IN THE OFFICE OF THE STATE ENGINEER OF THE STATE OF NEVADA

FILED
MAR 23 2011
STATE ENGINEER'S OFFICE

IN THE MATTER OF APPLICATION NUMBER 53989
FILED BY LVVWD/Southern Nevada Water Authority
ON October 17, 1989, 20 , TO APPROPRIATE THE
WATERS OF Underground Well

PROTEST

Comes now Defenders of Wildlife
Printed or typed name of protestant

whose post office address is 1130 17th Street, NW, Washington, D.C. 20036
Street No. or PO Box, City, State and ZIP Code

whose occupation is national, non-profit conservation organization and protests the granting

of Application Number 53989, filed on October 17, 1989, 20

by Las Vegas Valley Water District / Southern Nevada Water Authority to appropriate the

waters of SE1/4, SW1/4, Sec. 30, T. 02S., R. 64E. situated in Lincoln
Underground or name of stream, lake, spring or other source

County, State of Nevada, for the following reasons and on the following grounds, to wit:
See Attachment for Application No. 53989.

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THEREFORE the Protestant requests that the application be DENIED
Denied, issued subject to prior rights, etc., as the case may be

and that an order be entered for such relief as the State Engineer deems just and proper.

Signed
Agent or protestant

Adam Kron
Printed or typed name, if agent

Address 1130 17th Street, NW
Street No. or PO Box

Washington, D.C. 20036
City, State and ZIP Code

202-682-9400
Phone Number

District of Columbia : SS
Subscribed and Sworn to before me
this 22 day of March, 2011

Stephen M. McWilliams, Notary Public, D.C.
My commission expires April 30, 2015

Subscribed and sworn to before me this day of , 20

Notary Public

State of

County of

+ $25 FILING FEE MUST ACCOMPANY PROTEST. PROTEST MUST BE FILED IN DUPLICATE.

ALL COPIES MUST CONTAIN ORIGINAL SIGNATURE.

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ATTACHMENT TO PROTEST OF DEFENDERS OF WILDLIFE AGAINST APPLICATION NO. 53989, FILED OCTOBER 17, 1989, BY THE LAS VEGAS VALLEY WATER DISTRICT/ SOUTHERN NEVADA WATER AUTHORITY

This attachment lists and briefly describes the reasons and grounds for this protest of Defenders of Wildlife ("Protestant") against Application Number 53989. The Las Vegas Valley Water District and the Southern Nevada Water Authority ("SNWA" or "Applicant") as successor in interest filed this Application to appropriate groundwater from Lincoln County as part of its massive proposed network of wells and pipelines stretching across eastern Nevada from Clark County through Lincoln County and into White Pine County (the "Pipeline Project").

In sum, Protestant asserts as reasons and grounds for this Protest that: (1) there is insufficient unappropriated water in the proposed source of supply to support the application or the proposed use; (2) the proposed use would conflict impermissibly with existing water rights; (3) the proposed use would be detrimental to the public interest on environmental grounds and would be environmentally unsound as it relates to the basin from which the water is proposed to be exported; (4) the Applicant has not justified the need to import water from another basin; (5) the Applicant does not have and is not effectively implementing an adequate or reasonable plan for conservation in the area of proposed use; and (6) the Applicant has not demonstrated the good faith intent or financial ability and reasonable expectation to actually construct the work and apply the water to the intended beneficial use with reasonable diligence. These protest grounds are further explained below.

1. <u>There Is Insufficient Water Available In The Proposed Source of Supply</u>:

The State Engineer should deny the subject application pursuant to NRS § 533.370(5), because all available water within the perennial yield has already been appropriated – there is insufficient water available for appropriation in Dry Lake Valley Basin. The appropriation of this water, when added to the already approved appropriations in the basin of origin and hydrologically connected basins within the same flow system, will exceed the perennial yield of those basins and reduce the natural discharge of the flow system. Moreover, the State Engineer should keep with past practice and not depart from any measure of caution afforded by following his traditional measure of a basin's perennial yield. The State Engineer already has designated a number of hydrologically connected basins within the same flow system as the basin that is targeted by this Application, effectively acknowledging that those basins and potentially the entire flow system are fully appropriated, if not over-appropriated.

In addition, the State Engineer previously has found that there is too much uncertainty, too little sound data, and too great a risk of unsustainable over-appropriation in the interbasin flow system, of which this basin is a part, for further appropriations to be permitted until substantial additional data were gathered and evaluated. Until such additional data gathering and evaluation are complete it would be premature to permit any additional appropriation from hydrologically interconnected basins within the carbonate rock province, including the basin targeted by this Application.

Much of the recharge in the regional flow system and in the basin targeted by this and related applications from Applicant originates in mountainous areas of higher altitudes and lower temperatures. Climate change will adversely affect the temperatures and precipitation in these areas,

decreasing the amount of groundwater recharge. The State Engineer should first exercise caution and initiate additional study and monitoring to assess the effects of climate change on the perennial yield of these flow systems and basins.

2. **The Application and Proposed Use Would Conflict With Existing Water Rights:**

The State Engineer should deny Application 53989 pursuant to NRS § 533.370(5) because the proposed appropriation and use would conflict impermissibly with and impair existing senior water rights in the basin targeted by this Application and in hydrologically connected basins within the same flow system. When added to the previously approved appropriations in the subject basin and hydrologically connected basins within the same interbasin flow system, the proposed appropriation and use will exceed the perennial yield of the subject basins resulting in declining groundwater levels and unreasonable degradation of the level and quality of the groundwater.

Additionally, the basin within which this Application proposes to appropriate and export water is the source of water for hydrologically connected downgradient basins where it already has been appropriated by senior water rights holders.

The carbonate rocks that underlay the Dry Lake Valley basin are part of the White River Groundwater Flow System, a regional-scale carbonate-rock aquifer that flows generally toward the south and terminates at Muddy River Springs and the Virgin River – tributary to the Colorado River. Groundwater discharges in large springs in the Pahranagat Valley and Muddy River Springs Area. The use of water under this and other applications in the same basin and flow system will deplete the waters of the White River regional groundwater flow system, which supplies water to many springs, streams, seeps and wetlands that are home to threatened and endangered species and found within or near national wildlife refuges and national parks.

The use of water as proposed under the applications will interfere with water rights held by the Fish and Wildlife Service ("FWS"), National Park Service ("NPS") and Bureau of Land Management ("BLM") specifically to protect these waters and water-related resources. The underground source of water proposed to be appropriated will intercept the source of water that now maintains the numerous springs, seeps, marshes, streams, riparian and mesquite habitats that support wildlife and plant resources, including threatened and endangered species in the state of Nevada. FWS resources in this area include but are not limited to Pahranagat National Wildlife Refuge and Moapa Valley National Wildlife Refuge. NPS resources include Lake Mead National Recreation Area.

Approval of the applications would significantly reduce the water available at the refuges and other specially designated public lands and injure FWS's and NPS's water rights. Impairment of these water rights will also compromise the agencies' abilities to carry out their missions, continue to protect sensitive ecosystems and comply with federal environmental laws.

3. **The Appropriation And Export Of Water Proposed In This Application Would Be Detrimental To The Public Interest On Environmental Grounds And Would Be Environmentally Unsound As It Relates To The Basin From Which The Export Is Proposed:**

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The State Engineer should deny Application 53989 pursuant to NRS §§ 533.370(5) and 533.370(6)(c), because approval of this Application and inter-related applications from Applicant would threaten to cause serious environmental harms in the basin from which water is proposed to be appropriated and exported and in hydrologically connected downgradient basins within the same interbasin flow system, and therefore would be detrimental to the public interest and would be environmentally unsound as it relates to the basin of origin. The use of water under the applications will cause an unreasonable lowering of the water table, degradation of water quality, destruction of environmental, ecological, scenic and recreational values, all to the detriment of the public interest.

A. Harm to Wildlife and Wildlife Habitat:

The proposed appropriation, export and use would result in severely lowered groundwater levels in the basin from which the appropriation and export is proposed and in hydrologically connected downgradient basins within the same interbasin flow system. Those declining groundwater levels will result in drying out springs, seeps, wetlands, wet meadows, and moist playas, and in killing off vegetation that is groundwater-dependent in the subject basin and hydrologically connected downgradient basins. This loss of water will cause significant harm to many wildlife species and to wildlife habitat in the basin from which this Application proposes to appropriate and export water and in hydrologically connected downgradient basins within the same interbasin flow system. Among the species that will be harmfully impacted by this loss of water are a number of federally and state protected species, including federally listed threatened and endangered species, which will be threatened with extinction as a result of the proposed appropriation and export of this water. The list of species likely to be harmfully impacted by the appropriation and export of water proposed in this Application, includes fish, amphibians, other aquatic species, groundwater-dependent mammals and other terrestrial species, bird species that depend on the springs, wetlands, wet meadows, and vegetation supported by groundwater, and a variety of insects, including rare butterfly species.

The public interest will not be served if waters, water-related resources and water rights to support these resources and national assets – national parks and monuments, national wildlife refuges, and national recreational areas – are diminished or impaired as a result of these applications. These federal lands and waters were established to protect imperiled fish and wildlife and their habitats. Potentially affected areas include but are not limited to Pahranagat National Wildlife Refuge and Moapa Valley National Wildlife Refuge, established to protect the endangered Moapa dace, endangered plant and animal species and migratory birds.

Loss of adequate water supply to national wildlife refuges could eliminate or degrade wildlife habitat and result in the loss of migratory birds, threatened and endangered species and other imperiled wildlife the refuges were established to protect. This could defeat the purposes of the refuges and interfere with FWS's responsibilities under the Migratory Bird Treaty Act ("MBTA"), Endangered Species Act ("ESA"), National Wildlife Refuge System Administration Act and other laws. Acts that reduce the refuges' water supply could constitute a violation of the MBTA and ESA.

The use of water as proposed under the applications will degrade wetlands and riparian habitats, including those in Lake Mead National Recreation Area. Loss of adequate water supply to national parks and monuments could eliminate or degrade habitat for threatened and endangered species and other wildlife. Appropriation and diversion from these applications could adversely these species. This could interfere with the NPS's responsibilities under the National Park Service Organic Act,

ESA and other federal laws. Reducing the parks' water supply could constitute a violation of the ESA.

Loss of adequate water supply to other federal lands could eliminate or degrade protected and sensitive habitats. The use of water under the applications will interfere with the BLM's capability to provide water for the multiple uses under the Federal Land Policy and Management Act including, but not limited to recreation, range, wildlife, minerals, watershed and fish. The use of water under the applications will interfere with the BLM's responsibilities to protect wetlands and to conserve listed threatened or endangered species.

Threatened and endangered species are found throughout Nevada yet outside of the parks and refuges. Reducing water supplies to these species and their habitats could adversely affect these species and could constitute a violation of the ESA and other laws. The State Engineer must also ensure that wildlife which customarily use water from a spring or that has seeped to the surface of the ground will have access to it.

Wildlife habitat areas and refugia likely to be harmed by the appropriation and export of water proposed in this Application and SNWA's Pipeline Project, of which this Application is a part, include, but are not limited to, Desert National Wildlife Refuge Complex, Kirch Wildlife Management Area, Key Pittman Wildlife Management Area, Overton Wildlife Management Area, Amargosa Valley Pupfish Station, Humboldt National Forest, Death Valley National Park, Great Basin National Park, Ash Meadows Area of Critical Environmental Concern ("ACEC") and Shoshone Ponds ACEC.

Because of these harmful impacts, the State Engineer should deny this Application pursuant to NRS §§ 533.370(5) and 533.370(6)(c).

B. Degradation of Air Quality:

The proposed appropriation, export, and use would result in severely lowered groundwater levels in the basin from which the appropriation and export is proposed and in hydrologically connected downgradient basins within the same interbasin flow system. Those declining groundwater levels will result in drying out springs, seeps, wetlands, wet meadows, and moist playas, and in killing off vegetation that is groundwater-dependent in the subject basin and hydrologically connected downgradient basins. This pervasive desiccation, in turn, will make these previously moist and/or vegetated areas dramatically more susceptible to greatly increased mobilization of sediment, or dust. In other words, the desiccation of these areas will result in much more frequent and severe dust storms in the basin expressly targeted by this Application and in downgradient hydrologically connected basins in the same flow system. These dust storms likely will have catastrophic impacts on human and animal health in those basins and in additional downwind communities. In addition to causing severe respiratory problems, the particulate matter that will be mobilized in dust storms in these areas is likely to contain radioactive fallout that heretofore has been held in place by the groundwater-fed moisture in the soil and vegetation. These dust storms also will dramatically degrade the aesthetic and recreational value of the basins in which they occur and additional downwind areas. Because of these harmful impacts, the State Engineer should deny this Application pursuant to NRS §§ 533.370(5) and 533.370(6)(c).

C. Destruction of Recreational and Aesthetic Values:

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The severe decline in groundwater levels that will result from this Application and SNWA's Pipeline Project, of which this Application is a part, will kill off vegetation and wildlife, eliminate many of the springs and wet areas, and degrade air quality and visibility in the basin expressly targeted by this Application and hydrologically connected downgradient basins in the same interbasin flow system. These impacts will profoundly degrade the aesthetic values and appeal of all these basins and additional downwind areas. Similarly, the loss of water, wildlife, clean air, and good visibility will destroy the recreational uses and value of these basins and additional downwind areas. For these reasons, as well, the State Engineer should deny this Application pursuant to NRS §§ 533.370(5) and 533.370(6)(c).

D. Degradation of Water Quality:

The groundwater drawdown that would be caused by the appropriation and export of water proposed in this Application would lower the static water table in both the basin fill and carbonate rock aquifers within the affected basins to such an extent that brackish groundwater and other pollutants would infiltrate those aquifers. The consequence of this infiltration of poor quality groundwater and other pollutants would be significant degradation of groundwater quality in the basin expressly targeted by this Application and downgradient hydrologically connected basins within the same interbasin flow system. This degradation of groundwater quality would prevent humans, livestock, and wildlife from relying on the groundwater from these aquifers, as they have throughout history. Because such an outcome would be detrimental to the public interest and would be environmentally unsound in the basin of origin, the State Engineer should deny this Application pursuant to NRS §§ 533.370(5) and 533.370(6)(c).

4. <u>The Applicant Has Not Justified The Need To Import Water From Another Basin</u>:

SNWA has not justified the need to import water from another basin. SNWA has available to it other more feasible and cost-effective options, such as increased water conservation. The State Engineer should not permit such a massive interbasin transfer project, which is likely to be so economically and environmentally damaging to the basins of origin and hydrologically connected downgradient basins in the same flow system, when more cost-effective and environmentally sound alternatives are readily available to the Applicant. The current per capita water use in SNWA's service area currently far exceeds that of similarly situated western cities. Thus, there is significant potential for more cost-effective conservation alternatives, which would avoid the devastating impacts to the basins of origin. Additionally, given the current population, housing, and water use trends, the water demand projections that SNWA has been using to justify its water importation project are no longer credible. So, the State Engineer should deny the applications pursuant to NRS § 533.370(6)(a) because SNWA has not justified the need to import water from another basin.

5. <u>The Applicant Has Not Implemented A Sufficient Conservation Plan</u>:

Given the fragility of rural Nevada's high desert ecosystems and the absolutely vital role their scarce water resources play in supporting rural economies, agriculture, and flora and fauna, it should be mandatory for SNWA and its client water districts to achieve the highest practicable level of water conservation – as measured by reference to presently available technologies and methods and to the highest conservation levels achieved by sister western cities – before being permitted to transfer

groundwater from rural basins of origin to SNWA's service area to feed its growth and excessive per capita water use.

SNWA's conservation plan falls far short of meeting this goal. The current per capita water use in SNWA's service area currently far exceeds that of similarly situated western cities. The State Engineer should require SNWA to submit a conservation plan that utilizes all feasible conservation strategies to achieve concrete conservation goals that are at least as aggressive as those of the most conservation-minded other western cities. Unless SNWA submits such a plan, the State Engineer should deny the applications pursuant to NRS § 533.370(6)(b).

6. **The Applicant Has Not Demonstrated The Good Faith Intent Or Financial Ability And Reasonable Expectation To Actually Construct The Work And Apply The Water To The Intended Beneficial Use With Reasonable Diligence:**

To date, the Applicant has not provided the State Engineer or the public with a cost projection for the pipeline project. Estimates for such a project, however, are in the tens of billions of dollars. As SNWA's top management has stated, SNWA does not plan to build this Project in the near future and may never build it, saying they simply want to ensure that they have the option of doing so should they decide to in the future. *See* Brendan Riley, *Authority Keeps Pipeline Options Open: Mulroy Wants Construction Permits in Hand*, Las Vegas Review Journal (Feb. 12, 2009), *available at* http:///www.lvrj.com/news/39483777.html. Further, General Manager, Patricia Mulroy has publicly conceded that with the profound economic downturn that has settled with particular severity on southern Nevada, SNWA's financial base has dramatically contracted, calling into question its ability to construct such a project. *See* I-Team, *Dire Predictions Made on Las Vegas Water Supply*, Channel 8 Eyewitness News (Feb. 11, 2009), *available at* http://www.lasvegasnow.com/Global/story.asp?s=9829711. Because it appears that SNWA may never construct the project and that SNWA's ability to obtain financing for the project is highly doubtful, the State Engineer should deny the Application pursuant to NRS § 533.370(1)(c) as a speculative request to tie up Nevada's water resources indefinitely.

7. **Protestant Reserves The Right To Amend This Protest As May Be Warranted By Future Developments:**

SNWA's proposed groundwater export project is on a scale never before seen in Nevada, or in the United States. Thus, it is not possible to anticipate all potential adverse impacts without further study. New scientific or other data and changed circumstances may uncover different bases for this protest. Accordingly, the above-named Protestant reserves the right to amend the subject protest to include such issues as they develop.

8. **Incorporation Of Other Protests To SNWA's Applications By Reference:**

The above-named Protestant additionally incorporates by reference as though fully set forth herein and adopts as its own, each and every reason or ground for other protests to this Application and/or to any Application filed that is included in SNWA's groundwater export project and filed pursuant to NRS § 533.365.