

BLM_NV_NVSO_GWProjects

From: Lynn Davis <ldavis@npca.org>
Sent: Tuesday, October 11, 2011 4:41 PM
To: BLM_NV_NVSO_GWProjects
Subject: Submission re: SNWA Pipeline Proposal
Attachments: 2011 - 1011 NPCA Comments re SNWA Pipeline Proposal.pdf

Dear Ms. Woods,

The Nevada Field Office of the National Parks Conservation Association submits comments regarding SNWA's request for a right-of-way to pump and transport groundwater to Southern Nevada.

We thank the Bureau of Land Management for an exhaustive document that analyzes environmental impact and, in our comments, cordially ask that a few points be furthered examined IF there is a decision to proceed in the environmental review process.

Thank you. And, if you wouldn't mind, please confirm you received our comments.

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11 October 2011

Penny Woods, Project Manager
Bureau of Land Management
Nevada Groundwater Projects Office
Nevada State Office (NV-0910-2)
P.O. Box 12000
Reno, NV 89520-0006

RE: Public Comments on Clark, Lincoln and White Pine Counties
Groundwater Development Project Draft Environmental Impact
Statement DEIS

SUBMITTED VIA EMAIL TO:
nvgwprojects@blm.gov

Dear Ms. Woods,

Recommended: No Action Alternative

The National Parks Conservation Association (NPCA) provides the following comments regarding a Draft Environmental Impact Statement (DEIS) regarding Groundwater Development in Clark, Lincoln and White Pine Counties as requested in a right-of-way application (ROW) submitted by Southern Nevada Water Authority (SNWA).

SNWA's proposal would construct and operate a system of groundwater facilities including main and lateral pipelines, power lines, pumping stations, substation and pressure reduction stations, an underground water reservoir, water treatment plant and associated ancillary facilities primarily within a 2,640-foot wide corridor that traverses Clark, Lincoln and White Pine Counties in the State of Nevada.

NPCA supports the "NO ACTION" alternative, as described in the DEIS, which assumes that right-of-way will not be granted by the Bureau of Land Management (BLM) to SNWA. Lack of approval for the ROW would effectively preclude SNWA from developing (pumping and conveying) groundwater basins in Snake, Spring, Cave, Dry Lake and



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Delmar Valleys.

Specifically in these comments, NPCA focuses on the impacts of groundwater development in Snake and Spring Valleys which are located, respectively, on the east and west sides of the national park and bases these comments on analysis, as outlined by the BLM in the DEIS as it pertains to “special designations” which include federal mandates to protect the resources of Great Basin National Park.

National Parks Conservation Association (NPCA)

NPCA’s mission is to protect and enhance America’s National Parks for present and future generations. Founded in 1919, currently with more than 325,000 members, headquarters in our nation’s capital and 23 regional and field offices, NPCA plays a crucial role in protecting America’s treasured parks.

To this mission, one of NPCA’s strategic initiatives recognizes the need for review and oversight of large landscape ecosystems in the protection of national parks. As such, NPCA submits comments that holistically evaluate the impact SNWA’s proposed groundwater pumping plans, facilitated through a 300-plus mile right-of-way, has on the national park within the park boundaries and outside the park boundaries.

Congressionally Mandated Protections of Great Basin National Park

Great Basin National Park is one of the country’s youngest, established in 1986. Public Law 99-565 established Great Basin National Park “to preserve for the benefit and inspiration of the people a representative segment of the Great Basin of the Western United States possessing outstanding resources and significant geological and scenic values.”¹

Under the National Park Service Organic Act, national parks are

¹ Great Basin Enabling Legislation, Public Law 99-565



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created “to conserve the scenery and the natural and historic object and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.”

NPCA maintains that the DEIS does not adequately address “special designations” nor, through all the questions it raises and with limited knowledge of the quantity of groundwater does not assure that groundwater pumping will leave Great Basin “unimpaired and for the enjoyment of future generations.”

Great Basin National Park, which now encompasses 77,082 acres, is one of 395 national parks within the national park system, and is considered among an exclusive hierarchy of exceptionally scenic and Congressionally protected lands which includes Yosemite, Yellowstone, and Grand Canyon National Parks.

The park is an isolated mountainous park in the heart of the Great Basin, and in part forms a division between two hydrologic sub-regions of the Great Basin – Bonneville Basin Sub-region, to the east, and the Central Basin Sub-region, to the west.²

Because of the park’s elevation gradient, water sources, underground caves, and distance from urban centers (the nearest major cities of Salt Lake City and Las Vegas are 250 and 300 miles away) respectively, it serves as a sanctuary for an extensive variety of ecosystems and wildlife. Ecosystems vary from desert to alpine and endemic species like 4,000 to 5,000 year-old bristlecone pine found in the park and nowhere else.

In addition, the park’s pristine air quality and dark night skies are among the best in the nation. In 2004 and 2005, the National Park Service’s Night Sky Team determined that Great Basin is one of the darkest places in the country giving park visitors rare and uncommon opportunities to experience starry night skies.

² Great Basin Water Resources Management Plan, 1994



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Some of the park's assets include:

- Wheeler Peak, which towers above the surrounding valleys at 13,063 feet in elevation
- Three known and confirmed rock glaciers (Lehman, Theresa and North Fork Baker),
- Seventy-seven mammal species including mountain lions, bob cats and coyote,
- Unique, and never-been-seen-before cave species,
- Sixty miles of developed trails
- A 12-mile scenic paved drive to Wheeler Peak
- Lehman Caves and Visitor Center
- Visitor Center located in Baker and other ancillary facilities

Water Resources are Essential to the Survival of the Park.

Notably, Great Basin National Park has limited federal water rights. This is a point that the DEIS has not addressed, specifically in relation to this mission of the National Park Service to preserve and protect natural and cultural resources worthy of national park status.

Federal reserved water rights, in the park's enabling legislation, was assigned to Humboldt National Forest and for some use for Lehman Caves. In October 1989, after the Las Vegas Water District filed for large quantities of groundwater, the national park began a more than year process of protesting water applications in the area.³

Respectfully NPCA points out that the DEIS does not address adequately address the fact that the park was not, when it was

³ Great Basin Water Management Plan, 1994



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established, given appropriate water rights and, thus, faces magnified potential if groundwater is over pumped of too-little water to sustain the park.

As noted in a park resource assessment report, "Great Basin owes much of its ecological value and diversity to the water in streams and springs. Unfortunately, water withdrawals to serve populations in Las Vegas and southern Nevada are threatening groundwater that feeds Great Basin's water sources."⁴

Three precipitation regimes occur in the national park – Pacific, Continental and Gulf with accompanying storm types. Elevation heavily influences precipitation throughout the Great Basin. Annual rainfall is, notably, only six inches annually in the lower part of the national park, where a wild and vast cave system is located.

The park contains ten perennial streams, six subalpine lakes, five of which are located above 10,000 feet elevation, and 425 perennial springs. Water resources support abundant ecosystems that include montane and subalpine conifer forests and a cave system.

Water that originates in the park drains through eight major drainages into two basins, Snake and Springs Valleys, respectively to the east and west.

Within the park, water resources are essential to the survival of numerous vegetation types – desert shrub, mountain shrub, evergreen shrub, pinyon-juniper woodland, coniferous forest, and deciduous forest, meadow, alpine and riparian. Approximately 550 vascular plants occur within the park's vegetation.

Water resources also are essential to the survival of a wide array of fauna representing a mixture of Sierran, Great Basin and Rocky Mountain species including birds, amphibians, mammals including

⁴ Center for State of the Parks, Great Basin National Park Report, 2009



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mule deer, elk, badgers and several species of fox;

In 1994, an exhaustive report produced by the National Park Service entitled the "Water Resource Management Plan" distinguished surface and groundwater resources and reported that the "characteristics of groundwater flows in the park are largely unknown." While the USGS and NPS have ramped up collection, analysis and modeling of water resources over the past three years, much still remains unknown.

According to a resource assessment conducted by the Center for State of the Parks in 2008 and published in 2009, "the park's streams and springs are threatened by the increasing water needs of Las Vegas and the communities in southern Nevada.

The report stated that "the park's unique geology makes it difficult to predicate how groundwater withdrawals could affect the park's ecosystem, but any decreases in flow of park streams and springs could have far-reaching adverse effects on Great Basin's water dependent biological and geological systems.

Four groundwater monitoring wells were installed just outside the park entrance, with plans for addition of three monitoring wells inside the park following appropriate environmental processes.

The National Park's Cave System is Dependent on Water

Protection of Great Basin National Park's natural resources, as mandated in establishing legislation, is dependent on groundwater resources. "Limestone deposits are of special importance in the park as they contain numerous cave systems."⁵

In the mid 1880s Absalom Lehman, one of the first settlers in the area, stumbled upon a hole in the ground leading to an intricate and vast cave system with unique formations. By fall of 1985 Lehman had

⁵ Center for State of the Parks, Great Basin National Park Report, 2009



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installed stairs, ladders and led curious travelers through the cave by the light of dimly lit caverns. In 1922, President Warren G. Harding created Lehman Caves National Monument by proclamation, a 640-acre site.

The monument was, in 1986, made a national park and boundaries were vastly expanded to more than 77,000 acres. Currently Lehman Caves is one of the most popular visitor amenities. In addition to stalactites, helictes, and cave formations known as *draperies* and *soda straws* Lehman Cave has 300 rare formations called *shields*.

“In addition to the famous Lehman Caves, Great Basin contains more than 45 additional wild caves (caves with no lighting and no paved thoroughfares), most of which are closed to protect their fragile ecosystems.”

Groundwater flows are known to support the park’s cave system. Model Cave, for instance, is flooded every year with snowmelt but also there is evidence of moisture through the groundwater table.

The DEIS has not fully examined, nor can current groundwater modeling, establish at what level the national park’s cave system may be irreparably harmed or at what level cave species may be threatened and or endangered.

“Several of these cave systems are important hibernacula and maternity roosts for several species of bats.”

Within the past four years, the National Park Service has identified at least seven possible new cave species. Park staff has mapped and surveyed most caves, and through this work have discovered several endemic and new species of cave-dwelling fauna.⁶

A 2003 inventory uncovered a never-before-seen millipede (*Idogona lehmanesis*), another new species of millipede that is still being described and also represents a new genus, and a new species of

⁶ Great Basin National Park reports including The Midden, Summer 2011



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globular springtail that is still being described (Model Cave springtail, *Arrhophilates*)."

Lowering the Water Table Around the National Park May Result in a "Dust Bowl" Situation

Great Basin National Park has good data on air quality, with monitoring sites in the National Atmospheric Deposition Program, Clear Air Status and Trends Network, and Interagency Monitoring of Protected Visual Environments program present in the park. Currently, the park enjoys exceptional air quality – on most days visitors can see more than 186 miles and occasionally views exceed 230 miles.⁷

In 2004 and 2005, the National Park Service's Night Sky Team, formed in response to alarming increase of light pollution and its effects on national parks, visited Great Basin to test light levels. The sky team reported that Great Basin's night skies are among the darkest in the national park system, making it an ideal location for stargazing.

The park has, since, developed a strong, award-winning astronomy program that attracts thousands of people to star talks and an annual astronomy festival, the result of which is a fledgling but promising eco-tourism "hook" on which to appeal to travelers to bolster the area's tourism economy.

While the DEIS has analyzed lowered groundwater tables and potential impact on phreatophyte - deep-rooted vegetation in Snake and Spring Valleys that thrives on groundwater – NPCA maintains that modeling does not adequately address varied levels of phreatic zones and the cumulative impact of reduced vegetation, soil erosion and

⁷ Center for State of the Parks, Great Basin National Park Report, 2009



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subsequent air pollution.

Furthermore, NPCA maintains that the DEIS has not addressed eco-tourism benefits in the area fully, as it regards current travel patterns and anticipated and increasing travel inspired by dark night skies.

NPCA also requests that Visual Resource Inventory, as outlined in the DEIS, should be expanded to include impact on night sky viewing, and also comments that additional modeling and research should be undertaken to better evaluate the visual degradation of pumps surrounding the national park, on approach and from within the park boundaries.

Conclusion

In conclusion, NPCA restates a NO ACTION position which assumes that right-of-way will not be granted by the BLM to SNWA, which would effectively preclude SNWA from developing (pumping and conveying) groundwater basins in Snake and Spring surrounding Great Basin National Park, as well as groundwater basins in Cave, Dry Lake and Delmar Valleys.

NPCA notes that the BLM has produced exhaustive analysis of the impact of SNWA's proposal and asks that the following be reviewed, considered and, in some cases, bolstered with additional research in the environmental review process:

- Proximity to the federally protected national park, cross-referenced against the mission outlined under the National Park Organic Act;
- Proximity to nearby endangered wildlife and plant species, cross-referenced against the Endangered Species Act, Supreme Court rulings, and management plans within and outside the boundaries of the national park;
- Impact as it relates to the park's wildlife and plant species and limited water resources;
- Impact as it relates to the park's vast and wide cave system;



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- Impact as it relates to air pollution and the area's promising eco-tourism opportunities related to night skies;
- Visual distractions related to groundwater pumps on approach, from the east or west, to the park and from within the national park boundaries;
- Limited federal water rights within the national park and the potential for groundwater pumping plans to over tap limited supply;
- An unknown quantity of area water resources and the unknown impact of development in a sensitive watershed area that provides sustainable resources to a national park;
- Cumulative impacts of existing, currently planned, or foreseeable developments on nearby (or BLM) land; and
- Other threats that may be further identified.

We thank you for this opportunity to provide comments.

Sincerely,

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