

# **Biological Resources Rebuttal Report for Cave, Dry Lake, and Delamar Valleys**

**PRESENTATION TO THE OFFICE OF THE NEVADA STATE ENGINEER**

Prepared by



**SOUTHERN NEVADA  
WATER AUTHORITY**

December 2007

# Biological Resources Rebuttal Report for Cave, Dry Lake, and Delamar Valleys

Submitted to:

Tracy Taylor, P.E. State Engineer  
State of Nevada  
Department of Conservation & Natural Resources  
Division of Water Resources  
901 S. Stewart Street, Suite 2002  
Carson City, Nevada 89701

Pertaining to:

Groundwater Applications 53987 through 53992 in  
Cave, Dry Lake, and Delamar Valleys

December 2007

Prepared by:

Southern Nevada Water Authority  
Water Resources Division  
P.O. Box 99956  
Las Vegas, Nevada 89193-9956



---

Zane L. Marshall, Environmental Resources Division Manager

12-18-07

---

Date

## **1.0 INTRODUCTION**

The biological resource related Expert Reports submitted by the Department of Interior (DOI) provide additional factual information on the occurrence of sensitive biological resources in and around Delamar, Dry Lake and Cave Valleys (DDC). However, their conclusions rely upon the Mayer (2007) report, which provides no specific analysis on any one spring, wetland or phreatophytic habitat, they assume the worst case, they provide no temporal context for effects and there is no consideration for the benefits of monitoring, management and mitigation. Furthermore, the DOI has ignored the role of Federal environmental compliance regulations such as the Endangered Species Act of 1973 (ESA), the National Environmental Policy Act of 1969 (NEPA) and the Federal Land Policy and Management Act of 1976 (FLPMA), which will influence how the Clark, Lincoln and White Pine Counties Groundwater Development Project is developed and operated. Collectively, these Federal regulations will ensure a thorough effects analysis and appropriate protection of biological resources.

Biological reports written for the Advocates for Community and Environment (Advocates) present results that are speculative, as they exploit Dr. Myers report to extrapolate effects to springs and other habitats that are not specifically considered in Dr. Myers hydrologic analysis. An example of this is Dr. Charlet's prediction of impacts to southwestern willow flycatcher populations in Pahranaagat Valley. Both populations (Key Pitman Wildlife Management Area and Pahranaagat National Wildlife Refuge) breed in habitats adjacent to and dependent upon reservoirs with water elevations determined by upstream irrigation practices and direct reservoir management (Klinger et al., 2007 and McCleod et al., 2007). Myers (2007) provides no specific analysis for either one of these areas. Dr. Deacon and Dr. Charlet ignore existing stipulations between SNWA and the DOI Bureaus, and exclude the required Federal environmental compliance processes that are ongoing and collectively provide protective measures to biological resources potentially affected by groundwater development in DDC. Finally, the DOI and Advocates rely on the Mayer (2007) and Myers (2007) reports, respectively, and in both reports the flow routing and water budget numbers are different than in the SNWA (2007a) report, which was used for the SNWA analysis.

## **2.0 FEDERAL ENVIRONMENTAL COMPLIANCE**

As stated in the report, "Biological Resources for Cave, Dry Lake, and Delamar Valleys," (SNWA, 2007b) the Bureau of Land Management (BLM) is working to prepare a Biological Assessment (BA) and Environmental Impact Statement (EIS). These documents will analyze the direct, indirect and cumulative effects on biological resources resulting from construction and operation of the Clark, Lincoln and White Pine Counties Groundwater Development Project, of which the DDC applications are a component. The BA is part of a longer consultation process the BLM is undertaking with the U.S. Fish and Wildlife Service (FWS) concerning the groundwater project that is required by

Section 7 of the ESA. In Section 7(a)(2) of the ESA, Federal agencies are explicitly precluded from taking actions that will jeopardize the continued existence of a listed species. Given the known occurrence of Federally listed aquatic, wetland and/or riparian species in White River, Pahranaagat and Panaca Valleys, the ESA provides rigorous protection to many of the groundwater dependent habitats in those valleys, such as Flag, Hiko, Crystal and Ash Springs, upper Pahranaagat Lake and Panaca Big Springs.

NEPA requires BLM to prepare an EIS for the proposed groundwater project. The EIS will include an analysis of direct, indirect and cumulative effects on the human environment resulting from the proposed groundwater project and a range of alternatives to the proposed project. The EIS will consider mitigation measures to reduce the level of effect. FLPMA requires BLM to include Terms and Conditions in any Right of Way that it grants to “minimize damage” to scenic and aesthetic values and fish and wildlife habitat, and “otherwise protect” the environment. Collectively, NEPA and FLPMA provide BLM the necessary information and authority to ensure protection of biological resources in and around DDC. Having not considered the legal protections the Federal environmental regulations afford biological resources, the protestant’s predictions of catastrophic impacts to biological resources are invalidated by an absence of real-world context.

### **3.0 DELAMAR, DRY LAKE, AND CAVE VALLEYS STIPULATION**

The proposed DDC Stipulation requires SNWA and the DOI Bureaus to establish a Technical Review Panel and Biological Resources Team (BRT). These teams will prepare and implement a coordinated monitoring program with the goal of managing the development of all water rights permitted to SNWA by the Nevada State Engineer in DDC, while avoiding any injury to Federal water rights and unreasonable adverse effects to Special Status Species within DDC and the adjoining basins. The proposed stipulation also establishes a process for managing and mitigating effects resulting from the development of groundwater by SNWA in DDC to ensure that unreasonable adverse effects to Special Status Species are avoided. Coupled with the above mentioned Federal environmental regulations, the proposed DDC Stipulation addresses scientific uncertainty associated with any effects analyses and ensures the protection of sensitive biological resources over the life of the project.

### **4.0 OTHER SPECIFIC POINTS**

Dr. Deacon makes broad sweeping predictions of decline or extirpation of all wetland dependent species populations in the affected area without providing specific analyses or evidence. These claims are implausible, as they do not consider the limitations of the available hydrologic analyses, the inherent plasticity in many wetland ecosystems and the protections Federal environmental regulations and the DDC Stipulation afford these ecosystems. In the last paragraph of Dr. Deacon’s report, he attempts to assess the cumulative effects of developing other SNWA groundwater applications and rights outside of DDC. Here again, he excludes consideration of the Federal environmental regulations and existing stipulations between SNWA and the DOI Bureaus in Coyote Spring, Three Lakes and Spring Valleys (Exhibits 2011, 2014, and 322). Both NEPA and ESA require an evaluation of cumulative effects that are reasonably foreseeable and reasonably certain to

occur, respectively. All three of the above stipulations require significant hydrologic monitoring and a consultation process with DOI Bureaus to avoid and/or mitigate effects to sensitive biological resources. Together, consideration for the broader context of environmental effects in the Federal environmental compliance process and implementation of the above mentioned stipulations will ensure the protection of regional biodiversity.

Dr. Charlet makes unsupported claims regarding direct and indirect effects to biological communities in DDC and surrounding valleys that include upland communities that have no potential to be affected by groundwater diversion (e.g., xeric shrublands and woodlands, and winterfat) and impacts to Parish phacelia populations that are also not dependent upon groundwater. Other misleading statements made by Dr. Charlet include reference to a nonexistent playa in White River Valley, and a comparison he makes between groundwater diversion in DDC and diversion of the Owens River in Owens Valley that lacks merit.

Although a project of the scale of the Clark, Lincoln and White Pine Counties Groundwater Development Project can not be constructed and operated without having some impact on the biological resources in the project area, the SNWA, BLM and FWS are taking measures to avoid, minimize and mitigate effects. As part of the final Plan of Development for the project, the BLM requires a Mitigation and Monitoring Plan, a Vegetation Restoration Plan and a Weed Management Plan, among others. The implementation of these plans along with the DDC Stipulation will result in a project that does not have catastrophic effects as purported by Dr. Charlet and Dr. Deacon.

## **5.0 CONCLUSIONS**

Regardless of the results of any current hydrologic analyses, sensitive biological resources and regional biodiversity in and around DDC will be protected by the network of Federal environmental regulations, future required mitigation and monitoring plans, and existing stipulations and other agreements SNWA has entered into with DOI Bureaus. Finally, SNWA has a proven record in environmental stewardship that is exemplified by its accomplishments in the Las Vegas Wash and most recently in the Moapa Warm Springs area (Las Vegas Wash Coordination Committee, 2006, and USFWS, 2007). Given this record, the Nevada State Engineer can be certain that SNWA is committed to working collaboratively with Federal and state resource agencies to guarantee the long term protection of sensitive biological resources in and around DDC, thus ensuring environmentally sound utilization of groundwater in Delamar, Dry Lake and Cave Valleys.

## **6.0 REFERENCES**

- Klinger, C., Furtek, B., Neel, L.A., and Tomlinson, C., 2007, Southwestern Willow Flycatcher and Yellow-Billed Cuckoo 2006 Survey and Monitoring Report for Select Sites in Southern Nevada, Nevada Department of Wildlife, Southern Region, Wildlife Diversity Program, Program Activities Report January 1, 2006 through December 31, 2006, 44 p.
- Mayer, T., 2007, Hydrologic Assessment of SNWA Water Right Applications for Delamar, Dry Lake, and Cave Valleys in the White River Flow System, Presentation to the Office of the Nevada State Engineer.
- McCleod, M.A., Koronkiewicz, T.J., Brown, B.T., and Carothers, S.W., 2007, Southwestern Willow Flycatcher surveys, demography, and ecology along the lower Colorado River and tributaries, 2006. Annual report submitted to U.S. Bureau of Reclamation, Boulder City, NV, by SWCA Environmental Consultants, Flagstaff, AZ, 194 pp.
- Myers, T., 2007, Hydrogeology of Cave, Dry Lake and Delamar Valleys and groundwater development proposed by the Southern Nevada Water Authority, White Pine and Lincoln, Nevada. Presentation to the Office of the Nevada State Engineer.
- SNWA, see Southern Nevada Water Authority.
- Southern Nevada Water Authority, 2007a, Water-Resources Assessment and Hydrogeologic Report for Cave, Dry Lake, and Delamar Valleys. Presentation to the Office of the Nevada State Engineer. Las Vegas, NV.
- Southern Nevada Water Authority, 2007b, Biological Resources for Cave, Dry Lake, and Delamar Valleys. Presentation to the Office of the Nevada State Engineer. Las Vegas, NV.
- Las Vegas Wash Coordination Committee, 2006, Year-End Report.
- U.S. Fish and Wildlife Service, 2007, Letter to Defenders of Wildlife regarding the Status of the Moapa River Memorandum of Agreement dated November 8, 2007.