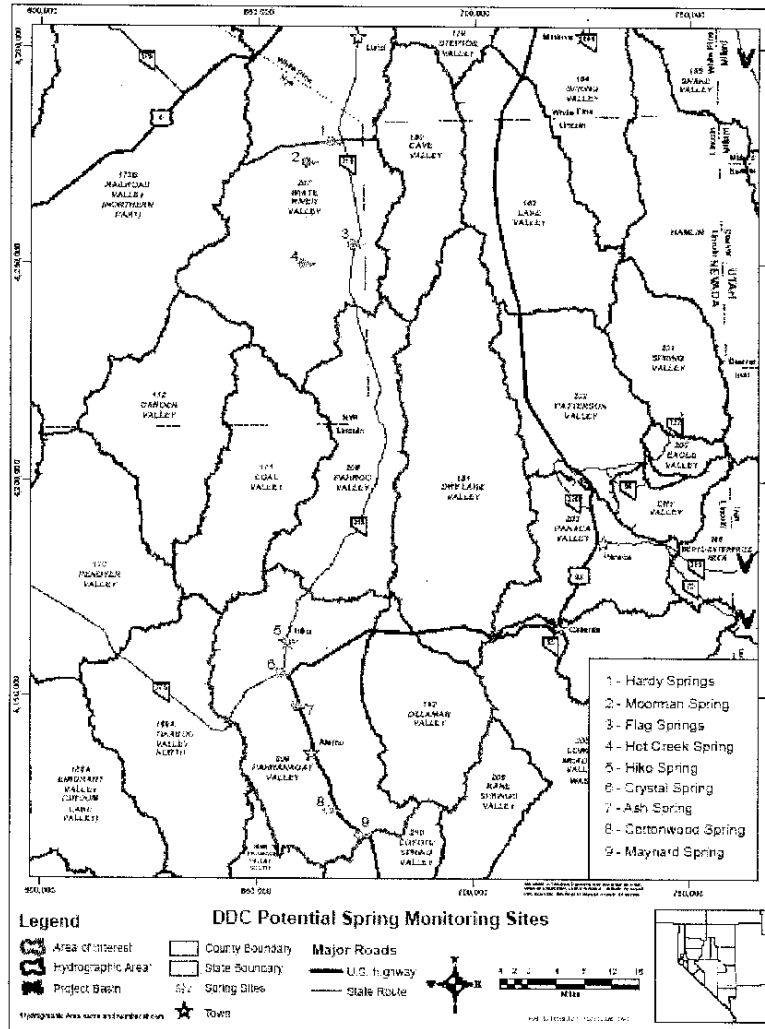
Hydrologic Monitoring Network-- Wells

- **SNWA has already collected or funded collection of extensive monitoring data**
- **TRP will select 9 existing wells to be monitored quarterly and 6 existing wells to be monitored continuously**
- **SNWA agrees to drill 4 new monitoring wells at locations selected by the TRP**
- **Wells will be located by TRP to serve as early warning indicators and to help characterize interbasin groundwater flow**

Hydrologic Monitoring Network-- Springs

- **TRP will select springs for monitoring. Possible monitoring locations:**
 - Flag Springs
 - Hot Creek Spring
 - Moorman Springs
 - Ash Springs
 - Crystal Spring
 - Hiko Spring
 - Maynard Spring
 - Hardy Springs
 - Cottonwood Spring
 - Up to 8 springs located within Dry Lake, Delamar, and Cave Valley basins

Potential Spring Monitoring Sites



Baseline Data Collection

- **At least 5 years of pre-pumping data will be collected for existing wells and springs that are already being monitored**
- **At least 2 years of pre-pumping data will be collected for wells and springs that are not yet being monitored**

Hydrologic Data Collection & Reporting

- **Aquifer tests will be performed on all test wells**
- **Water chemistry sampling will be done at 10 sites selected by the TRP**
- **Additional precipitation stations may be established if recommended by the TRP**
- **SNWA will report the results of all monitoring and sampling pursuant to this Stipulation in an annual monitoring report that is submitted to the TRP and the Nevada State Engineer**

Groundwater Flow Model

- **Data collected pre- and post-groundwater pumping will be used to help calibrate an agreed upon transient groundwater flow model**
- **Transient model is one tool to give early warning of possible injury to Federal Water Rights or unreasonable adverse effects to Federal Resources or Special Status Species with the Area of Interest**
- **May create embedded (child) models focused on Pahranaगत and White River Valley Hydrographic Basins**

Intent of the Parties

- **Integrate data and information gathered pursuant to all stipulations and agreements related to Clark, Lincoln, and White Pine Counties Groundwater Project**
- **Parties intend to take actions to the extent possible to prevent injury to Federal Water Rights or unreasonable adverse effects to Federal Resources and Special Status Species before they occur**

Hydrologic Management and Mitigation Operation Plan

- **Prior to pumping, SNWA in cooperation with federal bureaus will prepare a Hydrologic Management and Mitigation Operation Plan**
- **Operation Plan will identify early warning indicators and define a range of mitigation actions that may be carried out if indicators are reached**
- **Use baseline data to develop a plan to optimize groundwater development without causing injury to Federal Water Rights and/or unreasonable adverse effects to Federal Resources and/or Special Status Species**
- **TRP will update the Operation Plan as necessary**

Biological Monitoring

- **Special Status Species** include those species that are federally listed or proposed for listing under ESA, state listed, BLM sensitive species, and G/1 and G/2 listed species that are groundwater dependent
- **Biological monitoring will be focused on Special Status Species and their habitats within the Area of Interest that are most likely to be affected by hydrologic changes from pumping**
- **Monitoring areas may include:**
 - Springs containing Special Status Species
 - Water Dependent Ecosystems
 - Sage grouse breeding habitat that is groundwater dependent
 - Pahrangat National Wildlife Refuge, Key Pittman and Kirch Wildlife Management Areas

Biologic Resources Team

- **Determine and recommend to EC appropriate course of action to manage or mitigate an unreasonable adverse effect to Special Status Species**
- **Identify Special Status Species most likely to be affected by potential hydrologic changes**
- **Assemble baseline information**
- **Develop and implement monitoring plan for Special Status Species**
- **Coordinate with Pahrangat and White River Valley Recovery Implementation Teams**

Possible Management and Mitigation Actions

- **Reduction or cessation of groundwater pumping**
- **Geographic redistribution of pumping**
- **Acquisition of property or water rights dedicated to recovery of Special Status Species**
- **Augmentation of Federal Water Rights, Federal Resources and/or Water Dependent Ecosystems**
- **Restore and enhance habitat on Pahranaagat National Wildlife Refuge**

Pahranagat National Wildlife Refuge

- **Shortened consultation process for possible injury to Pahranagat NWR water rights**
- **If any member of the TRP or BRT identifies an injury to Pahranagat NWR water rights and data suggests a trend toward reaching an early warning indicator, SNWA will implement mitigation within 30 days**
- **Executive Committee consultation process will determine if mitigation should continue**

Consultation Process

- **Any party to the TRP or BRT may initiate consultation among these technical groups if that party is concerned that there may be an injury to Federal Water Rights and/or an unreasonable adverse effect to Federal Resources and/or Special Status Species**
- **TRP or BRT will evaluate all relevant data and inform Executive Committee of their findings and recommendations**

Consultation Process

- **The TRP, BRT and/or Executive Committee will determine appropriate management and mitigation measures to respond to injury or unreasonable adverse effects, if any, caused by SNWA's groundwater withdrawals in DDC**
- **All decisions of the TRP, BRT or Executive Committee must be consensus based**



MBOP Stipulation

MBOP Stipulation

- **Tribe and SNWA have a history of working together to address water issues in Southern Nevada**
- **Tribe withdrew its protests to SNWA's applications in DDC in exchange for SNWA's commitment to develop and use any water rights permitted to SNWA in DDC in a manner that avoids injury to the Tribe's water rights**

MBOP Stipulation

- **Actions SNWA may take in order to offset injury to the Tribe's water rights:**
 - Reduction or cessation of pumping
 - Geographic redistribution of pumping
 - Augmentation of regional spring flows and/or regional groundwater tables
 - Augmentation of the Tribe's water rights
- **SNWA will share all data, reports, and analyses prepared by the TRP with the Tribe**