BEFORE THE STATE ENGINEER, STATE OF NEVADA
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES, DIVISION OF WATER RESOURCES

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IN THE MATTER OF APPLICATION No. **79448** FILED BY **WASHOE COUNTY** ON **1 FEBRUARY 2010**, TO APPROPRIATE THE WATERS OF: **UNDERGROUND in Smoke Creek Desert, Hydrographic Basin 021.**	**PROTEST AND REQUEST TO DENY APPLICATION 79448; PETITION FOR HEARING PURSUANT TO N.R.S. 533.365; PETITION FOR A HYDROLOGICAL AND ENVRIONMENTAL STUDY PURSUANT TO N.R.S. 533.368**

COMES NOW **DAVID RUMSEY, MICHAEL S. MOORE, LINDA FLEMING AND JOHN G. & RACHEL BOGARD,** as individuals (hereafter "Protestants"), by and through their agent, and hereby protest the granting of Application **79448** (hereafter "Application"), filed by **WASHOE COUNTY, a Political Subdivision of the State of Nevada,** on **1 February 2010**, to appropriate **Underground** waters situated in the Smoke Creek Desert (Hydrographic Basin #021) Washoe County, Nevada. Mr. Rumsey's address is: David Rumsey, Parker Ranch, P.O. Box 232, Gerlach, NV 89412. Mr. Moore & Mrs. Fleming's address is: Michael S. Moore, Wall Spring Ranch, 71600 County Road 33, Gerlach, Nevada 89412. Mr. & Mrs. Bogard's address is: P.O. Box 4, Gerlach, Nevada 89412. Protestants are all residents, landowners, and owners of Permitted, Certificated and Vested water rights in the Smoke Creek Basin, where the subject Application seeks changes to appropriated waters.

Rumsey, Moore, Fleming and Bogard (collectively referred to as "Protestants") protest the Application for the following reasons and on the grounds, to wit:

See attached Exhibit "A"

$25 FILING FEE MUST ACCOMPANY PROTEST. PROTEST MUST BE FILED IN DUPLICATE. ALL COPIES MUST CONTAIN ORIGINAL SIGNATURE.

THEREFORE, Protestants respectfully request that the State Engineer require hydrological and environmental impact studies to be conducted pursuant to N.R.S. 533.368, that the State Engineer hold a hearing on the Application, and that the Application be denied and an order be entered by the State Engineer denying said Application.

Dated this 31st day of March, 2010.

Respectfully submitted,

Chris C. Mahannah, P.E., SWRS
Mahannah & Associates, LLC
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Reno, NV 89505
(775) 323-1804
chris@gbis.com
Agent for Protestants: Rumsey, Moore, Fleming and Bogard

Subscribed and sworn to before (or affirmed) before me on this 31st day of March, 2010.

BRITTNI CHRISTIANSEN
Notary Public - State of Nevada
Appointment Recorded in Washoe County
No. 08 107557-2 - Expires April 19, 2010

Notary Public

State of: Nevada

County of: Washoe

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EXHIBIT "A"

1. Washoe County has entered into a Joint Permitting Agreement (hereafter, "JPA") with LSC Development, Inc. (hereafter "LSC") on 26 August 2008, a copy of which is attached to Protestant's protests of Bright Holland/Jackrabbit applications 77634-77636 and 77969, previously filed. Washoe County has also previously filed numerous applications to appropriate groundwater in the Smoke Creek for Municipal purposes. In October 1986 Washoe County filed thirteen (13) applications seeking approximately 47,000 acre-feet annually (afa) of new underground appropriations for municipal export purposes. The applications were protested by numerous parties and were denied in Ruling #4599 on 26 January 1998 on public interest grounds due to lack of due diligence and not proceeding in good faith. Specifically, the State Engineer found in part:

> "There is no indication that Washoe County is any closer than it was when it filed these applications twelve years ago to having a plan for the development of any waters under these applications. The State Engineer concludes that the record is devoid of any evidence indicating Washoe County has proceeded with good faith and reasonable diligence toward developing any water applied for under these applications. Applications ... are hereby denied on the grounds that it would be detrimental to the public interest to grant permits for a project the applicant no longer considers a viable source for municipal supply and for which the applicant has no definite plans formulated pursuant to which the waters would be put to beneficial use." Pages 7-9

Additionally in Ruling #4599, in response to the State Engineer's request for information from the County, Washoe stated:

> "The filing of these applications collectively known as the Silver State Project is an attempt to appropriate all unappropriated water from the hydrographic basins which are wholly within the geographic boundaries of Washoe County. These filings will provide Washoe County with the opportunity to manage water resources from the affected areas until such time as the actual resource can be better quantified. Furthermore, this process will protect these resources from appropriations for purely speculative purposes." Page 5

In response the State Engineer found:

> "...the management and protection of the State's water resources falls within the responsibilities granted to him and not Washoe County under the provisions of Nevada Revised Statutes Chapters 533 and 534." Page 5

Upon the State Engineer's denial of the Washoe County applications on 26 January 1998, the County immediately re-filed another thirteen (13) applications on 27 March 1998 seeking approximately 47,000 afa, again for Municipal use which were also protested by multiple entities. These applications have been 'RFP' since 1998 or nearly twelve (12) years, again without any significant effort by Washoe County to conduct hydrologic studies, permit the applications or put the water to beneficial use. On 1 February 2010, Washoe County filed the subject "Provisional Applications" 79438 – 79450 as a result of the 28 January 2010 Nevada Supreme Court decision to appropriate all unappropriated underground waters in the Smoke Creek Basin.

One of the purposes of the JPA "***is to increase the Parties' ability to appropriate water in the Smoke Creek Basin***" and "***LSC and County desire to each file concurrently with the State Engineer, their own papers, pleadings and other documents for the LSC Water Rights and County Water Rights respectively (also referred to herein collectively as 'Joint Water Rights') to convert the Joint Water Rights to a municipal use.***" Page 1. The *Joint Water Rights* of LSC and Washoe County are summarized in Exhibits 1 and 2 to the JPA which include applications to appropriate, applications to change, permits, certificates, and undetermined claims of vested rights, many of which are supplemental to each other and include both surface and groundwater. Item No. 2 of the JPA calls for: "*within thirty (30) days of the Effective Date,* (8/26/08) *LSC and County shall concurrently apply for and request that the State Engineer rule on all permits, certificates, entitlements (vested or otherwise) or other administrative approvals*

necessary for conversion and beneficial use of the Joint Water Rights for municipal purposes, including all administrative proceedings and appeals (judicial or otherwise) which may result therefrom (collectively, the 'Approvals'). Pages 1-2. Clearly, these applications are part of a large speculative water exportation scheme of unknown magnitude with the potential to over appropriate Smoke Creek Basin and to injure existing surface and groundwater rights of unknown magnitude.

The parties have not complied with the 30 day filing period pursuant to the JPA and piecemeal filings have ensued. Applications 77634 – 77636 were filed on 21 November 2008, Application 77969 was filed on 2 February 2009, Applications 78588 – 78612 were filed on 29 May 2009 and most recently surface water Applications 78722 – 78728 were filed on 9 July 2009. There will be many additional filings seeking changes to the '*Joint Water Rights*' shown in Exhibits 1 and 2 of the JPA and perhaps others. It is requested that the State Engineer review the applications and water export project as whole and not piecemeal application by application. Washoe County's and LSC's pending applications need to also be considered together in reviewing the subject applications since they are proceeding jointly pursuant to the JPA.

2. NRS § 533.370 1(c) requires Applicant to prove its intent to construct any work necessary to apply the water to beneficial use, and its financial ability and reasonable expectation to actually construct the work and apply the water to beneficial use. Applicant has not provided any evidence of its intent to construct a municipal export project, identified a specific project or development for the proposed municipal use, or that it is financially able and intends to actually construct the work and apply the water to beneficial use. Conversely, Applicant has defined a place of use encompassing all of Washoe County. See State Engineer Ruling #5782 regarding a similar water exportation project from Granite Springs Valley wherein

the applications were denied on anti-speculation grounds among others. Specifically, the State Engineer Ruled under #5782:

1) "No contracts with those who would place the water to beneficial use were demonstrated nor was any agency relationship with a municipality or other entity demonstrated; therefore, the Applicant did not satisfy the requirements for demonstrating a need for the water under NRS § 533.370(6).
2) No demonstration was made of the actual project to be constructed; therefore, no specific beneficial use of the water was identified.
3) No evidence was provided as to the amount of water reasonably required for any specific project
4) To grant the applications under these conditions would thereby threaten to prove detrimental to the public interest."

3. Applicant has not complied with the inter-basin transfer provisions of NRS § 533.370(6)(a-d), specifically they have not demonstrated or justified:

a) The need to import water from another basin;
b) All recipient basins shown in the proposed place of use have conservation plans;
c) Whether the proposed action is environmentally sound as it relates to the source basin;
d) Whether the proposed action is an appropriate long term use which will not unduly limit future growth and development in the source basin

4. The Application indicates that it will require twenty (20) years to construct the works and thirty (30) years to place the water to beneficial use. The extended amount of time required constructing the works, and put the water in the project (currently unspecified) to a beneficial use indicates the speculative nature of this application, and project. Protestants object to the extended period of time to prove beneficial use, because this ties-up water rights for an extended period for speculative purposes. Since the purpose and scope of the undefined project are unclear, the Protestants reserve the right to add or amend this Protest as more information becomes available.

5. Pursuant to NRS § 533.368, Protestants request the State Engineer require applicant to conduct necessary Hydrological and Environmental studies to assess water availability, potential impacts to existing rights, and the environmental impacts associated with a

large water export project. At a minimum, it is requested that the State Engineer require Applicants to immediately release all components of the *Water Resource Study,* including the groundwater flow model, referenced in Section 3 of the JPA. Upon information and belief, Protestants believe this comprehensive study commissioned when the Granite Fox Power applications were active would provide valuable insight to the hydrogeology of the basin and possibly alleviate some protest concerns. It is requested that this *Water Resource Study* and all associated models, data, appendices, etc. be released to the public and Protestants well in advance of any evidentiary exchange deadlines.

6. On 26 January 2005, when the Granite Fox Power applications were active, Protestant Rumsey petitioned the State Engineer for an adjudication of all waters of the Smoke Creek Basin due to the large scale water development (16,000 afa) associated with the proposed Sempra Energy coal fired power plant. That project contemplated changes to nearly all the same water rights or claims of vested rights shown in Exhibit 1 of the JPA. Due to Sempra Energy's withdrawing this proposal and the associated change applications, the State Engineer denied the request for adjudication by letter dated 26 January 2007. Since the LSC has filed changes to unsubstantiated/inflated claims of vested rights shown in Exhibit 1 of the JPA and supplemental nature of many of the rights, Protestants filed a renewed petition to the State Engineer for an adjudication of the surface, spring and underground sources in the Smoke Creek Desert on 10 April 2009. This petition was granted on 22 July 2009 and the State Engineer issued a Notice of Order and Proceedings to Determine Water Rights to <u>all</u> (surface and underground) waters in the Smoke Creek Desert. Protestants believe adjudication is essential to determine the extent of all claims of Vested rights including any Reserved rights before any action is taken on the pending applications. Additionally at the pre-hearing conference held on Washoe County's pending

Applications on 13 May 2009, there was discussion about an abbreviated or expedited Adjudication process. Protestant's believe it would be premature for the State Engineer to act on any changes to vested claims or applications to appropriate prior to the court adopting the Final Order of Determination and issuing a Decree. By reason of the impending adjudication and the amendments to NRS § 533 by Assembly Bill No. 419 effective 1 July 2009, the adjudication ordered by the 22 July 2009 Order must be final, including exhaustion of all appeals, before these Applications may be considered. It is apparent from the JPA that between the LSC applications and Washoe County's applications to appropriate, their joint intent is to appropriate the entire perennial yield or as they state: "*increase the Parties' ability to appropriate water in the Smoke Creek Basin*" (item 1, page 1 of JPA). This is further evidenced in Section 5.1 of the JPA where it is stated that any consumptive use reduction imposed on LSC's applications would be appropriated by Washoe's applications and how the return flow component of the water rights would be split 75/25% between the County and LSC. This intent further demonstrates the need to adjudicate all sources in the basin before any permits are granted allowing water export.

Historically the State Engineer has only granted change applications on un-adjudicated proofs for relatively small amounts of water associated with smaller projects, primarily associated with irrigation, <u>not</u> large scale municipal projects which have a continual demand for large volumes of water or they cease to function. Clearly, the scale of this project and the amount of vested claims sought to be changed necessitates adjudication.

Adjudication is necessary to address the inter-state issues and to address return flow issues, especially as they relate to Smoke and Rush Creeks because the lower irrigated areas most likely receive surface and subsurface tail waters for their supply.

7. Upon information and belief, the Pyramid Lake Indian Tribe (PLIT) who's Reservation extends into the Southern portion of the Smoke Creek Basin will be making a claim for an unknown amount of Reserved groundwater rights. Until this amount is known and whether they will be recognized by the State Engineer or Courts, the amount of committed rights verses Perennial Yield is unknown. The Tribe recently served a letter on the State Engineer and all parties noticed in the State Engineer's 22 July 2009 Adjudication Order indicating: "...the Tribe intends to fully participate in this adjudication in order to assert and protect any and all federally reserved water rights, to either or both the surface streams and groundwater of the Smoke Creek Desert, which are owned by the United States and held in trust for the benefit of the Tribe."

8. It is unknown at this time the amount of water sought to be transferred in this Municipal export project either from the LSC (Jackrabbit/Bright Holland) applications filed, yet to be filed or the Washoe County applications. Applicant should provide a detailed abstract of the total duty they intend on exporting in addition to that contemplated under the LSC applications. Supplemental duties should also be accounted for, including supplemental groundwater and groundwater supplemental to surface water. Since both surface and groundwater will be moved, a detailed description of how surface waters will be captured, stored, recharged or exported should be provided. If Recharge applications are contemplated for an ASR project, those need to be filed and explained in detail. Based on the locations of the proposed points of diversion on prior groundwater change applications filed by LSC (Jackrabbit/Bright Holland) immediately adjacent to the Smoke Creek, it appears an ASR project is contemplated to capture surface waters from the wells. LSC (Jackrabbit/Bright Holland) has not filed a Recharge Storage and Recovery (RSR) application which is necessary. Until such

application is filed with supporting documentation, it is unclear how LSC (Jackrabbit/Bright Holland)/Washoe intends on capturing, storing and diverting surface, spring and underground waters

9. Based on information and belief, Protestants believe that the Applications and those of LSC (Jackrabbit/Bright Holland) will conflict with existing water rights of Protestants. Groundwater aquifers in the Smoke Creek Basin are intimately connected to surface water sources in the Basin. Capture of surface waters are a natural component and a source of recharge to the groundwater resources in Smoke Creek Basin. Conversely, groundwater development can capture surface waters, reduce spring flows, creek flows and reduce natural evapotranspiration from wetlands, meadows or riparian habitats which are natural discharge areas. The environmental consequences of a large scale water exportation project have not been documented or demonstrated. This large-scale diversion will have a negative impact on ground water and spring water sources relied upon by the Protestants and other farmers, ranchers and landowners in Smoke Creek Desert/Basin 21, and will negatively impact flows to the wetlands and artesian wells throughout Basin 21. Many of the Protestant's underground water rights have been perfected with flowing artesian wells having minimal or modest head which naturally discharges water to their places of use without the use of pumps. Any reduction in head caused by a large scale water exportation project will reduce that head and reduce or eliminate the artesian flow conditions of the Protestant's wells. Since power is not available in the valley, reduction in head would require wells to be equipped with pumps and powered by solar or motor drivers. The Application's proposed diversion will also adversely affect water quality in groundwater, spring water and surface water throughout the Basin that Protestants and other landowners rely on for water supply and domestic purposes. Many of the Protestants

underground sources and others in the basin have a thermal component which is relied upon. Heat flux impacts from a large scale water development project must be addressed and mitigated.

10. According to the USGS Reconnaissance Report #44, the perennial yield for Smoke Creek Desert/Basin 21 is 16,000 af/a. Nevada Division of Water Resources Water Rights Database, Hydrographic Abstract for Basin 21, provides that there are over 12,200 af/a of permitted, certificated, and vested underground water rights in Basin 21 which does not include any new claims of vested rights which will be filed during the adjudication process or claims of Reserved rights by the PLIT. This also does not include the numerous pending applications to appropriate underground waters in Smoke Creek Basin which approach 80,000 afa. Upon information and belief the *Water Resource Study* referenced in the JPA has determined a revised perennial yield number different from the original USGS Reconnaissance Report #44 using updated techniques that weren't available during the 1960's when the Reconnaissance investigations were conducted by the USGS. As previously requested, this *Water Resource Study* should be released to the public and Protestants for review.

These studies are especially critical since previous USGS studies have identified the potential for inter-basin flow between Smoke Creek and adjacent basins. Maurer identified the potential for inter-basin groundwater flow via either the alluvial aquifer and/or the permeable volcanic rocks which underlie the alluvium and are prevalent on the Modoc plateau located to the west and north. The direction and/or magnitude of inter-basin groundwater flow between the Smoke Creek and Honey Lake, San Emidio Desert, Pyramid Lake, Dry Valley, Painters Flat is not well understood without drilling additional wells around the perimeter of the basin. Maurer also indicates that the high concentration of dissolved solids associated with groundwater beneath the playa can affect how water moves by producing density-driven flow. Studies have

shown that groundwater flows downward beneath playas of closed desert basins as the concentration of dissolved solids and the density of the groundwater increases. This downward flow beneath the playa can circulate groundwater either toward the margin of the playa or downward into a regional flow system and out of a closed basin even when groundwater divides exists. If permeable volcanic rocks underlie the Smoke Creek playa, the high density of groundwater under the playa could drive flow down and outward toward other basins[1]. Large scale groundwater development as proposed by the Applicant has the potential to affect water resources and water rights in adjacent basins. These inter-basin connections need to be well understood before acting on the applications so as to not impact existing rights in those basins. If significant inter-basin flow occurs, reassessment of the perennial yield will be required which would affect the State Engineer's decision as to how much water could potentially be exported, if any.

Perennial yield cannot exceed the natural recharge to an area and ultimately is limited to the maximum amount of natural discharge that can be salvaged for beneficial use. Salvage of natural discharge implies diversion of ground water presently destined for consumption by native evapotranspirative processes and part of the subsurface outflow to areas of pumping. (Glancy and Rush, 1968, page 46[2]) This implies that use of the entire estimated perennial yield in the Smoke Creek basin will effectively eliminate all discharge of groundwater to wetlands, spring vegetation and the playa. The State Engineer must analyze the impacts on water dependent species by loss of wetland and riparian vegetation in the Smoke Creek Desert under the

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[1] Maurer, Douglas, Hydrogeologic Setting and Hydrologic Data of the Smoke Creek Desert Basin, Washoe County, Nevada, and Lassen County, California, Water Years 1988-90, WRI Report 93-4043, 1993.

[2] Glancy, Patrick & Rush, Eugene, Water Resources Reconnaissance Series Report 44- Water Resources Appraisal of Smoke Creek-San Emidio Desert Area, Nevada & California, April 1968.

environmental soundness criteria (NRS 533.370(6)(c)). The applicant must quantify playa and riparian zone ET and how it will change as a result of the project.

The distribution of the groundwater recharge or perennial yield needs to be quantified as the Maxie-Eakin is an empirical method and does not identify specifically where the recharge occurs. This will be critical in reviewing these applications. For example, recharge which occurs as a result of precipitation falling on the Fox Range located on the east side of the valley will have no benefit due to the large discharge zone (playa) located between this recharge zone and the points of groundwater extraction. Presumably this is addressed in the *Water Resource Study* referenced in the JPA.

11. N.R.S. § 534.120 authorizes the State Engineer to designate a basin as a depleted groundwater basin. Protestants assert that Basin 21, Smoke Creek Basin, is a depleted groundwater basin and should be so designated by the State Engineer given the uncertainty in outstanding claims of vested rights, reserved rights and the nearly 80,000 afa of pending applications filed by Washoe County and others which seek to appropriate any unappropriated ground water resources in this basin.

12. The Application would require easements for rights of way over private and federally administered lands. The Applicant has made no demonstration that it is feasible for it to obtain said easements.

13. The Application also proposes places of use on or near areas of federal property managed by the Bureau of Land Management ("BLM") as wilderness study areas to retain their wilderness character. Wilderness study area uses include protection of air and watersheds, fish and wildlife habitat, maintenance of soil and water quality, ecological stability, plant and animal gene pools, protection of archaeological and historical sites, habitat for wildlife, livestock

grazing, and recreation. Development in federally administered wilderness study areas runs contrary to these specified uses and allows a man-made structure to intrude into the wilderness in violation of 43 U.S.C. § 1782 *et seq*.

14. A project of this magnitude will require NEPA compliance as well as an Environmental Impact Report. The State Engineer should withhold hearings and actions on these applications until these studies / processes are completed.

15. Any change of water rights should be allowed only at the historical consumptive use amount pursuant to NRS § 533.3703 since the water will be exported from the basin and hence no return flows to the aquifer.

16. Very little of the permitted or vested rights claimed have been put to beneficial use, including many of the water rights owned or claimed by LSC (Jackrabbit/Bright Holland), in some cases for many decades. Many of the LSC (Jackrabbit/Bright Holland) claims of Vested rights may not be determined to be valid claims during the adjudication process. Most of the water rights are merely 'paper water rights', and large scale pumping of the valley as contemplated under this municipal export project has not occurred therefore, there will be uncertainty in any predicted impacts.

17. The State Engineer must ensure that the provisions of N.R.S. § 533.370(6)(a) – (e) are fulfilled and addressed. This Application will limit the future growth and development to the detriment of the rural community in Basin 21. This is a violation of N.R.S. § 533.370(6)(d).

18. The proposed application is detrimental to the public interest for the following reasons:

a. The amount of water to be developed would cause further depletion to the ground and surface water and continue to place the basin in overdraft;

b. The proposed use of the water would have a detrimental effect on wildlife and on native vegetation;

c. The proposed use of the water will cause the soil to subside, causing cracks in foundations and roadbeds;

d. The proposed use will cause detrimental impacts to wetlands and riparian areas;

e. The proposed use of water will likely impact the water supply in adjacent basins including Pyramid Lake, potentially causing harm to listed endangered and/or threatened species;

f. The proposed use of water will cause the water table to drop, preventing subsurface irrigation of vegetation;

g. The proposed use of water will remove surface water from the water basin, thus altering the geology and appearance of the area forever;

h. The proposed use of water will lower the water table, causing existing wells to cease flowing and/or dry up or requiring wells to be drilled deeper;

i. The proposed use of water will interfere with artesian water sources, springs, and seeps, preventing them from reaching the surface;

j. The proposed use of water will have a detrimental effect on wildlife refuges and protected habitats;

k. The proposed use of the water will cause an increase in dust and particulates and will cause exceedances of air quality standards for the basin;

l. The proposed use conflicts with protectable interests in existing domestic wells as set forth in N.R.S. § 533.024.

19. Since the full scope of this project is unknown and speculative in nature and no RSR applications have been filed, the protestant reserves the right to add or amend this protest as more information becomes available.

20. THEREFORE, Protestants respectfully request that the State Engineer require hydrological and environmental impact studies to be conducted pursuant to N.R.S. 533.368, that the State Engineer hold a hearing on the Application, and that the Application be denied and an order be entered by the State Engineer denying said Application.