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

IN THE MATTER OF APPLICATION NUMBER 79271
FILED BY Southern Nevada Water Authority
ON January 28, 20 10, TO APPROPRIATE THE
WATERS OF underground Snake Valley

PROTEST

FILED
APR 14 2010
STATE ENGINEER'S OFFICE

Comes now Kenneth F. Hill & Kathryn A. Hill
Printed or typed name of protestant

whose post office address is HC 61 Box 550 Wendover UT 84083
Street No. or PO Box, City, State and ZIP Code

whose occupation is School secretary (Kenneth) Teacher (Kathryn) and protests the granting

of Application Number 79271, filed on January 28, 20 10

by Southern Nevada Water Authority to appropriate the

waters of underground Snake Valley situated in White Pine
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:

Please see the attached

RECEIVED
2010 APR 14 PM 1:15
STATE ENGINEERS OFFICE

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 Kathryn A. Hill Kenneth F Hill
Agent or protestant

Kenneth F Hill Kathryn A. Hill
Printed or typed name, if agent

BETH B. ANDERSON
NOTARY PUBLIC • STATE of UTAH
290 PONY EXPRESS RD HC 61
CALLAO, UT 84083
COMM. EXP. 2-9-2011

Address HC 61 Box 550
Street No. or PO Box

Wendover UT 84083
City, State and ZIP Code

435 693 3120
Phone Number

Subscribed and sworn to before me this 8 day of April, 20 10

Beth B Anderson
Notary Public

State of Utah

County of Juab

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

ALL COPIES MUST CONTAIN ORIGINAL SIGNATURE.

Attachment to Protest of
Kenneth and Kathryn Hill
against Application No. **79271**,
Filed by the Southern Nevada Water Authority

This attachment lists and briefly describes the reasons and grounds for this protest of **Kenneth and Kathryn Hill** against **Application Number 79271**. The Southern Nevada Water Authority (SNWA) has filed this Application to appropriate **ground water from Snake Valley** 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). We believe this project will greatly impact Utah, as well as Nevada, residents.

1. **There is insufficient water available in the proposed source.**

The State Engineer should deny the applications because there is insufficient water in Snake Valley for the proposed applications. The current science does not have consensus about recharge, evapotranspiration, and interbasin flow in the valley. Residents of Snake Valley have observed declining water tables, smaller streams, and drying wetlands from water being withdrawn for agricultural use. These signs are compelling and factual and should be considered as part of the available science for determining available water. BARCASS estimates on Snake Valley discharge/recharge are inadequate due to insufficiencies of the way PRISM was used and insufficient measurements.

The science available is unclear about interbasin flow. It is possible that water would be doubly allocated if water is removed from Spring Valley. BARCASS shows a significant amount of interbasin flow from Spring Valley into Snake Valley. If water is removed from Spring Valley, there is a possibility of interfering with flow to Snake Valley unless more clear and accurate data can be gathered about the flow system. Monitoring, while a valuable tool, may not be finely tuned enough to prevent massive amounts of damage done to the environment until too late.

Further, this application would remove water from the basin, causing greater distress to the environment than water which is removed from the ground and used within the basin. Because of the lack of solid science and difficulties in ongoing monitoring, this application should be denied.

2. **Application and proposed use will conflict with existing water rights.**

The State Engineer should deny the applications because the proposed appropriation would conflict with existing senior water rights. In order to capture the large amounts of ET considered available water, a large cone of depression will be necessary around the pumping area. Snake Valley is extremely long and "available ET" is scattered throughout Snake Valley. It would be virtually impossible to capture ET from the Callao area without total devastation near Garrison/Baker. This will obviously severely impact those users (people and wildlife) near the pumping areas. Mitigation has been offered for those water rights holders who are impacted. This is an acknowledgement by the applicant that they recognize the strong likelihood of severe impacts.

3. **<u>The appropriation and export of water would be detrimental to the public interest because of the environmentally unsound practices necessary to obtain water.</u>**

The State Engineer should deny the applications because the withdrawal and export of this water will cause irreparable damage to the environment. Capturing ET as available water will kill plant life which holds the soil together. It is extremely difficult, if not impossible, to establish non-noxious, non-invasive plants in our desert alkaline soil. Further, the ET is spread over a large valley running nearly 100 miles in length. Capturing ET over the length of the valley would be necessary to get the so-called available water even though pumping could only occur at one end of the valley. In practical terms, capturing the available ET could only happen if the flow system is disturbed causing irreparable and permanent damage.

Pumping heavily in one end of the valley could cause reverse flow, creating irreparable damage, including reverse flow near Callao, resulting in permanent salt-contamination damage to the water table.

Because of the large size of the phreatophytic area supported by the aquifer and the limited area from which to pump, maximum damage over a large area will occur for a limited amount of water.

<u>4. The appropriation and export of water would be detrimental to the environment.</u>

The State Engineer should deny the applications because the removal of water will destroy our environment. In the process of capturing ET and lowering the water table, springs, seeps, wetlands, and other places will be harmed.

A. Destruction of Wildlife

Wildlife and their habitats will be threatened by reduced water flow and/or dried up wetlands. The wildlife threatened by the application includes sensitive and endangered species. Wildlife is also an important part of the value of the valley. Tourists and hunters, as well as local residents, enjoy the wildlife that will be irreparably harmed by the removal of plants and drying water sources.

B. Destruction of Plant life

Plant life is an important part of a healthy ecosystem. To deliberately denude the land of plants without an adequate plan of replacing those plants is irresponsible and injurious. The heavy alkaline soil and unpredictable rainfall makes it extremely difficult to replace vegetation. We have examples of roads not used for decades that still remain largely bare of vegetation. Reseeding after power lines and phone lines were put in has not been successful. The areas are still largely bare or noxious weeds such as Russian thistle have replaced the native vegetation. If large areas of land are denuded of native vegetation and reseeding efforts are ineffectual, the lives and health of residents will be threatened. The potential for widespread introduction and spread of invasive and noxious weeds could be an extremely serious problem, diminishing the carrying capacity and safety of range.

C. Destruction of aesthetic value

The severe decline in groundwater levels will kill off vegetation and wildlife, destroy many springs, meadows and wetlands. Air quality due to dust storms will be diminished and the aesthetic pleasure of the land will be destroyed. This will occur on private

property as well as on public lands. So the net result will be a diminishment of the value of land, both public and private.

D. Degradation of Air Quality

In order to capture available water currently used as ET in plants, there would need to be a systematic and methodical extinction of plants using groundwater. With no plants to hold soil in place, the results will be very susceptible to dust storms. Our frequent salt storms already are problematic for the local power company because of salt residue left on power poles. The poles catch on fire leaving residents without power for hours at a time. The increased possibility of power outages will decrease public safety in many ways. More dust will cause increased problems, including the health of the residents of the valley.

5. The appropriation and export of water would be detrimental to the communities of the area.

Appropriation and removal of water from this area has been a threat to our communities in the past, the present, and will be in the future.

A. Limiting growth and development

In the past, application for water rights has been denied individuals because of the applications made by SNWA. This has limited growth and development in the valley. In the present, as well as limiting growth, it has been a factor when trying to sell property and has had the effect of losing a sale or diminishing the value of the property. In the future, as water becomes a more scarce commodity, the price of water will increase – both in the developing of wells and the pumping of wells.

B. Increasing the costs of living

The added cost of getting water creates a heavy burden for small communities. Many of the residents already struggle financially and the burden of increased cost of water can be the deciding factor of survival here in the valley or being forced to move. We have already experienced loss of populations in parts of the valley. Some of the expressed reasons for moving have been the uncertainty of the future and increasing costs.

C. Increased dangers to the communities

Removing water from underground may have detrimental impacts on local fire departments. It will increase of the risk of fires and limit the availability of water to put out fires. Additionally, increased risks of power outages (see above) decrease communications necessary for public safety.

D. Destroying viability of communities

Communities cannot function well when the population gets below a critical mass to provide the varied functions of a community. We are a small population and our community can be defined as the immediate community or it can be defined as a larger community that incorporates the length of the valley. Residents enjoy the social benefits and economic benefits of mutual friendship. However, we all suffer when members of the community are forced to move away. Many of the members of our communities do not have a lot of money and don't have the resources to weather difficult times. A seemingly small upset is enough to force people to move away. The impacts of water removal from this valley will make it more difficult for residents to survive in the valley, thus causing the viability of communities to be destroyed. Furthermore, the pall that will

be cast over rural communities due to the negative impacts and uncertainties of this scheme will have debilitating effects on local communities.

6. Applicant has not justified the need to import water from another basin.
SNWA has not justified the need to import water from our basin. SNWA has many resources from which to draw water, while the residents of the proposed donation basin have only one source. Because of the potentially devastating impacts to the basin, all alternatives should be considered as better options than the proposed plan.

A. Better conservation of municipal water in southern Nevada.
Although Las Vegas began a conservation water plan, it discontinued it when money got scarce. The conservation plan was limited, only targeting middle income users rather the wealthy, high-end users. The per capita water usage is much higher than other desert cities such as Tucson.

B. Modernize water requirements to actually reduce water demands.
Using a tiered water rate plan, mandating water-saving household fixtures, rethinking the use of gray water can all help the overall water usage in southern Nevada. None of these plans are currently very stringent.

C. Alternatives for getting more water
Desalination, drying up of man-made lakes, curtailing urban sprawl are all more environmentally sound alternatives than drying up rural Nevada.

7. Applicant has not established credible and sound ways to finance water withdrawal and export.

SNWA has committed a lot of money for the pipeline and pumping project including monitoring, management, and mitigation plans for water users and environments that will surely be impacted by the project. However, most money comes from new hookup fees in southern Nevada. Since the economic downturn, it is no secret that SNWA has lost money and is now struggling to meet all its commitments which include running ranches at record losses in Spring Valley and the third straw in Lake Mead.

Apart from the cost of pumping and pipeline construction, there are long term costs associated with the water withdrawal for managing, monitoring and mitigating impacts. SNWA has committed to a sizeable monitoring plan in Spring Valley under the stipulated agreement. They have also shown willingness to commit to an expensive plan in Snake Valley through a Utah/Nevada agreement required by law before pumping can begin.

However, there are no assurances that SNWA will be able to meet all the financial commitments either now or in the future. Any 3M plan must have ironclad financial resources that will be able to survive for decades, through changing personnel and changing economies. Because of the lack of financial dependability to support this project for the decades when pumping will cause impacts to other water uses, this application should be denied.

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.

9. Protestant reserves the right to amend this protest as may be warranted by future development.

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.