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

IN THE MATTER OF APPLICATION NUMBER 79500
FILED BY Southern Nevada Water Authority
ON February 11, 20 10, TO APPROPRIATE THE
WATERS OF Keegan Hayfield Springs #2 in Basin 184

PROTEST

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2010 APR 13 PM 3: 1
STATE ENGINEERS OFFICE
STATE ENGINEER'S OFFICE

Comes now The Confederated Tribes of the Goshute Reservation
Printed or typed name of protestant

whose post office address is P.O. Box 6104, 195 Tribal Center Road, Ibapah, Utah 84034
Street No. or PO Box, City, State and ZIP Code

whose occupation is Tribal Government and protests the granting

of Application Number 79500, filed on February 11, 20 10

by Southern Nevada Water Authority to appropriate the

waters of Keegan Hayfield Springs #2 situated in Basin 184
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.

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.

GABRIELLE KANE NOTARY PUBLIC STATE OF IDAHO

Signed [signature]
Agent or protestant

Rupert Steele, Chairman
Printed or typed name, if agent

Address P.O. Box 6104, 195 Tribal Center Road
Street No. or PO Box

Ibapah, Utah 84034
City, State and ZIP Code

435-234-1138
Phone Number

Subscribed and sworn to before me this 2 day of April, 20 10

Gabrielle Kane
Notary Public

State of Idaho
County of Bannock

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

**ALL COPIES MUST CONTAIN ORIGINAL SIGNATURE.**

**ATTACHMENT TO:**

**PROTEST OF APPLICATION NUMBER __79500__,**
**FILED BY __Southern Nevada Water Authority__,**
**ON _February 11, 2010, FROM WATERS OF _Keegan Hayfield Springs #2, Basin 184 .**

This attachment lists and briefly describes the reasons and grounds for this protest of **Confederated Tribes of the Goshute Reservation (CTGR)** ("Protestant") against Application Number ___79500___. The Southern Nevada Water Authority ("SNWA" or "Applicant") has filed this Application to appropriate spring water from ___Basin 184_____ 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").

## SUMMARY

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, including federally reserved water rights, and protectable interests in domestic wells; (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 proposed use would be detrimental to the public interest on economic grounds and would unduly limit future growth and development in the basin from which the water is proposed to be exported; (5) the proposed action is not an appropriate long-term use of water; (6) the Applicant has not justified the need to import water from another basin; (7) the Applicant does not have and is not effectively implementing an adequate or reasonable plan for conservation in the area of proposed use; and (8) 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. There Is Insufficient Water Available In The Proposed Source of Supply:

The State Engineer should deny the subject applications pursuant to NRS § 533.370(5), because there is insufficient water available for appropriation in the proposed source of supply. 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. 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. In fact, the Bureau of Indian Affairs and the United

States Geological Survey have been formulating plans to conduct groundwater studies on CTGR lands pertinent to SNWA proposed pumping activities. Moreover, the SNWA has not incorporated data on climate variability into their groundwater models and projections of impacts on other water resources, which in effect, inaccurately portrays SNWA's pumping impact on the perennial yield of the basin and the total surrounding and downgradient environment. That said, additional data gathering and evaluation have not been completed and until they are 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.

2. **The Application and Proposed Use Would Conflict With Existing Water Rights And Protectable Interests In Domestic Wells:**

The State Engineer should deny the subject Application pursuant to NRS § 533.370(5) because the proposed appropriation and use would conflict impermissibly with and impair existing senior and federally reserved water rights for the CTGR (*Winters* Doctrine) and protectable interests in domestic wells in the basin targeted by this Application and hydrologically connected basins within the same interbasin 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 water in existing wells and groundwater from CTGR.

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 and where federally reserved water rights exist on tribal lands. Groundwater modeling studies already have shown that prospective pumping by SNWA from a large series of sources, and this Application is a part of that series, would cause groundwater drawdown for the CTGR (see Deacon et al. 2007 in Nature 57:688), which is in direct violation of the *Winters* Doctrine. Because of these issues, the State Engineer should deny the Application pursuant to NRS § 533.370(5).

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:**

The State Engineer should deny the subject Application pursuant to NRS §§ 533.370(5) and 533.370(6)(c), because approval of this Application and SNWA's Pipeline Project, of which this Application is a part, 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, adversely impact CTGR environment and water resources that are heavily relied upon by CTGR, and would be environmentally unsound as it relates to the basin of origin.

**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 basins within the same interbasin flow system. Those declining groundwater levels will decrease and eliminate water discharge from springs and seeps, decrease and eliminate water in wetlands, wet meadows, and ephemerally filled playas, which will result in the elimination and shift of various vegetation communities that are groundwater-dependent in the subject basin and hydrologically connected downgradient basins. This loss of water will cause significant direct 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. Nearly 137 spring- or riparian-dependent species (and their associated habitats) are expected to be impacted by the SNWA project, including 20 threatened or endangered species of mammals, birds, fishes, amphibians, aquatic and terrestrial insects, springsnails, and plants. Those threatened and endangered species will be threatened with extinction as a result of the proposed appropriation and export of this water. Moreover, the CTGR used the proposed water application region for current and historic hunting, gathering, and spiritual purposes.

The 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, Pahranagat National Wildlife Refuge, Kirch Wildlife Management Area, Key Pittman Wildlife Management Area, Moapa Valley National Wildlife Refuge, Overton Wildlife Management Area, Ash Meadows National Wildlife Refuge, Amargosa Valley Pupfish Station, the Desert National Wildlife Refuge Complex, Great Basin National Park, and Shoshone Ponds Natural Area.

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 basins within the same interbasin flow system. Those declining groundwater levels will result in drying out of natural communities in the subject basin and hydrologically connected 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 proposed pumping by SNWA will result in desertification of these areas, increasing the frequency and severity of dust storms in the basin expressly targeted by this Application and in hydrologically connected basins in the same flow system. These dust storms likely will have catastrophic impacts on human and animal health and welfare 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. Such desertification has resulted from groundwater pumping in many other environments, including the Owens Valley and Mono Lake Basin, which recorded the highest concentrations of dust ever recorded in North American during the autumn of 2009 (ca. 60,000 $ug/m^3$ – more than 400 times the federal Clean Air Act limit. The Goshute Reservation is particularly susceptible to the impacts of desertification and dust storms given the proximity and

downwind location from the proposed Application and respective basin. All of these impacts will increase over time. 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:**

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 reduce, shift, and eliminate vegetation and wildlife, eliminate springs and wet areas, and degrade air quality and visibility in the basin expressly targeted by this Application and hydrologically connected 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. This basin in which this Application falls is of great cultural and aesthetic value to tribal members of the CTGR. 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 and become more concentrated. 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 tribal people, livestock, and wildlife from relying on the groundwater from these aquifers, as they have throughout history. All of these impacts will increase over time. 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).

**E. Degradation of Cultural Resources:**

The environmental harms described above also will lead to the pronounced degradation, and in some instances destruction, of cultural resources in the basin expressly targeted in this Application and in hydrologically connected basins within the same interbasin flow system. Cultural resources likely to be harmed by the appropriation and export of water proposed under this Application and SNWA's entire Pipeline Project, of which this Application is a part, include but are not limited to Native American ritual worship and other sacred sites, prehistoric Native American village or dwelling sites, Native American graves or burial sites, and scenes of historic massacres of Native Americans. CTGR is inextricably linked to water resources and the tribes hold many spring and wetland areas (and the natural surround environment that includes specific plants and animals) as integral components of their cultural and spiritual resources. For example, this Application would specifically impact the Swamp Cedars and Warm Springs cultural/sacred sites because expected groundwater drawdown would cause the spring to dry up and the physiognomic landscape to be altered. These and other cultural resources that would be damaged if this Application is approved constitute an important part of Nevada's, and the Nation's, historical and cultural legacy. All of these impacts will increase over time. Therefore, the State

Engineer should deny this Application pursuant to NRS § 533.370(5) because the proposed appropriation and use would cause degradation of cultural resources that would be detrimental to the public interest.

4. **<u>The Appropriation And Export Of Water Proposed In This Application Would Be Detrimental To The Public Interest On Economic Grounds And Would Unduly Limit Future Growth And Development In The Basin From Which The Export Is Proposed</u>:**

**A. Undue Limitation Of Future Economic Activity and Growth In Basin Of Origin:** As detailed elsewhere in this Protest Attachment, permitting the appropriation and export of water proposed in SNWA's Application will exceed the perennial yield of and lead to declining groundwater levels in the basin from which the export is proposed. In addition to the other effects that this drawdown will cause, it will eliminate specific sources and the overall available supply of groundwater in the basin to support both existing economic activities and potential future economic growth in the basin of origin. Existing economic activities that would be undermined include agriculture and livestock uses, domestic uses, ecosystem markets for carbon sequestration and water quality, and recreational uses, including self-guided and outfitter-led hiking, camping, fishing, hunting, birding, and the like. Future economic growth and development that would be unduly limited include the expansion of all of the above-listed activities, particularly the expansion of businesses related to water development, recreation, tourism, ecosystem markets, and potential future energy development. In light of the undue economic harm the proposed use would cause in the basin of origin, the State Engineer should deny this Application pursuant to NRS § 533.370(6)(d).

**B. Undue Economic Harm Will Extend To The Economies And Communities of Downgradient Hydrologically Connected and Downwind Basins:** These economic harms will not be limited to the basin expressly targeted in this Application, but rather will extend outward as the groundwater depletion from SNWA's Pipeline Project radiates outward into hydrologically connected basins within the same interbasin flow system and to downgradient basins. Thus, the appropriation and export proposed in this Application also would cause the same host of economic harms to the rural economies and communities of other basins. This Application, and the large number of other SNWA Applications in Spring and Snake Valleys, are predicted to affect groundwater levels and water quality on CTGR. Any loss of CTGR groundwater resources unduly harms CTGR by degrading current uses and greatly constraining future economic development opportunities. CTGR have federally recognized water rights and any groundwater loss and corresponding economic loss are in violation of the *Winters* Doctrine. In addition, CTGR yields economic benefits from guided big-game hunts and the loss of water resources that this Application would contribute to negative impacts on big game animals by decreasing populations and shifting animal distributions to the detriment of CTGR's capacity to harness that economic benefit. Furthermore, existing economic activities that would be undermined include agriculture and livestock uses, domestic uses, recreational uses that include self-guided and outfitter-led hiking, camping, fishing, hunting, birding, and the like. Future economic growth and development that would be unduly limited include the expansion of all of the above-listed activities, particularly the expansion of businesses related to water development, recreation, tourism, ecosystem markets, and potential future energy development.

Therefore, the State Engineer should deny this Application pursuant to NRS § 533.370(5) because it would be detrimental to the public interest.

5. **The Proposed Action Is Not An Appropriate Long-Term Use Of Nevada's Water:**

Given the numerous alternatives available to SNWA that are more cost-effective, that avoid devastating impacts to tribal and rural communities and their economies, and that avoid impacts to the environment, SNWA's rural water grab is not an appropriate long-term use of Nevada's scarce water resources. The State Engineer should require SNWA to actively pursue alternatives to the rural water grab, especially including water conservation within the Las Vegas Valley and desalination, before granting water rights to SNWA from the subject valleys. In the meantime, the State Engineer should deny the applications pursuant to NRS § 533.370(6)(d) as an inappropriate long-term use of water.

6. **The Applicant Has Not Justified The Need To Import Water From Another Basin:**

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 and the use of desalination for downstream Colorado River users in exchange for additional Colorado River water. 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 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, by at least 35%. In addition, an Aquafina bottles water in Las Vegas and exports that water across the US. To maintain or expand such unsustainable water uses is not justification of need to import water. Thus, there is significant potential for more cost-effective conservation alternatives, which would avoid the devastating environmental and socioeconomic 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 the Pipeline 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.

7. **The Applicant Has Not Implemented A Sufficient Conservation Plan:**

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. The State Engineer should also allow interested and affected parties to comment on SNWA water conservation plan and require SNWA to consider and effectively incorporate water conservation suggestions to the greatest possible extent. Unless SNWA submits such a plan, the State Engineer should deny the applications pursuant to NRS § 533.370(6)(b).

8. **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:**

**A. Changed Circumstances, Uncertain Intent, Doubtful Financing:**
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.

**B. Failure To Demonstrate Ability to Access Land Containing Point of Diversion:**
The Applicant has not demonstrated a reasonable expectation or ability to put the water to beneficial use because it does not have access to the lands on which the potential point of diversion is located. In some instances, the Applicant has not even begun the process to establish access, showing that Applicant does not have the intention to, and is not likely to, develop the water in a reasonable time with due diligence.

9. **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.

**10. <u>Incorporation Of Other Protests To SNWA's Applications By Reference:</u>**

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.