FILED
JUN 26 2007
STATE ENGINEER'S OFFICE
2007 JUN 26 PM 2:32

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

IN THE MATTER OF CHANGE APPLICATION 75578 FILED BY **WASHOE COUNTY, NEVADA, THE CITY OF RENO, NEVADA AND THE CITY OF SPARKS, NEVADA** TO CHANGE THE PLACE AND MANNER OF USE OF WATER HERETOFORE APPROPRIATED UNDER CLAIM 626a OF THE ORR DITCH DECREE AND PERMIT 67526	**PROTEST AND REQUEST TO DENY APPLICATION 75578; PETITION FOR HEARING PURSUANT TO N.R.S. 533.365; AND ENVIRONMENTAL STUDY PURSUANT TO N.R.S. 533.368**

ORIGINAL

COMES NOW THE TRUCKEE-CARSON IRRIGATION DISTRICT ("TCID"), by and through its attorneys, organized under Chapter 539 of the Nevada Revised Statutes, whose address is Box 1356, Fallon, Nevada, 89407-1356, with responsibilities under contract to operate and maintain the Newlands Reclamation Project and to deliver water to landowners who have contracted either with the United States or with TCID, and to comply with water rights decrees for water rights appropriated by the United States under the Reclamation Act (43 U.S.C. 371, *et seq.*) and as a party to the water rights decree of the Truckee River, known as the Orr Ditch Decree (*U.S. v. Orr Water Ditch Co.*, Equity A-3-LDG U.S. District Court, Nevada, September 8, 1944), hereby protests the granting of change application 75578 filed by **Washoe County, Nevada, the City of Reno, Nevada and the City of Sparks, Nevada (hereinafter referred to as "Applicants")**, to change the place and manner of use of water heretofore appropriated under Claim No. 626a of the Orr Ditch Decree (or Truckee River Decree) and Permit 67526. TCID protests the application for the following reasons and on the grounds, to wit:

1. The Applicants propose to change the point of diversion, manner of use and place of use of water rights described in the Application to facilitate and implement the Truckee River Operating Agreement ("TROA"), a new management scheme for the Truckee River that

proposes to unravel the current Truckee River management system governed by the Orr Ditch Decree and the Truckee River Agreement ("TRA") used to manage the Truckee River and the Truckee River reservoirs for the past 72 years. In order to implement TROA, many other Change Applications and Applications to Appropriate have previously been filed with the Nevada State Engineer and the California State Water Resources Control Board. For reference, an example of TCID's protest to the California TROA change applications and applications to appropriate is attached as **Exhibit A** to this protest. Protestant hereby incorporates each and every protest point in Exhibit A by reference.

2. On information and belief, the purported water rights in the Application arise from the TRA, to which TCID is a party, and which is incorporated by reference into the Orr Ditch Decree (*U.S. v. Orr Water Ditch Co.*, et al., CV-N-73-003. D. Nev. (1944)), and such rights arise, if at all, based upon an express agreement of the parties to the TRA and not otherwise, and granting the application would violate the compromise reached in the TRA that allowed the Orr Ditch Decree to be entered.

3. The TRA and the Orr Ditch Decree control the distribution and storage of water in the Truckee River Basin. The TRA is incorporated into the Orr Ditch Decree as a part of the decree itself. See *U. S. v. Orr Water Ditch Company*, CV-N-73-0003 LDG at p. 86. The TRA sets forth the principles under which the Truckee River would be operated and allowed for the stipulated entry of the Orr Ditch Decree. The parties to the Truckee River Agreement are: The United States of America; Truckee-Carson Irrigation District; Washoe County Water Conservation District (Conservation District); Sierra Pacific Power Company (Sierra), and such other users of the waters of the Truckee River and/or its tributaries, known as Parties of Fifth Part. The TRA required the Truckee River to be operated on the basis of Floriston Rates, as

established in the 1915 General Electric Decree. *United States v. The Truckee River General Electric Company,* Case No. 14861 (N.D. Cal. 1915).

4. The GE Decree provided for the condemnation of the Lake Tahoe Dam and the assumption of rights to store and release water from Lake Tahoe by the United States. These rights required the United States to release water from Lake Tahoe in order to maintain Floriston Rates. Floriston Rates measure the rate of flow in the Truckee River at the Iceland Gage, and consist of an average flow of 500 cubic feet per second (cfs) each day during the year, commencing March 1 and ending September 30 of any year, and an average flow of 400 cfs each day from October 1 to the last day of February of the next year. Three types of water are used to achieve Floriston Rates: (1) project water stored in Lake Tahoe and Boca Reservoir pursuant to the Orr Ditch Decree, (2) water exchanged under the Tahoe-Prosser Exchange Agreement, and (3) unregulated flow in the Truckee River. If the General Electric Company requested that Floriston Rates be reduced, then the difference was considered saved water and was stored for the benefit of the Newlands Project.

5. Further, the TRA also allocates rights to the Truckee River, recognizes specific claims to be included in the final decree, sets rates of flow in the river, allows for construction of supplemental reservoirs, recognizes privately owned stored water, sets diversions by Sierra Pacific for municipal and domestic uses, allows use of water for power generation, allocates Diverted Flow to TCID and the Conservation District, and creates the framework for managing the Truckee River. The TRA was used as the basis for a stipulation that allowed the entry of the final Orr Ditch Decree. Once a party signed the stipulation, the signing party could not rescind its signature. The signatories to the TRA include: The United States of America; Truckee-Carson Irrigation District; Washoe County Water Conservation District ("Conservation

District"); Sierra Pacific Power Company ("Sierra"), and such other users of the waters of the Truckee River and/or its tributaries, known as Parties of Fifth Part.

6. The TRA explicitly provides that the original intent of supplemental stored water in Boca Reservoir was for irrigation purposes. After the TRA was executed, The Washoe Project added additional reservoirs to the Truckee River system to supply water for downstream irrigation in the Newlands Project and the Truckee Meadows – Prosser Reservoir and Stampede Reservoir.

7. Congress intended The Washoe Reclamation Project to operate for the purpose of, *inter alia*, furnishing water for the irrigation of approximately 50,000 acres of land in the Truckee and Carson River Basins in Nevada and California, and firming the existing water supplies of lands under the Truckee River Storage Project and the Newlands Project. *See* Public Law 858, 84th Congress, Chapter 809, 2nd Session. In 1956, Congress authorized Stampede Reservoir and Prosser Creek Reservoirs as part of The Washoe Reclamation Project. The original permit terms of Stampede Reservoir and original license terms of Prosser Creek Reservoir also provide that, in addition to other uses, water from Stampede and Prosser Creek Reservoirs should be beneficially used within the Newlands Project for irrigation purposes. Currently, Stampede Reservoir and Prosser Creek Reservoir are managed in conjunction with the other reservoirs serving the Truckee River Basin; however, Stampede Reservoir is primarily managed as storage for water for endangered and threatened fish in Pyramid Lake and the Lower Truckee River, and not for irrigation in the Newlands Project, in contravention of its existing California application and permit.

8. Any change to the compromise reached by the parties to the TRA requires the consent of the parties to that agreement, which consent is withheld by TCID.

9. The Application is defective because it attempts to effect a unilateral modification to the Orr Ditch Decree by changing the TRA, without consent, approval or notice, and attempts to modify the Orr Ditch Decree without approval of the Orr Ditch Court.

10. The Application proposes that the beneficial places of use will be set forth in applications for secondary permits consistent with TROA. The environmental review process for TROA is not complete, and there is no guarantee that TROA, in its present form, will be approved. Further, the Application fails to adequately identify a specific project where the water will be applied for beneficial use. The Applicants have not demonstrated feasibility of beneficial use of the water, therefore, the Application is premature and speculative.

11. The Applicants have failed to show that the proposed diversion and use of water is consistent with the management regime of the Truckee River as set forth in the TRA and the Orr Ditch Decree. Moreover, under the TRA, any unused water in the Truckee River is to inure to the benefit of the Conservation District and TCID. Attempts to alter the division of unused water are in violation of the TRA and undermine the Orr Ditch Decree.

12. The Application frustrates the terms of the Stampede Reservoir and Prosser Reservoir permit and license issued by the California State Water Resources Control Board, providing that water in Stampede Reservoir and Prosser Reservoir must be beneficially used for irrigation in the Newlands Project, because the Application proposes to store and reallocate water in these reservoirs for secondary uses to be defined at a later date. It is not clear what these secondary uses are. To the extent these uses are not irrigation uses in the Newlands Project, the Application frustrates the original terms of the Stampede Reservoir permit and Prosser Reservoir license. Consistent with the intent of the Washoe Project, this water would otherwise be diverted at Derby Dam or stored in Lahontan Reservoir for irrigation in the Newlands Project.

13. On information and belief, the proposed storage and secondary use under TROA of the water proposed in the Application (in conjunction with the other similar applications filed for upstream storage) will interfere with the management of Floriston Rates on the Truckee River. The proposed change applications purport to alter Floriston Rates on the Truckee River in violation of the TRA.

14. All Washoe Project reservoirs, include Prosser Reservoir and Stampede Reservoir, must also be operated based on Floriston Rates. The operation of these reservoirs would also be altered to the detriment of TCID under the proposed change applications.

15. The Application must comply with the TRA, unless and until consent of all parties is received. TCID does not consent. TROA was born from the Preliminary Settlement Agreement between Sierra Pacific and the Pyramid Lake Paiute Tribe of Indians ("PLIT"), which was recognized in the Truckee-Carson-Pyramid Lake Settlement Act, P.L. 101-618, 104 Stat. 3289, November 16, 1990 ("the Act"). The Act contains a reservation that it is not to be construed to alter or conflict with any existing rights to use the Truckee River water in accordance with the applicable decrees. The TRA is incorporated into the Orr Ditch Decree as a part of the decree itself. See *United States v. Orr Water Ditch Company*, CV-N-73-0003 LDG at p. 86. Specifically, the Act states that TROA will "ensure that water is stored in and released from Truckee River reservoirs to satisfy the exercise of water rights in conformance with the Orr Ditch decree and Truckee River General Electric decree." 104 Stat 3305. Therefore, even under TROA, if adopted, the Application must comply with the TRA requirements for storage and for maintenance of Floriston rates. The Applicants have made no showing that the proposed diversion of the water complies with the TRA, nor can it.

16. The proposed Application fails to adequately identify the beneficial use of the water, the specific place of use, or a specific project where the water will be applied for beneficial use. The proposed place of use for the applications will be subsequently "....set forth in applications for secondary permits consistent with the Truckee River Operating Agreement." The Applicants have not demonstrated feasibility of beneficial use of the water; therefore, the Application is premature and speculative.

17. On information and belief, the granting of this Application would injure existing water rights adjudicated in the Orr Ditch Decree, and under the Orr Ditch Decree such a transfer cannot be approved if it will cause injury to an existing right under the decree. Potential uses under TROA for fish credit water will injure Newlands water users. The historic use of this water was for irrigation, which provided for return flows which could be beneficially used by Newlands Project farmers. However, uses under TROA for fish water do not provide return flows resulting in injury to Newlands Project farmers, especially in years of drought.

18. This Application along with other numerous similar applications filed by the Truckee Meadows Water Authority ("TMWA")/Washoe County/Reno/Sparks are actually joint applications for storage of the consumptive portion and direct diversion of full diversion rate. Upon information and belief, water under these applications is prepared to be used for municipal and industrial, wildlife, irrigation and power generation. This violates NRS 533.330 wherein an application must be limited to one source for one purpose.

19. The Application incorrectly names the source of the water and fails to designate a point of diversion. NRS 533.440(2) specifies "the application shall refer to the reservoir for a supply of water." The Application does not specify the named reservoirs in Exhibit A as the "supply," rather the reservoirs are named as points of diversion, the source of supply for the

Applications is actually tributaries to the Truckee River. The point of diversion cannot be a storage facility.

20. The Application fails to provide evidence of sufficient capacity in the named reservoirs or the existence of agreements for the storage of water. NRS 533.440(2) specifies "the application...shall show by documentary evidence that an agreement has been entered into with the owner of the reservoir for a permanent and sufficient interest in such reservoir to impound enough water for the purpose set forth in the application." No such evidence has been provided in the Application regarding sufficient capacity in each reservoir and no evidence has been provided to demonstrate that permanent storage agreements have been entered into with the United States. Likewise, TCID has not given the Applicants permission to store credit storage or exchange water in Donner Lake, Lake Tahoe, or Boca Reservoir.

21. The Applicants have provided no evidence of a permanent water right to store the subject water under California law. The Applicants propose to divert water from a point in which they have no right or control. The water rights change petitions submitted to the California State Water Resources Control Board by the United States/TMWA/Washoe County Water Conservation District for credit storage under TROA in Prosser Reservoir, Boca Reservoir, Stampede Reservoir, and Independence Lake as well as the two water rights applications for increasing the storage at Prosser Reservoir and Stampede Reservoir are pending. The environmental review process the California State Water Resources Control Board is required to complete for the TROA project is also pending. Thus, this Application is premature and speculative. See Exhibit A to this Protest for an example of TCID's protest points to the California TROA water rights change petitions, which TCID hereby incorporates by reference.

22. The Applicants have not demonstrated that the proposed water can be stored in the reservoirs without displacing water that would otherwise be stored as irrigation water for the benefit of the Newlands Project in Lake Tahoe, Donner Lake, Boca Reservoir, Stampede Reservoir and Prosser Reservoir.

23. The Application fails to provide a full understanding of the proposed change. Negotiations for TROA are ongoing. The TROA agreement has not been finalized and the Draft environmental impact statement/environmental impact report ("DEIS/EIR") has not been certified. This Application is accordingly inadequate pursuant to NRS 533.345 wherein any application to change the place of diversion, manner of use, or place of use must contain "....such information as may be necessary to a full understanding of the proposed change." Indeed, TROA's evolution continues to evolve and has changed as recently as February 2007, when the United States Bureau of Reclamation published of a new version of a draft TROA document. Applications for secondary permits have not been filed. The potential impacts of TROA cannot be fully understood until TROA is finalized, if at all, and the beneficial uses and places of use are identified. It is noted that such secondary permits are not published in accordance with NRS 533.440 and thus, even though the actual points of diversion and the source of such diversions are not shown in the Application, the Applicants are attempting to bypass the notice provisions, thus shifting the burden to potential protestants to monitor application filings for the subsequent secondary permits and file additional protests at that time.

24. The Application also fails to provide a full understanding of the proposed change because it proposes to change the existing purpose of use from a wildlife use downstream to the Pyramid Lake inlet to TROA's storage and secondary uses, which, according to TROA, include wildlife and fish preservation uses in the same location – Pyramid Lake. *See* Section 205 of P.L.

101-618(B), providing that under TROA, the Truckee River reservoirs will be operated to "provide for the enhancement of spawning flows available in the Lower Truckee River for the Pyramid Lake fishery . . ." If, as TROA provides, wildlife and fish preservation are key purposes and motivations for the TROA scheme, it is unclear why this Application proposes to change the purpose of use from wildlife, to ultimately redirect the purpose of use to all original uses under TROA, including municipal and industrial instream flows, wildlife, irrigation, drought protection, and power generation.

25. Exhibit C of the Application describes the intent to store only the consumptive use portion of the water right and includes incomplete and vague language that the consumptive use portion shall be at least 2.5 acre feet per acre. This is problematic for two reasons. First, it appears the language is vague to allow the Applicants at some later time to attempt to increase the storage rate beyond the specified 2.5 acre feet per acre. If the Application is approved, it should specify that "the consumptive use portion shall not exceed the actual consumptive use portion of the water right, as determined by the State Engineer." Second, the Application (and in many instances the underlying permits) does not expressly state the number of acres to be used in determining the storage quantity under each right. The Application should specifically state the number of acres associated with the underlying water right. If the water issued for municipal and industrial uses, the number of people to be served must be stated. Moreover, the Application does not state the actual amount of water in acre feet that will be stored in the reservoirs, making the Application defective. If the water is to be used for subdivisions, there is no description of the legal subdivision on lands to be irrigated. If the water is used for power generation, there is no description of the vertical head under which the water will be applied or the location of the powerhouse or the use for the power.

26. The Application for primary storage and secondary uses will dramatically alter the flow regime of the Truckee River with potential injury to Newlands Project water right owners. The Application specifies the proposed period of use as January 1 to December 31 of each year, whereas the existing period of use is generally "as decreed." The underlying water rights for the claims in the Orr Ditch Decree were originally used for irrigation purposes, thus the historical diversion pattern was on an irrigation pattern. The Orr Ditch Decree does not specify a prescribed irrigation season rather it is purposely left open to allow for flexibility in changing hydrologic conditions. The prior change permit was issued allowing wildlife uses for a period of use specified "as decreed." Year-round use of water historically used on an irrigation pattern may cause injury to downstream rights and that proposed storage of these rights increases the potential for injury to downstream rights. If the Applicants are allowed to store these water rights in the non-irrigation season with subsequent TROA releases for municipal use or for conversion to fish water, the regime of the Truckee River will be dramatically altered resulting in potential injury to existing water right owners. The proposed period of use should be restricted to the "irrigation season" as determined each year by the Federal Water Master.

27. The amount diverted (either into storage or by direct diversion) should be restricted to no more than the 25 percent maximum monthly amount in accordance with the Orr Ditch Decree. However, use of 25 percent may not interfere with existing rights. See *United States v. Orr Water Ditch Company*, CV-N-73-0003 LDG at p. 88.

28. The Application is defective because there is no information provided regarding the releases and use of the stored water and thus the potential injury or impacts cannot be ascertained.

29. It is understood from review of the TROA DEIS/EIR that the stored water will be used as (1) subsequent municipal releases and diversions for municipal and industrial uses and drought protection for the Cities of Reno and Sparks or (2) the expanded uses under TROA to include conversion to fish water, releases for minimum instream flows, and releases for the broader lower Truckee River streamflow objectives. Any subsequent releases of the stored water should be subject to reservoir evaporation and seepage losses as well as river conveyance losses to the new point of diversion in order to prevent such losses from being incurred by the Newlands Project.

30. By diverting water and storing it in up stream reservoirs, the Application is keeping water out of the river to the detriment of other water right holders, particularly in years of drought. Further, agreements would be required with users of both Truckee and Carson River waters for modification of certain established water rights. No such agreement has been obtained.

31. Storage in up-stream reservoirs is to the detriment of Lake Tahoe. The water which is the subject of the Application, which would otherwise be credited into storage in Lake Tahoe, will result in an artificial decrease in the Lake Tahoe levels, adversely affecting water rights under Claims No. 3 and 4 of the Orr Ditch Decree. Further storage in up-stream reservoirs is counter to the 1990 Settlement Act which states that TROA may include "methods to diminish the likelihood of Lake Tahoe dropping below its natural rim . . ." Approval of the Application would have the exact opposite effect.

32. On information and belief, the Truckee River is subject to pending applications on the river that will fully appropriate the river. All remaining unappropriated water in the Truckee River is currently in litigation, and this Application will accordingly encroach on existing and

pending rights in the Truckee River. For example, as noted in Nevada State Engineer Ruling 4683, the Pyramid Lake Indian Tribe ("PLIT") claims a right to all of the unappropriated water with a priority date of 1859 based on the United States Supreme Court decision of *Nevada v. United States*. In Ruling 4683, the Nevada State Engineer awarded PLPT unappropriated water within the Truckee River system. Ruling 4683 is on appeal before the Third Judicial District Court in and for Churchill County, and PLIT's purported claims to the balance of unappropriated water in the Truckee River based on *Nevada v. United States* remain unresolved. TCID also contends it has a right to appropriate water remaining in the Truckee River. And this matter is also pending before the Third Judicial District Court. Because of this pending litigation, no unappropriated water remains in the Truckee River to fulfill the Little Truckee River Application. In fact, TROA itself acknowledges that there is no unappropriated water in the system. *See* TROA at §§ 1.E.1, 12.A.4(f).

33. Hydrographic Basin 87, which underlies a large portion of the Truckee River that will be affected by this Application, is designated by the State Engineer under Chapter 534 of the NRS, and moving surface water from the Truckee River in the basin will have a detrimental effect on the groundwater.

34. On information and belief, the purported Application will negatively impact Hydrographic Basin 87 because the flow of the Truckee River is hydrographically linked to underground water. By storing water in upstream reservoirs that normally flowed in the river, the Application (in conjunction with the other similar applications filed for upstream storage) will negatively impact recharge of Hydrographic Basin 87. Well pumping then must use other groundwater that is hydrographically connected to the Truckee River, thus affecting flows in the river for downstream users.

35. The Applicants' proposed upstream storage (and its associated negative impacts on the recharge of Hydrographic Basin 87) will also unreasonably lower the water table, resulting in injury to others who have wells in the Hydrographic Basin 87, which includes the Truckee Meadows. The State Engineer must take into account whether the proposed change conflicts with protectable interests in existing domestic wells as set forth in NRS 533.370(5). These wells must then draw water that is hydrographically connected to the Truckee River, thus adversely affecting downstream water right owners.

36. The application is premature, speculative, and detrimental to the public interest as there are a number of conditions that must occur before the water may be utilized as proposed in the application, including: (1) no permanent agreement to store water in the named reservoirs, (2) no permission to store water in Donner Lake from TCID, (3) TROA has not been finalized, (4) the NEPA and CEQA environmental review process has not been completed for TROA and (5) the California State Water Resource Control Board has not issued permits to store this water under California law. Nevada law mandates that the State Engineer either approves or denies an application, and an application can not be contingent on subsequent conditions. NRS 533.370. At this time there is insufficient information for the State Engineer to act.

37. This Application is also detrimental to the public interest because it proposes to convert water away from the wildlife purposes of the existing Application – wildlife in Pyramid Lake – for the municipal and industrial and drought protection purposes TROA states as a key priority in its proposed Truckee River management scheme.

38. Upon information and belief, the proposed change Application will violate the agreement between Sierra and TCID regarding the operation of Donner Lake, entitled "Donner Lake Operation and Maintenance Cost Sharing and Use of Donner Lake Water." The

Application will impound, allocate and schedule discharges of Privately Owned Stored Water in Donner Lake. The Agreement specifies all permissible uses of Donner Lake water and mandates that releases shall be for the sole use and benefit of the parties to the Agreement. The water rights in Donner Lake are currently the subject of litigation before the Superior Court of California in and for the County of Nevada (Case No. T06/2239C). The use of Donner Lake water in conjunction with this Application is speculative and will injure TCID's water rights in Donner Lake.

39. The amount of acreage shown on the Application is more than the consumptive use portion. If approved, the Application should be limited to the actual consumptive use portion.

40. Protestants therefore request that the State Engineer **DENY** this Application and any associated applications filed to implement TROA. If such applications are approved, any permits issued should subject to the following specific conditions:

a. The diversion shall be according to a new priority based on the date of the underlying change application.

b. The period of use for the first diversion either into storage or for direct diversion at the water treatment plants must be restricted to the irrigation season specified by the Federal Water Master.

c. The first diversion either into storage or for direct diversion must be restricted to the 25 percent maximum monthly amount in accordance with the Orr Ditch Decree, but only if existing rights are protested.

d. The consumptive use portion to be stored in the reservoirs shall not exceed the actual consumptive use portion of the water right as determined by the State Engineer, calculated based on a specified number of acres provided in the permit.

e. The non-consumptive use portion shall remain in the river to protect the historical flow regime of the Truckee River.

f. Any subsequent releases of the stored water shall be subject to reservoir evaporation and seepage losses as well as river conveyance losses to the new point of diversion in order to prevent such losses being incurred by downstream users.

g. Proposed accounting forms shall be approved by the State Engineer and the Federal Water Master tracking by right and priority amounts of water including but not limited to diversion to storage, direct diversion, exchanges, conversion to fish water, subsequent reservoir releases, reservoir losses, and river conveyance losses.

h. Conditions to insure that the proposed storage of water can be stored in the reservoirs without displacing water that would otherwise be stored or released for the benefit of the Newlands Project.

i. NRS 533.440 (1) provides that there is no notice requirement for secondary permits. Here, the unknown and speculative nature of the secondary uses in the application could result in injury to other water right owners. Therefore, there should be a specific notice requirement for secondary uses with this Application, if approved.

j. The transportation component of the water should be stored in Lake Tahoe for use by other water owners entitled to diversions under the Orr Ditch Decree.

k. The permit is issued subject to the terms and conditions of the Orr Ditch Decree and with the understanding that no other existing water rights on the source Truckee River will be affected by the change proposed.

l. The permit is issued subject to uses for a period of use specified "as decreed." However, this should be interpreted based upon historical irrigation practices.

41. Since the full scope of this project is unknown and referenced subsequent secondary recovery applications will be filed which are not published, TCID reserves the right to add or amend this Protest as more information becomes available.

THEREFORE, TCID respectfully requests 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 25th day of June, 2007.

Respectfully submitted,

MICHAEL J. VAN ZANDT, ESQ.
Nevada Bar No. 7199
Attorney for the Truckee-Carson Irrigation District

State of CALIFORNIA

County of SAN FRANCISCO

Subscribed and sworn to (or affirmed) before me on this 25th day June, 2007 by MICHAEL J. VAN ZANDT personally known to be or proved to me on the basis of satisfactory evidence to be the person who appeared before me.

Notary Public Signature

SAMANTHA HUBLEY
Commission # 1441610
Notary Public - California
San Francisco County
My Comm. Expires Oct 22, 2007

(seal)

State of California
State Water Resources Control Board
DIVISION OF WATER RIGHTS
P.O. Box 2000, Sacramento, CA 95812-2000
Info: (916) 341-5300, FAX: (916) 341-5400, Web: http://www.waterrights.ca.gov

PROTEST – (Petitions)

BASED ON ENVIRONMENTAL OR PUBLIC INTEREST CONSIDERATIONS

Protests based on Injury to Vested Rights should be completed on other side of this form

APPLICATION 15673 PERMIT 11605 LICENSE _____

I, (We,) Truckee-Carson Irrigation District (TCID), Churchill County, Individuals and the City of Fallon (see Attachment at paragraph A and Statement of Facts)
Name of protestant

of P.O. Box 1356, Fallon, Nevada, 89407-1356 have read carefully
Post Office address of protestant

a notice relative to a petition for ◉ change or ○ extension of time.

Under APPLICATION 15673 of U.S. Bureau of Reclamation
State name of petitioner

to appropriate water from See Attachment at paragraph B and Statement of Facts.
Name of source

It is desired to protest against the approval thereof because to the best of our information and belief:
my or our

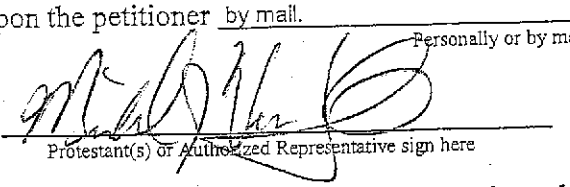
the proposed change/extension will
(1) not be within the State Water Resources Control Board's (SWRCB) jurisdiction ☒
(2) not best serve the public interest ☒
(3) be contrary to law ☒
(4) have an adverse environmental impact ☒

State facts, which support the foregoing allegations See Statement of Facts.

Under what conditions may this protest be disregarded and dismissed? See paragraphs 89-92 of Statement of Facts.
State conditions that will relieve protest, or if none, so state

A true copy of this protest has been served upon the petitioner by mail.
Personally or by mail

Date 4-2-07



Protestant(s) or Authorized Representative sign here

Protests MUST be filed within the time allowed by the SWRCB as stated in the notice relative to the change or such further time as may be allowed.

(NOTE: Attach supplemental sheets as necessary)

PRO-PET (1-00)

State of California
State Water Resources Control Board
DIVISION OF WATER RIGHTS
P.O. Box 2000, Sacramento, CA 95812-2000
Info: (916) 341-5300, FAX: (916) 341-5400, Web: http://www.waterrights.ca.gov

PROTEST – (Petitions)

BASED ON INJURY TO VESTED RIGHTS

Protests based on Environmental or Public Interest Considerations should be completed on other side of this form

APPLICATION 15673 PERMIT 11605 LICENSE _____

I, (We,) Truckee-Carson Irrigation District (TCID), Churchill County, Individuals and the City of Fallon (see Attachment at paragraph A and Statement of Facts)
Name of protestant

of P.O. Box 1356, Fallon, Nevada, 89407-1356 have read carefully
Post Office address of protestant

a notice relative to a petition for ◉ change or ○ extension of time.

under APPLICATION 15673 of U.S. Bureau of Reclamation
State name of petitioner

to appropriate water from See Attachment at paragraph B and Statement of Facts.
Name of source

It is desired to protest against the approval thereof because to the best of our information and belief the
my or our

proposed change will result in injury to us as follows: See Attachment at paragraph C and Statement of Facts.
me or us State the injury which will result to you (see NOTE below)

Protestant claims a right to the use of water from the source from which petitioner is diverting, or proposes to divert, which right is based on: See Attachment at paragraph D and Statement of Facts.
Prior to application, notice posted, use begun prior to 12/19/14, riparian claim, or other right

Please provide application, permit or license numbers or statement of diversion and use numbers, which cover your use of water, or state 'none' see comments. The extent of present and past use of water by protestant or his predecessors in interest from this source is as follows: See attachment at paragraph E and Statement of Facts.
State approximate date first use made, amount used, time of year when diversion made, the use to which water is put

Where is YOUR DIVERSION POINT located? Derby Dam ¼ of SW ¼ of Section 19
Describe location with sufficient accuracy that position thereof relative to that of petitioner may be determined.

T. 20N, R. 23E, MD B. & M. Is this point downstream from petitioner's point of diversion? YES ◉ NO ○
If Yes, explain: See Attachment at paragraph F and Statement of Facts.

Under what conditions may this protest be disregarded and dismissed? See paragraphs 89-92 of Statement of Facts.
State conditions which will relieve protest, or if none, so state.

A true copy of this protest has been served upon the petitioner by mail.
personally or by mail

Date: 4-2-07

Protestant(s) or Authorized Representative sign here

Protests MUST be filed within the time allowed by the SWRCB as stated in the notice relative to the change or such further time as may be allowed.

(NOTE: Attach supplemental sheets as necessary)

PRO-PET (1-00)

Attachment

PROTEST - PETITION 15673

A :
Individual Newlands Project water right owners protesting Petition 9247 and whose address is the same as TCID are: Ernest C. Schank, Richard Harriman, Ray Peterson, Don Travis, Jerry Blodgett, Lester deBraga and Larry Miller (referred to as Individual Protestants).

Contact information for the Individual Newlands Project water right owners:
Post Office Box 1356
Fallon, Nevada 89407-1356

Churchill County Contact information:
Churchill County Administration Building
155 N. Taylor Street
Fallon, Nevada 89406
Phone: 775.423.5136

City of Fallon contact information:
Fallon City Hall
55 W. Williams Avenue
Fallon, Nevada 89406

B:
Water impounded by Independence Dam is diverted from Independence Lake in Nevada and Sierra Counties, California, which is tributary to Independence Creek thence Little Truckee River thence the Truckee River.

C:
TROA proposes to restructure the current TRA and Orr Ditch Decree Truckee River water management system, and systematically reallocate water away from the Newlands Project a reclamation project in western Nevada authorized under the Reclamation Act of 1902. See *U.S. v Orr Ditch Co.*, et al., Equity No. A-3 D. Nev. (1944). The Petition and TROA reallocate and store water that would otherwise be diverted at Derby Dam or stored in Lahontan Reservoir for use in the Newlands Project, Churchill County and the City of Fallon. In *United States v. Nevada*, the United States Supreme Court emphasized that the U.S. Government/Bureau of Reclamation may not reallocate water rights conferred by the Orr Ditch Decree to Newlands Project farmers to irrigate farmlands. 463 U.S. 125, 126 (1983).

D:
TCID has a responsibility under contract to operate and maintain the Newlands Reclamation Project and to deliver water to water right owners, including Individual Protestants, Churchill

County and the city of Fallon, who have contracted either with the United States or with TCID, and to comply with water rights decrees for water rights appropriated by the United States Under The Reclamation Act (43 U.S.C. 371, et seq.), and as a party to the water right decree of the Truckee River, known as the Orr Ditch Decree (U.S. v Orr Water Ditch Co., Equity A-3-LDG U.S. District Court, Nevada, September 8, 1944).

E:

TCID, the Individual Protestants, Churchill County and the City of Fallon have water rights which will be injured as a result of TROA and this petition. Stampede Reservoir's permit and Prosser Reservoir's license state that the Newlands Project is an intended place of use for Truckee River water discharged from Stampede and Prosser Reservoirs. Based on progress reports filed with the State Board for Boca Dam and Reservoir, Truckee River water has also been released from Boca Reservoir for use in the Newlands Project. The water rights of Protestants derive from Claims 3 and 4 of the Orr Ditch Decree. These water rights are used for irrigation, domestic, municipal and industrial, and recreational uses.

F:

Our diversion point is located at Derby Dam. Also the subject TROA project lists Stampede Dam NW 1/4 NW 1/4 of Section 28, T19N, R17E, Independence Dam, Lot 1, Section 35, T19N, R15E and Boca Dam, SE 1/4 SW 1/4 of Section 21, T18N, R17E as new diversion points. These diversion points are also TCID diversion points because Newlands Project farmers have water rights to water in Stampede, Independence and Boca Reservoirs. If, as TROA contemplates, water is diverted and released from these reservoirs, these reservoirs would be diversion points of Newlands users.

STATE OF CALIFORNIA
BEFORE THE STATE WATER RESOURCES CONTROL BOARD

IN THE MATTER OF PETITIONS TO CHANGE AND APPLICATIONS TO APPROPRIATE WATER BY PERMIT FILED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, BUREAU OF RECLAMATION, TRUCKEE MEADOWS WATER AUTHORITY, AND WASHOE COUNTY WATER CONSERVATION DISTRICT TO IMPLEMENT THE TRUCKEE RIVER OPERATING AGREEMENT	**STATEMENT OF FACTS SUPPORTING TRUCKEE-CARSON IRRIGATION DISTRICT'S, NEWLANDS PROJECT WATER RIGHT OWNERS', CHURCHILL COUNTY, NEVADA'S & THE CITY OF FALLON, NEVADA'S PROTEST AND REQUEST TO DENY PETITION FOR CHANGE APPLICATION 15673/PERMIT 11605 (STAMPEDE RESERVOIR)**

THE TRUCKEE-CARSON IRRIGATION DISTRICT ("TCID"), by and through its attorneys, organized under Chapter 539 of the Nevada Revised Statutes, whose address is P.O. Box 1356, Fallon, Nevada, 89407-1356, with responsibilities under contract to operate and maintain the Newlands Reclamation Project ("Newlands Project") and to deliver water to water right owners who have contracted either with the United States or with TCID, and to comply with water rights decrees for water rights appropriated by the United States under The Reclamation Act (43 U.S.C. 371, *et seq.*) and as a party to the water rights decree of the Truckee River, known as the Orr Ditch Decree (*U.S. v. Orr Water Ditch Co.*, Equity A-3-LDG U.S. District Court, Nevada, September 8, 1944), hereby protests the granting of Petitions for Change for Licenses 3723, 4196, 10180 and Permit 11605 and Applications to Appropriate Water by Permit 31487 and 31488, implementing the Truckee River Operating Agreement ("TROA").

INDIVIDUAL NEWLANDS PROJECT WATER RIGHT OWNERS, Ernest C. Schank,

Richard Harriman, Ray Peterson, Don Travis, Jerry Blodgett, Lester deBraga and Larry Miller, whose addresses are also P.O. Box 1356, Fallon, Nevada, 89407-1356 also protest the granting of Petitions for Change for Licenses 3723, 4196, 10180 and Permit 11605 and Applications to Appropriate Water by Permit 31487 and 31488, implementing TROA. Mr. Schank, Mr. Harriman, Mr. Peterson, Mr. Travis, Mr. deBraga and Mr. Miller own parcels of land and water rights in the Carson Division of the Newlands Project. Mr. Blodgett owns land and water rights in the Truckee Division of the Newlands Project.

CHURCHILL COUNTY, NEVADA, whose address is 155 N. Taylor Street, Fallon, Nevada, 89406, also protests the granting of Petitions for Change for Licenses 3723, 4196, 10180 and Permit 11605 and Applications to Appropriate Water by Permit 31487 and 31488, implementing TROA.

THE CITY OF FALLON, NEVADA, whose address is City Hall, 55 West Williams Avenue, Fallon, Nevada, 89406, also protests the granting of Petitions for Change for Licenses 3723, 4196, 10180 and Permit 11605 and Applications to Appropriate Water by Permit 31487 and 31488, implementing TROA.

TCID, INDIVIDUAL NEWLANDS PROJECT WATER RIGHT OWNERS, CHURCHILL COUNTY, NEVADA and THE CITY OF FALLON, NEVADA (collectively referred to as "Protestants") hereby protest the granting of Petitions for Change for Licenses 3723, 4196, 10180 and Permit 11605 and Applications to Appropriate Water by Permit 31487 and 31488, implementing TROA as follows:

1. The State Water Resources Control Board ("State Board") noticed Petitions for Change for Licenses 3723, 4196, 10180 and Permit 11605 (collectively referred to as

"Petitions") and Applications to Appropriate Water by Permit 31487 and 31488 (collectively referred to as "Applications") on January 30, 2007. The applicants for these Petitions and Applications are the United States Department of the Interior, Bureau of Reclamation ("BOR"), the Truckee Meadows Water Authority ("TMWA") and the Washoe County Water Conservation District ("WCWCD") (collectively referred to as the "Applicants"). The deadline period for filing protests to these Petitions and Applications is April 2, 2007.

2. The Applicants submitted two applications and four petitions to change as one project to implement TROA. Protestants protest the State Board's implementation of each application and petition to change individually, as well as the State Board's implementation of TROA as a whole. Accordingly, Protestants will file six protests, one protest for each application and petition to change. Each protest will contain specific protest points for the application or petition to change the protest applies to, as well as general protest points applying to the entire TROA project as a whole.

3. Protestants served duplicate copies of this protest upon The Applicants by U.S. Mail.

4. The agent for Protestants is Michael Van Zandt, Esq., McQuaid, Bedford & Van Zandt, LLP, 221 Main Street, Sixteenth Floor, San Francisco, CA 94105.

5. Protestants have reviewed the information in the State Board's Public Notice for the TROA Project, Petitions for Change for Licenses 3723, 4196, 10180 and Permit 11605 and Applications to Appropriate Water by Permit 31487 and 31488, and references said Notice, Petition and Application information herein.

6. This protest is based on the grounds that: TROA and Petition to Change

15673/Permit 11605 at Stampede Reservoir injure the prior water rights of the Newlands Project, the State Board does not have jurisdiction to allocate Truckee River water already belonging to Newlands Project water right owners, and TROA and Petition to Change 15673/Permit 11605 injure the environment and the public interest, violate the Public Trust Doctrine and are contrary to existing law. Moreover, the State Board does not have jurisdiction over the water at issue here because these waters have been adjudicated under the Orr Ditch Decree in the State of Nevada. The Applicants submitted their two applications and four petitions as one project, to implement TROA.

7. TMWA, the City of Reno and the City of Sparks filed similar applications to change the manner and place of use of water to be stored in the Truckee River reservoirs in Nevada. These applications are currently pending review before the Nevada State Engineer. Protestants hereby incorporates by reference each and every protest point in the protests it filed to TMWA's Truckee River applications in Nevada in this protest. (*See* Exhibit A to this Statement of Facts for one of the protests TCID filed to TMWA's Truckee River applications in Nevada.)

TRUCKEE RIVER MANAGEMENT GENERAL BACKGROUND

8. The factual and legal background related to the management of the Truckee River basin and associated water rights is long and complex. However, an understanding of the background of events leading up to the current management scheme of the Truckee River along with how TROA has evolved is required for the State Board to fully understand the injury Protestants will suffer if TROA is implemented. Currently, the Truckee River Agreement and the Orr Ditch Decree control the distribution and storage of water in the Truckee River basin.

9. In 1913, the United States filed an action to quiet title to the waters of the Truckee River and its tributaries, including waters flowing in California that entered Nevada. This action was brought primarily on behalf of the farmers in the Newlands Project for irrigation of lands withdrawn under the Reclamation Act of 1902, and for the benefit of the Pyramid Lake Paiute Tribe of Indians ("PLIT") for irrigation on the Indian Reservation. *Nevada v. U.S.*, 463 U.S. 110, 114-117 (1983). This litigation resulted in the Orr Ditch Decree, *United States v. Orr Water Ditch Co.*, CV-N-73-0003 LDG, (D. Nev. 1944), which adjudicated water rights not only in Nevada but also in California, as those rights related to the Newlands Project.

10. An important component of the Orr Ditch Decree was the execution of the Truckee River Agreement ("TRA") in 1935. For the last 72 years, the Truckee River has been managed by the parties to the TRA, along with the Federal Water Master, appointed to administer the Orr Ditch Decree. The TRA set forth the principles under which the Truckee River would be operated and allowed for the stipulated entry of the Orr Ditch Decree. The TRA required the Truckee River to be operated on the basis of Floriston Rates, as established in the 1915 General Electric Decree. *United States v. The Truckee River General Electric Company*, Case No. 14861 (N.D. Cal. 1915). The GE Decree provided for the condemnation of the Lake Tahoe Dam and the assumption of rights to store and release water from Lake Tahoe by the United States. These rights required the United States to release water from Lake Tahoe in order to maintain Floriston Rates. Floriston Rates measure the rate of flow in the Truckee River at the Iceland Gage, and consist of an average flow of 500 cubic feet per second (cfs) each day during the year, commencing March 1 and ending September 30 of any year, and an average flow of 400 cfs each day from October 1 to the last day of February of the next year. Three types of

water are used to achieve Floriston Rates: (1) project water stored in Lake Tahoe and Boca Reservoir pursuant to the Orr Ditch Decree, (2) water exchanged under the Tahoe-Prosser Exchange Agreement, and (3) unregulated flow in the Truckee River. If the General Electric Company requested that Floriston Rates be reduced, then the difference was considered saved water and was stored for the benefit of the Newlands Project.

11. Further, the TRA also allocates rights to the Truckee River, recognizes specific claims to be included in the final decree, sets rates of flow in the river, allows for construction of supplemental reservoirs, recognizes privately owned stored water, sets diversions by Sierra Pacific for municipal and domestic uses, allows use of water for power generation, allocates Diverted Flow to TCID and the Conservation District, and creates the framework for managing the Truckee River. The TRA was used as the basis for a stipulation that allowed the entry of the final Orr Ditch Decree. Once a party signed the stipulation, the signing party could not rescind its signature. The signatories to the TRA include: The United States of America; Truckee-Carson Irrigation District; Washoe County Water Conservation District (Conservation District); Sierra Pacific Power Company (Sierra), and such other users of the waters of the Truckee River and/or its tributaries, known as Parties of Fifth Part.

12. The TRA explicitly provides that the original intent of supplemental stored water in Boca Reservoir was for irrigation purposes. After the TRA was executed, The Washoe Project added additional reservoirs to the Truckee River system that also existed to supply water for downstream irrigation – Prosser Reservoir and Stampede Reservoir. These reservoirs are currently managed in conjunction with the other reservoirs serving the Truckee River basin; however, Stampede Reservoir is primarily managed as storage for water for endangered and

threatened fish in Pyramid Lake and the Lower Truckee River, in contravention of its existing Application and Permit.

13. The TRA also provides for an allocation of any unused decreed water between the Conservation District and TCID. Specifically, the Conservation District has a right to use 69% of any unused decreed diverted flows, and TCID has a right to use 31% of any unused decreed diverted flows in the Truckee River.

14. The Orr Ditch Decree expressly incorporates the terms of the TRA, and also provides extensive requirements in its "General Provisions" that the State Board is legally bound to comply with and consider in its review of the TROA Petitions and Applications. *See generally United States v. Orr Water Ditch Co.*, CV-N-73-0003 LDG, (D. Nev. 1944). The portions of the Orr Ditch Decree that directly pertain to the Newlands Project are discussed in following paragraphs in the section of this protest entitled "Newlands Project General Background."

15. In anticipation of construction of the Prosser Creek Reservoir, certain parties entered an Agreement for Water Exchange Operation of Lake Tahoe and Prosser Creek Reservoir (Prosser Agreement) on June 15, 1959. The Prosser Agreement was signed by the Unites States, TCID, the Washoe County Water Conservation District and Sierra Pacific. The Prosser Agreement is binding on all signatories as well as their successors and assigns, and there is no termination clause in the agreement. It is designed to coordinate storage and releases of waters in Prosser Creek Reservoir and Lake Tahoe and incorporates the Prosser Creek Reservoir into the current management scheme of the Truckee River by reference to the GE Decree, Truckee River Agreement, and the Orr Ditch Decree. The Prosser Agreement provides for

storage in Prosser Creek Reservoir of "Tahoe Exchange Water," which is credited to and classified as Lake Tahoe Storage. "Tahoe Exchange Water" receives priority and must be released in amounts necessary to maintain Floriston Rates or Reduced Floriston Rates for the benefit of water users in the Truckee River Basin as contemplated by the GE Decree, Truckee River Agreement, and the Orr Ditch decree.

16. In 1988, Sierra and PLIT negotiated the "Preliminary Settlement Agreement" (PSA), which purports to set forth a process to settle disputes between Sierra and PLIT over uses of waters in the Truckee River, but primarily allows for storage of water owned by Sierra in upstream reservoirs for drought protection for the Truckee Meadows. Under the PSA, the PLIT would be able to convert Sierra Pacific's drought protection water into Fishery Credit Water if it is not needed by Sierra. The PSA was modified and then ratified by the United States in 1990. The PSA also became the foundation for the initiative to settle certain litigation the PLIT had initiated through the federal courts. Thus was born the Truckee-Carson-Pyramid Lake Settlement Act, P.L. 101-618, 104 Stat. 3289, November 16, 1990 (the "Settlement Act").

17. The Settlement Act included provisions for congressional approval of the interstate allocations of water between Nevada and California and for the negotiation of the Truckee River Operating Agreement, which would use the PSA as its starting point. The TROA provisions of the Settlement Act also required that water rights along the Truckee River be protected. Moreover, the Act also contained a reservation that it was not to be construed to alter or conflict with any existing rights to use the Truckee River water in accordance with the applicable decrees, including the right of the Newlands Project to divert water at Derby Dam. Section 205 of P.L. 101-618 requires the Secretary of the Interior to negotiate an operating

agreement with the State of Nevada and the State of California, after consulting with other parties. The PLIT, Sierra Pacific and Washoe County will be additional signatories to the TROA. The main purpose of the TROA is to implement the PSA and to resolve the claims of PLIT to waters of the Truckee River. The TROA is intended to replace the Truckee River Agreement of 1935, which is currently used to operate the Truckee River. The Applications and Petitions currently before the State Board are an effort by the Applicants to change the current management scheme of the Truckee River and implement TROA, without the participation of major water right holders in the Truckee River.

18. Related to the Truckee River reservoirs, section 205 of the Settlement Act provides that the reservoirs will be operated to:

> (A) satisfy all applicable dam safety and flood control requirements;
> (B) provide for the enhancement of spawning flows available in the Lower Truckee River for the Pyramid Lake fishery;
> (C) carry out the terms, conditions, and contingencies of the Preliminary Settlement Agreement as modified by the Ratification Agreement.
> (D) ensure that water is stored in and released from Truckee River reservoirs to satisfy the exercise of water rights in conformance with the Orr Ditch decree and Truckee River General Electric decree, except for those rights that are voluntarily relinquished by the parties to the Preliminary Settlement Agreement as modified by the Ratification Agreement, or by any other persons or entities, or which are transferred pursuant to State law; and
> (E) minimize the Secretary's costs associated with operation and maintenance of Stampede Reservoir.

See P.L. 101-618 § 205(A)-(D).

19. Further, TROA may under section 205 of the Settlement Act include provisions concerning:

> (A) administration of the Operating Agreement, including but not limited to establishing or designating an agency or court to oversee operation of the Truckee River and Truckee River reservoirs;

(B) means of assuring compliance with the provisions of the Preliminary Settlement Agreement as modified by the Ratification Agreement and the Operating Agreement;
(C) operations of the Truckee River system which will not be changed;
(D) operations and procedures for use of Federal facilities for the purpose of meeting the Secretary's responsibilities under the Endangered Species Act, as amended;
(E) methods to diminish the likelihood of Lake Tahoe dropping below its natural rim and to improve the efficient use of Lake Tahoe water under extreme drought conditions;
(F) procedures for management and operations at the Truckee River reservoirs;
(G) procedures for operation of the Truckee River reservoirs for instream beneficial uses of water within the Truckee River basin;
(H) operation of other reservoirs in the Truckee River basin to the extent that owners of affected storage rights become parties to the Operating Agreement; and
(I) procedures and criteria for implementing California's allocation of Truckee River water.

See P.L. 101-618 § 205(A)-(D).

NEWLANDS PROJECT GENERAL BACKGROUND

20. The Newlands Project is a reclamation project in western Nevada authorized for the reclamation and irrigation of land in the Carson and Truckee River watersheds. The Newlands Project contains the Lake Tahoe Dam and Derby Diversion Dam on the Truckee River, the Truckee Canal, Lahontan Dam and Reservoir, the Carson Diversion Dam, four pumping plants, and over 900 miles of canals, laterals and drains. The Newlands Project contains approximately 73,700 acres of water-righted lands of which approximately 59,000 acres are currently being irrigated with a diversion requirement of approximately 300,000 acre-feet. Water supplies for the Newlands Project are derived from direct diversions on the Truckee and Carson Rivers as well as releases of previously stored water in Donner Lake, Lake Tahoe, Prosser Creek Reservoir, Stampede Reservoir, Boca Reservoir, and Lahontan Reservoir. The date of priority for water rights in the Newlands Project in the Truckee River is 1902, as

adjudicated and decreed in *United States v. Orr Water Ditch Co.*

21. The Orr Ditch Decree confirmed and decreed the Newlands Project landowners' Reclamation Act water rights. The Orr Ditch Court affirmed these rights in 1944. *See U.S. v. Orr Water Ditch Co.*, et al., Equity No. A-3. D. Nev. (1944). Claim 3 of the Orr Ditch Decree secured irrigation, domestic and power generation rights for the farmers in the Newlands Project, including diversion rights of water for up to 1500 cfs of Truckee River water at Derby Dam and a right to store 290,000 acre feet of water in Lahontan Reservoir for the benefit of the Newlands Project. Claim 4 of the Orr Ditch Decree secured the right of the United States to store water in Lake Tahoe for the benefit of the Newlands Project and other lands under the federal Reclamation Act. Claim 4 of the Orr Ditch Decree also secured the Newlands Project's rights to release water from Lake Tahoe Dam, as set forth in the General Electric Decree. Thus, the Orr Ditch Decree adjudicated water rights not only in Nevada, but also in California, as those rights related to the Newlands Project.

22. Truckee River water is a critical component to the water supply of the Newlands Project. The Truckee River supplies 100% of the Truckee Division of the Newlands Project, and also supplies a substantial amount of water to the Carson Division of the Newlands Project.

GENERAL BACKGROUND OF TROA PROJECT AND OVERVIEW OF PROPOSED PETITIONS AND APPLICATIONS

23. TROA proposes to unravel the management scheme used for the Truckee River and the Truckee River reservoirs for the last 72 years. TROA would establish new rules for the accounting of water that is stored, released, exchanged displaced or spilled at Independence, Stampede, Boca and Prosser Creek Reservoirs. As part of these new rules, TROA proposes to

allow for the credit storage of waters in the Truckee River upstream rivers and lakes. TROA also proposes to replace the 1935 Truckee River Agreement ("TRA") the management agreement for the Truckee River which has been used to make decisions on the operation of the Truckee River for the last 72 years. TROA proposes a new management, credit storage, change and exchange system allegedly for instream flows, water quality and spawning flows for Pyramid Lake fishes, and increased storage for municipal and industrial water supply for the Reno-Sparks area (often referred to as the Truckee Meadows), the City of Fernley, Nevada and the Truckee River Basin in California. However, TROA makes no promises for drought protection or storage rights for other Nevada localities and projects that rely upon Truckee River water, namely Lyon County, Storey County, Churchill County, the City of Fallon. TROA also fails to propose any substantial protections for the Newlands Project's vested rights in Truckee River water.

24. TROA also includes planned changes in operations for Donner Lake and Lake Tahoe which would directly impact Protestants. Because the State Board is considering all applications and petitions as a joint project, the State Board should also review TROA's impacts on Donner Lake and Lake Tahoe, even though these structures have pre-1914 water rights under California law.

25. To facilitate and authorize TROA's changes and exchanges of water in the Truckee River, the Petitions in the TROA Project collectively propose new diversion, redistribution and rediversion points and add new places of use and purposes of use (municipal, domestic, industrial, irrigation, stockwatering, fish culture, fish & wildlife protection/enhancement (including wetlands), power, instream water quality enhancement, recreation, and conservation of the Pyramid Lake fishery) to the licenses and permit currently in

place on the Little Truckee River and Prosser Creek. These licenses and permit are for Boca Reservoir (License 3723), Independence Lake (License 4196), Stampede Reservoir (Permit 11605), and Prosser Creek Reservoir (License 10180). The Petitioners request that these licenses and permit have a common place of use and common purposes of use, with the exception that Independence Dam and Reservoir (License 4196) does not have flood control as a purpose of use. In addition, the BOR requests that a permit term be eliminated in License 10180 and replaced by TROA operating criteria. Finally, the BOR filed two time extensions for Permit 11605, and ultimately seeks to extend time to complete beneficial use of water to the year 2012.

26. To further facilitate TROA's implementation, the Applicants request that the State Board grant two new Applications to Appropriate Water from the Truckee River for the TROA Project. The Applicants request that the State Board grant the applications to appropriate water from the Little Truckee River (Application 31487) and Prosser Creek (Application 31488). Because TROA proposes such a massive storage scheme in upstream Truckee River reservoirs, TROA cannot succeed without the State Board's approval of Applications 31487 and 31488. However, Applications 31487 and 31488 directly violate the Orr Ditch Decree, and attempt to re-allocate water already adjudicated and allocated to other water right owners by the Orr Ditch Court.

27. Petition for Change of Application 15673/Permit 11605 (the "Stampede Reservoir Petition to Change") proposes to add Boca Dam as a point of diversion, point of rediversion and a point of redistribution and Independence Dam as a point of diversion and redistribution to the existing point of diversion at Stampede Dam. The Stampede Reservoir Petition to Change also proposes to add expanded places of use to the permit's existing places of use, the Truckee

Meadows and the Newlands Project. The expanded places of uses are certain areas within townships described more fully in the petition papers. Additionally, the Stampede Reservoir Petition to Change proposes to add additional purposes of use to the existing purposes of use in Permit 11605. Permit 11605's original uses were irrigation, flood control and recreation. In 1971, the permit terms were amended to provide domestic, municipal, industrial and fish culture uses. Today, The Applicants seek to add the following purposes of use to Permit 11605: conservation of the Pyramid Lake fishery, fish & wildlife protection/enhancement, power, instream water quality enhancement and stockwatering. All of the changes in the Stampede Reservoir Petition to Change purportedly implement TROA. Accordingly, the Applicants state that the changes they proposed in the Stampede Reservoir Petition to Change will not take effect unless and until TROA is in effect.

TROA & THE STAMPEDE RESERVOIR PETITION TO CHANGE INJURE THE PRIOR WATER RIGHTS OF THE NEWLANDS PROJECT, CHURCHILL COUNTY AND THE CITY OF FALLON

28. The California Water Code requires each Petition for Change to "[i]nclude sufficient information to demonstrate a reasonable likelihood that the proposed change will not injure any other legal user of water." Cal. Water Code § 1701.2(d). *See also* 23 C.C.R. § 791. Moreover, before the State Board grants a Petition to Change, the petitioner must prove, and the State Board must find, that "the change will not operate to the injury of any legal user of the water involved." Cal. Water Code § 1702. Protestants first protest the Stampede Reservoir Petition to Change, and TROA itself, on the grounds that the Stampede Reservoir Petition to

Change and TROA injure the water rights of the citizens of Churchill County and City of Fallon; and the individual water right owners in the Newlands Project.

29. In 1956, Congress authorized Stampede Reservoir as part of The Washoe Reclamation Project. Congress intended The Washoe Reclamation Project to operate for the purpose of, *inter alia*, furnishing water for the irrigation of approximately 50,000 acres of land in the Truckee and Carson River Basins in Nevada and California, and firming the existing water supplies of lands under the Truckee River Storage Project and the Newlands Project. *See* Public Law 858, 84th Congress, Chapter 809, 2nd Session. The Stampede Reservoir application and permit (Application 15673 and Permit 11605) echo the intent of The Washoe Project, and each provide that Stampede Reservoir water be used within the Newlands Project for irrigation purposes. Indeed, the progress reports filed with the State Board by the BOR indicate that Stampede Reservoir water was used for irrigation in the Newlands Project after the project was constructed, through at least 1974.

30. However, in 1975, the BOR began operating Stampede Reservoir only for fish conservation purposes in Pyramid Lake. Since 1975, the BOR has not put Stampede Reservoir water to beneficial use in the Newlands Project or Truckee Meadows, the only places of beneficial use in the Stampede Permit. Indeed, an internal State Board memorandum dated June 10, 1980 (attached to this Statement of Facts as Exhibit B) emphasized that the Bureau of Reclamation's rights for the use of Stampede Reservoir water in California are limited to recreation at the reservoir. In that memorandum, State Board staff concluded that the BOR's releases of Stampede Reservoir water to aid in restoration of the Pyramid Lake fishery are not consistent with any water rights in California.

31. The Stampede Reservoir Petition to Change and TROA injure the water rights of the water right owners in the Newlands Project, Churchill County and the City of Fallon because the Petition and TROA propose to restructure the current TRA and Orr Ditch Decree Truckee River water management system, and systematically reallocate water away from the stated purpose for which the Stampede Reservoir permit was issue – irrigation in the Newlands Project. *See* Application 15673 and Permit 11605. The Stampede Reservoir Petition to Change and TROA reallocate and store water that would otherwise be diverted at Derby Dam or stored in Lahontan Reservoir for irrigation in the Newlands Project. In *United States v. Nevada*, the United States Supreme Court held that the U.S. Government/Bureau of Reclamation may not reallocate water rights conferred by the Orr Ditch Decree to Newlands Project farmers to irrigate farmlands. 463 U.S. 110, 126 (1983). Rather, the ownership interest in the water rights to irrigate farmland in the Newlands Project lies with the owners of the land within the Newlands Project to which the water rights are appurtenant. *Id.*

32. Specifically, the Stampede Reservoir Petition to Change and TROA systematically frustrates the original terms of the Stampede Reservoir application and permit providing for irrigation in the Newlands Project by proposing to store water upstream in Boca Reservoir, Stampede Reservoir, Prosser Creek Reservoir and Independence Lake that has already been adjudicated as part of the Newlands Project water right owners' carryover storage rights in Lahontan Reservoir. Once the water is stored in upstream reservoirs, signatories to TROA, the Applicants here, may carryover such storage from year to year by establishing a system of credits. Because TCID is not a signatory to TROA, the Newlands Project has no recognized right to carryover storage in these upstream reservoirs. Moreover, the water that is sought by the

Applicants to be stored in these upstream reservoirs is water, at least in substantial part, with water rights that have been adjudicated under Claims 3 and 4 of the Orr Ditch Decree and allocated in the TRA to the water right owners in the Newlands Project.

33. TROA also dedicates portions of carryover water to fish conservation uses for the benefit of the Pyramid Lake Indian Tribe. TROA harms the Newlands Project, Churchill County and the City of Fallon in this regard as well, because once water has been stored as fish water or fish culture water under TROA, then that water is unavailable to the water right owners in the Newlands Project even though the PLIT has no right to this water under the Orr Ditch Decree, and the Newlands Project has an adjudicated senior water right.

34. TROA also harms the Protestants' water rights, and frustrates the irrigation purpose of the original Stampede Reservoir application and permit, because it increases water shortages in the Carson Division of the Newlands Project. Increased shortages are caused by the changed timing and reduction in magnitude of Truckee River supplies as a result of the proposed credit storage, reduction in Floriston Rates, and alteration of return flow amounts and patterns. Increased shortages reduce the amount of water in the Carson Division of the Newlands Project, and, in turn, reduce the amount of water Newlands Project water right holders, farmers, have to irrigate their crops. Indeed, review of the BOR's surface water modeling information for TROA, provided by the BOR in the Draft Environmental Impact Statement/Environmental Impact Report ("EIR/EIS") documents for the project, shows that the BOR actually projects TROA operations will increase water shortages in the Carson Division of the Newlands Project, compared to maintaining the current Truckee River management structure governed by the TRA and Orr Ditch Decree.

35. TROA also harms the water rights of the water right owners in the Newlands Project, Churchill County and the City of Fallon and frustrates the irrigation purpose of the Stampede Reservoir application and permit, because Pyramid Lake fish water, water not provided for in the Orr Ditch Decree, has carryover storage and no transportation losses attached. Pyramid Lake fish credit water is elevated above other water rights in the Orr Ditch Decree, such as the Newlands Project water rights, and given a higher priority in the Truckee River water management scheme. When Pyramid Lake fish credit water is released from storage, no transportation losses are applied until the water reaches its new point of diversion at Pyramid Lake. Thus for the distance from Sparks to Pyramid Lake, some fifty miles, the water needed to transport such credit waters comes out of the flow in the river that would otherwise be available to others downstream along the river for diversion, without regard to priority of appropriation.

36. TROA's potential new uses for Truckee River water – fish culture, fish & wildlife protection/enhancement and conservation of the Pyramid Lake fishery – will also injure water users in the Newlands Project, Churchill County and the City of Fallon. As provided in the text of the Washoe Project authorization by Congress, and the initial application and permit terms for Stampede Reservoir, water in Stampede Reservoir's main historic use was for irrigation purposes. Water used for irrigation upstream in the Truckee River provides return flows that when they return to the Truckee River flow downstream can be beneficially used by Newlands Project farmers. Likewise, the municipal and domestic uses of Truckee River water also provide substantial return flows that are available to be diverted at Derby Dam. However, water for fish uses under TROA does not provide return flows to the Newlands Project farmers, injures the farmers in times of water shortage and drought, and runs contrary to the intended purpose of the

Stampede Reservoir application and permit, and the intent of the Washoe Project.

37. TROA's proposed water storage and additional uses of Truckee River water will additionally interfere with the implementation of Floriston Rates on the Truckee River. The terms of the TRA limit when Floriston Rates can be changed, and require the permission of the Conservation District, TCID and Sierra Pacific Power Company before such changes can occur. Under TROA, an Administrator will oversee the management of the Truckee River at the direction of the TROA signatories (which do not include TCID). The TROA signatories purportedly may agree to a reduction in flow rates in exchange for storage credit in the upstream reservoirs. As a result, less water may be available for diversion by the Newlands Project Churchill County and the City of Fallon at Derby Dam. In turn, the Newlands Project, Churchill County and the City of Fallon may not have access to adequate amounts of water to meet their water rights.

38. TROA's proposed upstream storage scheme also proposes to store waters historically diverted to the Truckee Meadows, the City of Fernley and the Lahontan Valley. Upstream storage of Truckee Meadows, Fernley and Lahontan Valley water will negatively impact groundwater conditions and the stream/aquifer hydrologic connection in the Truckee River in both California and Nevada. It appears that the TROA Petitions and Applications no longer include "Groundwater Recharge" as a purpose of use. However, the TROA operations will negatively impact the groundwater recharge of Hydrographic Basins in Nevada by storing water in upstream reservoirs that normally flows in the river. The diversion of a portion of surface water that has historically recharged Hydrographic Basins in Nevada will also unreasonably lower the water table resulting in injury to well owners in these regions. These

wells must then draw water that is hydrologically connected to the Truckee River, thus adversely affecting downstream water right owners.

39. TROA, in conjunction with Petitions and Applications currently before the State Board, also proposes to impound, allocate, and schedule discharges of Privately Owned and Stored Water in Donner Lake. TCID and TMWA are the sole co-tenant owners of water rights in Donner Lake. Operation of Donner Lake is governed by an agreement related to "Donner Lake Operation and Maintenance Cost Sharing and Use of Donner Lake Water," ("Agreement") entered into by TCID and Sierra Pacific, the predecessor in interest to TMWA. The Agreement specifies all permissible uses of Donner Lake water and mandates that releases shall be for the sole use and benefit of the parties to the Agreement. The proposed management of Donner Lake water within the management scheme of TROA violates the Agreement and will deprive TCID of the benefit of its interest in Donner Lake. TROA also contemplates the sale of Donner Lake water rights by TCID for use in implementing the provisions of TROA. TCID has no intention of selling its water rights in Donner Lake. In fact, the water rights in Donner Lake are currently the subject of litigation before the Superior Court of California in and for the County of Nevada (Case No. T06/2239C). The use of Donner Lake water in conjunction with these Petitions and Applications is speculative and will injure TCID's water rights in Donner Lake.

40. TROA must comply with the TRA, unless and until consent of all parties is received. TCID does not consent. TROA and its associated petitions and applications are accordingly defective because they attempt to effect a unilateral modification to the Orr Ditch Decree by changing the TRA, without consent, approval or notice of TCID. By modifying the Orr Ditch Decree and changing the TRA, TROA changes the distribution and storage of water in

the Truckee River Basin. Changing the distribution and storage of water in the Truckee River Basin harms the prior water rights of the farmers of the Newlands Project, guaranteed under the Orr Ditch Decree, affirmed by the Orr Ditch Court, and provided for in the Stampede Reservoir original application and permit.

41. For the reasons above, the State Board should not approve the Stampede Reservoir Petition to Change because TROA and the Application attempt to appropriate and reallocate water that the Orr Ditch Decree already committed to supply the Carson Division of the Newlands Project, in violation of the historical purpose of Stampede Reservoir.

42. The State Board should also require the BOR to immediately apply the Stampede Reservoir water to beneficial use in the Newlands Project. The California Water Code and the terms of Permit 11605 require that the water stored in Stampede Reservoir under Permit 11605 "be directly applied to beneficial use," which use expressly includes the irrigation of the Newlands Project. Application 15673, ¶ 11 (filed Jan. 7, 1954); *see also* Water Code § 1825 (The California legislature has declared a policy that "the state should take vigorous action to enforce the terms and conditions of permits, licenses, certifications, and registrations to appropriate water, to enforce state board orders and decisions, and to prevent the unlawful diversion of water."). If the water is not applied to beneficial use as contemplated in the permit and in accordance with statutory and regulatory requirements, the SWRCB may issue a cease and desist order to enforce "[a]ny term or condition of a permit, license, certification, or registration issued under this division." Water Code § 1831. While a number of extensions of time to apply the water to beneficial use have been granted by the SWRCB since the permit was issued in 1958, the last extension expired on December 1, 2002.

43. In the absence of a contrary statute, regulation, court decision or SWRCB order, the BOR must immediately apply Stampede Reservoir water to the beneficial use of irrigation for the Newlands Project. Although the BOR used *Pyramid Lake Paiute Tribe v. Morton*, 354 F.Supp.252, 262 (D.C. Cir. 1973) to preclude any use of the water other than to maintain flows in the Truckee River below Derby Dam, that decision has been effectively reversed. *Nevada v. United States,* 463 U.S. 110 (1983) held that the *Orr Ditch* Decree barred the United States from reallocating the water of the Truckee River, and thus that the Secretary could not reallocate water in the Truckee River from the Newlands Project to Pyramid Lake.[1] Similarly, the fact that negotiations regarding the implementation of TROA are ongoing do not provide any authority for the SWRCB to refuse to act on the pending request for an extension of time, or to suspend the permitee's obligation to apply the water to beneficial use.

THE STATE BOARD DOES NOT HAVE JURISDICTION TO CHANGE THE USE OF TRUCKEE RIVER WATER ALREADY ALLOCATED TO THE NEWLANDS PROJECT WATER RIGHT OWNERS, CHURCHILL COUNTY AND THE CITY OF FALLON

44. Protestants also protest TROA and the Stampede Reservoir Petition to Change on the grounds that the State Board does not have jurisdiction to allocate Truckee River water

[1] Protestants note that *Carson-Truckee Water Conservancy Dist. v. Clark*, 741 F.2d 257 (9th Cir. 1984) ostensibly confirms the Secretary of Interior's authority to use Stampede Reservoir water for fish preservation. However, in *Clark* the plaintiffs were seeking to force the Secretary to sell water rights to them and to allow them to pay for the construction of Stampede Reservoir, so that they could have a contractual right to store water. *Id.* at 262. Unlike the plaintiffs in *Clark*, the Protestants here have vested and adjudicated water rights, and it is those water rights that were the basis for the original application to the State of California to support the granting of the application and the issuance of the permit. Nothing in *Clark* would allow the State of California or the United States to interfere with a vested and adjudicated water right under the Orr Ditch Decree. In fact, P.L. 101-618 specifically prohibits such interference.

already belonging to Newlands Project water right owners. The Stampede Reservoir Petition to Change proposes a complex scheme of storage, diversion and re-diversion of water that was historically diverted and continues to be diverted to Lahontan Reservoir for the benefit of the Newlands Project water right owners, Churchill County and the City of Fallon. The State Board has no jurisdiction over this water because the Orr Ditch Decree governs water rights belonging to the Newlands Project Churchill County and the City of Fallon water right owners in Truckee River water. *See U.S. v. Orr Water Ditch Co.*, et al., Equity No. A-3. D. Nev. (1944). Moreover, water stored in Lake Tahoe is subject to Claim 4 of the Orr Ditch Decree and this water also has been adjudicated in the Truckee River General Electric Decree.

TROA & THE STAMPEDE RESERVOIR PETITION TO CHANGE INJURE THE ENVIRONMENT

45. Protestants also protest the Stampede Reservoir Petition to Change on the grounds that TROA will adversely impact the environment. The California Water Code requires that a petition for change "[i]nclude all information reasonably available to the petitioner . . . concerning the extent, if any, to which fish and wildlife would be affected by the change, and a statement of any measures proposed to be taken for the protection of fish and wildlife in connection with the change." Cal. Water Code § 1701.2(c).

46. In order to address TROA's impacts on fish and wildlife and other aspects of the environment, The Applicants refer to and attempt to incorporate by reference the Revised TROA EIR/EIS the Department of Interior, U.S. Fish & Wildlife Service, Bureau of Indian Affairs and the California Department of Water Resources are currently preparing to evaluate TROA's environmental impacts. However, the Revised TROA EIR/EIS exists only as a draft. Informal

conversations with the agencies preparing the Final TROA Revised EIR/EIS indicate that the document may be complete and published for public comment and review sometime in late 2007. Without revised CEQA/NEPA environmental review documents, it is impossible to evaluate the environmental implications of the Stampede Reservoir Petition to Change, and TROA itself. And without revised CEQA/NEPA environmental review documents, the TROA Petitions and Applications are also premature and incomplete. *See e.g. ONRC Action v. Bureau of Land Management*, 150 F.3d 1132, 1137-38 (9th Cir. 1998); *Laurel Heights Improvement Ass'n v. Regents of University of California*, 6 Cal. 4th 1112, 1123-24 (1993) (both providing that CEQA/NEPA environmental review process must be concluded before a state or federal agency implements a project).

47. The Applicants failed to comply with the Water Code and the State Board's forms for petitions and applications because they have provided no analysis of the potential environmental impacts of TROA. Indeed, State Board forms request that petitioners and applicants attach the most recent environmental review document that exists. While a 2004 Draft EIS/EIR does exist for TROA, The Applicants fail to attach that document with their Petitions and Applications. Without any information regarding the environmental impacts of TROA, it is utterly impossible to evaluate, and, in turn, implement TROA, or to grant The Applicants' Petitions and Applications.

48. Additionally, the Draft EIS/EIR (the last published TROA CEQA/NEPA document, dated 2004) omits analysis of many potential adverse environmental impacts of TROA, including adverse impacts on fish and wildlife and plant communities, as required by the Water Code and the State Board's petition for change form. Under the California Environmental

Quality Act ("CEQA"), The Applicants are also required to adequately analyze all water supply issues associated with the TROA Project. Cal. Water Code §§ 10910-10915; *Stanislaus Natural Heritage Project v. County of Stanislaus,* 48 Cal. App. 4th 182, 196-97 (1996); *Santiago County Water Dist. v. County of Orange*, 118 Cal. App. 3d 818, 829-30 (1981). Indeed, recent California Supreme Court case law emphasizes that an EIR for a water supply project is required to explain how all long-term water demands will be met or affected by the proposed project, and clearly identify the environmental effects of a water project, and how those effects will be mitigated. *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova*, 40 Cal.4th 412, 441 (2007). Because the Draft EIS/EIR fails to address substantial water supply issues and associated environmental issues, The Applicants fail to fully comply with section 1701.2(c) of the Water Code and the State Board's form for petition to change applications, as well as California case law requiring a detailed analysis of potential environmental effects of a water project.

49. The Draft EIR/EIS fails to address significant potential environmental effects of the TROA project. First, a complex of interconnected Truckee water-dependant downstream wetlands, Stillwater Wildlife Management Area, Stillwater National Wildlife Refuge, and Carson Lake Pasture, will be injured by the upstream storage scheme the TROA Project proposes. These wetlands areas consist mainly of fresh and alkaline marshes varying from several centimeters to a meter in depth, and are dependent on primary water deliveries and return flows from irrigation projects, including the Newlands Project. The reduced return flows in the Truckee River and reduced storage in Lahontan Reservoir that TROA proposes would reduce return flows to the Newlands Project, and, in turn, to these wetland areas, and cause wildlife,

habitat, native flora and fauna and water quality to deteriorate. Both the United States and Nevada have purchased water rights for the recovery of the wetlands. These wetlands recovery water rights will also be injured and negatively impacted by TROA.

50. The Draft EIS/EIR also fails to address the potential impacts of the TROA Project on the Fallon National Wildlife Refuge. The Fallon National Wildlife Refuge is dependent on downstream diversions of Truckee River water and water stored and released from the Lahontan Reservoir, and comprises over 15,000 acres of playa and wetland habitat in the Carson Sink. The refuge is important habitat for migratory shorebirds and waterfowl in all years, and particularly in dry years when water supplies and water rights purchased by federal and state agencies will be impacted by increased shortages under TROA. Pursuant to the upstream storage scheme and diversions into Pyramid Lake TROA proposes, there will likely be insufficient water flow in the Carson and Truckee Rivers and Lahontan Reservoir for the water to enter the refuge. If water does not enter the refuge, wetland habitat deteriorates and declines, causing, in turn, the native migratory shorebirds and waterfowl and other animal species and plant communities supported by the refuge's wetlands to suffer.

51. The Carson River Basin is also home to threatened Bald Eagles. Healthy habitat for Bald Eagles depends on downstream/Carson River Basin diversions of Truckee River water and water stored and released from the Lahontan Reservoir, as well as return flows from irrigation projects such as the Newlands Project.

52. The TROA Project's upstream storage management scheme would additionally negatively impact air quality in desert regions surrounding the Truckee River. As the availability of Truckee River water for agricultural uses is reduced, a shift in water use to non-agricultural

purposes will result in less plant growth, increased particulate matter in the air and, in turn, worse air quality in high desert regions bordering the river.

53. The TROA Project will negatively affect groundwater and groundwater recharge from irrigation and agriculture across the aquifer underlying the Carson Sink and Newlands Project, resulting in a drop in the water table and corresponding drop in the domestic water supply for the areas surrounding the river.

54. The TROA Project will increase urban development and induce growth, resulting in reduced water quality from urban runoff in newly developed urban areas.

55. The TROA Project will increase upstream storage of Truckee River water and decrease downstream storage and water levels in the Lahontan Reservoir, and adversely impact Lahontan Reservoir aesthetically as well as recreationally, for public use.

56. The TROA Project's upstream storage management scheme is to the detriment of Lake Tahoe, and the ecosystem of the Lake Tahoe Basin. The water that is the subject of the TROA Project and will be stored in upstream reservoirs according to TROA would, under the current Truckee River management scheme, be credited into storage in Lake Tahoe. Storing this water in upstream reservoirs would result in an artificial decrease in Lake Tahoe levels, causing the lake to drop below its natural rim. In turn, flora and fauna, wildlife and fish habitat, water quality and other aspects of the Lake Tahoe Basin will suffer.

57. Therefore, Protestants also protest the TROA on the grounds that substantial injury to the environment potentially exists as a result of TROA. The Applicants fail to comply with the Water Code, section 1701.2(c), the State Board's petition for change form and CEQA/NEPA and do not discuss all reasonable potential effects on the environment as a result

of TROA.

TROA & THE STAMPEDE RESERVOIR PETITION TO CHANGE INJURE THE PUBLIC INTEREST

58. Protestants additionally protest the Stampede Reservoir Petition to Change, and TROA itself, on the grounds that the TROA Project will injure the public interest. The State Board has broad discretion to grant a permit to appropriate water subject to "terms and conditions as in its judgment will best develop, conserve, and utilize in the public interest the water sought to be appropriated." Cal. Water Code §§ 1253 - 1256. The State Board is to consider a variety of beneficial uses which particular water may serve, and may subject appropriation to conditions that will best develop and conserve water in public interest. Cal. Water Code § 1257.

59. The Stampede Reservoir Petition to Change and TROA injure the public interest because they will increase water shortages in the Newlands Project, and in turn reduce water that is available for irrigation purposes in the Newlands Project. In California, the second highest beneficial use for water is for irrigation purposes. Cal. Water Code § 1254. The Stampede Reservoir Petition to Change and TROA's upstream storage scheme for Truckee River water will increase water shortages in the Newlands Project by changing the timing and reduction in magnitude of Truckee River supplies as a result of the proposed credit storage scheme, reducing Floriston Rates, and altering return flow amounts and patterns. Water shortages in the Newlands Project directly affect the public, i.e. the farmers, who individually hold water rights in the Truckee River.

60. Water shortages in downstream portions of the Truckee River mean adverse impacts on the operation of the Newlands Project, particularly the economic effects of water shortages on the agricultural revenue of individual farmers in the public, due to a reduction in crop yields. TCID and the Newlands Project as a whole will also experience a drop in hydropower generation and revenues, and a reduction of water delivery fees received by TCID. The Draft EIR/EIS fails to acknowledge these public interest considerations and does not include a section on impacts to TCID hydropower generation and revenues.

61. The Stampede Reservoir Petition to Change and TROA will also injure the public interest because they will reduce Truckee River flows for domestic purposes in downstream portions of the Truckee River in Lyon County, Storey County, Churchill County, the City of Fernley, the City of Fallon and the Newlands Project. In California, the highest beneficial use for water is for domestic purposes. Cal. Water Code § 1254. The Stampede Reservoir Petition to Change and TROA will limit water delivered to these downstream areas particularly in times of drought. By diverting water to Pyramid Lake for fish conservation purposes, these counties, cities and the Newlands Project may lose their drought protection and suffer severe water shortages.

62. The Stampede Reservoir Petition to Change and TROA will also affect the public by keeping Truckee River water upstream, and, in turn, reducing the amount of water stored downstream in Lahontan Reservoir, and, limiting the public recreational opportunities in Lahontan Reservoir that are associated with higher water levels.

63. Holding water upstream in the Truckee River storage reservoirs will also deplete groundwater storage for communities downstream of Reno and Sparks that depend on surface water to recharge their groundwater aquifers.

64. Finally, the Stampede Reservoir Petition to Change and TROA also have the potential to harm the public interest by depleting the storage levels of Prosser, Independence, Boca and Stampede Reservoirs to increase the flow of water into Pyramid Lake even though Pyramid Lake has no water right in Truckee River water. If the storage levels of Prosser, Independence, Boca and Stampede Reservoirs are depleted, public recreational opportunities will be limited in these Reservoirs as well.

65. Therefore, Protestants protest the Stampede Reservoir Petition to Change and TROA on the grounds that substantial injury to the public interest to upstream reservoirs and to downstream reservoirs and downstream water users potentially exist as a result of the TROA.

TROA & THE STAMPEDE RESERVOIR PETITION TO CHANGE INJURE PUBLIC TRUST VALUES

66. Protestants additionally protest the Stampede Reservoir Petition to Change, and TROA itself, on the grounds that the Application and TROA Project will injure public trust values. Under the public trust doctrine, the state has title as trustee to all tidelands and navigable lakes and streams and is charged with preserving these waterways for navigation, commerce, and fishing, as well as for scientific study, recreation, and as open space and habitat for birds and marine life. *National Audubon Society v. Superior Court of Alpine County*, 33 Cal. 3d 419, 434-35 (1983). *See also Marks v. Whitney*, 6 Cal. 3d 251, 257-58 (1971) (recreation); *Baker v. Mack*, 19 Cal. App. 3d 1040, 1045-46 (1971) (recreation). The trust also extends to the tributaries of

navigable streams, ecological preservation uses and wild creatures. *See National Audubon Society v. Superior Court*, 33 Cal. 3d at 435-36 (tributaries); *Marks v. Whitney*, 6 Cal. 3d at 259-60 (ecological preservation); *Geer v. Connecticut*, 161 U.S. 519, 528-30 (1896) (overruled on other grounds) (wild creatures). The State Board has a duty to protect these public trust values and resources when administering water rights. *See generally National Audubon Society*, 33 Cal.3d at 434-36.

67. The Stampede Reservoir Petition to Change, and TROA itself, injure public trust values in numerous respects. First, implementing TROA and its associated permits and applications, including the Stampede Reservoir Petition to Change, would cause more Truckee River water to be stored upstream, and less river water to flow downstream to Truckee River diversions and tributaries. TROA would ultimately limit water supply to key areas of ecological study and preservation, Carson Lake, the Fallon National Wildlife Refuge and the Stillwater National Wildlife Refuge. *See National Audubon Society v. Superior Court*, 33 Cal. 3d at 435-36 (tributaries); *Marks v. Whitney*, 6 Cal. 3d at 259-60 (ecological preservation); and *Geer v. Connecticut*, 161 U.S. 519, 528-30 (1896) (overruled on other grounds) (wild creatures). The threatened bald eagle populates these wildlife refuges. The bald eagle is also protected under the Bald and Golden Eagle Protection Act. 16 U.S.C. §§ 668-668(d). TROA would injure public trust values in these national wildlife refuges by limiting water to these areas, reducing water-based habitat in those areas, and, in turn injuring ecological study and wildlife preservation. Indeed, Public Law 101-618 (the federal legislation conceptualizing TROA) was enacted in part to promote Fallon National Wildlife Refuge and the Stillwater National Wildlife Refuge

wetlands protection. *See* P.L. 101-618 section 205, entitled "Wetlands Protection." However, actually putting TROA into practice would harm the wetlands P.L. 101-618 strives to protect.

68. TROA and its implementing permits and applications also injure public trust values by potentially reducing (or draining) water levels in California and Nevada reservoirs, reservoirs used for recreational purposes, with wildlife habitats of their own. Because of TROA's complex management proposal in Truckee River reservoirs, the actual impacts of TROA are largely unknown. However, TROA's emphasis on fishery conservation in Pyramid Lake may allow The Applicants to drain Truckee River reservoirs, such as Prosser Reservoir, in low water years to provide sufficient water supply for fish conservation in Pyramid Lake. Likewise, storing and stockpiling Truckee River water in the upstream California reservoirs may also reduce water storage and water levels in Lahontan Reservoir, downstream from TROA's upstream storage reservoirs. Lower water levels in the California reservoirs and Lahontan Reservoir frustrate public trust values by limiting water-dependent recreational opportunities, wildlife habitat, and wildlife. *See Marks v. Whitney*, 6 Cal. 3d at 257-58 (recreation); *Baker v. Mack*, 19 Cal. App. 3d at 1045-46 (recreation & ecological preservation); and *Geer v. Connecticut*, 161 U.S. 519, 528-30 (1896) (overruled on other grounds) (wild creatures).

69. TROA and its implementing petitions and applications also have the potential to injure the public trust rights of the citizens of Lyon County, Storey County, Churchill County, the City of Fallon and the Newlands Project to clean drinking water. While the State of California has yet to extend the public trust doctrine this far, the public certainly is entitled to clean drinking water as a fundamental basic tenet of public property rights, human rights and common decency. The priority TROA places on designating large amounts of Truckee River as

water for Pyramid Lake fish conservation has the potential to limit available water in the Truckee River for downstream communities to use as drinking water and for drought protection purposes.

70. Lastly, TROA and its implementing petitions and applications also raise public trust issues by choosing which communities are entitled to drought protection and clean drinking water. TROA gives upstream communities the best chance at a fresh water supply in times of drought, despite the fact that TROA's applications claim broad drought protection as a TROA purpose of use.

71. Therefore, Protestants protest TROA on the grounds that TROA injures public trust values.

TROA & THE STAMPEDE RESERVOIR PETITION TO CHANGE ARE CONTRARY TO EXISTING LAW

72. Protestants also protest TROA and the Stampede Reservoir Petition to Change because they are contrary to existing law. The Applicants circumvent California law requirements for transfers of water and fail to comply with the requirements of CEQA and the National Environmental Policy Act ("NEPA").

73. First, the Applicants circumvent the scrutiny of California's transfer statutes and misapply California law by defining TROA's proposed storage and transfer scheme instead as "changes and exchanges" of water. Tellingly, the Applicants have stricken the term "transfer" from their petitions and applications in order to mask the true intent of the TROA project. In reality, the Applicants propose broad water transfers outside of the change petitions on file with the State Board. Because the Applicants have not properly defined the scope of the TROA project, the Applicants neglect to discuss the true impacts and injury to other water users, such as

the Newlands Project, Churchill County and City of Fallon water right owners, that will most likely occur as a result of TROA's water transfers. Likewise, because the Applicants have not properly defined TROA as a transfer project, many water right owners on the Truckee River that will potentially be harmed by the TROA transfers have not had opportunity to intervene and protest injuries to their water rights.

74. The Applicants also failed to comply with CEQA and the National Environmental Policy Act ("NEPA"), which they incorporate by reference into their Petitions and Applications. CEQA, Cal. Pub. Resources Code §§ 21000-21177, and NEPA, 42 U.S.C. 4321, *et seq.*, require state and federal agencies, respectively, to identify and analyze agency actions with the potential to impact the environment, evaluate alternatives to those actions, document the environmental analysis and findings, and make the environmental analysis and information available to the public before final agency action is made. The State Board should deny the TROA Petitions and Applications because The Applicants have failed to comply with CEQA and NEPA before attempting to implement TROA at the State Board level. The Protestants hereby incorporate by reference each and every CEQA and NEPA comment letter they have submitted for TROA EIR/EIS documents (attached as Exhibit C to this Statement of Facts).

75. Both CEQA and NEPA require that the lead agency conducting the environmental review fully complete the entire CEQA/NEPA environmental review process, including the Revised EIR/EIS, before approving and implementing a project. *See e.g. ONRC Action v. Bureau of Land Management*, 150 F.3d 1132, 1137-38 (9th Cir. 1998); *Laurel Heights Improvement Ass'n v. Regents of University of California*, 6 Cal. 4th 1112, 1123-24 (1993). An agency may not take any action that would significantly impact the environment before the

CEQA/NEPA process has fully concluded. *Id.* The TROA Petitions and Applications are contrary to law because they violate this basic tenant of CEQA/NEPA case law, and request implementation of TROA before formal TROA environmental review has officially concluded, and before the State Board (and Protestants) have had an opportunity to review the Final EIR/ EIS discussing the environmental effects of TROA. The Applicants may not implement TROA, and the State Board may not grant The Applicants' Petitions and Applications to implement TROA, before reviewing the Final EIR/EIS for the project.

76. Likewise, the Applicants have recently published a revised draft of TROA itself, with significant substantive changes to TROA that directly affect the Newlands Project. Yet, Protestants have not had an opportunity to review and comment on these changes prior to submitting their protests to the State Board. Accordingly, The Applicants may not implement TROA and the State Board may not grant The Applicants' Petitions and Applications to implement TROA before reviewing the recently published updated version of TROA.

77. Moreover, the most recent publicly available TROA environmental document, the TROA Draft EIS/EIR, published in 2004, is contrary to CEQA and NEPA in numerous respects, many of which may plague the Final EIS/EIR, to be published in late 2007.

78. As the State Board emphasized in its letter of December 28, 2004 evaluating the TROA Draft EIS/EIR (attached to this Statement of Facts as Exhibit D), the Draft EIS/EIR does not adequately address the project level water right actions under consideration by the State Board – the Petitions for Change and Applications to Appropriate and their specific descriptions and sources of water. The Draft EIS/EIR also does not discuss the impacts associated with the State Board's potential approval of the Petitions or Applications and their potential impacts on

beneficial uses of water, public trust resources, and other legal water right owners. Additionally, the Draft EIS/EIR fails to discuss the potential groundwater recharge component of the Petitions and Applications, and the impact to the environment and other legal users of water with regards to groundwater recharge.

79. The Draft EIS/EIR also fails to adequately analyze water use and water consumption. California case law interpreting CEQA consistently emphasizes that an EIR analyzing a proposed water project must "clearly and coherently explain . . . how long-term water demand is to be met with the [proposed] water sources," as well as the environmental impacts associated with exploiting the water resources. *See Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova*, 40 Cal.4th 412, 441 (2007). *See also Santa Clarita Organization for Planning the Environment v. County of Los Angeles*, 106 Cal. App. 4th 715 (2003). Analysis of water use or water supply in an EIR may not be speculative or only cursorily mentioned in passing. *Id.* However, most of the information regarding water consumption and sources of water in the TROA Draft EIR/EIS is derived from a fatally flawed water model. The model The Applicants use to analyze TROA and its effects has never been calibrated, verified or validated. Significant limitations in the model exist that cause unintended consequences in the output the model predicts. *See* Comment Letter from Principia Mathematica, attached in Exhibit C. The model does not address many of TROA's components. The Draft EIS/EIR does not include model output for Prosser Reservoir water levels as contained in Exhibit 6 of the Water Resources Appendix for Boca, Donner, Stampede, Independence, Lahontan, Stampede and Tahoe. Finally, the model assumes that the last 100 years of water resources conditions will repeat, and does not conduct stochastic runs to verify that this is truly a

likely possibility. Thus, TROA environmental analysis is based upon a faulty model, which in turn results in faulty analysis of water use and water consumption in the TROA Draft EIR/EIS.

80. The Draft EIR/EIS also gives an inadequate alternatives analysis, failing to consider all reasonable alternatives in depth. *See* 40 C.F.R. §§ 1502.9(a) and 1502.14. The TROA EIR/EIS only evaluates three alternatives: no action, Local Water Supply Alternative ("LWSA") and TROA. These alternatives, however, do not analyze the range of alternatives CEQA and NEPA require. *See e.g. Westlands Water District v. United States*, 376 F.3d 853, 868 (9th Cir. 2004). The Draft EIR/EIS neglects to discuss obvious, common sense alternatives to TROA. For instance, the Draft EIR/EIS does not analyze water conservation, building more reservoirs or allowing water to be stored in Lahontan Reservoir.

81. The Draft EIR/EIS draws a distinction between the importance of the State Board's implementation of the Petitions to Change and the Applications to Appropriate, and states that the State Board's approval of the Applications to Appropriate is not essential for the TROA project to move forward. However, the Draft EIS/EIR did not evaluate a scenario where the State Board approved the Petitions to Change but did not approve the Applications to Appropriate. It is thus impossible to ascertain how The Applicants would implement TROA without the State Board's approval of the Applications, and the Draft EIS/EIR appears incomplete.

82. The Draft EIS/EIR fails to include or adequately examine baseline alternatives. NEPA requires that an environmental impact study adequately consider and disclose the environmental impact of its actions by examining current baseline conditions to evaluate proposed alternatives against. Without establishing baseline conditions, there is simply no way

to analyze the effect an action will have on the environment. *See American Rivers v. Federal Energy Regulatory Commission*, 201 F.3d 1186, 1195 (9th Cir. 2000). The TROA configuration is flawed when comparing to current conditions because the TROA alternative includes all of the embedded assumptions associated with year 2033. To determine the potential impacts of TROA on the current operations of the Newlands Project, only TROA provisions should be imposed on current conditions. Instead, the document compares TROA to a set of artificial, contrived conditions that do not exist in the Truckee River basin, and the overall impact of TROA appears significantly less significant than if the TROA alternative were simply added to conditions that actually exist in the Truckee River basin. The Draft EIS/EIR does not compare TROA to the current Truckee River management scheme, governed by the TRA and determined under the Orr Ditch Decree.

83. The Draft EIS/EIR also fails to adequately evaluate alternatives and potential mitigating actions. *See* 14 CCR § 15126.6; *Laurel Heights Improvement Assn v. Regents of the University of California*, 47 Cal.3d 376 (1988). An alternatives analysis should contain sufficient information about each alternative to allow meaningful evaluation and comparison with the proposed project. CEQA and NEPA do not provide for rejection of proposed alternatives by interested parties. However, the Draft EIR/EIS emphasizes that this is exactly the type of review of alternatives TROA went through, and that were eventually adopted by the environmental review document. Section 2.V of TROA refers to a Report to Negotiators, a report given to a select group of TROA stakeholders with mandatory signature authority. The Report gave the stakeholders an opportunity to reject alternatives that were not detailed in the Draft EIS/EIR. The Draft EIS/EIR only contains alternatives the stakeholders did not veto. If

rejection by interested parties were a criteria for disqualification of alternatives under CEQA, then the analysis of alternatives proscribed by CEQA would be nothing more then a *post hoc* rationalization to support decisions already made.

84. The alternatives accepted in the Draft EIR/EIS are counter to existing law, the Truckee-Carson-Pyramid Lake Water Rights Settlement Act of 1990. TROA, the accepted alternative in the Draft EIR/EIS, requires water to be stored and released without permission of the owners of water rights in the Truckee River, precludes certain storage and release for decreed water rights and users, and provides benefits to non-water-righted uses at the expense of water-righted uses. These actions are in conflict with the Truckee-Carson-Pyramid Lake Water Rights Settlement Act of 1990. Section 205(a)(2) of the Settlement Act states that water is to be stored and released from Truckee River Reservoirs to satisfy exercise of water rights in conformance with both the *Orr Ditch* and *Truckee River General Electric* Decrees. In addition, the Settlement Act requires full compliance with NEPA and state law, including CEQA. And CEQA provides that alternatives counter to existing law need not be analyzed . CCR § 15126.4(a)(5). Potential conflicts with the *Orr Ditch* and *Truckee River General Electric* Decrees are fatal to any TROA alternative.

85. In addition to the faulty alternatives analysis of the Draft EIS/EIR, the document is also biased toward the proposed action, TROA, and has prejudiced the outcome and the selection of alternatives examined in the environmental review. The Draft EIS/EIR is biased in several respects: the document defines TROA so narrowly as to rule out other reasonable alternatives, and bias in drafting the document appears to interfere with agency obligations to consider and weigh the pros and cons of each environmental alternative presented. *See*

Muckleshoot Indian Tribe v. U.S. Forest Service, 177 F.3d 800, 813 (9th Cir. 1999) (agency bias in picking a program or desired outcome at early stages of review process and forgoing all other reasonable alternatives); *Simmons v. United States Army Corps of Engineers*, 120 F.3d 664, 666 (7th Cir. 1997) (agency bias in "contriv[ing] a purpose so slender as to define competing 'reasonable alternatives' out of consideration (and even out of existence)").

86. The Applicants' Petitions and Applications are also contrary to CEQA and NEPA because the Draft EIS/EIR, the only published and available document discussing The Applicants' environmental review of TROA, lacks scientific integrity. *See* 40 C.F.R. § 1502.24 ("Agencies shall insure the professional integrity, including scientific integrity, of the discussions and analysis in environmental impact statements. They shall identify any methodologies used and shall make explicitly reference by footnote to the scientific and other sources relied upon for conclusions in the statement. An agency may place discussion of methodology in an appendix.") Similarly, CEQA also requires agencies to rely on precise data when available, and include in an EIR facts and analyses sufficient to allow for informed decision-making. 14 Cal. Code Regs. § 15151; *Citizens of Goleta Valley v. Board of Supervisors*, 52 Cal.3d 553, 568 (1990). Agencies can rely on computer models to help make these analyses, but the models must be relevant to the inquiry and updated to reflect current conditions. *Friends of Boundary Waters Wilderness v. Dombeck*, 164 F.3d 1115, 1130 (8th Cir. 1999) (upholding use of model that "was fully updated" and relevant); *National Wildlife Federation v. E.P.A.*, 286 F.3d 554, 565 (D.C. Cir. 2002) (upholding use of old model because it was "quite accurate over these last 25 years and remains an objective, established tool").

Withholding information related to a model's variables, as well as a model's shortcomings, violates NEPA. *The Lands Council v. Powell*, 395 F.3d 1019, 1031 (9th Cir. 2005).

87. Here, the agencies relied upon an outdated version of modeling software to analyze the TROA model and its effects, when new, up-to-date modeling software existed. The agencies also failed to account in the model for the effects of low flow years, or serious drought. At the least, the Draft EIS/EIR must contain an acknowledgement that low flow years and serious drought are possibilities. *See* 43 C.F.R. § 1502.22. However, the document mentions neither of these possibilities, and the model fails to account for these possibilities. Finally, the model also uses river flows for points on the Truckee River that are different than the USGS gaging stations for historical streamflows. Model output was processed using a program to estimate streamflows at the other locations. The use of these estimates, and others, without adequate data and rationale to support the use of the estimates, render the analysis flawed.

88. Last, but certainly not least, TROA and its last published CEQA/NEPA document are contrary to law because they are incomprehensible. An EIR/EIS must be written in plain, clear and concise language for public understanding and review. *See* 40 C.F.R. §§ 1502.8, 40 C.F.R. § 1502.1, 14 C.C.R. §§ 15121(a); 15140. Materials that support the environmental analysis must be attached in an appendix to the document. 40 C.F.R. § 1502.18. In order to understand the TROA Draft EIR/EIS, the reader must, in turn, understand TROA. However, TROA is full of cross-references and unique definitions, and long rules with multiple exceptions. Likewise, the Draft EIS/EIR is also complex and difficult to read. It contains a collection of definitions, jargon and cross-references to other provisions of TROA that embroil the reader in a whirlwind of concepts. And never once in the Draft EIS/EIR does the document attempt to set

forth any factual scenarios or realistic conditions that the reader or the public could understand. The Draft EIS/EIR far exceeds the page limitations recommended by the regulations, and is unwieldy, particularly for members of the general public. At the same time, the appendices fail to provide all necessary data required to permit specialists to fully analyze the scientific basis for the conclusions reached in the Draft EIS/EIR. For these reasons, the Draft EIS/EIR fails to satisfy the readability and understandability requirements of CEQA and NEPA, and is contrary to law.

STEPS THAT COULD BE TAKEN TO RESOLVE THIS PROTEST

89. Protestants request that the State Board not rule on the TROA Petitions and Applications until the Revised EIR/EIS document for the project is complete, and the public (including Protestants) have had an opportunity to review and comment on the Final EIR/EIS. The State Board should allow Protestants to supplement their Protest, if necessary, a reasonable time after review of the Revised TROA EIR/EIS takes place to respond to The Applicants' Revised EIR/EIS and incorporate discussion of this document into Protestants' Protests.

90. The State Board should not approve the Petitions and Applications that implement TROA until and unless the following terms and conditions are enacted:

a. Terms and conditions are imposed to ensure that existing water rights in the Newlands Project are not injured;

b. Newlands Project storage rights under the Orr Ditch Decree are permitted before any water is stored under TROA;

c. The TROA diversions and storage shall be according to a new priority based on the date of the underlying change applications and applications

to appropriate;

d. All restrictions and requirements of the TRA, Orr Ditch Decree and Prosser-Tahoe Exchange Agreement are imposed on TROA and the Petitions and Applications;

e. Any subsequent releases of the stored water shall be subject to reservoir evaporation and seepage losses as well as river conveyance losses to the new point of diversion in order to prevent such losses being incurred by downstream users;

f Drought protection is ensured for all downstream users;

g. Current return flow amounts existing under the TRA and Orr Ditch Decree are preserved;

h. Current groundwater recharge in downstream portions of the Truckee River existing under the TRA and Orr Ditch Decree is preserved;

i. Measures are taken to protect downstream wetlands and wildlife refuges;

j. Measures are taken to protect and preserve water levels in Lahontan Reservoir for recreation purposes.

k. Each and every transfer of water between and among upstream reservoirs must be in accordance with California Water Code transfer statutes to consider injury to the public and existing water rights.

91. Since the full scope of TROA is unknown, and environmental review of TROA is not complete, Protestants reserve the right to add to or amend or supplement this Protest as more information becomes available.

92. Therefore, Protestants respectfully request that the State Board require The Applicants to submit Revised EIR/EIS documents pursuant to CEQA and NEPA, before the State Board rules on the TROA Petitions and Applications. The State Board should review the Revised EIR/EIS documents before ruling on the TROA Petitions and Applications, and should hold a hearing on the TROA Petitions and Applications after the Revised EIR/EIS becomes available. Finally, the State Board should deny the TROA Petitions and Applications, and enter an order denying the TROA Petitions and Applications, because the Petitions and Applications injure prior water rights on the Truckee River, the State Board does not have jurisdiction to re-allocate water already belonging to Newlands Project , Churchill County and the City of Fallon water right owners, and the TROA Petitions and Applications injure the environment, the public interest, public trust values, and are contrary to law.

Dated this 2nd day of April, 2007.

Respectfully submitted,

MICHAEL J. VAN ZANDT, Esq.
California State Bar No. 96777
McQUAID BEDFORD & VAN ZANDT, LLP
221 Main Street, 16th Floor
San Francisco, CA 94105
Telephone: 415-905-0200
Fax: 415-905-0202
Attorneys for Protestants

CERTIFICATE OF MAILING

I hereby certify that on April 2, 2007, I served a copy of the attached **STATEMENT OF FACTS SUPPORTING TRUCKEE-CARSON IRRIGATION DISTRICT'S, NEWLANDS PROJECT WATER RIGHT OWNERS', CHURCHILL COUNTY, NEVADA'S & THE CITY OF FALLON, NEVADA'S PROTEST AND REQUEST TO DENY PETITION FOR CHANGE APPLICATION 15673/PERMIT 11605 (STAMPEDE RESERVOIR)** via United States first class mail, postage pre-paid, on the parties listed below:

Martha Kaiser
Mid-Pacific Region
US Bureau of Reclamation, (MP-440)
2800 Cottage Way
Sacramento, CA 95825

Ms. Lori Williams, GM
TMWA
PO Box 30013
Reno, NV 89520

Mr. Kenneth Parr
US Bureau of Reclamation
705 North Plaza Street
Carson City, NV 89701

Brad T. Goetsch
County Manager
Churchill County
155 No. Taylor Street, Suite 153
Fallon, NV 89406

Michael F. Mackedon
Mackedon, McCormick & King
179 South LaVern Street
PO Box 1203
Fallon, NV 89407

Mr. Donald Casazza
Washoe County Water Conservation
295 Holcomb Ave, Suite A
Reno, NV 89502

I declare under penalty of perjury of the laws of the United States of America that the foregoing is true and correct. Dated this 2nd day of April, 2007 in San Francisco, California.

Keith Kiley

EXHIBIT A

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

IN THE MATTER OF CHANGE APPLICATION 73783 FILED BY TRUCKEE MEADOWS WATER AUTHORITY TO CHANGE THE PLACE AND MANNER OF USE OF WATER HERETOFORE APPROPRIATED UNDER CLAIM 314 OF THE TRUCKEE RIVER DECREE AND PERMIT 42732 CERT. 11014	**PROTEST AND REQUEST TO DENY APPLICATION 73783 PETITION FOR HEARING PURSUANT TO N.R.S. 533.365; AND ENVIRONMENTAL STUDY PURSUANT TO N.R.S. 533.368**

COMES NOW THE TRUCKEE-CARSON IRRIGATION DISTRICT ("TCID"), by and through its attorneys, organized under Chapter 539 of the Nevada Revised Statutes, whose address is P.O. Box 1356, Fallon, Nevada, 89407-1356, with responsibilities under contract to operate and maintain the Newlands Reclamation Project and to deliver water to landowners who have contracted either with the United States or with TCID, and to comply with water rights decrees for water rights appropriated by the United States under the Reclamation Act (43 U.S.C. 371, et seq.) and as a party to the water rights decree of the Truckee River, known as the Orr Ditch Decree (*U.S. v. Orr Water Ditch Co.*, Equity A-3-LDG U.S. District Court, Nevada, September 8, 1944), hereby protests the granting of change application 73783 filed by Truckee Meadows Water Authority ("TMWA"), to change the place and manner of use of water heretofore appropriated under Claim No., 314 of the Orr Ditch Decree (or Truckee River Decree) and permit 42732, cert. 11014. TCID protests the application for the following reasons and on the grounds, to wit:

///

///

2006 MAY 11 PM 3:01

1. On information and belief, the purported water rights arise from the Truckee River Agreement ("TRA"), to which TCID is a party, and which is incorporated by reference into the Orr Ditch Decree (*U.S. v. Orr Water Ditch Co.*, et al., CV-N- 73-003. D. Nev. (1944)), and such rights arise, if at all, based upon an express agreement of the parties to the Truckee River Agreement and not otherwise, and granting the application would violate the compromise reached in the TRA that allowed the Orr Ditch Decree to be entered.

2. Any change to the compromise reached by the parties to the TRA requires the consent of the parties to that agreement, which consent is withheld by TCID.

3. The Application is defective because it attempts to effect a unilateral modification to the Orr Ditch Decree by changing the TRA, without consent, approval or notice, and attempts to modify the Orr Ditch Decree without approval of the Orr Ditch Court.

4. The Application proposes that the beneficial places of use will be set forth in applications for secondary permits consistent with the Truckee-River Operating Agreement ("TROA"). TROA is still in the environmental review process and there is no guarantee that it will be approved. Further, the Application fails to adequately identify a specific project where the water will be applied for beneficial use. The Applicant has not demonstrated feasability of beneficial use of the water, therefore, the Application is premature and speculative.

5. The Truckee River Agreement and the Orr Ditch Decree Control the Distribution and Storage of Water in the Truckee River Basin. The TRA is incorporated into the Orr Ditch Decree as a part of the decree itself. See *U. S. v. Orr Water Ditch Company*, CV-N-73-0003 LDG at p. 86. The TRA sets forth the principles under which the Truckee River would be operated and allowed for the stipulated entry of the Orr Ditch Decree. The parties to the Truckee

River Agreement are: The United States of America; Truckee-Carson Irrigation District; Washoe County Water Conservation District (Conservation District); Sierra Pacific Power Company (Sierra), and such other users of the waters of the Truckee River and/or its tributaries, known as Parties of Fifth Part. The TRA required the Truckee River to be operated on the basis of Floriston Rates, as established in the 1915 General Electric Decree. *United States v. The Truckee River General Electric Company,* Case No. 14861 (N.D. Cal. 1915). For the last 70 years, the Truckee River has been managed by the parties to the TRA, along with the Federal Water Master. Several new reservoirs have been added to the Truckee River watershed that did not exist when the TRA was executed. These reservoirs are part of the Washoe Project and include Prosser Reservoir and Stampede Reservoir. These reservoirs are managed in conjunction with the other reservoirs serving the Truckee River basin. The Applicant has failed to show that the proposed diversion and use of water is consistent with the management regime of the Truckee River as set forth in the Truckee River Agreement and the Orr Ditch Decree. Moreover, any unused water in the Truckee River is to inure to the benefit of the Conservation District and TCID. Attempts to alter the division of unused water are in violation of the TRA and undermine the Orr Ditch Decree.

6. The Applicant may not use Boca Reservoir or Lake Tahoe water as proposed in the Application. These water bodies are subject to the terms of the TRA, to which TMWA, a successor to the Sierra Pacific Power Company, is bound.

7. On information and belief, the proposed storage and secondary use under TROA of the water proposed in the Application (in conjunction with the other similar applications filed for upstream storage) will interfere with the management of Floriston Rates on the Truckee

River. Floriston Rates are defined in the TRA as the rate of flow in the Truckee River as measured at the Iceland Gage, consisting of an average flow of 500 cubic feet per second (cfs) each day during the year commencing March 1 and ending September 30 of any year and an average flow of 400 cfs each day from October 1 to the last day of February of the next year. Water in Lake Tahoe must also be released as required under the TRA to maintain Floriston Rates. The TRA sets limitations on when Floriston Rates can be changed and requires that before that can occur, the permission of the Conservation District, TCID and Sierra must be obtained. In addition, the United States and TCID must agree pursuant to their rights under the 1915 GE Decree. Changes in the flow from Boca Reservoir requires the consent of TCID. The TRA also calls for Reduced Floriston Rates under certain conditions that would also potentially be impacted by the proposed change. The proposed change applications purport to alter the TRA in violation of the aforementioned agreement.

8. All Washoe Project reservoirs, include Prosser Reservoir and Stampede Reservoir, must also be operated based on Floriston Rates. The operation of these reservoirs would also be altered to the detriment of TCID under the proposed change applications.

9. The Application must comply with the TRA, unless and until consent of all parties is received. TCID does not consent. TROA was born from the Preliminary Settlement Agreement between Sierra Pacific and the Pyramid Lake Paiute Tribe of Indians (PLIT), which was recognized in the Truckee-Carson-Pyramid Lake Settlement Act, P.L. 101-618, 104 Stat. 3289, November 16, 1990 (the Act). The Act contains a reservation that it is not to be construed to alter or conflict with any existing rights to use the Truckee River water in accordance with the applicable decrees. The TRA is incorporated into the Orr Ditch Decree as a part of the decree

itself. See *United States v. Orr Water Ditch Company*, CV-N-73-0003 LDG at p. 86. Specifically, the Act states that TROA will "ensure that water is stored in and released from Truckee River reservoirs to satisfy the exercise of water rights in conformance with the Orr Ditch decree and Truckee River General Electric decree." 104 Stat 3305. Therefore, even under TROA, if adopted, the Application must comply with the TRA requirements for storage and maintenance of Floriston rates. The Applicant has made no showing that the proposed diversion of the water complies with the TRA, nor can it.

10. The proposed Application fails to adequately identify the beneficial use of the water, the specific place of use, or a specific project where the water will be applied for beneficial use. The proposed place of use for the applications will be subsequently "....set forth in applications for secondary permits consistent with the Truckee River Operating Agreement." The Applicant has not demonstrated feasibility of beneficial use of the water; therefore, the Application is premature and speculative.

11. On information and belief, the granting of this Application would injure existing water rights adjudicated in the Orr Ditch Decree, and under the Orr Ditch Decree such a transfer cannot be approved if it will cause injury to an existing right under the decree. Potential uses under TROA for fish credit water will injure Newlands water users. The historic use of this water was for irrigation, which provided for return flows which could be beneficially used by Newlands farmers. Likewise, the current use of this water for municipal and domestic provides substantial return flows. However, uses under TROA for fish water do not provide return flows resulting in injury to Newlands Project farmers, especially in years of drought.

12. This Application along with other numerous similar applications filed by

TMWA/Reno/Sparks are actually joint applications for storage of the consumptive portion and direct diversion of full diversion rate, which violates NRS 533.330 wherein an application must be limited to one source for one purpose.

13. The Application incorrectly names the source of the water and fails to designate a point of diversion. NRS 533.440(2) specifies "the application shall refer to the reservoir for a supply of water." The Application does not specify the named reservoirs in Exhibit B as the "supply," rather the reservoirs are named as points of diversion, the source of supply for the Applications is actually tributaries to the Truckee River. The point of diversion cannot be a storage facility.

14. The Application fails to provide evidence of sufficient capacity in the named reservoirs or the existence of agreements for the storage of water. NRS 533.440(2) specifies "the application...shall show by documentary evidence that an agreement has been entered into with the owner of the reservoir for a **permanent** and sufficient interest in such reservoir to impound enough water for the purpose set forth in the application." No such evidence has been provided in the Application regarding sufficient capacity in each reservoir and no evidence has been provided to demonstrate that permanent storage agreements have been entered into with the United States. Likewise, TCID has not given Applicant permission to store credit storage or exchange water in Donner Lake, Lake Tahoe, or Boca Reservoir.

15. The Applicant has provided no evidence of a permanent water right to store the subject water under California law. They propose to divert water from a point in which they have no right or control. The water rights change petitions submitted to the California State Water Resources Control Board by the United States/TMWA/Washoe County Water

Conservation District for credit storage under TROA in Prosser Reservoir, Boca Reservoir, Stampede Reservoir, and Independence Lake as well as the two water rights applications for increasing the storage at Prosser Reservoir and Stampede Reservoir are still pending. Thus, the Application is premature and speculative.

16. The Applicant has not demonstrated that the proposed water can be stored in the reservoirs without displacing water that would otherwise be stored to the benefit of the Newlands Project.

17. The Application fails to provide a full understanding of the proposed change. Because negotiations for TROA are ongoing, the agreement has not been finalized, and the Draft environmental impact statement/environmental impact report ("DEIS/EIR") has not been certified the Application is inadequate pursuant to NRS 533.345 wherein any application to change the place of diversion, manner of use, or place of use must contain "....such information as may be necessary to a full understanding of the proposed change." This is particularly true because the applications for secondary permits have not been filed and the potential impacts cannot be fully understood until TROA is finalized, if at all, and the beneficial uses and places of use are identified. It is noted that such secondary permits are not published in accordance with NRS 533.440 and thus, even though the actual points of diversion and the source of such diversions are not shown in the Application, the Applicant(s) are attempting to bypass the notice provisions, thus shifting the burden to potential protestants to monitor application filings for the subsequent secondary permits and file additional protests at that time.

18. Exhibit D of the Application describes the intent to store only the consumptive use portion of the water right and includes incomplete and vague language that the consumptive

use portion shall be at least 2.5 acre feet per acre. This is problematic for two reasons. First, it appears the language is vague to allow the Applicant at some later time to attempt to increase the storage rate beyond the specified 2.5 acre feet per acre. If the Application is approved, it should specify that "the consumptive use portion shall not **exceed** the actual consumptive use portion of the water right, as determined by the State Engineer." Second, the Application (and in many instances the underlying permits and certificates) does not expressly state the number of acres to be used in determining the storage quantity under each right. The Application should specifically state the number of acres associated with the underlying water right. Moreover, the Application does not state the actual amount of water in acre feet that will be stored in the reservoirs, making the Application defective.

19. The Application for "Primary Storage" and "Secondary Uses" will dramatically alter the flow regime of the Truckee River with potential injury to Newlands Project water right owners. The Application specifies the proposed period of use as January 1 to December 31 of each year, whereas the existing period of use is generally "as decreed." The underlying water rights for the claims in the Orr Ditch Decree were originally used for irrigation purposes, thus the historical diversion pattern was on an irrigation pattern. The Orr Ditch Decree does not specify a prescribed irrigation season rather it is purposely left open to allow for flexibility in changing hydrologic conditions. Although the prior change permit was issued without restricting the municipal use to a historical diversion pattern, the permits generally contain language to the effect that the permit is issued subject to the terms and conditions of the Orr Ditch Decree and "with the understanding that no other rights on the source [Truckee River] will be affected by the change proposed herein." Further, the prior change permit was issued allowing municipal and

domestic uses for a period of use specified "as decreed." Year-round use of water historically used on an irrigation pattern may cause injury to downstream rights and that proposed storage of these rights increases the potential for injury to downstream rights. If the Applicant is allowed to store these water rights in the non-irrigation season with subsequent releases for municipal use or for conversion to fish water, the regime of the Truckee River will be dramatically altered resulting in potential injury to existing water right owners. The proposed period of use should be restricted to the "irrigation season" as determined each year by the Federal Water Master.

20. The amount diverted (either into storage or by direct diversion) should be restricted to the 25 percent maximum monthly amount in accordance with the Orr Ditch Decree. See *United States v. Orr Water Ditch Company*, CV-N-73-0003 LDG at p. 88.

21. The Application is defective because there is no information provided regarding the releases and use of the stored water and thus the potential injury or impacts cannot be ascertained.

22. It is understood from review of the TROA DEIS/EIR that the stored water will be used as (1) subsequent municipal releases and diversions or (2) the expanded uses under TROA to include conversion to fish water, releases for minimum instream flows, and releases for the broader lower Truckee River streamflow objectives. Any subsequent releases of the stored water should be subject to reservoir evaporation and seepage losses as well as river conveyance losses to the new point of diversion in order to prevent such losses from being incurred by the Newlands Project.

23. By diverting water and storing it in up stream reservoirs, the Application is keeping water out of the river to the detriment of other water right holders, particularly in years

of drought. Further, agreements would be required with users of both Truckee and Carson River waters for modification of certain established water rights. No such agreement has been obtained.

24. Storage in up-stream reservoirs is to the detriment of Lake Tahoe. The water which is the subject of the Application, which would otherwise be credited into storage in Lake Tahoe, will result in an artificial decrease in the Lake Tahoe levels, adversely affecting water rights under Claims No. 3 and 4 of the Orr Ditch Decree. Further storage in up-stream reservoirs is counter to the 1990 Settlement Act which states that TROA may include "methods to diminish the likelihood of Lake Tahoe dropping below its natural rim . . ." Approval of the Application would have the exact opposite effect.

25. On information and belief, the purported Application will negatively impact Hydrographic Basin 87. The flow of the Truckee River is hydrographically linked to underground water. By storing water in upstream reservoirs that normally flowed in the river, the Application (in conjunction with the other similar applications filed for upstream storage) will negatively impact recharge of Hydrographic Basin 87. Further, TMWA currently utilizes Hydrographic Basin 87 as a source of substantial water which is pumped from the basin. By storing water up-stream they are in effect utilizing the water twice to the detriment to other water users whose water will now recharge the basin, especially in times of drought. Removing this water from the basin prevents it from partially recharging the aquifer. Well pumping then must use other groundwater that is hydrographically connected to the Truckee River, thus affecting flows in the river for downstream users.

26. Based upon information and belief, the Applicant will divert a portion of their

surface water rights that historically go to recharge Hydrographic Basin 87 to the named up-stream reservoirs. This will unreasonably lower the water table resulting in injury to others who have wells in the Truckee Meadows. The State Engineer must take into account whether the proposed change conflicts with protectable interests in existing domestic wells as set forth in NRS 533.370(5). These wells must then draw water that is hydrographically connected to the Truckee River, thus adversely affecting downstream water right owners.

27. Basin 87 is designated by the State Engineer under Chapter 534 of the NRS, and moving surface water from the basin will have a detrimental effect on the groundwater.

28. The application is premature, speculative, and detrimental to the public interest as there are a number of conditions that must occur before the water may be utilized as proposed in the application, including: (1) no permanent agreement to store water in the named reservoirs, (2) no permission to store water in Donner Lake from TCID, (3) TROA has not been finalized, and (4) the California State Water Resource Control Board has not issued permits to store this water under California law. Nevada law mandates that the State Engineer either approves or denies an application, and an application can not be contingent on subsequent conditions. NRS 533.370. At this time there is insufficient information for the State Engineer to act.

29. On information and belief, Applicant intends with the secondary use to use the water below the current point of diversion. Any secondary use below the original point of diversion should be treated as a new application with a priority date as of the date of the change application to prevent injury to existing water right owners. Further, the Applicant has no right to divert and use water at diversion points outside of Truckee Meadows. Moreover, a change in the point of diversion downstream will have a negative effect on upstream and downstream users.

30. Storage of water at Stampede Reservoir which otherwise would be stored in Lahontan Reservoir can not be accomplished without agreement with TCID. No such agreement has been made in regards to this Application.

31. Upon information and belief, the proposed change Application will violate a 1994 Agreement between Sierra and TCID regarding Water Rights.

32. The amount of acreage shown on the Application is more than the consumptive use portion. If approved, the Application should be limited to the actual consumptive use portion.

33. If such applications are approved any permit should be issued subject to the following specific conditions:

a. Assure that all irrigated lands and residual acreage associated with prior transfers do not receive any Truckee River water either inadvertently or directly.

b. The diversion shall be according to a new priority based on the date of the underlying change application.

c. The period of use for the first diversion either into storage or for direct diversion at the water treatment plants must be restricted to the irrigation season specified by the Federal Water Master.

d. The first diversion either into storage or for direct diversion must be restricted to the 25 percent maximum monthly amount in accordance with the Orr Ditch Decree.

e. The consumptive use portion to be stored in the reservoirs shall not exceed the actual consumptive use portion of the water right as determined by the State Engineer, calculated based on a specified number of acres provided in the permit.

f. The non-consumptive use portion shall remain in the river to protect the historical flow regime of the Truckee River.

g. Any subsequent releases of the stored water shall be subject to reservoir evaporation and seepage losses as well as river conveyance losses to the new point of diversion in order to prevent such losses being incurred by downstream users.

h. Proposed accounting forms shall be approved by the State Engineer and the Federal Water Master tracking by right and priority amounts of water including but not limited to diversion to storage, direct diversion, exchanges, conversion to fish water, subsequent reservoir releases, reservoir losses, and river conveyance losses.

i. Conditions to insure that the proposed storage of water can be stored in the reservoirs without displacing water that would otherwise be stored to the benefit of the Newlands Project.

j. NRS 533.440 (1) provides that there is no notice requirements for secondary permits. Here, the unknown and speculative nature of the secondary uses in the application could result in injury to other water right owners. Therefore, there should be a specific notice requirement for secondary uses with this Application, if approved.

k. The transportation component of the water should be stored in Lake Tahoe for use by other water owners entitled to diversions under the Orr Ditch Decree.

l. The permit is issued subject to the terms and conditions of the Orr Ditch Decree and with the understanding that no other rights on the source Truckee River will be affected by the change proposed.

m. The permit is issued subject to uses for a period of use specified "as

decreed."

34. Since the full scope of this project is unknown and referenced subsequent secondary recovery applications will be filed which are not published, TCID reserves the right to add or amend this Protest as more information becomes available.

35. On information and belief, the water rights at issue have been abandoned or forfeited due to non use.

THEREFORE, TCID respectfully requests 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 4th day of May, 2006.

Respectfully submitted,

MICHAEL J. VAN ZANDT, Esq.
Nevada State Bar No. 7199
McQUAID BEDFORD & VAN ZANDT, LLP
221 Main Street, 16th Floor
San Francisco, CA 94105
Telephone: 415-905-0200
Fax: 415-905-0202
Attorneys for Truckee-Carson Irrigation District

Subscribed and sworn to before me this 4th day of ~~October, 2004.~~ May, 2006

SAMANTHA HUBLEY
Commission # 1441610
Notary Public - California
San Francisco County
My Comm. Expires Oct 22, 2007

Notary Public
State of California
County of San Francisco

CERTIFICATE OF SERVICE

I, the undersigned, declare under penalty of perjury that I am over the age of eighteen years, and that I am not a party to nor interested in this action. On the date stated below, I caused to be served a true and correct copy of the within **PROTEST AND REQUEST TO DENY APPLICATION 73783; PETITION FOR HEARING PURSUANT TO N.R.S. 533.365; and ENVIRONMENTAL STUDY PURSUANT TO N.R.S. 533.368** by the method indicated below:

By First Class Mail - I caused each such envelope, with first-class postage thereon fully prepaid, to be deposited in a recognized place of deposit of the U.S. mail in San Francisco, California, for collection and mailing to the office of the addressee on the date shown herein following ordinary business practices.

and addressed to the following parties listed on the attached Service List.

I declare under penalty of perjury that the foregoing is true and correct. Executed on May 10, 2006 in San Francisco, California.

Dené W. Tatmon

EXHIBIT B

ORIGINAL SIGNED BY

Jill B. Dunlap, Member

Walter G. Pettit, Chief

Division of Water Rights

JUNE 10 1980

Stampede Reservoir, Application 15673 (Permit 11605)

This memo is in response to your note on a copy of Mr. M. A. Catino's letter of May 5, 1980. This note asks if the proposal to again release water stored in Stampede Reservoir to aid in restoration of the Pyramid Lake fishery is consistent with any water rights in California.

The U. S. Water and Power Resources Service has no rights for use of this water in California (except for recreation at the reservoir). Permit 11605 (Application 15673) covers direct diversion of 350 cubic feet per second from about April 1 to about November 1 and collection to storage of 126,000 acre-feet per annum in Stampede Reservoir throughout the year for domestic, municipal, industrial, irrigation, flood control, fish culture and recreational purposes. The place of use is Truckee Meadows, gross acreage 36,340, net acreage 26,800 and Newlands Project, gross acreage 107,140, net acreage 70,000. The Service has no other California permits for this water.

The Service states in its progress reports that use of water under this permit is limited by court decision Pyramid Lake Paiute Tribe of Indians v. Roger C. B. Morton, Civil Action No. 2506-70, and until pending court actions are settled, none of the water developed by Stampede Reservoir is permitted to serve any purpose except maintaining of flows in the Truckee River below Derby Dam. The time for completing use under the permit expired in 1976. WPRS filed a petition for extension at that time. Board action has been deferred on it and other petitions in the Tahoe-Truckee River watershed.

cc: W. R. Attwater
C. M. Bard
W. J. Miller
L. L. Mitchell
F. K. Aljibury

LCSPENCER/WGPETTIT:tgraybill

SURNAME	1	2	3	4
				OSP

CA02538

EXHIBIT C

MCQUAID
BEDFORD &
VAN ZANDT LLP

221 Main Street 16th Floor
San Francisco CA 94105-1936
TEL 415/905-0200
FAX 415/905-0202

December 30, 2004

VIA EMAIL (kparr@mp.usbr.gov)

Mr. Kenneth Parr
U.S. Department of the Interior
Bureau of Reclamation
Lahontan Basin Area Office
705 North Plaza Street
Carson City, Nevada 89701

Re: Truckee-Carson Irrigation District's Comments on Draft Truckee River Operating Agreement Environmental Impact Statement and Environmental Impact Report

Dear Mr. Parr:

On behalf of the Truckee-Carson Irrigation District (TCID), I hereby submit comments on the Draft Environmental Impact Statement/Environmental Impact Report (Draft EIS/EIR) for the Truckee River Operating Agreement (TROA). TCID and this firm commented on the 1998 Draft EIS/EIR and those comments still apply. I incorporate those comments by reference and attach them for your convenience. I also adopt the comments of Churchill County and the City of Fallon. I have also attached comments from Mr. Charles Binder, President of Binder & Associates Consulting, Inc. (Binder), a water resources expert, and from Drs. Devraj Sharma and Willem Schreuder, President Emeritus and President of Principia Mathematica, Inc. (Principia), experts in water resources modeling. The comments of these experts are also submitted on behalf of Churchill County and the City of Fallon. I appreciate the opportunity to comment on this very important proposal, one that will affect not only the participants in the TROA negotiations but also all of the water users in the Truckee River Watershed.

These comments are organized as general comments on the Draft EIS/EIR in this letter, a separate attachment addressing page by page comments, a copy of the previous comments from this office on the 1998 Draft EIS/EIR, and the comments of Binder and Principia.

BACKGROUND

The Truckee River and its tributaries supply water to several hundred thousand individuals, to farms, ranches, businesses, and to flora and fauna over a vast area, stretching from

the Sierra Nevada Mountains to the Stillwater Range in Churchill County. There are several thousand individuals and entities that own water rights from water supplied by the Truckee River and its tributaries. These water rights were adjudicated in the *Orr Ditch* Decree, *U.S. v. Orr Water Ditch Company*, Case No. Equity A-3 (D.Nev. 1944). The *Orr Ditch* Decree was finalized after the parties agreed to stipulate to its entry after they had entered into the Truckee River Agreement (TRA) in 1935. The TRA was negotiated to settle all remaining disputes concerning the allocation of water from the Truckee River and to establish a scheme for the management of the reservoirs and resources associated with the Truckee River, including Lake Tahoe and what was to become Boca Reservoir.

The main participants in the negotiation of the TRA were the United States of America, TCID, the Washoe County Water Conservation District (Conservation District), and Sierra Pacific Power Company (Sierra). A portion of Sierra's water resource responsibilities have been taken over by the Truckee Meadows Water Authority (TMWA). Parties of the Fifth Part, or other individuals using water rights from the Truckee River also signed the agreement. TCID, the Conservation District and Sierra were assigned responsibilities for managing the river, since they were the major owners of water rights. The United States also was assigned a role since it had a major interest in facilities, including the dam at Lake Tahoe, Derby Dam, Lahontan Reservoir and the Newlands Project. The Federal Water Master, appointed by the *Orr Ditch* court also had a major role to play in the management of the River. There are many important components of the TRA, but the most important ones are the management of the reservoirs and Lake Tahoe in order to meet Floristan Rates in the Truckee River. Floristan Rates are designed to ensure that there is sufficient flow in the river to satisfy power generation requirements under the General Electric Decree of 1915, and to ensure sufficient flows in the river so that downstream irrigation, domestic and municipal and industrial (M&I) demands are met. These would include demands of the Newlands Project under Claims 3 and 4 of the *Orr Ditch* Decree to store water in Lake Tahoe and Lahontan Reservoir and to allow diversions at Derby Dam for irrigation, domestic and livestock and for carryover storage. Without the TRA, the *Orr Ditch* Decree could not have been entered as a final decree. The stipulation entered into by the parties prohibits withdrawal from the stipulation and makes the stipulation irrevocable. Any changes, therefore, to the TRA requires the consent of all the parties to the TRA.

After the *Orr Ditch* Decree was entered, disputes arose concerning the amount of water that the United States had allocated for the Pyramid Lake Paiute Tribe of Indians (PLIT). These disputes culminated in several significant events, including a suit by the PLIT to force the Secretary of Interior to regulate diversions from the Truckee River to the Newlands Project and an attempt by the United States to reallocate water in the Truckee River from the Newlands Project to the PLIT. This attempt was halted by the United States Supreme Court in the case of *Nevada v. U.S.*, 463 U.S. 110 (1983). The Court ruled that the *Orr Ditch* Decree barred the United States from reallocating the water of the Truckee River once the decree was final. The

Secretary of Interior has continued to regulate diversions from the Truckee River through the Newlands Project Operating Criteria and Procedures (OCAP), first promulgated in 1967, and amended in 1973, 1988 and modified in 1997. The OCAP is intended to ensure that the Newlands Project complies with all applicable decrees, including the *Orr Ditch* Decree.

For the last 69 years, the Truckee River has been managed by the parties to the TRA, along with the Federal Water Master. Several new reservoirs have been added to the Truckee River watershed that did not exist when the TRA was executed. These reservoirs are part of the Washoe Project and include Prosser Reservoir and Stampede Reservoir. These reservoirs are managed in conjunction with the other reservoirs serving the Truckee River basin; however, Stampede Reservoir is primarily managed as storage for water for endangered and threatened fish in Pyramid Lake and the Lower Truckee River.

In 1988, Sierra and PLIT negotiated the Preliminary Settlement Agreement (PSA), which purports to set forth a process to settle disputes between Sierra and PLIT over uses of waters in the Truckee River, but primarily allows for storage of water owned by Sierra in upstream reservoirs for drought protection for the Truckee Meadows. In return, the PLIT would be able to convert this drought protection water into Fish Credit Water if it is not needed by Sierra. The PSA was modified and then ratified by the United States. The PSA also became the foundation for the initiative to settle certain litigation the PLIT had initiated through federal legislation. Thus was born the Truckee-Carson-Pyramid Lake Settlement Act, P.L. 101-618, 104 Stat. 3289, November 16, 1990 (the Act).

The Act included provisions for congressional approval of the interstate allocations of water between Nevada and California and for the negotiation of the Truckee River Operating Agreement, which would use the PSA as its start point. The TROA provisions of the Act also required that water rights along the Truckee River be protected. Moreover, the Act also contained a reservation that it was not to be construed to alter or conflict with any existing rights to use the Truckee River water in accordance with the applicable decrees, including the right of the Newlands Project to divert water at Derby Dam.

WATER RIGHTS ISSUES

The TROA purports to supercede all prior agreements regarding the management of the Truckee River. There is a significant question whether any parties to the TRA can unilaterally dispose of the TRA and replace it with a different management scheme without the consent of all parties to the TRA. Moreover, certain allocations of water in the TRA are not preserved in the TROA and the TROA purports to alter the manner in which Floristan Rates are set in the river. As noted above, the major management decisions on the Truckee River revolve around the

maintenance of Floristan Rated to meet the water right demands of the decree. TROA in many ways dismantles not only the management structure associated with Floristan Rates and storage in reservoirs to meet these rates but also alters the manner in which the rates are reduced and completely alters the characteristics of the water saved through such reductions. The long and short of this is that the water is no longer saved for the benefit of all water users on the river but is saved only for TMWA and/or the PLIT. The water right owners in the Newlands Project are completely cut out of this process and no longer have even a seat at the table to decide how the water in the river will be managed.

TROA purports to create carryover storage rights in the upstream reservoirs and even removes water from storage in Lahontan Reservoir which is then stored in these upstream reservoirs, ostensibly for the purpose of preventing spills at Lahontan. The truth is that this initiative, which is part of TROA but neither analyzed or modeled in the Draft EIS/EIR, is designed to hold water that is part of the Newlands project water right owners carryover storage right in Lahontan, in the upstream reservoirs where it will be converted to fish water for the benefit of the PLIT. This is exactly the type of reallocation that was barred by the U.S. Supreme Court in 1983. In contrast to the carryover storage rights of the Newlands Project, Sierra, TMWA, PLIT and others are allowed to store water in upstream reservoirs and to carryover such storage from year to year by establishing a system of credits.

TROA also claims that the credit waters stored in these upstream reservoirs will attain the characteristics of Privately Owned Stored Water. This means that such waters can be stored in the reservoirs and when released, no transportation losses are applied until the water reaches its new point of diversion. This means that water stored for drought protection by TMWA that normally would be diverted in the Reno/Sparks area will now be stored with no losses and converted into Fish Credit Water. The Fish Credit Water, when it is released, will have no transportation losses applied until it reaches Pyramid Lake. Thus for the distance from Sparks to Pyramid Lake, some fifty miles, there are no transportation losses applied and the water needed to transport such credit waters comes out of the flow in the river that wold otherwise be available to divert by others along the river without regard to priority of appropriation. To declare that water that is not even decreed water such as fish water or fish credit water is permitted to have carryover storage and no transportation losses elevates this water above other decreed water with a clearly higher priority and with decreed rights.

TROA also purports to be able to alter the way in which Floristan Rates are reduced without regard to the rights of Newlands Project water right owners, including rights to store water for drought protection. The negotiators of TROA have seen fit to remove TCID as a participant in any of the management decisions and have provided no protection for the rights of Newlands Project water rights owners, other than the State of Nevada. On average, 60,000 to 100,000 acre feet of water is diverted from the Truckee River for the benefit of the Newlands

Project. This is compared to an average flow of about 600,000 acre feet. Thus water right owners with a significant interest in the waters of the Truckee river are being eliminated from its management. Moreover, in addition to control over Floristan Rates, the TROA purports to include credit storage in Lake Tahoe adverse to Claim 4 of Orr Ditch and to allow Donner Lake water, of which TCID owns and undivided one half, to be divided and credited by TMWA for drought protection and/or converted to fish credit water. This is a direct and substantial impact on the Newlands project. Finally, TMWA and Sierra are permitted to store hydroelectric power generation water, water that has a non consumptive use, and to eliminate that water from flowing in the river by converting it to Fish Credit Water, which requires it to bypass Derby Dam. Normally, this non consumptive use by TMWA or Sierra would continue to flow in the river and would be available for diversion by TCID. This is a direct and substantial impact on the Newlands Project.

PURPOSE AND NEED FOR THE ACTION

The Draft EIS/EIR states that there are two primary purposes for the proposed action, TROA. First, the action will provide drought protection for the Truckee Meadows. Second, the proposal will provide additional water for fish flows to Pyramid Lake for endangered and threatened species and will better time those flows. All other purposes for TROA appear to be secondary at best, even though the primary purposes of TROA, in addition to those favoring PLIT and TMWA, are to protect all water rights on the Truckee River, to provide for flood protection, and to minimize the costs to the Secretary of operating and maintaining Stampede Reservoir.

When all is said and done, TROA provides for enhanced protection for TMWA's water rights, and elevates water used for fish above all water rights on the Truckee River. As demonstrated in the Draft EIS/EIR, the benefits to Pyramid Lake from TROA are questionable if not negligible. Overall, the flow regimes 1, 2 and 3, favored by PLIT will actually occur less frequently under TROA as compared to No Action, and Most likely will occur less frequently as compared to Current Conditions. Further, TROA only provide an additional 5240 acre feet of water to Pyramid Lake on average, an amount that is within the gage error for the gage at Nixon. Thus, TROA, as compared Current Conditions provides questionable benefits.

In comparison, TROA, if adopted would have significant impacts on the water resources available to the Newlands Project. Although the water resources computer model used to support the analysis in the Draft EIS/EIR we believe is fatally flawed, even that model shows that under extreme drought conditions, an additional 8000 acre feet of shortages will occur in the Newlands Project. See Comments of Principia attached. This is a significant impact since P.L. 101-618 prohibits any alteration or conflict with decreed rights. The flawed Truckee River Operations Model (TROM) has been used to provide long term averages as the output that is

included in the Draft EIS/EIR. The use of long term averages tends to mask the true impacts on a yearly or even on a monthly basis, as the peaks and valleys tend to flatten out over a 100 year averaging period. A look at individual years reveals that there will be shortages on the river caused by the implementation of TROA.

Moreover, the TROM uses flawed assumptions in order to accomplish its analysis, especially in the No Action Alternative. For example, the No Action Alternative assumes that all irrigation rights in the Truckee Division of the Newlands Project will be eliminated. It also assumes that only a small number of acre feet of M&I water will remain in Fernley. The No Action Alternative also assumes the elimination of a significant demand from the Carson Division to the Newlands Project; it assumes the divided use of Donner Lake water; it assumes that Lahontan Reservoir has no carryover storage right; it assumes that water quality water will be used at 133 percent of its duty; it assumes that wetlands demand is 2.99 acre feet versus 3.5 acre feet; it assumes that efficiencies in the Newlands Project of 65.4 percent regardless of water supply conditions; it assumes that water quality water can be stored upstream; it assumes that PLIT will fully utilize its Claims 1 and 2 water; it assumes that PLIT has obtained rights to all unappropriated water on the Truckee River; it assumes that factors used to calculate monthly accretions are the same always; it does not calculate stream conveyance losses; it does not model Newlands Project incentive credit water; it assumes that inflows from the Carson River to Lahontan will not change. See Comments of Binder attached.

None of these assumptions or omissions are realistic for many reasons, and as explained in the detailed comments attached, many of the assumptions are simply erroneous or are too speculative at this point to assume that they will occur. Since the TROM is based on these faulty assumptions, the output from the model which is the basis for the impacts analysis in the Draft EIS/EIR is highly suspect.

ALTERNATIVES ANALYSIS

1. The Draft EIS/EIR Fails to Explore and Objectively Evaluate an Adequate Range of Alternatives, and Specifically Failed to Examine Other Viable Alternatives.

A draft EIS/EIR must consider all reasonable alternatives in depth. This requirement is equally applicable to both a draft and final EIS/EIR. *See* 40 C.F.R. §§ 1502.9(a) and 1502.14. The specific obligation to consider a range of alternatives is set forth in the regulations as follows:

> [The Agency] should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis of choice among options by the decision maker and the public. In this

> section agencies shall: (a) Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated. (b) Devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits. © Include reasonable alternatives not within the jurisdiction of the lead agency. (d) Include the alternative of no action. (e) Identify the agency's preferred alternative or alternatives, if one or more exits, in the draft statement and identify such alternative in the final statement unless another law prohibits such preference.

See 40 C.F.R. § 1502.14. In the present case, only three alternatives were considered: no action, Local Water Supply Alternative ("LWSA") and TROA. The alternatives analyzed, however, are insufficient to satisfy the obligation to analyze a range of alternatives. The deficiencies in this analysis include the following:

a. The Draft EIS/EIR failed to consider an adequate number or range of alternatives. Only three alternatives were considered, the No Action alternative, the LWSA, and the TROA. The No Action alternative and the LWSA are virtually identical. *See e.g.* Table 2.1 (Comparison of water management provisions among the alternatives); *see also* Draft EIS/EIR, p. 2-10 - 2-26. Under the LWSA alternative, all elements of Truckee River reservoir operations, river flow management, Truckee River hydroelectric plant operations, minimum reservoir releases, and reservoir spill and precautionary release criteria, and water exportation from Lake Tahoe and upper Truckee River basins are all presumed to be the same as under the No Action alternative. Further, the LWSA is speculative, representing water supply options that may be authorized by State and local governmental agencies if the TROA is not implemented. *See* Draft EIS/EIR p. 2-23. Accordingly, considering only a No Action alternative along with a virtually identical alternative (LWSA) is tantamount to considering no alternatives at all.

b. The Draft EIS/EIR fails to rigorously explore and objectively evaluate all reasonable alternatives. Alternatives not explored or objectively evaluated include the construction of additional reservoir facilities, use of additional storage capacity in Lahontan reservoir, transbasin importation of surface water and groundwater supplies, conservation measures, increased use of conjunctive use and groundwater banking, and water leasing that would allow water users to temporarily forego the use of water for payment. The existence of these viable but unexamined alternatives renders the Draft EIS/EIR deficient. *See Westlands Water District v. United States*, 376 F.3d 853, 868 (9th Cir. 2004); *see also*

Muckleshoot Indian Tribe v. U.S. Forest Service, 177 F.3d 800, 813 (9th Cir. 1999).

c. The Draft EIS/EIR fails to identify a legitimate basis for dismissing the alternatives considered and rejected and TROA components considered and rejected. *See* Draft EIS/EIR Attachment G; *see also* Draft EIS/EIR, p. 2-3 (other alternatives to TROA rejected during the negotiating process). The public interest in the environment and in ensuring that all alternatives were considered cannot be limited or defeated by agreements between parties. *See e.g. Simmons v. United States Army Corps of Engineers*, 120 F.3d 664, 670 (7th Cir. 1997).

d. The Draft EIS/EIR fails to explore and objectively evaluate all reasonable alternatives, and fails to fully explicate its course of inquiry, its analysis, and its reasoning with respect to these alternatives. In reference to the alternatives which were considered and rejected, all documents and data relating to the alternatives have not been produced. *See* Draft EIS/EIR, Attachment G. Material and underlying data cannot be incorporated by reference in the Draft EIS/EIR unless it is reasonably available for inspection by interested persons within the time allowed by comment. *See* 40 C.F.R. § 1502.21.

e. The Draft EIS/EIR is biased toward the proposed action, TROA, and has prejudiced the outcome and the selection of alternatives examined. Moreover, action has been initiated, including but not limited to the filing of transfer applications, to give effect to the TROA, which limits through action the choice of other reasonable alternatives available. *See* Draft EIS/EIR, p. 3-396 - 3-402.

2. The Draft EIS/EIR Is Deficient Because It Failed To Include a Baseline Alternative.

In the Binder Comments, Mr. Binder notes that the failure to analyze current conditions, (or a baseline alternative) masks the true impact of the TROA. When compared to the "No Action" alternative that was examined in the Draft EIS/EIR, the impact of TROA appears to be significantly less than when you compare to current conditions. *See* Binder Comments.

In *American Rivers v. Federal Energy Regulatory Commission*, 201 F.3d 1186 (9th Cir. 2000), the Court examined this issue, although the reverse problem was presented. In that case, opponents of a hydro power license objected to the use of existing environmental conditions as a baseline for comparing proposed alternatives. The Ninth Circuit, however, concluded that the use of baseline or existing conditions complied with provisions of NEPA. Moreover, the Court noted that such a comparison is necessary. The Court wrote:

> A baseline is not an independent legal requirement, but rather, a practical requirement in environmental analysis often employed to identify the environmental consequences of a proposed agency action. *See* 54 Fed.Reg. 23756 (1989). Although this Court has had few occasions to address this issue, we have stated that "[w]ithout establishing ... baseline conditions ... there is simply no way to determine what effect [an action] will have on the environment and, consequently, no way to comply with NEPA." ... "The concept of a baseline against which to compare predictions of the effects of the proposed action and reasonable alternatives is critical to the NEPA process."

American Rivers, 201 F.3d at 1195, ft.n. 15 (*internal citations omitted*).

3. CEQA Also Requires Analysis of a Reasonable Range of Alternatives.

The Environmental Impact Report ("EIR") is the heart of the California Environmental Quality Act ("CEQA"), Public Resources Code, § 21050, *et seq.*, as amended. *Planning and Conservation League v. Department of Water Resources*, (App. 3 Dist. 2000) 100 Cal.Rptr. 2d 173, 83 Cal.App.4th 892 (modified on denial of reh'g., rev. denied); *Mann v. Community Redevelopment Agency of the City of Hawthorne (Cloverleaf South Bay, Ltd.)*, (App.2 Dist. 1991) 285 Cal.Rptr 9, 233 Cal.App.3d 1143. The EIR seeks to inform the public and its responsible officials of the environmental consequences of their decisions before they are made. *Marin Mun. Water Dist. v. KG Land California Corp.*, (App. 1 Dist. 1991) 1 Cal.Rptr.2d 767, 235 Cal.App.3d 1652 [main vol.] (reh'g denied). An error in failing to include relevant information in an EIR is prejudicial if the failure to include such information precludes informed decision making and an informed public participation, thereby thwarting the statutory goals of the EIR process. *Save our Peninsula Committee v. Monterey County Board of Supervisors*, (App. 6 Dist. 2000) 104 Cal.Rptr.2d 326, 87 Cal.App.4th 99.

A major function of the EIR is to preview and ensure that all reasonable alternatives are thoroughly assessed by the responsible official or board. *Inyo County v. City of Los Angeles*, (1977) 71 Cal.App.3d 185.[1] As the California State Legislature has declared:

---

[1] Public Resources Code, § 21002.1 (a) states that "The purpose of an environmental impact report is to identify the significant effects on the environment of a project, *to identify alternatives to the project*, and to indicate the manner in which those significant effects can be mitigated or avoided." Section 21061 states that "The purpose of an environmental impact report is to provide public agencies and the public in general with detailed information about the effect which a proposed project is likely to have on the environment; to list ways in which the significant effects of such a project might be minimized; and to *indicate alternatives to such a project.*" Section 21081 states that "no public agency shall approve or carry out a project for which an environmental impact report has been certified which identifies one or more significant effects on the environment that would occur if the project is approved or carried out unless . . . specific economic, legal, social, technological, or other considerations, . . . make

> "The Legislature finds and declares that it is the policy of the state that public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects..."

Public Resources Code, § 21002. Thus, CEQA sets a much higher standard than NEPA for approval of projects. In order to assess thoroughly whether environmental effects can be alleviated and to fully inform the decision making and the public, the EIR must meaningfully discuss both mitigation and alternatives. *Laurel Heights Improvement Assn v. Regents of the University of California* (1988) 47 Cal.3d 376 at 401-402.

The CEQA guidelines at 14 California Code of Regulations ("CCR") § 15120 et seq, set out the required content of an EIR. Section 15126.4 states that an EIR shall describe feasible measures which could minimize significant adverse impacts. However, "[i]f the lead agency determines that a mitigation measure cannot be legally imposed, the measure need not be proposed or analyzed. Instead, the EIR may simply reference that fact and briefly explain the reasons underlying the lead agency's determination." (14 CCR §15126.4(a)(5)). An EIR must discuss alternatives to the proposed project and describe

> a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.

14 CCR § 15126.6 (a). (See also *Laurel Heights Improvement Assn v. Regents of the University of California* (1988) 47 Cal.3d 376, and *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553). The EIR should briefly describe the rational for selecting the alternatives to be discussed as well as briefly explain the agencies decision for any alternatives considered by the agency but rejected as infeasible. Factors for eliminating alternatives from detailed consideration

---

infeasible the mitigation measures or *alternatives identified in the environmental impact* report."

in the EIR include; 1) failure to meet most of the basic project objectives, 2) infeasibility, or 3) inability to avoid significant environmental impacts. (14 CCR §15126.6 ©). The alternatives analysis should contain sufficient information about each alternative to allow meaningful evaluation and comparison with the proposed project. A matrix displaying the major characteristics and significant environmental effects of each alternative may be used for this purpose. (14 CCR §15126.6 (d)). The range of alternatives that must be evaluated is governed by the "rule of reason" that requires only those alternatives necessary to permit a reasoned choice. Additionally, alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making. (14 CCR §15126.6 (f)).

Here, the TROA failed to look at alternatives and potential mitigating actions in the Draft EIS/EIR. Although the document does give some detail on the alternatives selected for analysis, it fails to meet the CEQA requirements in regards to the alternatives considered and rejected. Section 2.V of TROA refers to a Report to Negotiators which is apparently a detailed report given to a select group of stake holders who were given mandatory signature authority, and an opportunity to reject additional alternatives that were not detailed in the Draft EIS/EIR. Numerous alternatives were evaluated to assist the negotiators in developing an operating agreement. The Report to Negotiators was intended to serve as the draft EIS/EIR for TROA, but due to indeterminate issues, it was modified and distribution was restricted to the negotiating parties. It contained a "NEPA-style analysis of five potential project alternatives." It is unclear the fate of the other alternatives that are not discussed in the Draft EIS/EIR. According to the Draft EIS/EIR Section 2.V, "the projected adverse effects on water resources of each preliminary alternative were unacceptable to one or more of the negotiating parties with mandatary signature authority . . . . Accordingly, the alternatives evaluated in the Report to the Negotiators were rejected, and negotiations continue", apparently leading to the Draft EIS/EIR. If rejection by interested parties were a criteria for disqualification of alternatives under CEQA, then the analysis of alternatives proscribed by CEQA could not inform the decision maker and would be nothing more then a *post hoc* rationalization to support decisions already made.

The procedure for alternatives analysis described in the Draft EIS/EIR does not follow the procedure provided in CEQA. There is no provision in CEQA to have a selected group of stake holders make a preliminary determination of alternatives and thus circumvent the requirements of a thorough assessment of all alternatives. Additionally, the purpose of a thorough, detailed analysis of alternatives is to inform the decision maker and the public. The pre-Draft EIS/EIR exclusion of alternatives and cursory discussion in the Draft EIS/EIR does not meet the intent of the CEQA alternatives analysis. In addition, the claim that the alternatives were not fully analyzed because they affected water rights appears disingenuous. All of the options, including TROA will interfere with water rights. It just happens that the rejected alternatives interfere with only the negotiator's water rights. The TROA will interfere with water rights in the Newlands Project (see Binder Comments). If interference with a water right is reason for removal from

analysis, then the TROA itself is on no better footing then any of the rejected alternatives.

The California Supreme Court has determined that an EIR must contain a meaningful discussion of both mitigation and alternatives. *Laurel Heights Improvement Assn v. Regents of the University of California* (1988) 47 Cal.3d 376, at 401-402. In *Laurel Heights*, alternatives for a university biomedical research facility in a draft EIR were determined to be inadequate. The draft EIR identified three types of alternatives: no project anywhere, alternative sites on campus, and alternative sites off-campus; but gave cursory treatment to these alternatives which received only a small amount of text in the large EIR. The court determined that these brief review offered nothing more then inappropriate conclusory statements and provides no information to the public to enable it to understand, evaluate, and respond. The court states that "the key issue is whether the selection and discussion of alternatives fosters informed decision making and *informed public participation*." *Id.* at 404. The Regents argue that alternatives had already been considered and found to be infeasible during the internal planning processes and that EIR need not discuss a clearly infeasible project alternative. The court rejects a result that would require blind trust by the public, especially in light of CEQA's fundamental goal that the public be fully informed as to the environmental consequences of action by their public officials. "To facilitate CEQA's informational role, the EIR must contain facts and analysis, not just the agency's bare conclusions or opinions." *Id.* at 404 (quoting *Concerned Citizens of Costa Mesa, Inc. v. 32nd Dist. Agricultural Assn.* (1986) 42 Cal.3d 929, 935).

As in *Laurel Heights*, the TROA Draft EIS/EIR should not call for blind faith in the negotiating parties to determine the feasability of alternatives. If the negotiators feel that the alternatives have significant impacts not apparent in TROA, then the Draft EIS/EIR is the place to fully explain the alternatives and the reasons for selecting TROA. The scant 2 paragraph description and conclusory statements regarding impacted water rights in section 2.A. of the Draft EIS/EIR can hardly be said to fully inform the public. The information provided in Attachment G regarding the alternatives basically reiterates the same information in section 2.A., and the computer model used to extrapolate the data in Table 1 is suspect.

Finally, the alternatives considered but rejected do not include a reasonable range of alternatives as required by CEQA. Some alternatives not considered are: 1) construction of additional reservoirs; 2) use of water banking or underground storage for drought protection; 3) use of interbasin transfers that allow pumping of underground aquifers and transmission of the water to the Truckee River or as a substitute for water diverted from the Truckee River; 4) conservation measures financed by the parties seeking to increase their water supply, such as piping of diverted water, additional water metering, installation of low flow devices, channeling of the River to minimize evaporation, planting of shade trees to reduce temperature, etc.; 5) providing a leasing mechanism for times of drought, when water right owners may lease their water to increase the supply needed for M&I or fish flows. The only mention of any of these

suggested alternatives in the Draft EIS/EIR is a conclusory statement in section 2.V. that "Constructing a new reservoir was not considered as an alternative because it would have exacerbated degradation of riverine fish and riparian habitat as well as created additional cumulative environmental impact throughout the Truckee River basin." This is not a sufficient discussion designed to inform; it is merely an admission that this alternative was not considered.

Both the California and the federal courts have declared that the consideration of alternatives must be judged by "the rule of reason". *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553 At 565. CEQA establishes no categorical legal imperative as to the scope of alternatives to be analyzed in an EIR and each case must be evaluated on its facts, which in turn must be reviewed in light of the statutory purpose. *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553 at 566 Reasonable or feasible alternatives must be analyzed. The guidelines at Title 14 CCR §15364 define feasible as "means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors."

Here, the alternatives accepted require water to be stored and released without permission of the owner, preclude certain storage and release for decreed water rights and users, and provide benefits to non-water-righted uses at the expense of water-righted uses. These actions are in conflict with § 205(a)(2) of P.L.101-618, which states that water is to be stored and released from Truckee River Reservoirs to satisfy exercise of water rights in conformance with both the *Orr Ditch* and *Truckee River General Electric* Decree. If the alternatives are counter to existing law they need not be analyzed (CCR § 15126.4(a)(5)). In addition, § 205(a)(1)© of P.L.101-618 requires TROA to carry out the terms of the Preliminary Settlement Agreement between Pyramid Tribe and Sierra Pacific. The stated justification for rejection of alternatives is that any alternative rejected by a party with mandatory signature authority is not feasible because the TROA requires the approval of these parties. However, P.L. 101-618 requires full compliance with NEPA and state law, including CEQA.

Here, TROA is the sole proposed document to determine the operation of the Truckee River reservoirs. Potential conflicts with the *Orr Ditch* and *Truckee River General Electric* Decrees are fatal to an alternative to TROA. Section 210 (b)(13) of P.L.101-618 states that the Act shall not be construed to conflict with or alter the *Orr Ditch or Alpine* Decrees. Failure to comply with CEQA's requirements for alternative analysis makes the document inadequate.

ENVIRONMENTAL SETTING

The Draft EIS/EIR fails to adequately describe the current environmental setting and its baseline conditions. NEPA requires that an environmental impact study adequately consider and disclose the environmental impact of its actions. The only way to fulfill this mandate is to

examine current baseline conditions against which the various proposed alternatives can be evaluated. As recognized by the Ninth Circuit, without establishing baseline conditions, there is simply no way to determine what effect an action will have on the environment and, consequently, no way to comply with NEPA. *See American Rivers v. Federal Energy Regulatory Commission*, 201 F.3d 1186, 1195 (9th Cir. 2000), *quoting Half Moon Bay Fishermans' Mktg. Ass'n v. Carlucci*, 857 F.2d 505, 510 (9th Cir. 1988). It is, therefore, critical to the NEPA process that the current environmental conditions be fully and accurately defined. *Id.*

Notwithstanding the above, the Draft EIS/EIR fails to properly describe the current environmental setting, fails to consider or take into effect important aspects of Truckee River management, and fails to fully analyze current conditions as an alternative to the three analyzed alternatives (No Action, LWSA, and TROA). Deficiencies in this regard include but are not limited to the following:

a. The Draft EIS/EIR does not analyze current conditions as a separate alternative to the No Action, LWSA and TROA alternatives. While comparisons to current conditions are referred to occasionally in the Draft EIS/EIR, use of baseline comparisons is incomplete. By way of example, Table 2.10 describes a Summary of Effects of Alternatives on Resources. The Table compares current conditions to the No Action, LWSA and TROA alternatives in the categories of effects to the economic environment, social environment, and cultural resources. However, a comparison of current conditions to the three alternatives is omitted in the important categories of the effects on water resources, Truckee River flow, exercise of water rights to meet demand, groundwater, water quality, sedimentation and erosion, biological resources, and recreation. *See* Draft EIS/EIR, p. 2-53 - 2-62; *see also* Draft EIS/EIR, Table 3.96, p. 3-389. Analysis should be conducted, and resultant tables and discussion provided, to compare the proposed action to current conditions with consistency throughout the Draft EIS/EIR. In particular, this needs to be provided in reference to the potential impacts, and changes from current conditions and operations, of the Newlands Project. *See* Draft EIS/EIR, p. 3-388 - 3-391.

b. The Draft EIS/EIR does not adequately describe historic and current management of the Truckee River. It fails to adequately disclose and analyze the TRA and the Orr Ditch Decree nor does it fully analyze the impact the proposed action on the management of the river.

GENERAL INADEQUACIES IN THE DRAFT EIS/EIR

1. The Draft EIS/EIR Is Neither Readable Nor Understandable.

The requirements that an environmental impact statement must be both readable and understandable derive from the goal of ensuring that the statement serve as an effective tool for decision makers and the general public alike. To that end, the applicable regulations require that environmental impact statements be written in plain language so that decision makers and the public can readily understand them. *See* 40 C.F.R. § 1502.8. The statements are to be "concise, clear, and to the point and shall be supported by evidence that the agency has made the necessary environmental analyses." *See* 40 C.F.R. § 1502.1. The text of the environmental impact statements should be less than 150 pages and for proposals of unusual scope or complexity shall normally be less than 300 pages. *See* 40 C.F.R. § 1502.7. At the same time, additional materials, in the form of an appendix, should be circulated with the statement and must include material prepared in connection with the statement that substantiates any analysis, that is analytic in nature, or that is relevant to the decision to be made. *See* 40 C.F.R. § 1502.18; *see also Oregon Environmental Counsel v. Kunzman*, 817 F.2d 484, 494 (9th Cir. 1987) ("an EIS must be 'organized and written in language understandable to the general public and at the same time contain sufficient technical and scientific data to alert specialists to particular problems within their expertise'") (*internal citations omitted*). If not disclosed in the form of an appendix, the technical and scientific data must be readily available on request. *See* 40 C.F.R. § 1502.18(d).

A clear understanding of the Draft EIS/EIR first requires that the public understand TROA and what it is attempting to accomplish. A reading of the appendix containing TROA leaves one with the same feeling that a federal judge had when first encountering the federal Clean Water Act.

> The Clean Water Act ("CWA") is an enigmatical piece of legislation. Filled with more sesquipedalian jargon than a year's subscription to any trade journal and a byzantine system of cross references; its intricacies are virtually indecipherable.

Citizens' Coal Counsel v. Environmental Protection Agency, ___ F. 3d ___ (6th Cir. 2004), No. 02-3628.

The TROA is a complex document, full of cross references and unique definitions, that test the reaches of the human brain. It also leaves one with the feeling that something is happening with the water, you just can never tell what or when. The Draft EIS/EIR does not improve upon the TROA much. It also contains a byzantine collection of definitions and jargon and cross references to other provisions of TROA that leaves one in a whirlwind of concepts.

Never once in the Draft EIS/EIR does the document attempt to set forth any factual scenarios that would mimic real world conditions that the public can relate to and then attempt to describe how TROA works. This is not too much to ask for so important a proposal.

In the present case, the Draft EIS/EIR far exceeds the page limitations recommended by the regulations. It is unwieldy, particularly for members of the general public. At the same time, the appendices fail to provide all necessary data required to permit specialists to fully analyze the scientific basis for the conclusions reached in the Draft EIS/EIR. Materials which were prepared in connection with the Draft EIS/EIR that could be used to substantiate or discredit the analysis and that are relevant to the decisions at issue were not fully disclosed in either the body of the Draft EIS/EIR or the appendices thereto, and were not made readily available on request. To the contrary, in an effort to receive the data and information, TCID was required to submit formal requests pursuant to the Freedom of Information Act ("FOIA"). For these reasons, the Draft EIS/EIR fails to satisfy the readability and understandability requirements.

2. Bias in the Selection of Alternatives and in the Analysis.

The Draft EIS/EIR evidences impermissible agency bias and an attempt to justify decisions already made. This comment has two components. The first is that you cannot so narrowly define a project so as to dismiss out of hand all other reasonable alternatives. The second is that the DEIS cannot contrive a purpose of a project to be so slender so as to define "reasonable alternatives" out of consideration or out of existence. The second is that agency bias cannot interfere with the obligation to consider and weigh the pros and cons of all alternatives.

Sometimes, agency bias is evidenced by picking a program or desired outcome, thus forgoing all other reasonable alternatives. *See Muckleshoot Indian Tribe v. U.S. Forest Service*, 177 F.3d 800, 813 (9th Cir. 1999). Or, as in the present case, by stating without further explanation that all other alternatives either would not be agreed to by the parties or would conflict with P.L. 101-618. *See e.g. Simmons v. United States Army Corps of Engineers*, 120 F.3d 664, 666 (7th Cir. 1997). In our case, if you boil it down, what the Draft EIS/EIR tells us is that the drafters believe that there is only one way, TROA, to comply with or satisfy the requirements of P.L. 101-618. I think a closer look will reveal that this is not the case, and there are viable alternatives that either individually or in combination will satisfy the objectives of P.L. 101-618. If that is the case, then by only considering TROA as an option, the parties involved have effectively engaged in the following tactic:

> One obvious way for an agency to slip past the strictures of NEPA is to contrive a purpose so slender as to define competing "reasonable alternatives" out of consideration (and even out of existence). The federal courts cannot condone an agency's frustration of Congressional will. If the agency constricts the definition of the project's purpose and

thereby excludes what truly are reasonable alternatives, the EIS cannot fulfill its role. Nor can the agency satisfy the Act.

Id.

Administrative bias also was addressed in *Sierra Club v. Forehlke*, 345 F. Supp. 440 (W.D. Wisc. 1972). In that case, plaintiffs sought injunctive relief to restrain defendants from commencement of construction of a flood control dam and reservoir project. Although the court did not find enough evidence of administrative bias to warrant injunctive relief at this stage, the court did go through alleged tactics by which agencies have manipulated the contents of a report to justify a desired end and addressed the manner in which other courts have addressed the problem of administrative bias. In *Sierra Club* it was alleged that the agency used misleading statements, double standards, distortion of benefits, understatement of disadvantages, and partial disclosures evidenced a "total lack of open-minded willingness to consider fairly all alternatives." The Draft EIS/EIR contains distortions, unsupported assumptions, and a flawed computer model analysis that is evidence of bias.

3. The Draft EIS/EIR Impermissibly Incorporates Other Documents.

The Draft EIS/EIR incorporates other documents into the analysis without properly summarizing those documents. Particularly in Attachment G addressing the range of alternatives that were "considered" but rejected, justification for the decision is based on reference to a document and series of underlying studies not produced as part of the Draft EIS/EIR. While under some circumstances, such or incorporation by reference is permitted, there are restrictions. *See* 40 C.F.R. § 1502.20[2]; *see also* 40 C.R.F. § 1502.21.[3]

---

[2] "Tiering: Agencies are encouraged to tier their environmental impact statements to eliminate repetitive discussions of the same issues and to focus on the actual issues ripe for decision at each level of environmental review. . . . Whenever a broad environmental impact statement has been prepared (such as a program or policy statement) and a subsequent statement or environmental assessment is then prepared on an action included within the entire program or policy (such as a site specific action) the subsequent statement or environmental assessment need only summarize the issues discussed in the broader statement and incorporate discussions from the broader statement by reference and shall concentrate on the issues specific to the subsequent action. The subsequent document shall state where the earlier document is available Tiering may also be appropriate for different stages of actions."

[3] "Incorporation by reference: Agencies shall incorporate material into an environmental impact statement by reference when the effect will be to cut down on bulk without impeding

Virtually the entire justification for rejecting the alternatives identified in Attachment G is contained not in the document itself, but through reference to the Report to Negotiators and to other "studies" and "extensive computer simulation effort." *See* Draft EIS/EIR, p. G1-1. To my knowledge, the Report to Negotiators has not been produced pursuant to our FOIA request, nor has information and data relating to the underlying studies. Such nondisclosure alone, and specifically the failure to make it available for inspection within the time allowed for comment is objectionable. *See* 40 C.F.R. § 1502.21. Improper tiering and incorporation by reference is a close cousin to another challenge, which is a challenge to the scientific integrity of the EIS and a failure to provide complete information serving as the basis of the decision.

4. The Preparers Failed to Insure the Scientific Integrity of the Analyses (1502.24)

NEPA requires scientific integrity in the preparation of a detailed statement. *See* 40 C.F.R. § 1502.24 ("Agencies shall insure the professional integrity, including scientific integrity, of the discussions and analysis in environmental impact statements. They shall identify any methodologies used and shall make explicitly reference by footnote to the scientific and other sources relied upon for conclusions in the statement. An agency may place discussion of methodology in an appendix.") NEPA also requires that the public have access to all pertinent information in order to understand the environmental impacts.

A good discussion of a challenge to the scientific methodology is found in *Public Lands Council v. Powell*, 379 F.3d 738, 749-50 (9th Cir. 2004). Of particular import is the Court's conclusions that the withholding of information relating to the model's variables as well as the model's shortcomings violated NEPA. *See Public Lands Council, supra*, p. 750 ("The Forest Service's heavy reliance on the WATSED model in this case does not meet the regulatory requirements because there was inadequate disclosure that the model's consideration of relevant variables is incomplete ... We hold that this withholding of information violated NEPA which requires up-front disclosures of relevant shortcomings in the data or models"). Conclusory statements are insufficient, and impact statements should be rejected that "suffer from a serious lack of detail and rely on conclusions that are based on assumptions without supporting objective data. *See Rankin v. Coleman*, 394 F. Supp. 647, 656 (E.D. North Carolina 1975), *quoting Brooks v. Volpe*, 350 F. Supp. 269, 276-277 (W.D. Wash. 1972), *aff'd per curiam*, 487 F.2d 1344 (9th Cir. 1973).

---

agency and public review of the action. The incorporated material shall be cited in the statement and its content briefly described. No material may be incorporated by reference unless it is reasonably available for inspection by potentially interested person within the time allowed for comment. Material based on proprietary data which is itself not available for review and comment shall not be incorporated by reference."

In the present case, the shortcomings of both the model and data inputted into the model are discussed at length in comments prepared and submitted by Dr. Willem A. Schreuder and Charles W. Binder on behalf of TCID. In sum, the deficiencies include but are not limited to the following:

a. The Draft Draft EIS/EIR incorporates many assumptions into its analysis and fails to provide sufficient supporting data to back up the assumptions. By way of example, the assumptions included in the No Action alternative and inadequately defined and insufficient data in support of these assumptions is provided.

b. The Draft Draft EIS/EIR is based on an outdated and flawed model that cannot be relied up to ensure the scientific integrity of the Draft Draft EIS/EIR. It is premised on theoretical approaches and research methods that are not generally accepted in the scientific community. Accordingly, the true impacts of the alternatives cannot be accurately predicted or analyzed under the current model.

c. The data used in the model analysis is flawed and relies upon the use of long-term averages to analyze impacts when annual and monthly analysis would be both more accurate and further reveal additional impacts. *See e.g.* Water Resources Appendix, Exhibit 5.

d. The Draft EIR/EIS fails to include analysis of all TROA provisions and, therefore fails to analyze the entire proposed action. Of concern is that in evaluating only segments of the proposed action, masks its true impacts.

e. The model uses river flows for points on the Truckee River that are different than the USGS gaging stations for historical streamflows, and model output was processed using a program to estimate streamflows at the other locations. An adequate explanation for the use of estimates as opposed to historic data at the USGS gaging stations was not offered, and the result is that it impedes the ability to accurately analyze model results in comparison to historical conditions. *See e.g.* Water Resources Appendix, Exhibit 2. The use of these estimates, and others, without adequate data and rationale to support the use of the estimates, render the analysis flawed.

Under NEPA, all federal agencies have a duty to "insure the professional integrity, including scientific integrity, of the discussions and analyses in the environmental impact statements." 40 C.F.R. § 1502.24; *Utahns for Better Transp. v. United States Dept. of Transp.*, 305 F.3d 1152, 1181-82 (10th Cir. 2002). Similarly, the CEQA requires agencies to rely on precise data when that data is available and the EIR must include facts and analyses sufficient to

allow for informed decision making. 14 Cal. Code Regs. § 15151; *Citizens of Goleta Valley v. Board of Supervisors*, 52 Cal.3d 553, 568 (1990); *see also Berkeley Keep Jets Over the Bay Comm. v. Board of Port Comm'rs*, 91 Cal. App. 4th 1344, 1370 (lead agency must use every effort to disclose all information about significant impacts).[4]

Agencies can rely on computer models to help make these analyses, but the models must be relevant to the inquiry and updated to reflect current conditions. *Friends of Boundary Waters Wilderness v. Dombeck*, 164 F.3d 1115, 1130 (8th Cir. 1999) (upholding use of model that "was fully updated" and relevant); *National Wildlife Federation v. E.P.A.*, 286 F.3d 554, 565 (D.C. Cir. 2002) (upholding use of old model because it was "quite accurate over these last 25 years and remains an objective, established tool").

Equally important, the model must incorporate all available scientific information, or risk running afoul of NEPA. *See* 40 C.F.R. § 1502.22; *cf. Am. Iron & Steel Inst. v. EPA*, 115 F.3d 979, 1005 (D.C. Cir. 1997) (acceptable to proceed with imperfect information but not if information is readily available); *Environmental Defense Fund, Inc. v. Coastside County Water Dist.*, 27 Cal.App.3d 695, 706 (1972) ("It should be understood that whatever is required to be considered in an EIR must be in that formal report; what any official might have known from other writings or oral presentations cannot supply what is lacking in the report."). If the agency's decisions regarding the model were arbitrary or capricious, then the decisions can be overturned. *Public Lands Council*, 379 F.3d 743, n.5; *Lee v. United States Air Force*, 354 F.3d 1229, 1243 (10th Cir. 2004).

Here, BOR and DWR arbitrarily failed to include crucial data in the analysis, data that is readily available. Also, the model used to prepare the Draft EIS had been replaced by an updated version that BOR and DWR chose not to use. Because both of these actions are impermissible under the NEPA, the draft EIS is invalid.

The Draft's analysis was generated using an outdated version of the model's software. While it may have been acceptable to use old software if it was still accurate and relevant, the fact that a new version exists obviates this possibility. *See National Wildlife Federation*, 286 F.3d at 565. And, since the software was outdated, it could not qualify as "fully updated," and thus appropriate for the agency to use. *Friends of Boundary Waters*, 164 F.3d at 1130. Also

---

[4]In general, these cases analyzing NEPA play an important role in applying and understanding CEQA. "Recognizing that the California act was modeled on the federal statute, we have consistently treated judicial and administrative interpretation of the latter enactment as persuasive authority in interpreting CEQA." *Wildlife Alive v. Chickering*, 18 Cal.3d 190, 201 (1976).

critical was the agencies' failure to include the available scientific information that would allow for the model to make reasonable predictions. *See Commonwealth of Mass. v. Andrus*, 594 F.2d 872, 886-87 (1st Cir. 1979) (upholding use of model that was flawed but could not be updated because "not enough scientific data was available to make the kind of [elaborate] model envisioned by EPA worthwhile").

Specifically, the Draft fails to discuss many different, and readily obtainable, reasons for possible impacts. These primarily concern water supply issues. Under CEQA, the agencies are required to adequately analyze all water supply issues associated with the project. Cal. Water Code §§ 10910-10915; *Stanislaus Natural Heritage Project v. County of Stanislaus*, 48 Cal. App. 4th 182, 196-97 (1996); *Santiago County Water Dist. v. County of Orange*, 118 Cal. App. 3d 818, 829-30 (1981).

The Draft EIS/EIR makes many assumptions that are flawed and that when incorporated into the model have the effect of introducing error into the impact analysis.

An example of flawed assumptions and their effect on impact analysis occurs when the Draft fails to account for what would happen during extreme low flow years, nor does the model look at a serious drought or long-term drought. Even if this information is not specifically available, the Draft must contain an acknowledgment that the information is missing, that it would not be economically feasible or practical to obtain the information, and an analysis of the possible impacts flowing from the possible drought scenario. *See* 43 C.F.R. § 1502.22 There is none of this in the Draft. To fail to include any analysis of a drought, when five to seven year droughts are simply part of life in the high desert, is arbitrary on its face.

Because the Draft fails to properly account for necessary scientific information, it must be revised. The agencies must use a current, accurate version of the model and include the data necessary to make accurate forecasts. Since the Draft fails to do either of these things, it is facially invalid.

ENVIRONMENTAL IMPACT ANALYSIS

1. The Draft EIS/EIR Fails to Identify Environmental Impacts and Mitigations

As demonstrated, the manner in which the Draft EIS/EIR analyzes the proposed action and even the No Action Alternative and the LWSA tends to mask any impacts. The document fails to adequately analyze the impacts from not allowing return flows to the river, from storing Newlands Project Credit Water in Stampede on carryover storage, from looking at long term averages instead of focusing on month to month or year to year impacts, among others. The document has also segmented various proposals, again masking environmental impacts. Because

the Draft EIS/EIR does not adequately identify the environmental impacts, it also fails to identify feasible mitigations that could reduce or eliminate impacts. This is a requirement of both NEPA and CEQA.

A required component of any environmental impact statement is that it include a detailed statement regarding the environmental impact of the proposed action together with the identification of any and all adverse impacts. *See* 42 U.S.C. § 4332(C). Accordingly, in determining whether an agency complied with NEPA, the courts will consider whether the agency took the requisite "hard look" at the consequences of its proposed action. *See Price Road Neighborhood Association v. U.S. Dept. of Transportation*, 113 F.3d 1505 (9th Cir. 1997); *see also* 40 C.F.R. § 1502.16 (requiring the statement to address the various impacts or environmental consequences of both the proposed action and alternatives). NEPA requires that the statements present the environmental impacts of both the proposed action as well as the alternatives, in comparative form. *See* 40 C.F.R. § 1502.14. It also requires an examination of the relationship between short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and an examination of irreversible or irretrievable commitments of resources which would be involved in the proposal should it be implemented. Examination of both direct and indirect effects are also required. *See* 40 C.F.R. § 1508.8.

To complete the analysis, once impacts of the proposed action and alternatives have been identified, identification and analysis of measures to mitigate the impacts are also required. *See* 40 C.F.R. §1502.14(f) (the statement must "include appropriate mitigation measures not already included in the proposed action or alternatives"); *see also* 40 C.F.R. § 1502.16 (requiring analysis of means to mitigate adverse environmental impacts). The mere listing of mitigation measures is insufficient. The environmental impact statement must analyze the mitigation measures in detail and explain the effectiveness of the measures considered. *See Northwest Indian Cemetery Protective Ass'n v. Peterson*, 795 F.2d 688, 697 (9th Cir. 1986).

In the present case, the Draft EIS/EIR is deficient in its failure to disclose the impacts of its proposed action or the "alternatives" presented, and is deficient in its failure to identify and analyze specific mitigation measures. These deficiencies are particularly acute when considering the impacts of the TROA on the Newlands Project. The problems with the required analysis include each of the following.

a. The assumptions used in the No Action alternative, as well as the other alternatives, mask the magnitude of the impacts of the proposed action. These assumptions include parameters that have not occurred and may never occur, and the use of long-term averages that mask the impacts of the proposed action.

b. Failure to compare current conditions to the proposed action mask the impacts of the proposed action.

c. The EIS process is continuing to evaluate the impacts of the proposed action, with the findings to be revealed in the Final EIS. Procedurally, this is insufficient.

d. The models used to evaluate the impacts of the alternatives presented are flawed and are scientifically unreliable, and therefore render unreliable the findings and analysis concerning impacts.

e. The Draft EIS/EIR inadequately addresses the impacts of the proposed action on the Newlands Project.

f. The Draft EIS/EIR fails to define and analyze fully developed and finalized plans for the mitigation of the adverse effects that will result if the proposed action is implemented.

Thus, the Draft EIS/EIR fails to adequately analyze impacts under NEPA.

The failure of the Draft EIS/EIR to adequately analyze water use and consumption is fatal under CEQA, as well. In *Santa Clarita Organization for Planning the Environment v. County of Los Angeles* (2003) 106 Cal. App.4th 715 the court finds a EIR inadequate for failure to state accurately the amount of water available for the project. Here, a draft EIR for a housing development stated that the project would have sufficient water for present and future demands based on entitlements to water from the State Water Project (SWP). Despite comments that entitlements do not represent actual delivered water the draft EIR was finalized. In the final EIR dry year entitlements were assumed to be 50%, and each proposed project would be required to demonstrate available water as part of the sub-division approval process. The court was critical of the response given in the final EIR and states that "water is too important to receive such cursory treatment", and the problems raised by the public and responsible experts require a good faith reasoned analysis in response. *Id.* at 723. (Quoting *Cleary v. County of Stanislaus* (1981) 118 Cal.App.3d 348, 357, 173 Cal.Rptr. 390.). The court determined that the EIR made no attempt to calculate the differences between entitlements and actual supply and "fails to undertake an adequate analysis of how much water the SWP can actually deliver in wet, average and dry years." *Id.* at 724

TROA Draft EIS/EIR like the EIR in *Santa Clarita Organization for Planning the Environment* fails to adequately analyze water use and supply and is thus fatally flawed. The projected water sources in TROA are equally speculative for numerous reasons (See Comments from Binder and Associates Consulting, Inc. And Principia Mathematica, Inc.). Most of the

information regarding water consumption and sources of water is derived from a fatally flawed model, making the analysis of TROA as well as the alternative suspect. For example, the model has never been calibrated, verified or validated. Moreover, there are limitations in the FORTRAN model that cause unintended consequences in the output. The model does not address many of the components of TROA. There have never been sensitivity runs on the output of the model and the model assumes that the last 100 years of water resources conditions will repeat without doing any stochastic runs. Additionally, the fact that the Draft EIS/EIR only looks at long term averages (over 100 years) and not at impacts during individual months or years also makes the analysis suspect.

Additionally, like the situation in *Santa Clarita Organization for Planning the Environment*, the TROA Draft EIS/EIR fails to account for population growth and extended drought conditions. The Draft EIS/EIR study assumptions include one that population growth will occur with or without TROA. However, TROA is what is allegedly providing drought protection for the Truckee Meadows that would allow TMWA to increase the population served. Whether TROA facilitates the population growth or not, it is being used as a mechanism to serve an expanded population so that the growth inducing impacts of TROA on other infrastructure in Reno, Sparks, Fernley, Pyramid Lake Reservation, Fallon and Churchill County should be assessed. Local and state agencies have already planned to grow their populations by the numbers used in the Draft EIS/EIR. Presumably, the main reason that TMWA is involved in TROA is to ensure that its population, if it does grow to 119,000 will have water to serve it in times of drought. If TROA did not provide drought protection to allow this growth to 119,000, then TMWA could not be issued will serve letters for that many households. Consequently, TROA is providing incentives for developers to come to the Truckee Meadows and to build more houses. This is the growth-inducing effect of TROA. Moreover, TROA will allow the Pyramid Lake Reservation population to grow. This Draft EIS/EIR does not address the growth impacts of TROA on highways, schools, hospitals, air and water quality, etc. This is a serious flaw in the document and makes it invalid.

2. The DRAFT EIS/EIR Fails to Analyze Cumulative Impacts

Cumulative effects analysis is required in an EIS. It includes a requirement that the proposed project be analyzed in light of the project's interaction with the effects of past, current, and reasonably foreseeable future projects. *See Lands Council v. Powell*, 379 F.3d 738, 744 (9th Cir. 2004), *citing* 40 C.F.R. § 1508.7. NEPA requires adequate cataloguing of the related projects, including data of time, type, place, and scale of the other projects. *Id.* Further, the significance of the proposed action and likely impacts cannot be avoided by breaking an action into small component parts if it is part of a comprehensive strategy. *See Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208 (9th Cir. 1998).

Under CEQA, the agencies are required to adequately analyze all water supply issues associated with the project. Cal. Water Code §§ 10910-10915; Stanislaus Natural Heritage Project v. County of Stanislaus, 48 Cal. App. 4th 182, 196-97 (1996); Santiago County Water Dist. v. County of Orange, 118 Cal. App. 3d 818, 829-30 (1981).

In the present case, not all projects which stand to be impacted by the proposed action have been sufficiently analyzed. These include the Lahontan Reservoir, Stillwater Wildlife Refuge, Carson Lake and Pasture, Fernley Wildlife Management Area, the Naval Air Station at Fallon, modification to the OCAP to accommodate Newlands Project Credit Water, and recoupment . In addition, the drafters of the Draft EIS/EIR failed to take the required "hard look" at the following impacts:

a. Impacts on Newlands Project Operations and, in particular, increased water shortages. *See* Draft EIS/EIR, p. 3-388 - 3-391;

b. Economic impacts, in particular stemming from the shifting of water use from agricultural uses to M&I and other uses as well as the economic effects of water shortages on agricultural revenue due to a reduction in crop yields, drop in hydro power generation and revenues, and reduction of water delivery fees received by TCID;

c. Environmental impacts including adverse impacts on air quality due to a shift in water use from agricultural to non-agricultural uses;

d. Impacts relating to groundwater and other water resources;

e. Impacts on water storage and carryover storage;

f. Impacts relating to increased urban development and growth inducement;

g. Impacts on Pyramid Lake restoration efforts;

h. Recreational impacts including impacts on the use of Lahontan Reservoir for recreational purposes.

For those impacts not analyzed in detail, the Draft Draft EIS/EIR fails to provide an adequate factual basis for the conclusion that there were no significant impacts or that impact analysis was not required.

Failure to identify these significant environmental impacts means that the Draft EIS/EIR

has also failed to identify mitigations and to determine if impacts can be overridden under CEQA.

3. The Draft EIS/EIR Segments the Project and Hides Impacts

Both NEPA and CEQA require that the whole project be analyzed in the EIS/EIR and not just portions. Failure to analyzed the whole project tends to mask the potential environmental impacts. *Natural Resources Defense Council v. Callaway*, 524 F.2d 79 (2d Cir. 1975; *Cady v. Morton*, 527 F.2d 786 (9th Cir. 1975).

CEQA defines a "project" as the "whole of an action" that has the potential to result in a physical change to the environment "directly or ultimately." Guidelines § 15378(a). Thus, the term "project" refers to the entire set of activities for which government approval is sought and not just to each separate and distinct government approval necessary for the project activity to occur. Guidelines § 15378(c). Lead agencies may not improperly reach the decision to forego preparation of an EIR by segmenting a project into various stages of approval, focusing on pieces in isolation, and failing to consider the project as a whole. This prevents lead agencies from fragmenting environmental analysis into discrete parts of projects, and thereby avoiding full environmental disclosure. *See Bozung v. Local Agency Formation Commission*, (1975) 13 Cal.3d 263, 283. Piecemeal environmental review that ignores the end result of the entire project is unlawful. *See Christward Ministry v. Superior Court*, (1986) 184 Cal.App.3d 180, 193.

In *Christward Ministry*, the court held that an EIR should have been required for a general plan amendment designating an existing landfill site to permit various waste disposal activities, although an EIR would be required later for the specific use permits for such disposal activities. *Id.* Likewise, in *Citizens Assn. for Sensible Development v. County of Inyo*, *supra*, 172 Cal.App.3d at 167, the court held that a county improperly prepared a negative declaration for a general plan amendment and rezoning for a shopping center followed by another negative declaration for a subdivision map and road abandonment because the county failed to analyze the impacts of the entire development.

In the Draft EIS/EIR does not address the entire "project," but rather segments the project and fails to adequately address future actions necessitated by TROA. Reference is made to the Newlands Project Credit Water but use of this credit water is not modeled or analyzed in the Draft EIS or the Draft TROM. Additionally, reference is made to storage of credit water in Donner Lake. Donner Lake storage rights are owned as an undivided interest between TCID and Sierra Pacific. No use of Donner Lake for credit storage under TROA can be made without permission from TCID. The TROA discussion states that certain provisions of the Truckee River Agreement (TRA) would be changed but nowhere are these provisions identified or described. In fact, nowhere in the Draft EIS/EIR is there a description of the TRA and how it has been used

in the past to manage the Truckee River for the last 69 years. The section on Reservoir Operations purports to allow TMWA to exchange water in Donner Lake for Fish Credit Water. Since the water in Donner Lake owned by TMWA is an undivided one half interest in common with the TCID, any use of such water as Fish Credit Water can only be done with the express consent of TCID. The reference to Newlands Project Credit Water being removed from Lahontan is unsupportable since this is being segmented from the TROA proposal and it cannot be accomplished without permission of the Newlands Project water right owners. Moreover, the Fernley Credit water has also been segmented in the analysis.

An EIS must include analysis of environmental effects of future activities if: (1) it is a reasonably foreseeable consequence of the initial project; and (2) the future expansion or action will be significant in that it will likely change the scope or nature of the initial project or its environmental effects.. *Laurel Heights Improvement Assn v. Regents of the University of California* (1988) 47 Cal.3d 376, at 396. The contents of the EIR must discuss future and commutative environmental effects and an agency must consider the commutative effects of its action before a project gains irreversible momentum, *City of Antioch v. City Council* (1986) 187 Cal. App. 3d 1325 at 1333. Environmental considerations cannot be masked or minimized by chopping a large project into smaller segments cumulatively may have disasters consequences. *Plan for Arcadia, Inc. v. City Council of Arcadia* (1974, 2nd Dist) 117 Cal Rptr 96 at 105. Further, not only must reasonable anticipated future projects be considered in the EIR, but they must be discussed in the cumulative analysis. *Terminal Plaza Corp. v. City and County of San Francisco* (1986, 1st Dist) 223 Cal Rptr 379 at 385-386.

The cumulative impacts of the TROA should be analyzed for Lahontan Reservoir, groundwater in Churchill County, impacts on Stillwater Wildlife Refuge, impacts on Carson lake and Pasture, impacts on Fernley Wildlife Management Area, impacts on the Naval Air Station at Fallon, impacts from modification to the OCAP to accommodate Newlands Project Credit Water, impacts from recoupment (since there is a judgment in the case) and impacts from water rights acquisition programs. All of these other actions have the potential to impact TROA and their cumulative impacts should have been analyzed.

CONCLUSION

For the foregoing reasons, the Draft EIS/EIR should be withdrawn, substantially revised and recirculated for public comment.

Sincerely,

McQUAID BEDFORD & VAN ZANDT LLP

Michael J. Van Zandt
Attorneys for Truckee-Carson Irrigation District

cc: Lyman F. McConnell
Charles Binder
Willem Schreuder
Brad Goetsch
Michael Mackedon
Elizabeth Ewens
Justin Lucke
Nathan Metcalf
Michael Cooney

G:\Docs\18068\008\corresp\2004 Comment Letter.wpd

COMMENTS OF McQUAID BEDFORD & VAN ZANDT LLP ON DRAFT TROA EIS/EIR

Chapter 1. Purpose and Need

1. P. 1-7. Change applications filed by the Washoe County Water Conservation District, Sierra Pacific (now Truckee Meadows Water Authority (TMWA)) and the Bureau of Reclamation include two new water right applications for the Little Truckee River. The Little Truckee River is a tributary to the Truckee River and its waters have already been adjudicated under the *Orr Ditch* Decree. *See U.S. v. Orr Water Ditch Company, et al.*, Equity A-3, p. 10 (D. Nev. Sept. 8, 1944).

2. P. 1-7. The EIS states that changes would be made to the Newlands Project Operating Criteria and Procedures but does not specify what these changes would be or when they would be implemented. No such changes are modeled in the Draft TROM. Reference is made to the Newlands Project Credit Water but use of this credit water is not modeled or analyzed in the Draft EIS or the Draft TROM. The water rights adjudicated to the Newlands Project water right owners includes a 290,000 acre foot storage right in Lahontan Reservoir. Any reduction in the amount of storage right in Lahontan Reservoir would constitute a major change to the *Orr Ditch* Decree. Any change in the place of storage, for example from Lahontan to Stampede Reservoir would require the permission of the Newlands Project water right owners.

3. P. 1-7. The EIS specifies that TROA will not take effect until certain litigation is settled. All of the lawsuits referred to have been brought by the Pyramid Lake Paiute Tribe of Indians. To our knowledge, none of the litigation is active. Moreover, the action against TCID was dismissed in 1985, almost 20 years ago. The litigation against the Navy is over, as well. Therefore, resolving these cases through TROA provides no benefit to TCID or the other parties. Resolution of the other cases, if still alive, will not affect the resolution of the dispute in *Nevada v. U.S.*, 463 U.S. 110 (1983).

4. P. 1-8. Reference is made to storage of credit water in Donner Lake. Donner Lake storage rights are owned as an undivided interest between TCID and Sierra Pacific. No use of Donner Lake for credit storage under TROA can be made without permission from TCID.

5. P. 1-8. Reference is made to the Pyramid Lake Tribe's interest in water under State Engineer Ruling 4683. This ruling has been appealed by TCID, the City of Fallon and the Corkill Brothers, and the matter is pending in state court in Nevada. There is a stay in effect that prevents the State Engineer from issuing a permit to the Tribe. The State of Nevada has recently moved the court to dismiss the appeal. The court has not ruled on the motion. Therefore, until this matter is resolved, there can be no confirmation of rights to the Tribe.

6. P. 1-9. The *Orr Ditch* case adjudicated not only the Truckee River but also its tributaries.

7. P. 1-10. The discussion of the Truckee River Agreement (TRA) speaks only to the operation of Lake Tahoe and Boca, not to river operations which is the main component of the TRA. *See* general discussion on the TRA.

Chapter 2. Alternatives.

8. P. 2-4 to 2-10. The chapter purports to describe the difference between No Action, Local Water Supply Alternative (LWSA) and TROA. The requirements of CEQA and NEPA are that the current conditions or those that will be changed by the proposed action be compared to the various alternatives. Here there is no depiction of current conditions and how they may differ from the No Action alternative. Moreover, the LWSA as depicted here has very minor differences from the No Action Alternative. Under Ninth Circuit case law, an alternative that is not significantly different from another alternative does not meet the requirements for a reasonable range of alternatives. *See* general comments. The chapter also describes a method for eliminating alternatives and measuring them against P.L. 101-618. However, P.L. 101-618 states in section 210 (b)(9) that nothing in the title shall be construed as waiving or altering any requirements of NEPA. Thus NEPA must be fulfilled in all respects. Having negotiators eliminate reasonable alternatives because they are not acceptable to one or more parties does not comply with NEPA. Eliminating alternatives because they may cause significant environmental impacts does not comply with NEPA. This section does not provide a description of the reasonable range of alternatives.

9. P. 2-12. The No Action Alternative assumes that the Pyramid lake Tribe's will use its entire decreed water under Claims 1 and 2 of the *Orr Ditch* Decree. This is not possible. The PLIT now only has the ability to irrigate about 1000 acres of farmland, using about 4700 acre feet of its decreed amount. The PLIT must file permanent transfer applications to dedicate this water for instream flows or some other use, something it has not done and has declared it is reluctant to do. Thus some 25,000 acre feet of Claim 1 and 2 water go unused every year and there is no plan or proposal by the PLIT to use the water that can be incorporated into the No Action Alternative. If this water is not used by the PLIT, then it becomes available for other appropriators on the river to divert. Moreover, the 40 cfs claimed by TMWA as a high priority use comes from a compromise struck in the Truckee River Agreement. TMWA has no right to use of the 40 cfs if the underlying compromise reached in the TRA is undermined by TROA. The so-called PLIT Appropriated water has been challenged by TCID, the City of Fallon and Corkill Brothers and no permit for its use has been applied for or issued by the Nevada State Engineer. Thus the inclusion of this water in the No Action alternative is speculative. The amount of water TMWA may divert to clear ice from the Highland Ditch must be returned in like quantities to the river under the TRA.

10. P. 2-13 and 2-15. The assumption that TMWA and TCID each control a divided one-half of Donner lake water is erroneous. The original intent of the Donner Lake water acquisition by TCID and Sierra Pacific was that Sierra would make non-consumptive use of the water and the

water would be returned to the Truckee River and be available for diversion at Derby Dam for the Newlands Project. The assumption that OCAP or any other restriction can prevent the diversion fo Donner Lake water by TCID is also erroneous. The Donner Lake Water Company no longer owns the 990 acre feet of water rights in Donner Lake. The right was condemned by the Truckee-Donner Public Utility District and the final condemnation decree has been approved by the Nevada County Superior Court.

11. P. 2-17. Newlands Project Water is not currently being stored in Stampede Reservoir, although such storage is allowed for under the OCAP. Any such change in storage from Lahontan Reservoir to Stampede Reservoir would require a change application to be filed with the Nevada State Engineer and the SWRCB. Only the water right owners in the Newlands Project can file for or request a change in storage for this water. The Newlands Project water right owners have completed their reimbursement for the construction of Newlands Project, including Lahontan Reservoir. This means that the United States has bare legal title to this reservoir and has no claim to the storage of water in Lahontan Reservoir. The No Action Alternative should not contain any component of storage in Stampede for Newlands Project water. Moreover, this feature of No Action has not been modeled in the TROM.

12. P. 2-10 to 2-22. The description of the No Action alternative is fundamentally flawed. First there is no discussion of the total amount of water available in the Truckee River watershed as compared to the demands that are listed for no action. Second, the assumption that no action will be a continuation of plans and proposals now in place that will increase available water supply is highly speculative and does nothing more than mask the true impacts of the proposed action. For example, the No Action alternative assumes that the Truckee Meadows will gain 25,860 acre feet of additional water from some unknown source. This is highly speculative. Moreover, the no action discussion assumes that between 12,570 and 22,000 acre feet of groundwater will be available for pumping in normal and extremely dry years respectively. This discussion does not acknowledge the safe yield of the aquifer underlying the Truckee Meadows, nor the feasibility of pumping so much groundwater. Finally, the discussion assumes that a savings of ten to nineteen percent can be accomplished through conservation, without any reference as to how this will be accomplished.

13. P. 2-22. The assumption that the City of Fernley would only acquire approximately 6800 acre feet of total water rights is erroneous. Fernley is one of the fastest growing cities in Nevada. There is plenty of land for expansion for Fernley. It is logical to assume that Fernley and developers will seek more of the existing irrigation rights in the Truckee Division and attempt to convert them to M&I. It is not clear that the Water Quality Settlement Water rights Acquisition water will grow. The purchase of water rights for this purpose has stagnated recently. The more likely scenario for water rights in the Fernley area is that a portion of the water rights will remain in irrigation, and a portion will be dedicated for development. Only a small amount of additional water will be acquired for water quality purposes.

14. P. 2-23-24. A review of the LWSA proposal reveals that it is really no different than the No Action alternative.

15. P. 2-26-27. The TROA discussion states that certain provisions of the Truckee River Agreement (TRA) would be changed but nowhere are these provisions identified or described. In fact, nowhere in the Draft EIS/EIR is there a description of the TRA and how it has been used to manage the Truckee River for the last 69 years.

16. P. 2-30-31. What is the basis for assigning a priority to certain California uses ahead of Nevada irrigation rights? What is the basis for allowing TMWA priority for its claim to 40 cfs ahead of other Nevada irrigation uses? Water rights in the Truckee River watershed and tributaries to the Truckee River were adjudicated in the *Orr Ditch* Decree. Why were the claims that California purports to assert here not covered in that effort? At the very least, the California claims should be assigned a priority according to the date of appropriation of the respective water rights. Later in this document, it is stated that water available for diversion by the Newlands Project will be less because of PLIT's exercising its Claim 1 and 2 rights and because California is given priority in its allocations. That is determined not to be a significant impact when any reduction to Pyramid Lake is considered significant. This double standard protects only the few who were signatories to TROA.

17. P. 2-33. The document states that Credit Waters will be made up primarily from Floristan Rates. Floristan Rates were set in the GE Decree, as modified by the TRA, and are designed to ensure that sufficient water is flowing in the river to satisfy decreed rights under both the GE and Orr Ditch Decrees. Floristan Rates also provide sufficient transportation water flowing in the river to ensure that water arrives in sufficient quantity to allow diversions. Currently, any adjustments to Floristan Rates requires the consent of Sierra (TMWA), Washoe County Water Conservation District, and TCID. TROA cannot alter that arrangement.

18. P. 2-33 to 2-38. This section deals with the various credit waters to be created and recognized under TROA. Credit waters are not recognized under the Orr Ditch Decree or the TRA. The TROA purports to have the authority to unilaterally alter the TRA without the consent of all of the parties to that agreement. Since the TRA was used as a stipulation by the parties to the Orr Ditch Decree to allow the entry of the Final Decree as compromised by those parties, it is presumptuous for the United States and the three Nevada entities involved in TROA to believe they can discard TRA in favor of a management scheme that provides "benefits" to only a few parties.

19. P. 2-38. As recognized, Floristan Rates drive how Lake Tahoe and Boca Reservoir are operated. TROA purports to alter Floristan Rates without the consent of one of the main parties to the TRA who is most affected, TCID. The creation of Credit Waters in upstream reservoirs that interfere with Floristan Rates undermines the water available in the Truckee River to be diverted at Derby Dam.

20. P. 2-38 to 2-41. The section on Reservoir Operations purports to allow TMWA to exchange water in Donner Lake for Fish Credit Water. Since the water in Donner Lake owned by TMWA is an undivided one half interest in common with the TCID, any use of such water as Fish Credit Water can only be done with the express consent of TCID. The reference to Newlands Project Credit Water being removed from Lahontan is unsupportable since this is being segmented from the TROA proposal and it cannot be accomplished without permission of the Newlands Project water right owners.

21. P. 2-41 to 2-43. Minimum releases from the various reservoirs must always take into account the water rights of downstream irrigators under the Orr Ditch Decree. Releases for fish flow, recreation, water quality, etc. are secondary to releases for decreed rights.

22. P. 2-44. The reference to TMWA continuing its exercise of water rights compromised and granted to its predecessor under the TRA is contingent upon TMWA agreeing to keep the provisions of the TRA in force that divide waters in the Truckee River among the parties to the TRA. If TMWA does not abide by the TRA, then its right to the 40 cfs (which comes out of Truckee Canal Water) should be forfeited. Reference to TMWA procuring TCID's interest in Donner Lake water is speculative and should not be used as part of No Action, LWSA, or TROA. The parties to the TRA agreed that the rights to the use of Diverted Flow of the Truckee River shall be allocated in accordance with the TRA. The TRA provides that Diverted Flow (essentially all water rights that are diverted along the Truckee River) is allocated thirty-one percent to TCID for use in the Newlands Project and sixty-nine percent to the Washoe County Water Conservation District, subject to the rights of Sierra Pacific Power in Article V of the TRA (40 cfs plus diversions from Hunter Creek). If at any time the right to use the sixty-nine percent is not being exercised and there is water available at Derby Dam, then TCID is given the right under the TRA to divert and use that excess water. TROA makes no provision for this term in the TRA. It would appear that if water is being declared as excess and allowed to be converted to Credit Water that such water is part of the sixty-nine percent allocation and should be managed in accordance with the terms of the TRA. The execution of the TRA is irrevocable.

23. P. 2-47. There are provisions in TROA to reimburse Sierra Pacific for lost revenues due to conversion of its water rights to Fish Credit Water. TROA also proposes to remove a significant amount of water from Lahontan Reservoir that wold be used for hydroelectric generation and store it upstream to ultimately become Fish Credit Water. Why is there no provision for compensating TCID for its lost hydroelectric revenue?

24. P. 2-48. The document mentions change petitions to be filed in California but not the ones to be filed in Nevada. Of the six to be filed in California, two are for new appropriations. However, the so-called new appropriations are for tributaries of the Truckee River. Since all tributaries of the Truckee River have already been adjudicated under the Orr Ditch Decree, these claims are barred. Attempts to increase storage in upstream reservoirs located on tributaries to the Truckee River should also be barred because they interfere with waters that are decreed to

other water right owners on the Truckee River, namely storage rights for the Newlands Project under Claim 3.

25. P. 2-49 to 2-51. The Alternatives considered but rejected do not include a reasonable range of alternatives as required by NEPA or CEQA. Some alternatives not considered are: 1) construction of additional reservoirs; 2) use of water banking or underground storage for drought protection; 3) use of interbasin transfers that allow pumping of underground aquifers and transmission of the water to the Truckee River or as a substitute for water diverted from the Truckee River; 4) conservation measures financed by the parties seeking to increase their water supply, such as piping of diverted water, additional water metering, installation of low flow devices, channeling of the River to minimize evaporation, planting of shade trees to reduce temperature, etc.; 5) providing a leasing mechanism for times of drought, when water right owners may lease their water to increase the supply needed for M&I or fish flows.

26. P. 2-52 to 2-62. The Summary of Effects chart is misleading in several respects but revealing in others. By its own admission, there is little benefit to be gained from TROA when compared to No Action, except in very limited time frames and for limited resources. If the TROA was compared to Current Condition, as the document promised it would, there would be no benefit from TROA and most likely a detriment. By leaving out the Current Conditions column for the summary, the document masks the real information from the public and decision makers. Moreover, the fact that most of the information contained in this summary is derived from a fatally flawed model makes if even more suspect. The fact that the Draft EIS/EIR only looks at long term averages (over 100 years) and not at impacts during individual months or years also makes the summary suspect. [*See* Comments from Binder and Associates Consulting, Inc. And Principia Mathematica, Inc.]

Chapter 3. Affected Environment

27. The description of the affected environment never provides a summary of how the TRA is used today to manage the Truckee River. Without the reader having any idea of how the river is actually managed under current conditions, how can one be expected to understand how the TROA will affect the management, let alone what impacts may result from it? There are very important reasons for why the TRA was set up the way it was, and there were important compromises in the TRA that allowed the Orr Ditch Decree to be entered as a final decree. The Draft EIS/EIR ignores this history and ignores any description of how the current management of the river works and has worked for the last 69 years. The Document does not adequately describe the environmental setting.

28. P. 3-28 to 3-31. This section discusses the TROM. The full set of assumptions used in the TROM are not delineated here, nor are the limitations, omissions or deficiencies of the TROM. This is a defect fatal to the Draft EIS/EIR. The details of the assumptions are described in the comments from Binder and Associates, Inc. and the details of the problems with the model are

described in the comments from Principia Mathematica, Inc. For example, the model has never been calibrated, verified or validated. Moreover, there are limitations in the FORTRAN model that cause unintended consequences in the output. The model does not address many of the components of TROA. There have never been sensitivity runs on the output of the model and the model assumes that the last 100 years of water resources conditions will repeat without doing any stochastic runs.

29. P. 3-31 to 3-32. The study assumptions include one that population growth will occur with or without TROA. However, TROA is what is allegedly providing drought protection for the Truckee Meadows that would allow TMWA to increase the population served. Whether TROA facilitates the population growth or not, it is being used as a mechanism to serve an expanded population so that the growth inducing impacts of TROA on other infrastructure in Reno, Sparks, Fernley, Pyramid Lake Reservation, Fallon and Churchill County should be assessed.

The study also assumes that certain water right transfers will occur, including one for the PLIT to store unappropriated water from the Truckee River in upstream reservoirs. First, the PLIT cannot act on its claim for unappropriated water because approval of its application has been stayed in state court. Second, the water that the PLIT claims is essentially flood waters of the Truckee River; yet the TROA treats these "excess waters" as if the PLIT has a primary right to store them detrimentally to other decreed rights on the river with a higher priority. For example, the PLIT is able to store these waters and provide for carry over storage of these waters in upstream reservoirs, when the Newlands project is prevented from diverting decreed waters from the Truckee River for drought protection and is never allowed to provide carryover storage in Lahontan Reservoir to anywhere near the capacity of the reservoir. The TROA tilts the shortage of water equation firmly toward shortages for the Newlands Project with its decreed rights and tilts the excess water equation firmly in favor of PLIT, which has no decreed rights to the so-called unappropriated water. The Newlands project has significant excess capacity for carryover storage water but is not permitted to use this capacity, even in years where the Carson River is predicted to provide low amounts of water. This management provision of TROA flies in the face of the decreed rights of the Newlands project water right owners.

Also the study assumptions regarding storage include a provision for the consumptive use portion of the rights to be stored in reservoirs and thereafter released as Credit Water. The problem with this is that at the time the water is being stored there is generally sufficient transportation water to allow the water to flow in the river and reach its normal point of diversion. By delaying its release to the late summer months (when most of this water would be released), there is generally insufficient transportation water in the river to "carry" the Credit Water. This has not been modeled. In fact, the model assumes that there will be such water in the system, when historically this is the major problem in the late summer months. To exacerbate this problem, TROA anoints this Credit Water with the characteristics of Privately Owned Stored Water, which means that it flows in the river without regard to transportation losses. The transportation water has long since flowed and the only way for the Credit Water to reach its destination is by floating

it on top of water being released to make Floristan Rates. Since, in the late summer, there may not be enough water to make Floristan Rates, then the other parties with decreed rights may have to forego diversions to allow this Credit Water to flow past to ensure that no transportation losses are counted against such water. The concept of anointing all Credit Water as Privately Owned Stored Water requires consent of all water right owners on the Truckee River and the consent of all parties to the decree. This has not been obtained.

30. P. 3-36. Table 3.1 illustrates how the baseline conditions might be used to predict whether TROA may actually work. If there had been a mass balance analysis of the Truckee River water supply with all of the demands and uses accounted for, then the Draft EIS/EIR would provide useful information to the public about whether the river is being managed or mismanaged under current conditions. But the document fails to do this. When working with a limited supply of water that on average causes shortages on the river in three out of every ten years, it defies logic to assume that all demands on the river can be met by allowing two entities to store their water and to carry that storage over from year to year without impacting the other water right owners. What these two entities are doing is shifting the balance of shortages away from them and to the remaining water right owners without regard to the consequences. The TROM merely assumes that all water rights will be satisfied without actually proving it.

31. P. 3-37. To illustrate the problem, many of the downstream rights on the Truckee River depend on return flows for the water that they will divert to satisfy their primary rights on the river. When even the theoretical consumptive use portion of the right is withheld, there remains in the river only the transportation component. For water controlled by TMWA that would be used for hydroelectric power generation, of course, there is no consumptive use portion. None of the water is assumed to be consumed when passing through the power facilities. Yet this water is being stored as Credit Water. Clearly this water would provide return flows and would be sent back to the river as soon as it is used. Under TROA, this water would be converted to Fish Credit Water and must pass all the way to Pyramid Lake without any transportation losses. The loss of the return flows from this water has not been calculated as an impact to downstream users.

32. P. 3-48. The basis for the six flow regimes for Pyramid lake are unclear. Either there should be a source document referenced for these or this Draft EIS/EIR should, for the first time, analyze the impacts of the six flow regimes on the rest of the Truckee River water resources. The high flow regime results in over 245,000 acre feet of water to Pyramid Lake. On average the lake receives over 425,100 acre feet. See Table 3.1. Thus, the need to release water for the highest flow regime happens less than half the time. Even the lowest flow regime results in the Lake receiving over 75,000 acre feet. Under these conditions, fish spawning is not likely to happen and the water may be needed elsewhere for drought protection.

33. P. 3-56. Under No Action Modeled Demands, the document mentions that Sierra Pacific looked at a number of options for supplying a reliable water supply to the Truckee Meadows.

Sierra even looked at constructing new dams but did not include a new storage reservoir. The Draft EIS/EIR then states that because TMWA has not proposed a new reservoir the Draft EIS/EIR does not include it as an alternative. This is not the test under NEPA or CEQA for considering alternatives, however.

34. P. 3-95. The Draft EIS/EIR concludes that agricultural demand in the Carson Division is met about the same under TROA as under No Action but there is no comparison to Current Conditions. The document also concludes that average water supply is slightly less under TROA than under No Action. But then does make a comparison in minimum supply years and concludes that TROA will provide six percent less water to the Carson Division in these dry years than current conditions. Since P.L. 101-618 provides that there shall be no impairment of vested or decreed water rights under the Act, any reduction in supply caused by TROA is a significant impact. The document admits that TROA will exacerbate shortages in these dry years. No mitigations are supplied for this impact and the Draft EIR/EIR does not even recognize it as an impact. To contrast the threshold of significance for Pyramid Lake is *any* reduction in inflows. Again the model looks at long term averages and not individual years. The one year impact for 1934 from TROA on the Newlands Project is over 8000 acre feet, if the model can be believed.

35. P. 3-112. The document admits here that there could be adverse consequences to the shallow aquifer in the vicinity of the Newlands Project since less water will be flowing in the Truckee Canal and released from Lahontan. Again, the Draft EIS/EIR does not believe this is significant, despite the fact that the entire area around Fernley and Fallon relies on the aquifer and the recharge of the aquifer for its drinking water supply.

36. P. 3-235. The whole purpose of the TROA is presumably to allow management of the water resources in the Truckee River basin to permit more water to flow to Pyramid Lake. Although the information has been developed with a questionable model, the model results show that on average the increased inflow to Pyramid Lake from TROA is less than 10,000 acre feet. The difference compared to Current Conditions is only 5240 acre feet. The Government could have purchased 10,000 acre feet of permanent water right for Pyramid lake and avoided TROA altogether. The Draft EIS/EIR concludes that Pyramid Lake elevation will be higher under TROA but 5240 acre feet over the vast expanse of Pyramid Lake would not raise the lake by any measurable amount. The benefits from the TROA in meeting the purpose and need statement of this EIS/EIR are questionable.

37. P. 3-236, Table 3.64. Even more telling than the inflow to Pyramid Lake is the frequency that Flow Regimes 1, 2 or 3 are achieved under TROA compared to Current Conditions. Presumably, in order to meet the Purpose and Need for the Proposed Action, the frequency of meeting or exceeding the high flow regimes should increase under TROA. However, this is not the case. As shown in table 3.64 (if the model can be believed), in April, the frequency of flow regime 1 decreases from Current Conditions to TROA by six years, while flow regime 2

increases by three years and flow regime 3 decreases by one. In May, the frequency of years for flow regime 1 decreases by two years, for flow regime 2 it increases by four years and for regime 3 it decreases by three years. In June, flow regime 1 increases by one year, flow regime 2 increases by six years and flow regime 3 decreases by eight years. Looking at the totals in Table 3.64 the overall number of years of frequency for flow regimes goes down rather than up under TROA.

38. P. 3-244. Table 3.65 also reveals that only in August on average will there be any effect on Lahontan Cutthroat Trout from TROA when compared to Current Conditions.

39. P. 3-275 and 3-276 and 3-329. The discussion on Lahontan Reservoir recreation shows there will be a significant impact from TROA since more water will be removed from storage when Newlands Project Credit Water is stored upstream. Why is Lahontan Reservoir not included in this Recreation Visitation and Expenditures chart?

40. P. 3-334. Here any reduction in hydroelectric generation revenue is considered significant--for Sierra Pacific. However, with the withdrawal of a significant amount of water from Lahontan Reservoir by storing Newlands Project Credit Water upstream, there will be a significant impact on electric power revenues for the New and Old Lahontan Power Plants and the 26 Foot Drop Power Plant. The failure to consider these impacts make the Draft EIS/EIR invalid.

41. P. 3-388 and 3-389. The discussion of impacts on the Newlands Project is inadequate. First, the analysis relies on a fatally flawed model. Second, the impacts on the project are never compared to Current Conditions. Instead, the analysis looks at No Action, which includes erroneous assumptions about Fernley M&I water, retirement of irrigation rights in the Truckee Division, unsupported reductions in Carson Division demand, and excludes the potential impact of Newlands Project Credit Water. Even with the comparison of TROA to the No Action alternative, the analysis shows a reduction in water supply to the Newlands Project, which means less water available to deliver for decreed rights. P.L. 101-618, section 210(b)(13) prohibits any impairment of vested or decreed rights as a result of TROA; therefore, the reduction in water supply is a significant impact and must be mitigated. This conclusion is also borne out by Table 3.97.

42. P. 3-404. This section concludes that local and state agencies have already planned to grow their populations by the numbers used in the Draft EIS/EIR. Therefore, TROA is not inducing the growth. This kind of faulty logic stands NEPA and CEQA on their respective heads. Presumably, the main reason that TMWA is involved in TROA is to ensure that its population, if it does grow to 119,000 will have water to serve it in times of drought. If TROA did not provide drought protection to allow this growth to 119,000, then TMWA could not be issued will serve letters for that many households. Consequently, TROA is providing incentives for developers to come to the Truckee Meadows and to build more houses. This is the growth-inducing effect of

TROA. Moreover, TROA will allow the Pyramid Lake Reservation population to grow. This Draft EIS/EIR does not address the growth impacts of TROA on highways, schools, hospitals, air and water quality, etc. This is a serious flaw in the document and makes it invalid.

43. P. 4-5 and 4-6, Table 4.1. The cumulative impacts of the TROA should be analyzed for Lahontan Reservoir, groundwater in Churchill County, impacts on Stillwater Wildlife Refuge, impacts on Carson lake and Pasture, impacts on Fernley Wildlife Management Area, impacts on the Naval Air Station at Fallon, impacts from modification to the OCAP to accommodate Newlands Project Credit Water, impacts from recoupment (since there is a judgment in the case) and impacts from water rights acquisition programs. All of these other actions have the potential to impact TROA and their cumulative impacts should have been analyzed.

44. P. 4-10 and 4-11. The discussion of impacts of TROA on the Newlands project, and particularly on Lahontan Reservoir is inadequate. First, the document acknowledges that recreation in the spring and summer will be adversely impacted. Second, the document recognizes that there will be less carryover storage in Lahontan. The discussion of this impact concludes that this is a benefit since fewer spills will occur. The document never broaches the subject of how less carry over storage may cause shortages in deliveries, even though this is acknowledged elsewhere in the Draft. This is merely a reflection of shifting the risk of shortages to decreed water right owners as opposed to the PLIT which does not have a water right for its Fish Credit Water or Fish Water.

List of Preparers

45. The List of Preparers does not meet the requirements of either NEPA or CEQA in that the list does not contain the qualifications of the preparers. Expertise, experience, and professional disciplines are not listed as required. Moreover, from the documents we have reviewed, there are many more people outside of government who have participated in the preparation of the Draft EIS/EIR. Rod Hall was the primary person responsible for the model information, for example. Also, Ali Shahroody participated extensively in the preparation of the water resources sections. This list must be corrected.

BINDER ASSOCIATES CONSULTING, INC.
928 Halidon Way, Folsom, CA 95630 • (916) 984-1470 • (916) 984-7456 (fax)

December 28, 2004

Mr. Kenneth Parr
U.S. Department of the Interior
Bureau of Reclamation
705 North Plaza Street, Room 320
Carson City, NV 89701-4015

Re: Comments on August 2004 Revised Draft Environmental Impact Statement/Environmental Impact Report for Truckee River Operating Agreement (TROA)

Dear Mr. Parr:

These comments are made on behalf of the Truckee-Carson Irrigation District (TCID), the City of Fallon, and Churchill County and are in addition to any separate comments submitted directly by these parties or their representatives. These comments pertain to the August 2004 Revised Draft Environmental Impact Statement/Environmental Impact Report (DEIS/EIR) and supplemental information provided by the U.S. Bureau of Reclamation (USBR) through oral communication and documents provided in response to my September 27, 2004 Freedom of Information Act (FOIA) request.[1] It is noted that TCID requested a 6-month extension for the comment period but the extension was granted for only two months. Thus the following comments should be regarded as preliminary and are based on limited time for review and analysis of the Truckee River Operations Model (TROM) and supporting information provided in response to the FOIA request. The comments include specific comments referenced to particular sections of the DEIS/EIR followed by general comments.

Page ES-6—The third complete paragraph contains a misleading statement that the Newlands Project Carson Division water demands would be served in wet, median, and dry hydrologic conditions. Analysis of model output data shows that the TROA Alternative results in increased shortages to the Carson Division in seven years of the study period including an increase of approximately 8,000 acre-feet in Water Year 1934.

Page 1-7—The third complete paragraph describes possible changes to OCAP to accommodate Newlands Project Credit Water (NPCW) including the statement that the potential environmental effects of such credit water are addressed in the DEIS/EIR. As discussed in more detail in other comments, the potential environmental effects are not adequately evaluated in the document because constraints included in the modeling analysis of the NPCW operations are so restrictive that the range of potential impacts on Newlands Project Carson Division shortages and Lahontan Reservoir water levels has not been disclosed.

Page 2-36—*vi. Newlands Project Credit Water.* The description of the NPCW program is not consistent with the provisions of TROA nor the modeling analysis used to evaluate NPCW operations. The description indicates that NPCW can be accumulated any time between October

[1] September 27, 2004 letter from Charles W. Binder to Kenneth Parr regarding Truckee River Operating Agreement DEIS/EIR—Freedom of Information Act Request for Information Related to the Truckee River Operations Model.

and July. No such time period is specified in TROA and furthermore the modeling analysis restricted the period of accumulation to January through June. The description also states that the credit water would be released (as much as possible before August 1) in time to be used for its authorized purposes. However, the modeling analysis used to evaluate the TROA Alternative restricts the deliveries of NPCW to the Newlands Project to the month of July.

Page 2-41—*iii. Enhanced Minimum Releases.* The TROA operations call for Credit Water and Project Water to be used to meet increased minimum releases for Donner Lake. Included in the definition for Project Water contained in TROA is Privately Owned Stored Water (POSW) in Donner Lake, apparently including the water in Donner Lake owned by TCID. Under what authority can POSW owned by TCID be used to meet the increased minimum releases specified in Table 2.8?

Page 2-43, Table 2.9—Why is NPCW the second in order for water to spill from reservoir storage?

Page 2-49—V. Alternatives Considered and Rejected.

The alternatives analysis is flawed due to overly restricting the range of possible alternatives and rejecting alternatives without sufficient analysis. The January 1996 Report to the Negotiators evaluated only alternatives that can be described as variations of the Basic TROA Alternative to address four limited aspects of Truckee River operations emphasizing (1) streamflows, (2) recreational pools, (3) threatened and endangered species, and (4) assured storage to serve uses in California. Even the narrow variations within the TROA framework were restricted and did not include a range of alternative operations. Examples include, but are not limited to, storage to assure all existing water rights under the Orr Ditch Decree are not injured and storage to assure Newlands Project shortages are not increased due to TROA operations.

The alternatives analysis should include a broad formulation and detailed evaluation of a range of possible alternatives to TROA including, but not limited to: (1) constructing a new reservoir(s), (2) transbasin importation of surface water and groundwater supplies, and (3) increased utilization of conjunctive use and groundwater banking. Constructing a new reservoir is briefly mentioned in the first full paragraph on Page 2-49 but it is summarily rejected as an alternative because "…. it would have exacerbated degradation of riverine fish and riparian habitat as well as created additional cumulative environmental impacts throughout the Truckee River basin." However, there is no analysis contained in the DEIS/EIR to support this claim and the rejection of constructing a new reservoir as an alternative to or a component of TROA.

Page 3-11—B. Past Cumulative Effects on Affected Resources. The third and fifth complete paragraphs improperly attribute the decline in water levels for Pyramid Lake and Winnemucca Lake entirely to the operation of the Newlands Project. There is no basis provided in the DEIS/EIR for this attribution. There are several other potential causes for declining water levels for these lakes including drought conditions and diversions for irrigation purposes in the Truckee Meadows. The DEIS/EIR should include a graph showing the historical water levels for these lakes including the recent recovery of water levels in Pyramid Lake to levels greater than target levels identified in the Cui-ui Recovery Plan.[2]

Page 3-59—*(ii) Nonconsumptive Demands.* The second paragraph in this section describes current and future estimated acquisitions of water rights under the Water Quality Settlement Agreement (WQSA). The calculations for the estimated acquisitions are referenced as presented in the Water

[2] U.S. Fish and Wildlife Service, Cui-ui (*Chasmistes cujus*) Recovery Plan, Second Edition, Region 1, Portland, Oregon.

Resources Appendix. However, review of the document revealed that such calculations are not included in the appendix. Detailed calculations including location of target water rights, prices, inflation rate, and sources of funding should be provided in the DEIS/EIR.

Page 3-64—2. Model Results.

The TROM results for reservoir storage and releases are presented for wet, median, and dry hydrologic conditions defined as 10-, 50-, and 90-percent exceedences. This type of comparison provides an interesting overview but is insufficient in evaluating specific impacts on the Newlands Project. Monthly and annual analyses are needed to fully understand the impacts on the Newlands Project. For example, model results show TROA operations increase the Carson Division shortages in seven years including Water Year 1934 when the shortage was increased by approximately 8,000 acre-feet compared to the No Action Alternative.

In addition to lack of monthly and annual model results described above, it is noted that the DEIS/EIR provides no detailed results for changes in storage and water surface elevations for Pyramid Lake even though it would seem that one of the objectives of TROA would be to increase the water surface elevation of Pyramid Lake to improve fish passage conditions. The DEIS/EIR should include a detailed analysis of changes in storage and water surface elevations for Pyramid Lake including monthly and annual data and graphs similar to those presented for other reservoirs throughout the Truckee River system.

Page 3-78—*c. TROA.* This section provides a description of the operations model results for the various reservoirs and differences in storage amounts and releases are often attributed to credit water operations under TROA. However, there is insufficient information presented in the DEIS/EIR to establish specific cause and effect relationships between the various credit water operations and the reported changes in storage amounts and releases derived from the operations model results.

Page 3-83—*viii. Lahontan Reservoir.* This paragraph contains misleading statements and one incomplete sentence containing typographical errors and missing words. The statement is made that "Carson Division demands are met in wet, median, and dry hydrologic conditions" but insufficient information is provided in the DEIS/EIR to reach this conclusion. The cited figures 3.15 and 3.16 are inadequate to evaluate impacts on the Carson Division. Review of backup modeling information provided by the USBR under the FOIA request shows that in fact TROA operations increase the Carson Division shortages in seven years including Water Year 1934 when the shortage was increased by approximately 8,000 acre-feet compared to the No Action Alternative.

Page 3-88—*d. TROA.* This section provides a description of the operations model results for streamflows at various river locations and differences in flows are often attributed to credit water operations under TROA. However, there is insufficient information presented in the DEIS/EIR to establish specific cause and effect relationships between the various credit water operations and the reported changes in river flows derived from the operations model results.

Page 3-92—3. Evaluation of Effects. See general comments regarding formulation of the Current Conditions and the No Action and TROA alternatives.

Page 3-93, second line, first complete paragraph. Change the word "percent" to "percentage points."

Page 3-95—(b) Carson Division. This paragraph contrasts percentage of demand met in the minimum year but this comparison is misleading and does not present the true impacts on the Newlands Project. For example, model results show TROA operations increase the Carson Division shortages in seven years including Water Year 1934 when the shortage was increased by approximately 8,000 acre-feet compared to the No Action Alternative.

Page 3-96—F. Optional Scenarios. The statement is made that TROA was modeled using conditions "most likely" to occur in the future based on the draft agreement. What is the basis for excluding Fernley M&I Credit Water from the base TROA run?

Page 3-97—*b. Donner-TMWA Scenario.*

Insufficient information and poor graphical representations are presented in this section resulting in an inability to properly evaluate the impacts on TCID operations and Newlands Project water supplies under the scenario of TMWA having 100 percent ownership of Donner Lake. The graphs contained in figures 3.23, 3.24, and 3.25 are presented at an insufficient scale to discern changes in operations. Furthermore, the selected items in the graphs do not include specific points of interest to the Newlands Project such as Truckee Canal inflows to Lahontan Reservoir or Carson Division shortages.

The third complete paragraph on Page 3-104 summarizes modeling results stating the Truckee Canal diverts 120 acre-feet per year less water to Lahontan Reservoir and that the average annual Carson Divisions shortages would increase by 80 acre-feet per year under the Donner-TMWA Scenario. These statistics are misleading in terms of potential impacts on TCID and Newlands Project water supplies because a long-term average determination masks the impacts in individual months and years, particularly in dry years when Donner Lake water is a critical element of the water supply for TCID. These numbers are also artificially low due to the assumption that 100 percent of the Truckee Division water rights will be acquired for either WQSA or City of Fernley purposes.

To adequately address the potential impacts on TCID and the Newlands Project, the DEIS/EIR should contain monthly amounts for the entire period of record reported for Current Conditions and the No Action, LWSA, and TROA alternatives. The monthly amounts should be reported for both scenarios: (1) Donner Lake undivided joint ownership by TCID and TMWA as currently in place and (2) 100 percent ownership by TMWA. The TROA falsely assumes that Donner Lake water can be partitioned. Even assuming this is true, the TMWA and TCID points of operation for Donner lake water are not presented. The results should be presented for the following points of operations:

- Donner Lake Storage reported by separate accounts for TCID and TMWA
- Donner Lake Releases of TCID and TMWA separate accounts
- Donner Lake water diverted at Derby Dam
- Donner Lake water delivered to Lahontan Reservoir
- Donner Lake water as an undivided asset

Insufficient information is currently provided in the DEIS/EIR to understand the future operation of Donner Lake and in particular the future operation of the TCID Donner Lake water rights for Current Conditions and the No Action, LWSA, and TROA alternatives.

Page 3-111—E. Recharge of the Shallow Aquifer near the Truckee Canal. The analysis of potential impacts on groundwater resources in the vicinity of the Newlands Project, including areas adjacent to the Truckee Canal and Lahontan Valley, is inadequate because the analysis presented is qualitative and potential impacts are simply assumed to be insignificant when comparing the TROA and No Action alternatives. One of the problems arises due to the assumptions included in the formulation of the No Action Alternative as described in the general comments. More realistic assumptions including a range of possible actions should be included in the No Action Alternative. Once a more realistic No Action Alternative is formulated, a quantitative analysis should be conducted to

determine potential impacts on groundwater resources adjacent to the Truckee Canal and within the Lahontan Valley. The DEIS/EIR should also include an expanded description of the number of wells and population dependent upon groundwater resources that are recharged from return flows from the Newlands Project.

Page 3-157—last paragraph. The DEIS/EIR describes new flow recommendations referred to as the six-flow regime for management of Fish Water and Fish Credit Water releases in order to meet ecosystem requirements along the Truckee River. The new flow recommendations are attributed the Truckee River Basin Recovery Implementation Team under a report[3] to the U.S. Fish and Wildlife Service. The discussion should include a description of the NEPA and ESA compliance procedures and requirements for adopting the six-flow regime as well as analyses showing the stand-alone impacts of the recommended flows on diversions from the Truckee River to the Newlands Project.

Page 3-235—2. Threshold of Significance. The DEIS/EIR establishes the threshold of significance for Truckee River inflow to Pyramid Lake as "Any change in inflow was considered significant." What is the scientific basis for considering any change in Pyramid Lake inflows as significant whereas increases in Carson Division shortages for the Newlands Project are not considered significant?

Page 3-235—*c. TROA.* This paragraph reports that model results show the average annual increase in inflow to Pyramid Lake is 9,730 acre-feet under TROA compared to the No Action Alternative and concludes this increase is significant. However, this increase in inflow corresponds to only a two percent increase in inflow to Pyramid Lake. What is the scientific basis for considering this change in inflow as significant?

Page 3-330 thru Page 3-334—D. Employment and Income Affected by Changes in Water Use. This section evaluates the effects of transferring water rights but the analysis was aggregated to such a large scale that the effects on the Newlands Project and in particular the Truckee Division are not discernable. The analysis should be disaggregated to show the specific impacts of purchase of irrigation water rights for the city of Fernley and for Truckee River water quality under the WQSA. The analysis should include impacts on employment and income as well as the economic impacts on TCID operations.

Page 3-334 thru Page 3-336—E. Hydropower Generation and Revenues. This section is incomplete because the analysis does not include the impacts on hydropower generation and revenues for the Newlands Project and particularly the impacts on TCID operations. The analysis should be expanded to include impacts related to the reduction in hydropower generation for the Lahontan Reservoir Old and New Power Plants and the V-Canal (26-foot Drop) Power Plant.

Page 3-388 thru 3-391—Newlands Project Operations.

All of the following comments related to this section on the Newlands Project Operations assume for purposes of the comments only that the formulation and assumptions for the No Action Alternative are appropriate; however, as discussed in the general comments there are serious concerns about the formulation and assumptions for the No Action Alternative and the resulting effect of masking the potential impacts of TROA on the Newlands Project and TCID.

The analysis should be expanded as described below to include Carson Division shortages. Also the analysis should evaluate potential impacts on the following resources related to

[3] Truckee River Basin Recovery Implementation Team, Short-Term Action Plan for Lahontan Cutthroat Trout (*Oncorhynchus clarki henshawi)* in the Truckee River Basin, report prepared for U.S. Fish and Wildlife Service, August 2003.

Newlands Project operations: (1) groundwater resources dependent upon return flows from the Newlands Project, (2) stock watering and domestic uses under the Newlands Project, and (3) water supplies for wetlands including Fernley Wildlife Management Area, Stillwater Wildlife Management Area, Stillwater National Wildlife Refuge, and Carson Lake Pasture.

Page 3-388, last paragraph. The list of specific operations for evaluating potential impacts on the Newlands Project should be expanded to include Carson Division shortages. In addition, all of the specific operating parameters of interest to the Newlands Project should be evaluated on monthly and annual bases as well as period of record descriptive statistics to include various frequency points, maximum, minimum, average, and median values. Also the analysis should be expanded to include a scenarios analysis for drought conditions assuming worst-case, multi-year drought conditions.

Page 3-389, Table 3.96. The summary table of potential impacts on the Newlands Project is interesting but the results should be supported by detailed tables showing monthly and annual values for the entire study period and all appropriate operating parameters for the project. In addition, the summary table and detailed supporting tables should be expanded to show results for the operating parameters for Current Conditions along with all three alternatives.

Page 3-389, Table 3.96 and following discussion of potential impacts resulting from TROA. The operations model results summarized in the table are inadequate to provide a basis for reaching conclusions on the potential impacts on the Newlands Project. In particular, monthly and annual results for Carson Division shortages are not provided in the DEIS/EIR and such results should be provided in the document. Review of backup modeling information provided by the USBR under the FOIA request shows that in fact TROA operations increase the Carson Division shortages in seven years including Water Year 1934 when the shortage was increased by approximately 8,000 acre-feet compared to the No Action Alternative. The annual increases in Carson Division shortage for seven years are shown below:

Annual Carson Division Shortages Determined From Operations Model Results				
	Carson Division Shortage			
Water Year	No Action (acre-feet)	TROA (acre-feet)	Increase In Shortage (acre-feet)	Percentage Increase In Shortage
1932	14,740	14,750	10	0.1%
1934	71,760	79,720	7,960	11.1%
1961	49,580	53,980	4,400	8.9%
1988	60,630	61,470	840	1.4%
1990	38,830	40,130	1,300	3.3%
1992	156,000	156,440	440	0.3%
1994	54,940	56,490	1,550	2.8%
TOTAL			16,500	

The increases in Carson Division shortages exacerbate the shortages that are incurred by the individual water right holders served by the Newlands Project. For example, in 1934 the water users under the Carson Division would experience a 27 percent shortage in available supplies under the No Action Alternative. The 11.1 percent increase in shortages caused by TROA would increase the Carson Division shortage to 30 percent. It is also noted that these

shortages would be greater if deliveries are made to the Lahontan Valley wetlands at the full duty of 3.5 or 4.5 acre-feet per acre compared to the current delivery rate of 2.99 acre-feet per acre.

Page 3-390, first full paragraph. The statement is made that based on the analysis of releases to serve Newlands Project water rights, there should be little to no economic impact from TROA compared to No Action. There is no basis for this conclusion particularly in light of the increases in shortages shown above as a result of TROA. An analysis should be performed to quantify the economic impacts resulting from increases in Carson Division shortages and decreases in Lahontan Reservoir releases. The economic impacts include, but are not limited to, reduction in hydropower generation and revenues, reduction in water delivery fees received by TCID, reduction in crop yields and gross revenues as a result of reduced water supplies, and reduction in net revenue as a result of reduced gross revenues while fixed costs and some variable costs remain the same.

Page 3-390, fifth paragraph. This paragraph provides a description of the NPCW operations included in the modeling analysis for the TROA alternative. The following comments and questions arise concerning the NPCW analysis:

- What is the scientific basis for the proposed California Guidelines objectives for flows in July for the various stream reaches that are used to limit establishment of NPCW?
- What is the legal authority for imposing the proposed California Guidelines objectives for flows in July?
- The description indicates that NPCW was not released before July 1 but review of supplemental materials provided by USBR shows that releases to the Newlands Project were restricted to the month of July. The analysis should be expanded to allow releases to the Newlands Project throughout the irrigation season as well as scenarios to include carryover storage for releases to the Newlands Project in subsequent years.
- The description includes a summary of the modeling results showing releases in 21 of the 100 years, with a maximum storage of 1,300 acre-feet. First, this sentence is unclear whether the "releases" are diversions at Derby Dam, Truckee Canal inflows to Lahontan Reservoir, or some other operations variable. Second, it appears a typographical error is included in third sentence and the word "recreation" should be either "creation" or "established." Third, backup data should be presented in the DEIS/EIR showing the monthly and annual amounts for: 1) NPCW established by either exchanges in accordance with TROA Section 7.H.1(a) or retention in storage in accordance with TROA Section 7.H.1(b), 2) NPCW released from individual reservoirs, 3) NPCW diverted at Derby Dam, 4) NPCW delivered to Lahontan Reservoir, 5) reclassification of NPCW by category in accordance with TROA Section 7.H.6, and 6) utilization of any reclassified NPCW including but not limited to flows past Derby Dam classified as Fish Water or Fish Credit Water.

Page 3-390, sixth paragraph. This paragraph describes two other scenarios for management of NPCW that are characterized as "possible and reasonable" but only a qualitative analysis is provided. Included in the qualitative analysis is an acknowledgement that such operations under the first scenario would increase Carson Division shortages. If such other scenarios are "possible and reasonable," a full range of possible scenarios should be analyzed to quantify

the potential impacts on the Newlands Project and to identify mitigation measures to offset any increases in Carson Division shortages.

References—The references section should be revised to provide consistent format and style. Redundant entries should be eliminated such as Item No. 10 on Page 3 and Item No. 12 on Page 17. Also, Item No. 4 on Page 9 appears to be the same document as Item No. 1 on Page 20. It also appears that the entire body of information available from the U.S. Geological Survey (USGS) was not utilized and cited in the DEIS/EIR. Included in the missing USGS publications are reports related to USGS river and reservoir modeling efforts for the Truckee and Carson River Basins; traveltime characteristics of the Truckee River; groundwater quality and groundwater resources of Lahontan Valley; data on groundwater quality and aquifer conditions for Reno-Sparks area; and irrigation drainage, water supplies, and water quality for Stillwater and Fernley Wildlife Management Areas.

Water Resources Appendix—Exhibit 2 provides historical monthly streamflow data at key stream gaging stations including stations of particular interest to TCID and the Newlands Project including: (1) Donner Creek at Donner Lake near Truckee , California (USGS 10338500), (2) Truckee River at Farad, California (USGS 10346000), (3) Truckee River at Vista, Nevada (USGS 10350000), (4) Truckee River below Tracy, Nevada (USGS 10350400), (5) Truckee River below Derby Dam near Wadsworth, Nevada (USGS 10351600), (6) Truckee River near Nixon, Nevada (USGS 10351700), and (7) Carson River below Lahontan Reservoir near Fallon, Nevada (USGS 10312150). However, the TROM model output for river flows summarized in subsequent exhibits in the appendix shows river flows for the Current Conditions and the No Action, LWSA, and TROA alternatives for points on the river that are different than the USGS gaging stations for historical streamflows. The model output was apparently post-processed using a separate program to estimate streamflows at these other locations. Displaying the model results at points on the river different than USGS gaging station locations as well as points that are not included in the direct TROM output makes it difficult to analyze model results in comparison to historical conditions. For example, the model output for the closest location to the Farad gage appears to be "Truckee River above Coldron Ditch and Verdi Powerhouse." No description is provided as to the location of this alternate location nor is any explanation provided on how the streamflows are determined using the model output. Another example in the appendix includes monthly data for the "Truckee River at S-Bar-S Ranch" which appears to be located somewhere between Derby Dam and Pyramid Lake. Again the location is not described nor is an explanation provided on how the TROM output is used to derive flows at this alternate location considering intervening diversions and accretions. Lastly, as described in more detail below, monthly TROM output for Carson River below Lahontan Reservoir is not provided in the DEIS/EIR for the Current Conditions and No Action, LWSA, and TROA alternatives.

Water Resources Appendix—Exhibit 4 provides input files for the TROM for the various scenarios and included in the input files are demands for the various users. Although some additional information is presented in Exhibit Nos. 14, 15, and 16, insufficient information is provided in the DEIS/EIR to understand the assumptions and calculations used in deriving these demands. For example, the input files require input demands for the Truckee and Carson Divisions under the Newlands Project for the Current Conditions and No Action, LWSA, and TROA alternatives. Information provided by the USBR under the FOIA request included calculations for the demands for the Truckee and Carson Divisions; however, this supporting information should be provided in the DEIS/EIR. Included in the input files are numerous variables and switches for operational parameters that are not defined. The definitions for the variables and switches as well as the selection of the proper switches for the Current Conditions and No Action, LWSA, and TROA alternatives should be provided in the DEIS/EIR.

Water Resources Appendix—Exhibit 5 provides output file summaries for the TROM for the Current Conditions, and No Action, LWSA, and TROA alternatives. The output summaries are comprised of four pages for each scenario listing monthly values for output variables related to streamflow; diversions; reservoir inflows, outflows, storage, and elevation; exchanges; credit storage; shortages; depletions; and demands for the various users extending from Lake Tahoe and the other upper basin reservoirs to Pyramid Lake on the Truckee River and Lahontan Reservoir on the Carson River. The summaries present the TROM output for the 1901-2000 average values. These output summaries have limited utility because the output is presented for the long-term averages only and thus it is impossible to evaluate output variables of interest during individual years particularly during drought conditions. The full output is necessary and should be included in the DEIS/EIR to fully understand TROA operations and to evaluate potential impacts on Donner Lake operations and the Newlands Project. Also, the information provided in the DEIS/EIR does not include definitions of the output variables. The definitions for the output variables and a description of the interrelationships of the variables are needed to understand the analysis and should be provided in the DEIS/EIR.

Water Resources Appendix—Exhibit 6 provides TROM 1901-2000 Simulated Monthly Reservoir Data for the Current Conditions and No Action, LWSA, and TROA alternatives. The monthly data are provided for reservoir storage, water surface elevation, water surface area, and shore habitat area. However, the data are provided for only six of the major reservoirs of interest: Boca Reservoir, Donner Lake, Independence Reservoir, Lahontan Reservoir, Stampede Reservoir, and Lake Tahoe. The same information for Prosser Creek Reservoir and Pyramid Lake should also be included in the DEIS/EIR.

Water Resources Appendix—Exhibit 7 provides TROM Monthly Reservoir Exceedence Frequency Data for the Current Conditions and No Action, LWSA, and TROA alternatives. The frequency tables are provided for reservoir storage, water surface elevation, water surface area, and shore habitat area apparently based on the data provided in Exhibit 6. Frequency tables are provided for Prosser Creek Reservoir but the supporting data are not provided in Exhibit 6. Frequency tables for Pyramid Lake should be included in the DEIS/EIR.

Water Resources Appendix—Exhibit 8 provides TROM End of August Reservoir Exceedence Frequency Plots for the Current Conditions and No Action, LWSA, and TROA alternatives. The frequency plots are provided for all of the major reservoirs except Pyramid Lake. Also the plots are provided for only reservoir storage and only for the month of August. It is not clear why only August was selected. Frequency plots should be provided for all months for all locations including Pyramid Lake.

Water Resources Appendix—Exhibit 9 provides TROM 1901-2000 Simulated Monthly Flow Data for the Current Conditions and No Action, LWSA, and TROA alternatives for sixteen locations. As indicated above many of these locations are different than USGS gaging locations and TROM model output. Also it is unclear why these particular locations were selected and more importantly why other locations were not selected for detailed analyses such as Lahontan Reservoir releases.

Water Resources Appendix—Exhibit 10 provides TROM Monthly and Seasonal Flow Exceedence Frequency Data for the Current Conditions and No Action, LWSA, and TROA alternatives. The exhibit also includes a location key providing some additional information related to the names and specific locations of the sixteen points; however, more detailed information along with a map is necessary to identify the locations of the points.

Water Resources Appendix—Exhibit 11 provides TROM Monthly and Seasonal Flow Exceedence Frequency Plots for the Current Conditions and No Action, LWSA, and TROA alternatives. The frequency plots are provided for fourteen of the sixteen locations included in Exhibits 9 and 10. The

two missing locations are Truckee River at S-Bar-S Ranch and Little Truckee River below Sierra Valley Diversion. For each of the fourteen locations, four frequency plots are provided that are actually multiple months: (1) Oct-Jan, (2) Feb-Mar, (3) Apr-Jul, and (4) Aug-Sep. It is not clear why these particular monthly combinations were selected. Frequency plots should be provided for all locations for all individual months and on an annual basis corresponding to the tabular information provided in Exhibit 10.

Water Resources Appendix—Exhibit 15 provides the TROM Operations Criteria and Analysis for Current Conditions and Alternatives, which is comprised of a general review of assumptions and procedures in TROM to simulate the Current Conditions and No Action, LWSA, and TROA alternatives. The exhibit may be useful for some readers of the DEIS/DEIR in gaining a preliminary understanding of the modeling of the various components of TROA but the exhibit is not a satisfactory substitute for full documentation of the model that is necessary to fully evaluate potential impacts on the Newlands Project and Donner Lake operations. Please recall that included in my September 27, 2004 FOIA request I asked for full documentation of the model as Item No. 7—"Users manual or other documentation of TROM providing descriptions of variables, explanations of model logic, flowcharts, user instructions, and other information for the main program and associated subroutines." However, the USBR denied the request as explained in the October 27, 2004 letter[4] as being protected pursuant to the Attorney Work Product Doctrine. It is understood that a users manual has been prepared for the TROM. This users manual should be available in order for the public to understand the modeling analysis that is relied upon for conclusions presented in the DEIS/EIR and the decisions that will be reached based upon the DEIS/EIR. Please explain why this information is being withheld.

Water Resources Appendix—Exhibit 16 provides the TROM Selected TROA Operations, which is comprised of more detailed discussions and examples for the assumptions and procedures in TROM to simulate the Current Conditions and No Action, LWSA, and TROA alternatives. Exhibit 16 is a useful supplement to Exhibit 15 but again the exhibit is not a satisfactory substitute for full documentation of the model that is necessary to fully evaluate potential impacts on the Newlands Project and Donner Lake operations. The exhibit provides more detailed examples of some of the cause and effect relationships for TROA operations for selected years or hypothetical conditions resulting in differences in the exceedence plots between the Current Conditions and No Action, LWSA, and TROA alternatives for the various reservoirs and streamflow locations. However, the exhibit does not provide sufficient information to track all of the various storage credit priorities and operations. Again, please explain why full documentation of the TROM is being withheld.

General Comment No. 1—Impacts on Current Operations of Newlands Project.

The DEIS/EIR does not provide an evaluation of the potential impacts of the TROA Alternative on the current operations of the Newlands Project. The DEIS/EIR provides information for comparing the TROA Alternative with Current Conditions; however, such a comparison does not show the potential impacts on current operations because the TROA Alternative includes all of the embedded assumptions associated with future conditions for Year 2033. An analysis should be conducted to impose the TROA provisions on the Current Conditions to determine the potential impacts on the current operations of the Newlands Project.

---

[4] October 27, 2004 letter from Craig D. Muehlberg (Acting Regional Business Manager, Mid-Pacific Regional Office, Bureau of Reclamation) to Charles W. Binder regarding Freedom of Information Act (FOIA) Request—4MPRO11908.

General Comment No. 2—Formulation and Assumptions for No Action Alternative.

The question arises whether the No Action Alternative is realistic or whether potential impacts from the proposed action (TROA Alternative) have been understated as a result of the formulation of the No Action Alternative. The DEIS/EIR should include a more complete description of the assumptions included in the No Action Alternative. In addition the DEIS/EIR should include sensitivity and scenario analyses to demonstrate that the assumptions embedded in the No Action Alternative do not unduly mask any impacts from the proposed action. The DEIS/EIR should report the range of potential impacts associated with reasonable ranges of values for parameters and events assumed to occur in the No Action Alternative. The following assumptions should be reviewed and varied appropriately through sensitivity and scenario analyses to more fully evaluate the No Action Alternative:

1. Assumption that 100 percent of agricultural irrigation in the Truckee Division will be eliminated. There is no demonstration that all of the water rights for the Truckee Division will be acquired for purposes other than irrigation.

2. Assumption that demands used in modeling do not include any stock watering or domestic use (other than City of Fernley) for demands in Truckee Division. This is contrary to current water uses within the Truckee Division such as deliveries from the Hazen Pipeline and other pipelines. This is also inconsistent with the assumptions used in developing demands for the Lower Truckee River wherein stock watering was included in the demands.

3. Assumption that of the 3,815 acres for Truckee Division 2,304 acres (60 percent) would be acquired for water quality purposes and 1,511 acres (40 percent) would be acquired for the City of Fernley. Recent acquisitions and prices of Truckee Division water rights indicate that funding for acquisition of water rights for water quality purposes may be inadequate and a greater percentage of the water may be acquired by the City of Fernley compared to acquisitions for water quality purposes. It is also noted that the DEIS/EIR does not address the environmental impacts of acquisition of Truckee Division water rights for water quality purposes which include dust control and revegetation costs associated with drying up irrigated lands and transferring the water rights to instream flow purposes for the Truckee River.

4. Assumption that water quality water acquired from Truckee Division is acquired at an amount equal to 133 percent of the duty (equivalent to duty divided by efficiency of 75 percent) compared to Fernley water acquired at duty only.

5. Assumption that water quality water acquired from Truckee Division can be stored in upper Truckee Reservoirs.

6. Assumption that 13,889 acres in Carson Division would be acquired for wetlands purposes resulting in a total acreage for wetlands purposes of 21,000 acres.

7. Assumption that wetlands demand is 2.99 acre-feet per acre instead of the full duty of 3.5 or 4.5 acre-feet per acre. Sensitivity and scenario analyses should be conducted for Carson Division demands based on deliveries to Lahontan Valley wetlands at the full duty. It should not be assumed that future wetlands deliveries will be restricted to amounts less than full duty, particularly deliveries associated with water rights acquired by the State of Nevada and others for use at Carson Lake Pasture.

8. Assumption that delivery efficiency is 65.4 percent for all years irrespective of water supply conditions. Also, the value 65.4 percent may be low for future conditions (Year 2033) considering recent increases in efficiencies reported for the Project.

9. Assumption that Carson River inflows to Lahontan Reservoir will not change even though upstream water use practices in year 2033 are likely to be different than the practices that occurred over 1901-2000 period of record. A change in future Carson River inflows to Lahontan Reservoir would impact the Truckee Canal deliveries to Lahontan Reservoir through diversion criteria established in OCAP. Thus the proposed TROA operations and potential impacts on the Newlands Project are dependent upon Carson River inflows to Lahontan Reservoir.

10. Assumption that Newlands Project credit storage allowed under the 1997 Adjusted OCAP is not included in the No Action Alternative. Discussions with USBR representatives during the November 23, 2004 conference call confirmed that Project credit storage is not modeled in the No Action run contrary to Table 2.2 in DEIS/EIR indicating that such an operation is included in the No Action Alternative.

11. Assumption that Lower Truckee River demands will increase from current annual demand of 12,040 acre-feet per year to future demand of 34,280 acre-feet per year.

12. Assumption that water obtained by Pyramid Tribe in the unappropriated water case can be stored in upper Truckee reservoirs. The DEIS/EIR should show the amount of unappropriated water that is stored, released, and delivered past Derby Dam that otherwise under historical conditions would be available for diversion to the Newlands Project, particularly during drought conditions.

13. Assumption that in all four model analyses the factors used to calculate monthly accretions to the Truckee River between Derby Dam and Pyramid Lake are the same.

14. Assumption that TMWA will be able to acquire agricultural water rights at the assumed levels for conversion to M&I and other uses. As discussed below in General Comment No. 4, the model results appear to be extremely sensitive to this assumption.

15. Assumption that Floriston Rates are not adjusted in accordance with either current provisions of the Truckee River Agreement or TROA Section 5.A.3(b).

General Comment No. 3—Formulation and Assumptions for TROA Alternative.

There are several questions and concerns regarding the formulation and assumptions used in analyzing the TROA Alternative including the concerns with the various assumptions that are carried over from the No Action Alternative described above. The DEIS/EIR should include sensitivity and scenario analyses to demonstrate that the assumptions and modeling analyses for the TROA Alternative result in a range of potential impacts associated with reasonable ranges of values for parameters and events assumed to occur in the TROA Alternative. Specific issues that need to be addressed include, but are not limited to, the following:

1. Stream channel conveyance losses are not considered in any of the TROM analyses, which is of particular concern for the TROA Alternative. TROA Section 5.E specifies that conveyance losses shall be determined and allocated to various categories of water in proportion to the total amount of water in each stream reach. When questioned about this concern, individuals responsible for conducting the modeling analysis for the DEIS/EIR responded by first acknowledging that conveyance losses are not considered and then

indicating that the possible errors would tend to cancel one another because such losses are not considered in all of the model runs. Furthermore it was stated that insufficient information is available to characterize stream channel conveyance losses particularly in the Truckee Meadows. Both of these responses are not satisfactory. First, USGS historical streamflow records and studies on river travel times could be used to develop conveyance loss factors or methods for modeling purposes. Second, and of particular importance, any errors associated with not considering conveyance losses will not necessarily cancel one another because of the changes in timing of storage and releases of water associated with the various credit waters under TROA. For example, the consumptive use portion of unused and excess agricultural rights converted to M&I purposes by TMWA will be stored in Truckee River reservoirs as M&I Credit Water for subsequent release to meet M&I demands or if unused converted to Fish Credit Water and released at times different than the historical flow patterns. Subsequent releases of stored credit waters will likely occur during times when Truckee River streamflows are significantly less than the streamflows occurring at the time the water is stored and thus the potential for significant differences in stream conveyance losses. It is also not sufficient to say that the historical return flows will be left in the river at the time such consumptive use is stored in the reservoirs. An analysis needs to be conducted to determine the historical depletions to then determine appropriate depletion and conveyance loss factors for future operations to ensure that downstream water rights holders such as the Newlands Project are not injured.

2. Assumption that TMWA will be able to acquire agricultural water rights at the assumed levels for conversion to M&I and other uses. As discussed below in General Comment No. 4, the model results appear to be extremely sensitive to this assumption.

3. Assumption that Floriston Rates are not adjusted in accordance with either current provisions of the Truckee River Agreement or TROA Section 5.A.3(b).

4. Assumption that credit water can be established through changed diversion rights using a consumptive use factor of 62.5 percent for rights acquired in the Truckee Meadows. It is understood that it is assumed for purposes of the DEIS/EIR analysis only that such establishment of credit water would be restricted to the historical consumptive use of the acquired water rights. However, Mr. Rod Hall indicated in a December 16, 2004 conference call that the actual amount would be determined in future Nevada State Engineer proceedings. Is it the intent of the TROA signatory parties to establish credit water at amounts exceeding the historical consumptive use of the acquired water rights? If not, specific limitations should be provided in the TROA document and assurances provided in the DEIS/EIR. If so, the full amount contemplated for establishment of credit water should be disclosed and included in the model analysis to evaluate potential impacts on the Newlands Project.

5. As discussed in more detail in the above comments referring to specific pages of the DEIS/EIR, the NPCW provision of TROA has been analyzed with overly restrictive constraints resulting in unrealistic impacts on the Newlands Project related to reduction in Lahontan Reservoir water levels, decrease in carryover storage, and increase in Carson Division shortages.

6. Several provisions in TROA are not incorporated into the modeling analysis raising questions whether the analysis provides the full range of potential impacts of the TROA Alternative. The DEIS/EIR should include full disclosure of the omitted provisions including a quantitative analysis showing the effects of the exclusions. Included in the

omitted provisions are several categories of credit water including Fernley Municipal Credit Water, California Environmental Credit Water, California Additional California Environmental Credit Water, and Other Credit Water. Review of information[5] provided by the USBR under the FOIA request shows all or a portion of the following TROA provisions are not included in the TROA model run. An evaluation needs to be conducted and reported in the DEIS/EIR showing which, if any, of the excluded provisions result in material differences in modeling results. It should be noted that the April 23, 2004 draft paper does not include a description of all provisions in TROA. For example, TROA Section 6.B.2(b)—Calculation of Orr Ditch Decree Irrigation Demand is not described in the draft paper and thus it is unknown whether or not that particular provision is included in the model. The DEIS/EIR should include a full disclosure of all TROA provisions not incorporated into the modeling analysis. Based on the review of information provided by USBR, all or a portion of the following TROA provisions are not included in the TROA model run:

§ 5.A.3—Extension of Floriston Rate Supply
§ 5.B.6—Prosser Creek Reservoir Operations
- § 5.B.6(a)(3)
- § 5.B.6(a)(4)
- § 5.B.6(a)(5)
- § 5.B.6(c)(6)
- § 5.B.6(c)(7)
- § 5.B.6(c)(8)
- § 5.B.6(d) [Note: apparently corrected after July 2003 runs used for DEIS/EIR.]
- § 5.B.6(d)(2) [Note: apparently corrected after July 2003 runs used for DEIS/EIR.]
- § 5.B.6(e)

§ 5.B.7—Independence Lake Operations
- § 5.B.7(b)
- § 5.B.7(c)
- § 5.B.7(f)
- § 5.B.7(h)

§ 5.B.9—Boca Reservoir Operations
- § 5.B.9(c)

§ 5.C.1—Accounting for Spill
- § 5.C.1(a)
- § 5.C.1(f)

§ 5.E—Stream Channel Conveyance Losses
- § 5.E.1
- § 5.E.2

§ 6.B—Sierra Valley Diversion [other than historical input data]
§ 6.C—Diversion of Truckee River Basin Surface Water Allocated to California Pursuant to Section 204(c) of the Settlement Act
- § 6.C.3
- § 6.C.4
- § 6.C.5
- § 6.C.6
- § 6.C.7

[5] April 23, 2004 draft paper entitled Incorporation of TROA Provisions into Truckee Operation Model.

§ 6.D—Lake Tahoe Basin Allocation Procedures [other than historical input data]
§ 6.E—California Truckee River Basin Allocation Procedures
Appendix 6.A
Appendix 6.B
Appendix 6.C
Appendix 6.D
§ 7.A.3—Establishment of Credit Water Using Changed Diversion Rights
  § 7.A.3(c)
  § 7.A.3(d)
§ 7.A.4—Changes to Water Rights and Other Changes
  § 7.A.4(a)(4)
§ 7.A.5—Restrictions and Limitations on Establishment of Certain Categories of Credit Water to Benefit Water Quality Flows
  § 7.A.5(c)
  § 7.A.5(d)
  § 7.A.5(e)
  § 7.A.5(f)(ii)
  § 7.A.5(f)(iii)
§ 7.A.6—Power Company Use of Water for Hydroelectric Generation and Compensation for Reduced Generation
  § 7.A.6(a)
  § 7.A.6(b)
  § 7.A.6(c)
  § 7.A.6(d)
  § 7.A.6(e)
  § 7.A.6(f)
§ 7.B—Power Company M&I Credit Water
  § 7.B.1
§ 7.B.4(a) [other than historical input data]
§ 7.B.4(b) [other than historical input data]
§ 7.B.4(c) [other than historical input data]
§ 7.B.4(d) [other than historical input data]
§ 7.C—Fish Credit Water and Joint Program Fish Credit Water
  § 7.C.4(c)
§ 7.D—California M&I Credit Water, California Environmental Credit Water and Additional California Environmental Credit Water
  § 7.D.3
  § 7.D.5
  § 7.D.6
  § 7.D.8
  § 7.D.9
§ 7.F—Fernley Municipal Credit Water
§ 7.G—Other Credit Water
§ 8.E—Priorities Among Credit Water Operations
  [Note: April 23, 2004 draft paper indicates most provisions under this section are incorporated into the model; however, certain provisions are not incorporated and certain conflicts are identified such as described in item 10 in the draft paper.]
  § 8.E.4

§ 8.F—Relation of Power Company M&I Credit Water to Fish Water, Fish Credit Water and Joint Program Fish Credit Water
§ 8.F.2
§ 8.F.3(a)
§ 8.F.3(b)
§ 8.F.3(d)
§ 8.F.4
§ 8.F.7
§ 8.G—Relation Between California M&I Credit Waters and California Environmental Credit Water
§ 8.I—Relation Among Project Waters in Another Reservoir
§ 8.J—Relation Between Additional California Environmental Credit Water and Other Credit Water
§ 8.K—Limitations on Accumulation of Credit Water
§ 8.K.4
§ 8.K.5
§ 8.K.6
§ 8.N—Classification of Project Water Exchanged or Restored
§ 8.O—Classification of Fish Credit Water, Joint Program Fish Credit Water and Fish Water Exchanged to or Re-Stored in Boca Reservoir
§ 8.P—Exchange Rules Regarding Trades
§ 8.Q—Exchange With Donner Lake Storage
§ 8.Q.2
§ 8.R—Exchanges and Voluntary Operations Proposed By California
§ 8.S—Exchanges of Certain Waters in Stampede Reservoir For Floriston Rate Water in Lake Tahoe
§ 8.S.1(b)
§ 8.T—Exchanges for Water Quality Credit Water
§ 9.C—Minimum Releases, Enhanced Minimum Releases and Prosser Creek Reservoir Releases for Ice Control
§ 9.C.1(c)
§ 9.C.1(h)
§ 9.C.5(c)
§ 9.C.5(d)
§ 9.C.6
§ 9.C.7
§ 9.F—California Guidelines Concerning Preferred Reservoir Operations for Instream Flows and Recreation
[Note: April 23, 2004 draft paper entitled Incorporation of TROA Provisions into Truckee Operation Model indicates all provisions under this section are incorporated into the model with the exception of ramping operations.]

General Comment No. 4—Supplemental Modeling Analysis Regarding TMWA Water Rights Acquisition.

The DEIS/EIR should include a scenarios analysis for the TROA Alternative assuming that TMWA is unable to acquire existing agricultural water rights at the levels assumed for the current analysis of the TROA Alternative. Such an analysis has been performed by Mr. Tom Scott of the USBR and a summary of the results was presented orally to TCID

representatives at a meeting on December 15, 2004 indicating that the model results are extremely sensitive to this particular assumption. The analysis apparently adopted all of the assumptions and configuration for the current TROA Alternative analysis except the TMWA water rights acquisitions were limited to the same levels assumed for the LWSA Alternative. The analysis showed an increase in the shortages to the Carson Division beyond the shortages shown for the TROA Alternative. These results should be documented and presented in the DEIS/EIR. The DEIS/EIR should also include a complete description of the name, location, amount, existing owner, existing use, priority date, and other pertinent information for all water rights assumed to be acquired by TMWA.

General Comment No. 5—Newlands Project Credit Water.

The TROA, the DEIS/EIR, and the modeling analyses all improperly represent the NPCW for the following reasons:

- The provisions for NPCW appear to place the operation and control of NPCW in the hands of the United States with little input and control by TCID.
- The Newlands Project receives relatively small benefits compared to the potential impacts, which will include reduced carryover storage, reduced water levels in Lahontan Reservoir, and increased Carson Division shortages.
- The provisions for NPCW appear to be much more restrictive in terms of actual credit water utilized by the Newlands Project compared to the current credit water provisions of OCAP.
- OCAP would have to be modified to accommodate the NPCW language in TROA.
- The NPCW results provided in the DEIS/EIR should be expanded to show how much NPCW is reclassified and utilized as Fish Credit Water.
- The operations criteria for NPCW provided in TROA are general resulting in arbitrary assumptions used for modeling criteria for NPCW. The modeling criteria appear to be overly restrictive and biased against project utilization of the credit water. Problems with the modeling assumptions are illustrated below:
  - The accumulation months and storage volumes are not specified in TROA. The model uses arbitrary NPCW storage volumes to establish credit storage for the months of January through June. This period conflicts with OCAP wherein accumulation is specified to occur over the months of November through June. The modeling assumptions appear to also conflict with the description of NPCW provided on Page 2-36 of the DEIS/EIR wherein it is stated that accumulation can occur anytime between October and July.
  - The specific months in which credit water can be released are not specified in TROA rather an objective is specified in which credit water would be "Released in accordance with the Truckee Canal Diversion Criteria to a maximum extent possible prior to August 1." The model assumptions restrict any releases to the single month of July. This is contrary to OCAP wherein releases can be made throughout the irrigation season.
  - The provisions included in TROA in Section 7.H—NEWLANDS PROJECT CREDIT WATER do not specify that NPCW releases would be restricted based on

CDFG streamflow objectives. However, the model assumptions appear to rely heavily on these streamflow objectives in first determining whether any NPCW is established and then second on actual releases during the month of July.

General Comment No. 6—Cause and Effect Relationships.

The DEIS/EIR and underlying TROM results do not provide sufficient information to delineate specific cause and effect relationships of the various elements in the proposed action to determine whether the TROA meets the purpose and need of the project. The impacts section of the DEIS/EIR contains a discussion of increases and decreases of streamflows and lake surface water elevations at various locations and invariably concludes the changes are caused by the various credit water operations. However, there is no demonstration that the specific credit water operations resulted in the changes.

- The monthly establishment of the various categories of credit water by method such as reduction in Floriston Rates or changed diversion rights is not provided in the DEIS/EIR and based on supplemental information[6] provided by the USBR only limited data regarding various categories are available from the model output.
- The monthly utilization, exchange, reclassification, carryover, and use of the various categories of credit water are not provided in the DEIS/EIR and supplemental information provided by the USBR indicates data regarding various categories are available from the model output but extraction of such data would require significant understanding and effort.
- Monthly supply of water quality water derived from acquisition of Truckee Division water rights and other water rights is not delineated nor is it available from the current model output. Furthermore, a breakdown is not provided for water quality water remaining in the river versus storage for subsequent releases.
- The storage and release of Pyramid Tribe unappropriated water is not reported nor is it available from the current model output.
- The storage and release of TCID Donner Lake water is not reported nor is it available from the current model output. This includes the issue that Donner Lake diversions at Derby Dam are not delineated.

General Comment No. 7—Assurances and Mitigation.

The DEIS/EIR does not provide sufficient provisions to assure that operations of the Newlands Project are not impacted by the TROA Alternative. Provisions should be included to ensure that available water supplies for the Newlands Project are not decreased as a result of TROA operations. Also, provisions should be included to modify TROA operations if it is determined that modeling techniques or assumptions are erroneous. For example, provisions should be established in the event TMWA is unable to acquire the level of agricultural water rights assumed for the modeling analysis. A second example would be if actual operations show that stream channel conveyance losses result in a decline in Truckee River streamflows available for diversion at Derby Dam. A third example would be if the TROA parties

[6] November 16, 2004 memorandum from Rod Hall to Tom Scott regarding Comments on October 7, 2004 Request for Information from TCID.

establish credit water in amounts greater than the historical consumptive use of acquired water rights to the detriment of downstream water right holders relying upon return flows.

Such provisions could include mitigation measures to protect the water supplies for the Newlands Project. The DEIS/EIR does not provide any such mitigation measures even though the analysis shows the TROA Alternative will result in increased shortages for the Carson Division. Mitigation measures should be developed in consultation with TCID and other affected parties. Possible mitigation measures include, but are not limited to, accounting and reporting procedures; improved modeling of TROA operations through adoption of peer-reviewed and documented models such as RiverWare; and reformulating NPCW to provide a real benefit to the Newlands Project such as increased storage priority, carryover storage, and flexible release provisions.

I appreciate your efforts in providing information in response to the FOIA request and subsequent inquiries. I look forward to continuing to work with you on resolving the questions and issues provided above. If you have any questions, please do not hesitate to contact me at (916) 984-1470.

Sincerely,

BINDER & ASSOCIATES CONSULTING, INC.

Charles W. Binder

Charles W. Binder, P.E.
President and Principal Engineer

cc: Lyman F. McConnell
Michael J. Van Zandt
Brad T. Goetsch
Michael F. Mackedon

PRINCIPIA

December 27, 2004

Mr. Kenneth Parr
U.S. Department of the Interior
Bureau of Reclamation
705 North Plaza Street, Room 320
Carson City, NV 89701-4015

Dear Mr. Parr:

Principia Mathematica, Inc. (Principia) has reviewed and evaluated the Truckee River Operating Agreement (TROA) model used in preparing the draft TROA Environmental Impact Statement/Environmental Impact Report (EIS/EIR). On behalf of the Truckee-Carson Irrigation District, Churchill County and the City of Fallon, Principia hereby submits its comments on the Draft EIS/EIR, specifically concentrating on the TROA model upon which this Draft rests.

1. Introduction:

A review of the mathematical model upon which the Draft TROA EIS/EIR centrally rests was conducted recently by Principia. This review revealed three major facts that call into serious question the fundamental underpinning of this Draft EIS/EIR. These three facts are presented as follows.

(1) The model upon which this Draft EIS/EIR rests so heavily is unreliable in critical respects. In any unbiased scientific review by qualified peers, this model would be rejected for the very uses that are reported in the Draft EIS/EIR.

(2) The model's unreliability is caused by significant, serious and, in some instances, fatal flaws. Such flaws prevent the model from being applied properly to evaluate "what-if" scenarios intended to establish suitable alternatives to or adjustments of planned water allocations.

(3) Employing a fatally flawed model to plan water allocations and to make decisions that would continue well into the future, when other well-tested and reliable stream flow models are readily available for use, introduces scientific unreliability into the TROA process. It leads inevitably to unsupportable management decisions that may be adopted as a regulation and thereby create unintended and seriously flawed consequences.

These facts lead Principia to urge that the model, in its present form, be rejected for use

as the foundation for the Draft EIS/EIR. Furthermore, Principia urges that this model be opened to wider and unhindered scrutiny by practitioners who were not involved in this model's development. Only in this way can the affected public be persuaded that the assumptions and procedural rules that are embedded in it are indeed valid and actually implemented as claimed, let alone be demonstrated as unbiased and in the public interest. The flaws identified by Principia even via its preliminary review are summarized below. This summary provides some indication that such assumptions and rules as embedded in the TROA are seriously flawed.

2. Crippling Flaws in the Model:

The specific flaws in the model revealed even by Principia's preliminary review conducted in just a few weeks are identified below. This identification should be viewed as illustrative examples of numerous such flaws that exist and not a comprehensive list of such flaws. Requests for additional time needed for a more comprehensive review were denied, we understand.

(1) The computer program embodying the TROA model consists of more than 72,000 lines of convoluted FORTRAN language contained in 173 subroutines. The sparse comments contained among these lines do not illuminate, amongst other facts, the innumerable quantities that are assigned unexplained values. Such values furthermore are inexplicably altered as the program instruction courses through the many subroutines of the program. This is very poor and antiquated programming practice that could not be further away from current accepted scientific methodology. What makes this practice untenable in this instance is that not even a rudimentary documentation seems available for the program. It is therefore virtually impossible for any independent and unbiased reviewer to follow the steps the program does take, evaluate values embedded as facts into it, and test the logic to evaluate whether the program computations are indeed being performed as intended, and as reported.

(2) This flaw is compounded further by the fact that the computer program embodying the TROA model has not been provided with adequate output generating features. Such features would at least allow an independent reviewer to evaluate details of water volumes and flow quantities that the program purports to allocate. For instance, the program claims to track water flow quantities throughout the TROA system, but can produce computed output only for a few selected flows at selected locations. These selections of course were made by the program author and do not reflect the quantities and locations that remain of deep interest to the affected public. In order to evaluate just what the program computes in these matters of interest, an independent reviewer is forced to modify the program code in order to obtain output that is clearly contained in the program but is otherwise unattainable. This tedious and cumbersome task is made unnecessarily difficult by the absence of program documentation.

(3) The accounting of relevant flow quantities is seriously inadequate in the program. In this program, flow quantities associated with different sources are lumped together, but thereafter the program is not equipped to track each flow quantity according to its source. It is not possible to evaluate whether, or not, this poor programming practice was intentionally adopted. However, it denies any independent reviewer the basic tools

needed to understand just why certain results are predicted by this program. This is a serious programming deficiency which makes it impossible to establish just which specific planned action leads to what computed outcome; just the types of basic information essential to manage the TROA system. It is for this very reason that other well-tested and reliable programs such as Riverware® are intentionally equipped to keep rigorous track of flow quantities by their "accounts".

(4) The computer program embodying the TROA model employs antiquated FORTRAN-language programming practices and modeling techniques. The ready availability of modern computer models for river systems makes the continued use of the TROA model suspect. The serious consequences stemming from using an outdated model can neither be easily detected nor readily rectified. Consider an example specific to TROA: each planned action taken on the water system is coded within a program subroutine that is found to have complex, undocumented, and sometimes unexpected interactions with different parts of the program that represent other segments of the flow system. It is thus made impossible for any independent reviewer to evaluate whether, or not these interactions were intentional, and if so why, or merely accidental stemming from the manner in which the program has evolved during the past two decades. In direct contrast, modern modeling programs such as Riverware® are designed to isolate actions specific to certain "objects," enabling a user to keep track of intended actions. Further, such programs employ component flow models with relevant physical realism and accounting procedures that keep rigorous track of flow quantities propagating through the system. In reliable programs, complex management decisions may indeed be specified by prescribing "rules"; however, the programming of these rules leaves no room for unintended and thus hidden side effects. Furthermore, the use of generic "objects" in reliable programs simplifies the tasks of program validation and documentation, and makes them transparent.

(5) Potentially serious differences have been detected between the draft and final versions of the TROA model. The model used in justifying the Draft EIS/EIR is dated June 2003. A review of the model dated as November 3, 2004 indicates that more than 4000 lines of code have been altered involving more than half of the program files, without any documentation being created to establish just why this was done and with what consequences. The unscientific and potentially prejudicial nature of such program alterations suggest that it is futile to expend significant resources in conducting further review of the model used to justify the Draft EIS/EIR since this model has already been substantially changed apparently in preparation for the Final EIS/EIR. It is inconceivable that so many changes to the program would have been done without causing any effect on the predictions made by the model. It would therefore be entirely improper and unprofessional to simply ignore these efforts in commenting on the draft, knowing significant changes are forthcoming in the Final EIS/EIR.

3. Flaws in Demonstrating the Model's Validity:

(1) The TROA model has not been calibrated to known conditions in the flow system. When a mathematical model is considered valid for application to any physical setting, it is essential to demonstrate that the parameters representing physical properties in it are appropriate to this very setting. For surface water models, such parameters include rates of evaporation, seepage from stream segments and other losses, transit times and return

flow delays, among others. The validity and appropriateness of model calibration is typically demonstrated by comparison of quantities predicted by the model against observations as its parameter values are adjusted. In the present instance, it is claimed that some values prescribed as input data to the model, such as the Farad to Derby Dam net change, are based upon some previous (and undocumented) modeling effort. It is further claimed that individual terms such as evaporative losses from reservoirs are based upon observations, that are also unidentified. However, no attempt has apparently been made to check that when all of these estimated quantities are combined in this model, model predictions indeed match physical observations of any recorded stream flow values or similar recorded quantities.

(2) It is a significant flaw that the TROA model is entirely based upon the central premise that available water resources and stream flows will, in future, remain at precisely their historically recorded values. No attempt seems to have been made to estimate, through appropriate stochastic simulations, the future variations in such quantities which will have significant quantitative consequences upon water planning and allocations. No such variations, which accepted scientific methodology would indicate as real possibilities, were apparently tested for purposes of such planning and allocations which this TROA model was apparently designed to quantify. This flaw is exacerbated by the reliance on long term averages to evaluate the effect of various alternatives, instead of a more detailed evaluation of impacts at a time scale that are relevant to water users.

(3) The calculation sequences embedded into the TROA model have not been demonstrated to be valid. When a model program is constructed in support of just one project, it is necessary to demonstrate that the model program operates correctly as intended. This is achieved by running the model with a set of input data for which the output results are known, such as from an analytical solution to even a theoretical stream flow problem. This step is usually referred to as model or program validation. In the present instance, while it is claimed, orally of course and not documented, that a mass balance was performed on some reservoirs to "ensure that input minus output equals change in storage," even such a basic calculation has not been undertaken for the TROA system as a whole. This flaw thus makes it possible for water to be either lost or created in the system simply due to artifacts of mis-programmed complex calculations, because no checks were performed to ensure that the model maintains a valid overall mass balance.

(4) The TROA model has not been verified following its calibration. In generally accepted modeling practice, it is customary to retain some data not used in making calibration adjustments to evaluate just how well the model predictions compare with such data. This step is frequently achieved by calibrating a model using data collected during some selected time period, and then verifying it with data available to represent a different time period. This is a step that tests the robustness of physical representations embedded in the model in their ability to predict values that have been observed for this period, and which have not been consumed during model calibrations. The serious flaw in the TROA model is that no such verification was even attempted.

(5) Sensitivity runs have not been conducted with the TROA model to establish just how its predicted results vary when unknown parameter values are adjusted each within

its reasonable bounds of variability. After all, it is reasonable to hypothesize that future water availability and stream flow conditions will vary if the past millennia of recorded history of natural phenomena are any guide. It is thus important to test the variability of the model predictions to reasonable variations in physical parameter values. Well known and accepted scientific methodology requires that such sensitivity analyses be undertaken in any modeling effort. This step becomes particularly important when predicted impacts of implementing water allocation plans are anticipated to be small, in order to determine if predicted changes are significant. In the present instance, numerous examples exist wherein conducting such sensitivity analysis would be appropriate. For example, when it is assumed that future changes in water use would occur, it is appropriate to test the sensitivity of the model to different amounts of such changes in order to evaluate the sensitivity of the model predictions to that parameter value, all other conditions being held the same. The serious flaw in the TROA model is that no such sensitivity analysis was performed.

(6) Not even a basic User's Manual or Program User's Guide has been prepared for the TROA model. Such a lack of basic documentation is unprecedented and represents a serious flaw. Given the complexity of this model, the absence of a user's manual or guide which explains the syntax, meaning and function of input data sets supplied to the model makes it virtually impossible for any independent reviewer to evaluate the model's uses and thereby verify its validity. Under present circumstances it is difficult to establish just how a valid scientific methodology can be followed to allow a proper peer review of the model can be performed.

4. Flaws in Model Applications:

(1) In order for members of the affected public to apply the TROA model for any valid purpose, the computer program embodying it has to be installed in a computer prior to running it. Principia's preliminary test runs have demonstrated that this model is unreasonably sensitive to the computer architecture and FORTRAN-language compiler routinely used to convert the source code to a usable or executable form. In other words, when used on different computers or with different FORTRAN-language compilers, the TROA model predicts quantitatively different results. This is also unprecedented and represents a serious flaw in the TROA model. Such differences indicate either the use of dangerously poor programming practices or the inherently chaotic behavior of the flow system as modeled, or some combinations of both. The differences in results predicted by the model for identical input data sets are particularly significant and troubling since no model sensitivity runs were performed. Discussions held by Principia with authors of this model reveal that the authors themselves had not studied this behavior but were not even surprised by such differences in results. In this TROA flow system as modeled even one extra drop of water can trigger a sequence of program "decisions" which drastically alter how the system is predicted to operate. This serious flaw in applying the model is dramatically demonstrated by the significant changes in model predicted results for some months, even when using identical data sets, simply by running the program on two different computer systems.

(2) Results predicted by the TROA model apparently cannot be checked or verified as valid real-life possibilities. One of the reasons cited by authors of this model for not

having undertaken model calibrations is that the model is known not to predict any flow quantities that can actually be compared to observed values. This is also unprecedented especially for a model intended to reflect water allocation plans that will affect so many and for so long into the future if adopted. For example, the flow system may historically have been operated according to "rules" that differ from their present form. When used to simulate such historical conditions, the TROA model would cause this flow system to operate not according to such historical rules but differently when applied to the same time period. This failure violates the most basic principles of science that are recognized and widely accepted as valid methodology. It is essential to demonstrate that it is not only possible to undertake such comparisons but that important model results indeed compare favorably with actual observations, even just for selected periods. Without the basic ability to subject the TROA model to valid controlled scientific experiments and to compare the resulting model predictions with observed data, the affected public is forced to accept this model as an article of faith based only upon representations by its authors, and without any opportunity to review its basis in science which is the normal practice.

(3) It is a deeply disturbing flaw that the TROA model makes predictions that are driven by the results expected by parties to water allocation plans. This model has been so constructed that it fails to consider changes to gains and losses in the flow system as a result of planned changes in operations. Specifically, the TROA as implemented in the model is aimed at finding unappropriated water, storing that water, and then releasing the water when it is deemed beneficial. What the model as constructed fails to account for is the real possibility that at the time of water releases, water may not reach the lower end of the system as a result of increased losses. Therefore, the increased benefit of such releases may not materialize, may be diminished or even cause additional impact to downstream users who may be "charged" the additional transit losses. Consequently, the model will always predict a benefit from the TROA operations whereas in reality the real benefit would be much smaller and the impact on other water users much greater than predicted. This is also a serious flaw of the TROA model and greatly diminishes its validity as a tool for evaluating real changes in water allocations.

5. Summary Findings:

Even this preliminary review of the TROA model illustrates that it is seriously flawed in several significant respects. Some of these flaws prevent a valid model review from being conducted using accepted scientific methodology, given the short time frame allocated for such reviews. Other flaws are more serious and cripple the model from being used in support of the Draft EIS/EIR. Several of the TROA model flaws identified during Principia's review are fatal and prevent it from being used to evaluate the consequences of water allocation plans for the TROA system and its future operations.

It is Principia's scientific view based upon this review, and the experiences of its scientists from modeling reviews conducted during the past two decades, that model flaws which have serious consequences must be revealed and then evaluated through a process of wide and unhindered scrutiny by scientific peers. Thereafter, each flaw must be rectified through rational means and then rigorously tested before a model is finalized and used for predictive purposes. The ultimate goal of a scientific computer model is to create confidence in the user that the model will actually predict an outcome that can be relied upon. It is by documenting such efforts in an open and thorough manner that the

affected public will be persuaded that such confidence is indeed merited. Principia's opinion of the draft TROA model is that it provides little, if any, confidence in the data it is evaluating and no confidence that the output created by this TROA is either reliable or usable for purposes of decision making.

Yours Sincerely

Principia Mathematica, Inc.

Dr. Devraj Sharma

Dr. Willem A. Schreüder

221 MAIN STREET
SIXTEENTH FLOOR
SAN FRANCISCO, CALIFORNIA 94105-1
(415) 905-
FAX (415) 905-0202

QUAID, METZLER, MCCORMICK & VAN ZANDT LLP

MBER 18068-008

DIAL

June 29, 1998

BY FAX 702-882-7592

Ms. Betsy Rieke
Bureau of Reclamation
Lahontan Basin Office
705 North Plaza Street
Carson City, NV 89702-0640

Re: Truckee River Operating Agreement Draft EIS/EIR

Dear Ms. Rieke:

These comments are made on behalf of the Truckee-Carson Irrigation District ("TCID") and are in addition to the comments submitted separately by TCID. These comments relate to the process and substance of the Truckee River Operating Agreement ("TROA") Environmental Impact Statement/Environmental Impact Report ("EIS/EIR").

BACKGROUND

TCID was established in 1918 to address design defects in the drainage system for the Newlands Project. The U.S. Reclamation Service (now Bureau of Reclamation ("BOR")) desired that TCID operate and maintain the Newlands Project on behalf of the United States under a federal contract. In 1925, TCID and the United States entered into an O&M contract which authorized TCID to operate and maintain the project and to act as the fiscal agent of the United States for purposes of repayment of the capital construction charges for the project.

In the early days of the project, the project manager found it increasingly difficult to assure an adequate water supply was available for the entrymen. Significant problems were faced by the project due to the overdiversion of water from the Truckee River by persons in the Truckee Meadows. So much water was diverted that at times there was no water flowing in the Truckee River at Derby Dam, and certainly no water flowing to Pyramid Lake. At the insistence of the Department of Interior, the Department of Justice filed a quiet title suit to determine the relative rights of the water users of the Truckee River. The

A LIMITED LIABILITY LAW PARTNERSHIP INCLUDING PROFESSIONAL CORPORATIONS

case is known as United States v. Orr Water Ditch Company or the Orr Ditch decree. In the 1920s and 1930s, the region experienced a severe drought. The drought made it imperative to secure upstream storage on the Truckee River in order to ensure an adequate supply of water for irrigation during times of shortage.

TCID in order to secure additional sources of water began leasing water from Donner Lake. This culminated with the purchase of a common interest with Sierra Pacific Power Company ("SPPCo") in 9500 acre feet of storage and water rights in Donner Lake. This water is referred to as "Privately-owned stored water" in the Truckee River Agreement. In 1930, TCID filed with the Nevada State Engineer two applications to appropriate water on the Truckee and Carson Rivers for 100,000 acre feet each. Applications 9330 and 9331 were intended to allow the District to have available water to meet the needs of the water right owners in the Newlands Project.

As a prelude to and a condition of the entering of the final decree in the Orr Ditch case, the parties entered into an agreement for the operation of the Truckee River. The Truckee River Agreement ("TRA") contains specific language which makes it binding on all of the signatories, including the United States, the SPPCo, TCID, the Washoe County Water Conservation District and the individual water right owners on the Truckee River. There is no provision for modifying the TRA. Instead the parties had stipulated to the entry of the final decree with the Orr Ditch Court incorporating by reference the provisions of the TRA into the decree. Therefore, the operation of the Truckee River under the decree became integral to the adjudication of the rights of the parties to the water in the Truckee River itself. One cannot be divorced from the other.

The Orr Ditch Decree in Claim 3 recognized diversion rights in the water right owners in the Newlands Project for up to 1500 cfs of Truckee River water at Derby Dam. It also recognized the right of the water right owners to store water in Lahontan Reservoir for the benefit of the Newlands Project. Moreover, the decree recognized the right of the United States to store water in Lake Tahoe for the benefit of the Newlands Project. One of the important compromises in the TRA was the recognition of Claim 2 for the addition of certain irrigation water rights for the Pyramid Lake Paiute Indian Tribe ("PLIT"). Without the consent of the parties to the TRA, there would be no Claim 2 in the Orr Ditch Decree because the United States did not ask for this right in the original complaint.

The PLIT and others have filed claims with the Nevada State Engineer for unappropriated water in the Truckee River. The finalization of the TROA requires that the PLIT's application be resolved favorably to the PLIT. However, the TROA EIS/EIR fails to recognize that TCID's application predates PLIT's by some fifty years. The parties are awaiting the outcome of the hearings conducted by the State Engineer with regard to the unappropriated water application. Until the State Engineer rules, it is premature to assume that only the PLIT will be awarded this water. Given the priority of the district's application and the clearly stated need for water to correct shortfalls created by the OCAP, TCID has made a compelling case for this water.

ALTERNATIVES

Every decisionmaker must have before him or her the range of reasonable alternatives in order to make an informed decision. This is especially important when the government is proposing to alter the operations of a vital resource such as the Truckee River. Altering the relationships among so many water right owners can have a devastating effect, especially in times of drought. This in turn can have an impact on the wetlands, wildlife, soil, groundwater, and on the social and economic well-being of the community.

Alternatives analysis in an environmental document is at the heart of the analysis and decision making. Thomas v. Peterson, 753 F.2d 754 (9th Cir. 1985). The alternatives analysis ensures the decision maker has before him or her the necessary range of reasonable alternatives in order to make an intelligent and informed decision. Calvert Cliffs' Coordinating Committee, Inc. v. Atomic Energy Commission, 449 F.2d 1109 (D.C. Cir. 1971). The rule of reason controls the range of reasonable alternatives that must be analyzed and in this case, the BOR must include alternatives that would only modify the TRA in such a way as to add the additional reservoirs and other potential changes in operation but would not alter the basic relationships among the parties to the original Truckee River Agreement. See Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, 435 U.S. 519 (1978). California Environmental Quality Act (CEQA) Guidelines Section 15126(d) provides that alternatives analysis must be accomplished in order to provide the decision maker with choices that will avoid or lessen environmental impacts. Therefore, under California law, the decision maker must have a range of alternatives from which to choose.

Unfortunately, in this case the EIS/EIR contains only one alternative, the no action alternative. The proposed action is termed the preferred alternative; however, there are no other alternatives analyzed or presented. This is a clear violation of the National Environmental Policy Act (NEPA). The document admits that other alternatives were considered and rejected by the negotiators. The basis for the rejection of the alternatives was the rejection of the idea by the negotiators. Thus if a negotiator, for whatever reason, rejected an alternative, then that alternative was deemed not feasible by the team and was rejected. All of this was accomplished without any input from the public as is required under NEPA. Moreover, the idea that an alternative can be rejected merely because one of the negotiators refuses to agree, denies the decision makers in this case an opportunity to explore fully all of the reasonable alternatives. In fact, what may be unacceptable to one agency may be reasonable to another and must at least be considered. In this case, the Draft TROA states that it is subject to being changed; therefore, if an agency considers an alternative to be reasonable from an environmental perspective then it could renegotiate that provision, insisting that it be given consideration. To do otherwise, turns the alternative analysis of NEPA on its head.

The EIS/EIR states at page 2-7 that goals of the alternatives could not be achieved unless parties to the negotiation voluntarily agreed on management measures, including giving up water rights or relinquishing control of water rights as to timing of releases. Since TCID was not involved in the decisions to relinquish water rights or its rights to the timing of releases, the question arises as to how the parties to these negotiations are able to change Floristan rates and to change the priorities of storage in the reservoirs without gaining TCID's permission and the parties of the Fifth Part to the TRA.

The Draft EIS/EIR also states at page 2-8 that changes will continue to be made to the TROA by the parties but that the additional changes are expected to fall within the range of possible actions evaluated in the draft EIR/EIR. It seems obvious that if there are changes to the TROA, then they can be analyzed in this document if there is a range of reasonable alternatives analyzed in the EIS/EIR. However, if there is only one proposed action and one alternative (no action), then how can any changes to the TROA fall within a range of alternatives, when there are none. If changes are made to the TROA after the EIS/EIR is completed then only a supplemental EIS/EIR can satisfy the requirements of NEPA and CEQA.

Within the discussion of the no action alternative, there are numerous errors. The most glaring of which are the omissions of TCID as a full participant in the management of the Truckee River. In fact when speaking about Lake Tahoe Dam, the document never mentions the fact that TCID is in control of and operates the dam. Moreover, when mentioning Donner Lake water, the document does not acknowledge that SPPCo only owns an undivided one-half interest in the water and that the Donner Lake water even after it is used by SPPCo is to be returned to the Truckee River so that it can flow downstream to Derby Dam to be diverted for the Newlands Project. There is no proposal by SPPCo to acquire all of Donner Lake water and TCID has no present intention of relinquishing such a right. The proposal by SPPCo to trade Donner Lake water as Fish Credit water would be a breach of the agreement SPPCo has with TCID for the use of that water.

The EIS/EIR treats the remaining waters in the Truckee River, those not committed under Orr Ditch, as being under the control of the United States. That is not true and is inconsistent with the position of the United States in hearings before the Nevada State Engineer on TCID's Application 9330 to appropriate waters of the Truckee River. That issue has not as yet been decided and the United States should not assume that unappropriated waters in the Truckee River will inure to the benefit of the PLIT.

On page 2-19 of the EIS/EIR, the document discusses the basis for TROA. It is difficult to glean the real reason for having to amend the operations of the river from this discussion. Several things are clear. The document does not address the potential for additional water shortages for the Newlands project due to changes in the operations of the river. Further, the basis of the TROA seems to be drought protection for the Truckee Meadows while enhancing fish spawning. There is no mention of drought protection for the Newlands Project as the basis for TROA, something that was at the heart of the TRA. Why is this, except for blatant discrimination against the Newlands Project. In fact, the TROA through its water storage credit and accounting mechanisms allows for priorities of water rights to be shifted in the upstream reservoirs and for carryover storage for SPPCo and PLIT while denying these same benefits to the Newlands Project. In fact at the same time that storage rights are being enhanced for other parties to the TROA, they are being diminished for the Newlands project under the Adjusted OCAP.

The reduction in Floristan rates proposed by TROA is particularly disturbing since it could have the effect of

diminishing the amount of water available to divert at Derby Dam. By allowing TROA signatories to agree to reduction in flow rates in exchange for storage credit in the upstream reservoirs, the TROA creates a situation where less water is available for diversion at Derby Dam and favoritism is being shown to signatories whether or not they have the priority of right to store water. In fact, the storage rights the Newlands Project has in Lahontan Reservoir as granted by the Orr Ditch Court is being undermined by the storage credit scheme of TROA.

The TROA creates categories of water rights which do not exist under Nevada law or the Orr Ditch decree. The TROA purports to create fish credit, M&I credit, Joint Program Fish Credit and other categories of water not recognized elsewhere. The water appropriated by the United States on behalf of the Newlands Project and the PLIT was for irrigation and domestic purposes. The TROA is attempting to create new purposes for the use of the water without going through an approval process for the change of use of the water. This is a violation of the Reclamation Act and Nevada law.

PROCESS FOR DEVELOPMENT OF TROA

The TROA as drafted is a complex document with a myriad of relationships between parties, a complex river system and interrelated reservoirs. The draft TROA does not make very clear how all of these complex mechanisms do interrelate. Moreover, if there is an opportunity to cause an environmental impact it is from the manner in which the TROA is implemented that will give rise to these effects. The manner in which the TROA was negotiated has exacerbated the difficulty of understanding how the TROA will operate because apparently there are no minutes of the negotiation sessions and the meetings were not conducted under the auspices of the Federal Advisory Committee Act (FACA).

Under FACA, the Federal agency seeking advice on the management of the river and in setting U.S. policy must charter the advisory committee so that potential conflicts of interest are revealed and the public may evaluate the source of the various inputs to the decision making process. For example, in this case most of the computer modelling for the TROA was accomplished by the SPPCo. Moreover, most of the drafting of the document was done by the attorney for SPPCo. Without these facts being revealed, it is difficult to evaluate the TROA in a truly impartial light. Also it is difficult for the public to participate in the process when there were no Federal Register notices for the meetings, no formal minutes were kept and no

registering of financial interests were filed by the major participants. Most particularly, the party which had the most to gain from the "negotiations," the SPPCo was in complete control of the modelling and drafting. SPPCo had already struck a deal with the PLIT as to how the water would be split in the Preliminary Settlement Agreement (PSA). The United States had already ratified the PSA. Therefore, conflicts abounded and none of the actions of the government were conducted in the sunshine.

CUMULATIVE EFFECTS

The Draft EIS/EIR purports to analyze the cumulative effects of a series of proposals all related to the water resources in the Lahontan Valley and the Truckee Division of the Newlands Project. These include wetlands water right purchases, retirement of Truckee Division rights, water quality agreement, recoupment, fish spawning enhancements, modifications to Pyramid Lake fisheries, groundwater resource protection, unappropriated water claims, transfer protests, etc. All of these actions are either proposed by or being participated in by the United States. There is a need for a comprehensive or programmatic EIS to evaluate the effects of all these actions, especially as they affect the Newlands Project. Without this comprehensive review, the government is merely piecemealing its analysis of environmental impacts which will have the effect of underestimating such impacts.

UNCERTAINTIES

There are many areas of uncertainty in the document which require further analysis once the uncertainty is resolved. For example, the resolution of the storage of TCID's Donner lake water may have an impact on SPPCo's storage rights and may alleviate some of the impacts from drought if TCID is allowed to store the Donner Lake water upstream or in Lahontan. Moreover, there are many provisions of the TROA itself which have not been finalized and therefore, the potential impacts analyzed in the Draft EIS/EIR will change. Therefore, the document will not assist the decision makers nor inform the public of the potential impacts if there are changes to the TROA.

TRUCKEE RIVER AGREEMENT

As discussed above, the TRA has served the people and the users of Truckee River water for many years. It is easy to demonstrate that the entity that controls the flow of the river controls who will benefit and who will not benefit from the

waters of the Truckee River. For many years, the Truckee River has been jointly managed by the United States, TCID, SPPCo, Washoe Conservation District, and the Federal Water Master. Now the TROA proposes to supplant this group with a new triumvirate of the United States, SPPCo and PLIT. The Federal Water Master's role will be subsumed into an administrator who is controlled by the triumvirate. The purpose of this power shift can only be for two purposes. First, the parties now wish the Federal Water Master and the courts to take less of a role in the administering of the decrees. Second, the parties now want to relegate TCID to a non role in deciding how the river will be administered. Since TCID is the government's contractor the real victim here are the persons owning the majority of the water rights in the Truckee River, i.e. the Newlands Project water right owners. The question must be asked: Is it fair to exclude TCID from making management decisions concerning the Truckee River when it has been directed by vote of the Newlands Project water rights owners to play such a role under the TRA?

LIST OF PREPARERS

Since the TROA was drafted by many non governmental entities and a significant amount of the computer modelling was accomplished by SPPCo, it is important to reveal this to the public. The names and affiliations of these other entities must be revealed along with their credentials.

CONCLUSION

The Draft EIS/EIR contains numerous erroneous statements and fails to analyze reasonable alternatives. The participation by entities whose motives may not coincide with the government's requires the controls of the Federal Advisory Committee Act to protect the integrity of the process.

Sincerely,
McQuaid, Metzler, McCormick
& Van Zandt, LLP

By: _____
Michael J. Van Zandt
Attorneys for
Truckee-Carson Irrigation District

cc: Lyman F. McConnell, Esq.

D:\DOCS\18068\008\TROAEIS.CMT

Office of the Churchill County Manager

December 27, 2004

Mr. Kenneth Parr
U.S. Department of the Interior
Bureau of Reclamation
Lahontan Basin Area Office
705 North Plaza Street
Carson City, NV 89701

Dear Mr. Parr:

Churchill County would like to thank the Department of the Interior for agreeing to extend the original comment period for the TROA DEIS/DEIR until December 30, 2004. Reviewing a stack of technical documents six to eight inches thick and 14 years in the making, and trying to understand the Truckee River Operating Model (TROM) used to develop the document, without access to the operating/user's manual is a significant challenge. As government officials, we are charged with performing due diligence in making decisions or taking actions which impact our constituency, and due diligence requires that adequate time and expertise be brought to bear. Though Churchill County comments are being submitted now to meet the current December 30, 2004 comment period requirement, it is our position that we have not been afforded sufficient access to, nor time with the TROM to understand and comment adequately on the document.

The following 5 pages contain an executive summary of Churchill County comments on the TROA DEIS/DEIR. Subsequent pages offer more detailed comments addressing specific sections within the document. Any comments on the TROA DEIS/DEIR and requests for further extension of the TROA DEIS/DEIR comment period submitted by the Truckee-Carson Irrigation District (TCID) and/or by the City of Fallon are hereby adopted by Churchill County and incorporated by reference herein as if they were a part of this document.

Churchill County has six major areas of concern with respect to the current TROA DEIS/DEIR which will be generally addressed in this executive summary and further commented upon in the enclosed document. These six areas of concern, in order of significance are: 1) Deficiencies, omission, invalid assumptions and lack of validation of the TROA Operating Model; 2) Lack of established and validated baseline conditions for

Churchill County Administrative Complex • 155 No. Taylor St., Suite 153 • Fallon, NV 89406 • PHONE (775) 423-5136 FAX (775) 423-0717

Email: countymanager@churchillcounty.org

use in comparative analysis; 3) Lack of analysis of the occurrence and impact of multiple drought years in succession, an event common in the history of the Truckee River; 4) Lack of differentiation between alternatives offered for analysis and of analysis of all reasonable alternatives as required by 40 CFR; 5) Lack of equality or balance in research and analysis of the lower Truckee River as compared to that of the upper Truckee River; 6) Lack of written commitment or stated requirement to follow implementation of TROA with multi year impact monitoring and verification of the DEIS/DEIR conclusions.

Let us briefly address each of the six concerns delineated above.

TROA Operating Model Deficiencies. To begin with, any model created and operated by an individual or entity with a vested interest in the outcome deserves special scrutiny.

When the documentation, assumptions and users operating manual are withheld from the public and from governmental agencies who have formally requested access, validity and fairness of the model and entire EIS/EIR process become suspect. Based upon preliminary review of the current model, in depth review of this model when it was presented in 1996, and as confirmed by conversations with Mr. Rod Hall and Mr. Tom Scott, it appears there are several omissions and deficiencies in the TROM. The TROM is not well understood, has not been peer reviewed, has neither been validated nor calibrated, and has not demonstrated repeatable results when operated by outside consultants. Lack of access to a comprehensive user's manual precludes normal and ethical standards for validation and public understanding. The model does not track flow of water by source (the accepted standard) so users cannot account for flows by source output. New code, sub functions and ancillary routines have been and are being added to the model which have not been validated nor shared with the public, interested agencies or other experts.

There seems to be a number of unfounded assumptions built into the TROM and DEIS/DEIR. Assumptions on population growth, change in agriculture, water credit storage and water demands do not match actual historic trends or current events.

The draft DEIS/DEIR makes assumptions concerning Truckee Division demand, Carson Division Demand, Newlands Project Credit Water (NPCW), Donner Lake water, and the Newlands Project Operating Criteria and Procedures (OCAP). Some, but not all of these assumptions are included in the modeling. There does not appear to be a rationale for what is modeled and what is not. Moreover, these assumptions are not based on any reasonably foreseeable events, and in fact, some of the events may not occur for thirty years or more, if at all. Nonetheless, these assumptions are built into the "No Action Alternative." Until we understand the ramifications of the impacts of these assumptions on the overall impact analysis in the Draft EIS/EIR, we find it difficult, if not impossible, to comment meaningfully on the document.

Lack of established base line conditions to include consideration of multiple drought years. Utilizing information contained in the DEIS document there appear to be some overly optimistic projections for end of season carry-over storage at Lahontan Reservoir. Simply taking the prior four-year actual end of season storage at Lahontan Reservoir and comparing that data with the projected storage for the same period in the DEIS, one quickly concludes that Project demand from the Truckee River may be understated and may produce significant long-term shortages for Project water right users. Why weren't the most recent actual year-end storage numbers utilized rather than 2033 assumptions that don't reflect current trends? The use of long-term average values under TROA give the appearance of insignificant impacts on Newlands Project operations in the Carson Division when comparing TROA with the No Action alternative in Table 3.96. This brings into question the reliability of the No Action alternative since there is no baseline for comparison. Long-term drought analysis encompassing more than just one year and including a realistic worst-case scenario as was done in formulating the current decrees, appears to have value and may reveal significant potential impact to the lower portions of the Project.

The cumulative impacts section of the document demonstrates a weakness in adequately quantifying the collective effects of numerous actions that are occurring in the Carson Division of the Newlands Project. Some of these actions include purchase and transfer of water rights to the Stillwater Wildlife Refuge, Operating Criteria and Procedures (OCAP), recoupment and the Water Quality Settlement Agreement. The Churchill County Water Resource Plan quantifies these actions and others that actually add up to more water than is theoretically available in the Lahontan Valley. Given the competing interests for Newlands water, it is not inconceivable that irrigated acreage reduction could approach 80% in the Carson and Truckee Divisions. Water resources on the upper Carson River are coming under increased stress as well. Growth in the Carson corridor all the way from Douglas County to Dayton Valley are sure to further stress this resource increasing required diversions from the Truckee River to meet agricultural and domestic M&I needs. Coupling this with the potential loss of groundwater recharge there is a significant potential impact that would limit redevelopment and use of the fallowed lands in an economically viable manner. The DEIS makes only passing references to USGS studies that have identified these impacts. Given that Title II of P.L. 101-618 authorizing TROA affects primarily the water rights associated with the Newlands Project, cumulative impacts to the lower portion of the Project should have been more thoroughly examined and addressed.

Lack of analysis of reasonable alternatives. NEPA requires the complete analysis of all reasonable alternatives, special interests notwithstanding. One of the more reasonable actions that was not addressed in this latest DEIS is the possibility of leasing Project water to maintain flows in drought years in the lower Truckee River. Although this proposal was suggested many years ago during the initial TROA scoping and summarily rejected, the idea seems to have gained new life as witnessed by a similar proposal now

being considered for the Walker River in Nevada. In fact, it is our understanding that the proposal has been favorably received by the prime sponsor of P.L. 101-618. Why was this option not further explored in the most recent TROA DEIS/EIR?

Development of differences in alternatives throughout the TROA DEIS/EIR document that can be fairly and quantitatively measured to afford factual comparisons is lacking. Despite comments submitted on the previous DEIS/EIR resulting from the TROA draft completed in 1996, the authors of the current document do not seem to have expanded their analysis beyond the no action and TROA alternatives to include consideration in depth of all reasonable alternatives. Because of this limited range of alternatives (no action (No Action), Local Water Supply Alternative (LWSA), and the Truckee River Operating Agreement (TROA), we continue to maintain that the DEIS is not sufficient and therefore lacks validity. In nearly every instance, as illustrated for example in Table 2.1 - A comparison of water management provisions among the alternatives, beginning on page 2-4, the No Action and LWSA are virtually identical in all respects rendering the LWSA superfluous at best. Therefore, it can be said that the DEIS really analyzes only the No Action and TROA alternatives, certainly not in keeping with 40 C.F.R § 1502.14, which requires a detailed consideration of all reasonable alternatives. Shouldn't the DEIS have at least considered, as an alternative, the newly rehabilitated water leasing plan? What about the possibility of a new reservoir on the upper Truckee River with sufficient capacity to meet the multi-purpose demands of water quality, fish flows, and drought supplies for both upstream M&I purposes and the Newlands Project? Are there other "reasonable alternatives" that are viable either individually or in combinations that have been ignored?

Lack of equality or balance in research and analysis of impacts to lower Truckee River and Newlands Project as compared to that of the upper Truckee River and Truckee Meadows. Impacts on: 1) Basin 101 groundwater; 2) Lahontan Lake level and recreation; 3) Rapidly growing M&I requirements in Lyon and Churchill Counties; 4) OCAP; 5) Timing of Newlands Project agricultural water demands; 6) Lower river economies; 7) Air quality; 8) Water quality; and 9) Urban development are scarcely addressed while upper river and Truckee Meadows impacts are addressed in detail. Even the way credit water storage is addressed lacks balance.

Since there is really only one source of water available for reallocation among the competing interests on the Truckee River, it stands to reason that the Newlands Project water right holders would be the most affected and therefore be subject to a thorough, detailed analysis of the impacts on decreed water. The TROA DEIS/EIR devotes little opportunity for meaningful analysis of the lower portion of the Newlands Project, specifically the Carson Division. The documents only give cursory mention to impacts and in some sections suggest development of a monitoring strategy to determine the long-term effects resulting from TROA and related actions. Analysis of the impacts of increased demand on surface and groundwater on the upper Carson River resulting in

increased demand for supplemental decreed Truckee River water is missing. Such monitoring and analysis should be formalized and undertaken in cooperation with the affected parties to include the local governments on the lower Project such as Churchill County, the City of Fallon and the TCID. Demonstrated losses should be offset with impact aid to the affected parties including local governments sustaining losses to infrastructure capacity or operations and maintenance revenues.

TROA purports to regulate the amount of storage, timing of releases and flows on the Truckee River. Depending on these factors in concert with OCAP, it is highly conceivable that the amount of water available to meet decreed demands for diversion at Derby Dam will not be fully realized more frequently than the TROM simulates due to competing interests reducing the Floriston Rates. Therefore, to state that TROA has no significant impact on the Newlands Project because the change in the average shortage to the Carson Division and releases from Lahontan Reservoir are insignificant comparing TROA with the No Action alternative may be arguable. Perhaps the only way to ensure that the lower Project is kept whole is to limit other demands that would tend to reduce the Floriston Rate at such time that diversions to the Truckee Canal are taking place under OCAP. TCID currently participates in decisions regarding Floriston Rates under the 1935 Truckee River agreement. Is it assumed that TROA eliminates all existing and past agreements and court decisions?

In conclusion, we recommend the following actions to reduce impact from the implementation of TROA to water right holders on the lower Project, specifically in the Carson Division below Lahontan Reservoir:

- Provide unrestricted access to the TROM and the associated user's manual for four to six months of additional comment period or fund an impartial expert to develop and validate an accurate TROM and enable other experts to operate and comment on the model.

- Develop a detailed evaluation of all reasonable alternatives, or any combination thereof, in keeping with 40 C.F.R § 1502.14. For example, a water leasing plan and/or the possibility of developing additional upstream storage to include capacity for water quality, fish flows, recreation, irrigation and drought protection.

- Develop an analysis of baseline conditions allowing for meaningful comparisons of the proposed alternatives to fully ascertain the true breadth of impacts with equal emphasis on the upper and lower Truckee River.

- Expand the DEIS/EIR to fully analyze the impacts, both direct and indirect (cumulative), upon the lower portion of the Newlands Project, specifically the Carson Division. Such analysis should include: source and reliability of surface

irrigation water; groundwater recharge; recreation resources; wildlife requirements and community socio-economic well being.

- Limit other demands that serve to reduce Floriston Rates at such time that diversions to the Truckee Canal are taking place under OCAP through incorporation of Newlands Project representation in Floriston Rate adjustments.

- Include a monitoring strategy to determine the long-term effects resulting from TROA and related actions. Such monitoring should be undertaken in cooperation with the affected parties to include the local governments on the lower Project such as Churchill County, the City of Fallon and TCID with financial oversight assistance through the Federal government. The long-term monitoring should require five-year evaluation and reporting and should contain specified data collection requirements, techniques and analysis in compliance and effectiveness. A mechanism and source for impact financial aid (mitigation) should also be identified.

We appreciate the opportunity to comment on the Truckee River Operating Agreement (TROA) Revised Draft Environmental Impact Statement/Environmental Impact Report (Revised DEIS/EIR). We are hopeful that our comments will stimulate an ongoing dialogue with the affected downstream parties. Detailed comments to the DEIS/EIR are attached.

Sincerely,

BRAD T. GOETSCH
County Manager

BTG:wm
Attachment
cc: Congressional Delegation
State Legislative Delegation
The Honorable Kenny Guinn, Governor
Nevada State Engineer

Office of the Churchill County Manager

December 27, 2004

Mr. Kenneth Parr
U.S. Department of the Interior
Bureau of Reclamation
Lahontan Basin Area Office
705 North Plaza Street
Carson City, NV 89701

Dear Mr. Parr:

Churchill County submits the following comments and questions with respect to the Revised Draft Environmental Impact Statement/Environmental Impact Report, Truckee River Operating Agreement, California and Nevada, August 2004.

Comments:

ES - 10 Growth Inducing Impacts - No mention is made as to the limitations upon growth in the absence of water. The only source of water for growth stems from agricultural water rights on the Truckee and Carson Rivers. What will happen after the year 2033, the window of analysis described in this document?

ES - 14 - Table 1 - Summary of effects of alternatives on resources - The column summarizing TROA impacts on Lahontan Reservoir makes no mention of the likely reduced inflow to Lahontan Reservoir as a result of multiple dry hydrologic events. The document fails to analyze any long-term dry hydrologic conditions (multi-year events). The model appears to rely on artificially high end of season storage numbers and then utilizes a single-year dry event to predict minimal impacts in the following year. Averaging the dry hydrologic cycles utilizing the 100-year database tends to soften the impact of an abnormally dry period.

ES - 15 - Table 1 - Summary of effects of alternatives on resources - The column summarizing impacts to Agriculture with respect to exercise of water rights to meet demand fails to factor anything more than a single-year dry event with an unusually high end-of-year storage level in Lahontan Reservoir thus overstating the percentage of demand met in a minimum supply year.

Churchill County Administrative Complex • 155 No. Taylor St., Suite 153 • Fallon, NV 89406 • PHONE (775) 423-5136 FAX (775) 423-0717

Email: countymanager@churchillcounty.org

ES - 19 - Table 1 - Summary of effects of alternatives on resources - Recreation - no mention of Lahontan Reservoir with respect to Boat ramp usability. Lahontan Reservoir is the second largest warm water recreational resource in Nevada.

ES - 21 - Table 1 - Summary of effects of alternatives on resources - Social Environment - Seems to imply that Air Quality is only an issue in the Truckee Meadows ignoring the dust hazards created due to cumulative effects from actions either authorized under the provisions PL 101-618 (the enabling statute for TROA) or past, present or reasonably foreseeable future actions undertaken by Federal or non-Federal agencies or persons (see 40 CFR 1508.7)

Table of Contents-xvi - Chapter 4 - Cumulative Effects III. Actions Authorized by Public Law 101-618 B, there is no mention of Section 210(b)16 addressing domestic groundwater impacts in the Lahontan Valley in the compiled actions.

Page 15 Executive Summary - Table 1. Exercise of water rights. The table needs to explain that "much less agricultural demand" is due to assumed wetlands purchases which may or may not occur. A more accurate representation would be Newlands Project Demand which would capture wetland as well as agricultural water right demand.

Chapter 2 - Alternatives

General comments to Chapter 2:

The discussion detailing development of alternatives excessively focuses on the negotiations process to limit the number of options to just three; those being the No Action, LWSA and TROA. Since the No Action and LWSA options are virtually identical, the analysis is severely limited and fails to adequately consider other "reasonable alternatives" as is mandated under the provisions of 40 C.F.R § 1502.14, which requires a detailed consideration of all reasonable alternatives. Failure to adequately address a broad range of alternatives is not in keeping with the requirements of the NEPA process and CEQ guidelines. Several alternatives previously introduced by participating entities include: development of additional upstream storage to allow for water quality, fish flows, irrigation and M&I demands; and, leasing of irrigation water in low water years to meet non-agricultural needs. A water leasing proposal is now being considered for the Walker River and Walker Lake to meet environmental needs and appears to be favorably received by the parties in that watershed. In order to fully meet the requirements of NEPA and CEQ regulations, shouldn't the TROA DEIS/EIR address all reasonable alternatives?

Page 2-27 2nd para. Needs to state that TROA must ensure that Orr Ditch Decree water rights are met.

Page 2-28 Table 2.6 does not indicate all changes from the no-action. Specifically it does not mention changes to Floriston rates and changes to water storage in Lake Tahoe and Boca. Please include these elements.

Page 2-29 If the U.S. District Court maintains authority over the Orr Ditch Decree, why do Orr Ditch water right owners need to bring disputes before the Special Hearing Officer? What authority does the Special Hearing Officer have over the Orr Ditch Court and its jurisdiction? A section on the DEIS needs to be dedicated to better understanding the authority envisioned by two different regulatory bodies. It is not clear legally what is the impact to those who will continue to rely upon the federal water master for Orr Ditch decisions. A more effective implementation of TROA would be for the federal water master to prevent conditions that would lead to reduced water deliveries.

Page 2-29 2nd para. Suggest that the Orr Ditch Court would not have the ability to take corrective actions with respect to operations that "inadvertently" reduced the delivery amount. Is this consistent with the role of the Orr Ditch Court? The Court would be able to take corrective actions when the delivery amount is adversely affected by TROA operations whether "inadvertently" or otherwise. Please explain. The Orr Ditch Court either maintains jurisdiction or they do not. It appears that TROA is attempting to relegate the court's role to one that is largely ceremonial.

How can the DEIS and TROA contemplate radical changes to an existing court decree (Orr Ditch Decree and Truckee River Agreement inclusive) particularly as it relates to the Newlands Project without a substantial analysis of the water resources. The reader of the DEIS and decisions makers have no real information to rely on in their understanding of the TROA proposal and evaluation of impacts.

Pg. 2-34 Table 2.7 Does not include Newlands Project Credit water. The table needs to show how much credit water will be accumulated for each category. How much credit water will be stored and how much credit water will be stored in each reservoir?

Pg 2-36 paragraph 1 How can Sierra Pacific's non-consumptive rights for hydropower generation be utilized for Fish Credit Water? Sierra's hydropower generation is not the only right served by this water. TROA is only supposed to store the consumptive use portion of water rights. Please explain how Sierra's non-consumptive use of water for hydropower can now be accumulated as credit water.

Pg 2-38 last paragraph. The first sentence does not appear to be an accurate portrayal of TROA intent. Please define the total amount of credit water that will be accumulated and when the reductions in Floriston Rates will occur. What does TROA propose to do and what will be the impacts to all water right holders and their ability to meet demand when Floriston Rates are reduced for credit water accumulation at the margin?

Pg. 2-39 a. i. Lake Tahoe and Boca. What is the average and maximum amount of credit water that will be stored in Lake Tahoe and Boca? Under what hydrologic conditions will this storage accumulate? Please include information in this section to better describe the proposed action.

Page 2-47 4th paragraph. Why should Sierra Pacific receive compensation for a reduction in Truckee River flows (reduction in Floriston Rates) for the accumulation of credit water? Please explain. Isn't the proposed compensation for Sierra Pacific an admission of adverse impacts from the reduction in Floriston Rate flows? Will other users who depend on Floriston Rate flows receive the opportunity for committed mitigation? If not, why not? Please explain.

Page 2-49 Alternatives Considered and Rejected-.General Comment. The Truckee River Irrigation District on behalf of Newlands Project Water Right Owners submitted a number of proposals for TROA consideration during the portion of negotiations they were allowed to attend. Please identify the proposals submitted by TCID, the reasons for rejection and the basis for rejections. This section notes that numerous alternatives were evaluated to assist negotiators in developing an operating agreement. There must have been some analysis completed in order to deny TCID requests. Shouldn't there be a complete analysis of the alternatives under the provisions of 40 C.F.R § 1502.14, which requires a detailed consideration of all reasonable alternatives? Please explain. Please include at least a summary of analysis that supports the rejection of Newlands Project proposals.

The Report to Negotiators---The federal government made several attempts to issue EISs that were incomplete and did not adequately address all the issues.

It appears for the description on Page 2-50.... Section 205(a) of P.L. 101-618 which states water is to be stored and released from Truckee River Reservoirs to satisfy the exercise of water rights in conformance with both the Orr Ditch and the Truckee River General Electric Decrees is only an important consideration when it is unacceptable to mandatory signature parties. What happens when other actual parties of the Orr Ditch Decree (inclusive of the Truckee River Agreement) and the General Electric Decree find the adverse effects unacceptable? Please explain. Are there acceptable adverse impacts? Please explain. Should adverse effects acceptable to the mandatory signature parties be included as part of TROA? Please explain.

Page 2.10 Table 2-55 If the no-action creates lower Lahontan April-September releases than under the current conditions and TROA is the same as the no-action, then doesn't TROA create lower April-September releases from Lahontan Reservoir? Would the lower releases occur if OCAP were not in place? Is the no-action in conformance with the Orr Ditch Decree, Truckee River Agreement and Truckee River General Electric Decree? Please explain how lower April through September releases could be consistent

with existing court decrees particularly in light of OCAP's responsibility to minimize diversions.

Page 2-59 Table 2.10 There is no mention of Lahontan Reservoir Recreation. Did the DEIS contain such analysis? If not, why not? Should the results be included in the summary?

Affected Environment-Why is past cumulative effects included in the Affected Resources?

Chapter 3 - Affected Environment and Environmental Consequences

General comments to Chapter 3:

The Affected Environment Section of the DEIS only provides general descriptions of resources and does not provide the quantitative information for comparison purposes that is needed in the analysis section

General Comment. The DEIS fails to analyze impacts to groundwater aquifers in the vicinity of the Truckee and Carson Divisions of the Newlands Project. The TROA DEIS assumes water quality water and Fernley M&I credit water will be stored in upstream reservoirs making the acquisitions of water quality water part of the TROA proposed action. Why did the federal government exclude this analysis? If another EIS was relied upon for the impact analysis, please provide a summary of activities undertaken to investigate this issue.

There is little or no baseline description in Chapter 3 regarding water resources of the Newlands Project. The information presented is largely general descriptions which provide the reader with very limited ability to understand the current conditions and how they might be affected by the proposed TROA. There is no ability to understand the current conditions or base line for the Newlands Project and then compare them against the impacts.

Page 3-2 - we question the inclusion of Hazen as "small" population center together with Fernley and Fallon. Hazen has not had a significant population since the construction of Lahontan Dam and the Truckee Canal. Further, it is not a "city" as its inclusion with Fernley and Fallon imply.

Page 3-5 -typo in 2nd par., last line

Page 3-5 no mention in 5th par. on historical hydrology regarding prolonged periods of drought such that fully mature trees have been located 200 feet below the surface of Lake Tahoe as well as other alpine lakes serving the Truckee Drainage indicating severe prior drought conditions in the region. Some mention must be made about a longer historical record than the past 100-years utilized for this DEIS. Recent articles such as that appearing in the *Reno Gazette Journal,* Saturday, October 9, 2004 indicate that decades-long droughts are very possible given the current climatological trend.

Page 3-9 - first par. refrain from editorializing by the use of the term "reclaim" in quotation marks. Eliminate any references in document that might be construed as editorial comment.

Page 3-11 last paragraph blames the Newlands Project solely for the decline in Pyramid Lake elevations when in reality changing hydrologic conditions have affected Lake Levels. How much Truckee River inflow would have been needed to maintain Pyramid Lake and Winnemucca Lake? How much has Lake levels risen since OCAP was implemented?

Page 3-12 - b. Groundwater. some reference should be made with respect to the perennial yield in the Lahontan Valley, which has been estimated by USGS at <1500 AFA.

Page 3-15 b. Carson River Basin. There is no information on water quality in the Basin. No information on current conditions of ground or surface water quality. Please include.

Page 3-16 Carson River Basin 150,000 acres of wetlands could not have existed in the Lahontan Valley unless 750,000 acre-feet entered the Valley. The USFWS estimates that 5 acre-feet of water is needed for each acre of wetlands. Did the Carson River produce 750,000 acre-feet of inflow at Lahontan Valley? Please explain.

Page 3-23 - 3rd par. Phrase should be added to indicate that to date very few if any properties purchased with water rights have been returned to the private sector thus reducing the tax base of Churchill County. Additionally, there is some question as to the suitability of these fallowed lands for other development owing to their location away from centralized services such as schools, public safety and other governmental services. Churchill Code adopted in 2000 requires all developments to dedicate surface water rights based on the number of dwellings proposed for construction if the subject property had those surface rights as of the date of adoption of the code amendment. Further, the State Engineer through Order No. 1116 limited the amount of ground water which may be withdrawn under a quasi-municipal permit to not more than 4000 GPD, an amount insufficient to serve more than two dwellings. State Statute allows the appropriation of groundwaters of the State of Nevada in an amount not to exceed 2.02 AFA for domestic purposes to serve a single residence. State Health regulations require at least one acre of

land for an individual sewage disposal system for a single-family residence. Thus development, if at all possible on fallowed lands, is pretty much limited to single family residences on at least one-acre of land. This results in sprawl and a tax base insufficient to provide services such as schools, public safety, streets and highways and other public functions thereby transferring much of the mitigation costs associated with an assured drought supply in the Truckee Meadows, coupled with OCAP, the WQSA and WRAP, to the residents in the Carson Division of the Newlands project.

Page 3-28 Comparative Evaluation of Alternatives- The no-action alternative creates significant adverse impacts to Cui-ui and LCT compared to the current conditions. So the federal government could allow the no-action to be implemented without mitigation or changing the no-action conditions which impact the Cui-ui? The no-action in this EIS is simply not valid nor is it adequately defined. Can the Orr Ditch Court allow shortages to the Newlands Project when water is available to divert or when greater carryover storage would eliminate shortages? Did the DEIS consider these scenarios in its analysis?

What are the feasible measures to avoid significant adverse impacts to the Cui-ui and LCT and non-compliance with respect to Orr Ditch Decree water rights in the Newlands Project? There appears to be no discussion of such measures in this document. Please identify the appropriate page numbers where feasible measures are discussed in the DEIS.

Page 3-28 Appears to imply that NEPA may not require mitigation for the no-action. However, other rules, regulations, laws and court decrees do. NEPA is not the only regulatory framework for this EIS. The EIS is required to identify the regulatory framework and address the impacts under each regulatory requirement. Is it enough to say that the No-action Alternative does not require mitigation when existing laws and regulations are either disregarded or even considered by the federal government?

The logic throughout the EIS appears to be to establish a no-action alternative that is similar to TROA; claim there is no difference between TROA and the no-action alternative, and then, abrogate responsibility for impacts by saying there is no mitigation required for the No-Action. Mitigation is not required for the no-action alternative but it is required for action proposals. The no-action is used as the basis of comparison. With respect to the Newlands Project, both the no-action and TROA have significant adverse impacts on water resources.

Page 3-28 Use of the Truckee River Operations Model- The water model is not set-up to evaluate the critical conditions for which the alternatives including TROA would impact the Newlands Project. The model appears to be structured in a manner that makes it incapable of evaluating specific hydrologic conditions which are most critical to TROA.

Page 3-29 4th par. We recommend that the last sentence be modified to read as follows: "Such a short (in natural historical terms) record serves as the only available record in evaluating proposals relative to variability of regional runoff and availability and use of water supplies." This is in deference to the longer historical/paleoclimatological record that indicates much longer periods of extreme drought as evidenced by mature trees several hundred feet below the current level of Lake Tahoe. In fact, it could even be said that the PLT oral history indicating the origin of Pyramid Lake seems to indicate long periods of drought revealing the tufa formation by the edge of the Lake known as "the Stone Mother." Certainly the lake elevation may have been higher in pre-historic times but it is unlikely that the oral history would have been handed down about a rock formation hidden in the depths of Pyramid Lake.

Page 3-31 III. Study Assumptions, A. Population and Water Demands - There is no mention of population growth and demands for M&I water for Churchill County and the city of Fallon. In fact there are some 4,907 domestic wells in Churchill County (source: Churchill County Assessor 10/08/2004) mostly located within the Lahontan Valley where the bulk of the Newlands Project irrigated lands are located. All domestic and M&I water is supplied by groundwater resources in Churchill County recharged almost exclusively by the application of surface irrigation water (perennial yield estimated at <1300AFA vs. >10,000AFA current demand). It should also be mentioned that Churchill County is actively pursuing water right dedication as a condition for development.

Page 3-32 C. Water Right Transfers-Will approval be needed to store Sierra Pacific's non-consumptive water that is currently be used to generate Hydroelectricity? If not, why not? Is water being used for non-consumptive use available for credit water storage?

Table 3.2 Do the historic annual flows consider changes under OCAP in the calculations of the average discharges? If not, why not? This information needs to be included. How are the historic annual flows in this table used in the impact analysis? Please explain.

Table 3.2 How will this information be used to understand impacts or changes from TROA? Please explain.

The historic annual minimum releases do not accurately portray actual minimum releases from Lahontan Reservoir. Please refer to recent records to provide accurate information. How do changes in OCAP affect the results in Table 3.2? Why does this DEIS ignore real data and opt for what appears to be modeled conditions with improbable assumption?

The diversions through the Truckee Canal needs to recognize amounts for irrigation in the Truckee Division and amounts for storage in Lahontan Reservoir. Again, historic data is not a good description of baseline operating conditions of Truckee Canal diversions.

Table 3.2 in what year does the maximum diversions through the Truckee Canal occur? Would OCAP allow for a diversion of 287,500 acre-feet from the Truckee? In what year did the minimum releases occur from Lahontan Reservoir?

Page 3-33 Water Resources, I Affected Environment, A. Supply, 1. Surface Water - Modify the first introductory sentence to include the word "Carson" following Tahoe...

Page 3-38 a. Agriculture - under 2nd par. add language to explain that the 275,700 acre-feet demand in the Carson division is made up of combined Carson and Truckee River water.

Page 3-39 no mention is made of M&I demands for city of Fallon, NAS Fallon, FPST and domestic demands for unincorporated areas in Churchill County of which at least a portion results from diversion of water from the Truckee River basin. In so doing, Table 3.3 - Current (2002) annual consumptive demands in the Lake Tahoe and Truckee River basins could be relabeled to indicate inclusion of the Carson Division.

Page 3-40 Table 3.4 Current (2002) nonconsumptive water demands (cfs) in the Lake Tahoe and Truckee River basins should be modified to include a reference to the hydropower generation at Lahontan Dam in the Carson Division of the Project since this fact is mentioned on page 3-41.

Page. 3-42, 1. Truckee River General Electric Decree. This paragraph is not a complete representation. Floriston Rates are also maintained to provide adequate Truckee River flows for downstream diversions including the Truckee Carson Irrigation District. The paragraph gives the reader the impression that the only function for Floriston Rates was for a pulp and paper mill. Please provide a more thorough discussion for the purpose of Floriston Rates

Pages 3-42& -43, 2. Orr Ditch Decree - it should be noted that although the Orr Ditch Decree reduced Floriston Rates the rate set was for the purpose of maintaining adequate flows to ensure that diversions at Derby Dam would allow the full allotment of water to Project irrigators.

Page 3-44 Current Operations. General Comment. There is no discussion of storing waters in Lahontan Reservoir. This section needs to include a discussion of Newlands Project storage procedures.

Pg 3-45 Changes to the Floriston rates are a key element of the TROA. Yet, the baseline description only provides a general description about the rates. Additional information needs to be included in the DEIS about Floriston rate flows.

There is no information or baseline description of flows available for diversion to the Newlands Project from the Truckee River. This information needs to be included for different hydrologic conditions.

Pg 3-49 Please define Carson Division demands under wet, median, and dry hydrologic conditions.

3-49 B. - Summary of Effects - 3rd par. insert "single-event" following...and dry...

Pg 3-55 Last paragraph states that the period 1993 to 2002 represents a wide range of hydrologic conditions, which can be used to average historic end of September storage. With the exception of 1994, this period can generally be characterized as wet. Even 1994 followed a wet water year 92-93. Were any truly dry periods used to calculate end of September storage? If not, why was this not done?

Page 3-56 5th paragraph indicates that surplus TMWA rights would be injected through wells into the groundwater. How much would be injected into groundwater? When would the injections occur? At what time of the year? Which groundwater aquifers are capable of storing water and what is the total capacity? Please identify studies or other data which support recharge programs in local aquifers. How much of the M&I credit water storage is assumed stored under the no-action alternative?

Page 3-57 Table 3.11. Please describe the reasons for an increase in M&I water demands for Pyramid Lake under the no-action and TROA? How will this water be used? Will the increase in Pyramid Lake consumptive water demand impact the Cui-ui and LCT? Shouldn't this water remain in the River to ensure the survival and habitat for the Cui-ui? Please explain.

3-57 - Table 3.11. Modeled annual consumptive demands in study area (acre-feet) - Other M&I demands - no listing of domestic and M&I demands in lower Carson (i.e., city of Fallon, NAS Fallon, FPST, unincorporated area of Churchill County).

Page 3-58 Consumptive Demand. This section describes a wetland acquisition program that is unrealistic and has not been seriously considered since a record of decision was implemented for the final EIS. Only a small component of Navy water rights have been transferred.

Page 3-58 paragraph 2. How can the model assume increases in agricultural water use under Claims 1 and 2 when the no-action alternative results in significant adverse impacts to the Cui-ui and LCT? Please explain. Is this a valid assumption?

3-58 - 1st par. Is it erroneous to assume that the transfer of water rights under WRAP to the Stillwater Wildlife management area will result in a full credit to the Truckee Basin as a result of lower demand since there is a matter of "fungibility" resulting from the mingling of Carson and Truckee River water in the Carson Division?

3-59 - 2nd full par. – There should be a discussion of M&I increases anticipated for the Carson Division (i.e., city of Fallon, NAS Fallon, FPST, and the unincorporated portions of Churchill County experiencing urbanization) since a portion of Truckee River water makes up the total water available in the Lahontan Valley.

Page 3-75 Figure 3.15. The figures indicate that under wet conditions January storage remains above 260,000 af.; median conditions about 155,000 af., and dry conditions approximately 105,000 to 110,000 acre-feet for the current conditions and between 85,000 to 90,000 acre-feet under dry conditions. Actual records show that January 04 Lahontan Storage was 112,718; Jan 03, 115,474; Jan 02, 101,468, and Jan 01, 100,718af. It appears that Lahontan Storage over the last 4-years reflects the dry scenario analyzed in the water model. Is the modeled portrayal of the dry storage conditions in Lahontan Reservoir accurate or does the model simply over-inflate storage levels under the dry period for the purpose of ensuring water right demands in the Newland Project are met? Please explain.

There is no analysis of Floriston rate reductions and impacts to the Newlands Project during various hydrologic conditions. Why? How can Floriston Rates be reduced to accumulate credit waters when the Newlands Project has the right to divert? Is the amount available for diversions to the Newlands Project impacted? Does the document contain an analysis that answers this question?

Water Resources-General Comment. During the review of the last 2 draft EISs produced for the TROA, Churchill County repeatedly asked for an analysis of multiple or sequential dry years. This revised DEIS again ignores the need to provide this type of analysis even when drought periods tend to occur over a 5 to 7 year drought cycle normally in successive years according to TMWA. Why has this analysis been excluded from the DEIS?

Page 3-78 - c. TROA. Model results under TROA demonstrate greater upstream storage, which comes at expense of water reliability for agricultural interests in the Project. All other stakeholders achieve greater reliability of supply.

Page 3-83 - *viii.* The presence of question marks seems to reinforce the questionable nature of the projections with respect to meeting water demands in the Carson Division. How much of that demand offset from decreased depletions due to water right purchases in the Truckee Meadows has been factored into the model?

Page 3-90 - E. Exercise of Water Rights to Meet Demand - 1. Method of Analysis - while the model results are based upon a determination of a "minimum supply year", defined as the year with the least supply to meet water rights over the 100-year period of simulation, there appears to be no multi-year analysis of the minimum supply year scenario. It is unlikely that the 100-year period of analysis included a prolonged period of drought exceeding five to eight years. Further, averaging drought years in a rolling multi-year scenario softens the one-year supply number. In August 2004, a paper published by researchers from the University of Nevada and Scripps Institution of Oceanography stated "the current drought condition was the seventh worst to affect the Upper Colorado River Basin in the past 500 years." (Source: *Reno Gazette-Journal,* Saturday, October 9, 2004) Surely, the minimum supply year developed for this DEIS needs to develop some additional analysis for a true evaluation of a "worst case scenario." Far too many people, communities and businesses depend upon the limited water resources in our region to ignore the possibility of a decades-long period of drought. How about a multiple drought-year scenario?

Page 3-90 - 2. a. Current Conditions - need to include the Carson River basin in the discussion since the bulk of agricultural water demands occur in the Carson Division of the Newlands Project which is discussed in the Evaluation of Effects following.

Page 3-95 c. TROA *i*, *Agriculture* (b) Carson Division - the sentence "Timing of Truckee River supplies results in a minimal decrease in diversions to the Newlands Project in some years" is misleading in that it fails to take into account multi-year drought scenarios where water is repeatedly retained as Upper Truckee storage for M&I, in-stream and fish flows to the detriment of agricultural diversions. A snapshot in time is not realistic. Please show the total decrease in demand met between the no-action and current conditions and the TROA and current conditions. Why did the decline in ability to meet demands occur under TROA? Is this consistent with the Orr Ditch Decree and the PL101-618?

Page 3-97 - 3. Evaluation of Effects - some sort of statement should be made reflecting that the 100-year period used in the analysis is not reflective of research indicating that there were periods of extreme drought conditions, which may not be descriptive of the period of analysis.

Page 3-106 - Groundwater, I. Affected Environment - 4th par. There is no mention of the "reliable small water supply" in and around Fallon and the Carson Division in Churchill County with 4,907 domestic wells (Source: Churchill County Assessor). Groundwater serves 100% of the domestic supply in the Carson Division including the city of Fallon, NAS Fallon, the Fallon Paiute-Shoshone Tribes and the majority of the population in the unincorporated area of Churchill County.

Page 3-107 - II. Environmental Consequences, A. Introduction - 1st par. - correct 4,500 domestic wells to reflect 4,907 wells as of 2004. While TROA is not a significant determinant, in and of itself, of water supply availability in the Carson Division of the Project, it is never-the-less a factor in the storage and release of water under OCAP, which in turn determines the acquisition of water rights under WRAP for the Stillwater Wildlife Management Area.

Page 3-108 - B. Summary of Effects - No mention is made of the impacts to groundwater in the Carson Division. The State Engineer has already determined that changing agricultural practices (i.e., reduced water deliveries to ag. lands) will have an effect upon groundwater in the Lahontan Valley resulting in a moratorium on further drilling of wells with a capacity over 4,000GPD (State Engineer Order No. 1116). Lahontan Reservoir does not lend itself to surface water supply for M&I due to known high concentrations of mercury.

Page 3-108 - Table 3.14 Summary of effects on groundwater - "Well pumping in the shallow aquifer" makes no mention of the absolute reliance on groundwater by almost the entire population residing in the Carson Division of the Project.

Page 3-110 - D. Recharge of the Shallow Aquifer in the Truckee Meadows, 1. Method of Analysis. - Why was the study limited to the Truckee Meadows? As stated previously, the entire population of Churchill County residing in the Carson Division relies on groundwater for domestic M&I uses. Why should the loss of canal seepage and deep percolation on the irrigated fields in the Truckee Meadows not produce a similar reduction in local groundwater recharge in the Lahontan Valley? In fact, Public Law 101-618 Sec. 210 b (16) contemplates a reduction in groundwater quality and quantity charging that "[T]the Secretary in consultation with the State of Nevada and local interests, shall undertake appropriate measures to address significant adverse impacts, identified by studies authorized by this title, on domestic uses of groundwater directly resulting from the water purchases authorized by this title." To date, no definitive study has taken place cumulatively addressing all of the significant adverse impacts directly resulting from the water purchases authorized by P.L. 101-618. If all of the proposed acquisitions authorized by the Act were to be implemented, they add up to significantly more water than is available in the Lahontan Valley (See Churchill County Water Resource Plan: 25 Year 2000-2025: 50 Year 2000-2050 (Water Research and Development, Inc. 2003)

Page 3-111 - D. Recharge of the Shallow Aquifer in the Truckee Meadows, 3 & 4. No mention is made of the approximately 4,900 shallow wells in the Lahontan Valley located in the Carson Division of the Project either as being affected or requiring mitigation due increase to depth of the groundwater table or the loss of quality or both.

Page 3-112 - Model Results and evaluation of Effects - While TROA purports to produce minimal incremental impacts to groundwater in the Newlands Project; when coupled with the WQSA, OCAP, WRAP and potential recoupment, the potential will likely be significant. Throughout the TROA DEIS document there is minimal acknowledgement of any significant impacts on the Carson Division.

Page 3-320 - Economic Environment, I Affected Environment, A. Current Economic Environment, 2. Nevada - 1st par. The Nevada portion of the study mentions all of the Counties and communities lying with in the Truckee and lower segment of the Carson Rivers. Yet the city of Fallon is set apart as an "agricultural community" rather than as a "population center" such Fernley, Reno-Sparks and even Wadsworth, Nixon and Sutcliffe. This gives the reader the impression that Fallon is somehow apart from the other cities and towns subsisting on what has been painted as a dying economic segment (agriculture). In fact, Fallon is a vibrant and growing regional economic hub drawing from most of rural north-central Nevada. The community is economically diverse with retail businesses, manufacturing, energy production, military and agriculture all contributing to our economy. Our local hospital has estimated that there is a population of some 60,000 to 70,000 persons served by their facility from as far away as Austin, Round Mountain, Hawthorne, Gabbs, Lovelock and even Fernley who also take the opportunity to shop and take care of other business while in town for their medical needs. Fallon's role as a population center should not be minimized by implying that it is a single sourced economy.

Page 3-320 - Economic Environment, I Affected Environment, A. Current Economic Environment, 2. Nevada - last par. The speculation that the decline in irrigated acreage is most probably due to changing agricultural markets and increasing demand for nonagricultural water is understating the obvious. As the next sentence only delicately hints at, the reduction is primarily due to the ever-increasing burdens placed upon the water right holder. Such burdens stem from legal challenges by the Federal government, the Pyramid Lake Tribe of Indians and upstream interests reaching clear back to such actions as OCAP, recoupment, bench-bottomland duties, transfer challenges and numerous other impediments and measures resulting in a steady erosion in water quantity and reliability to the economic detriment of the agricultural water users in the Newlands Project.

Page 3-322 - C. Agricultural and M&I Water Use - why limit the discussion to the Truckee Meadows area where the agricultural production has declined precipitously since 1995, and further, why rely on 1995 agricultural employment and personal income data? For example, in the Carson Division, Churchill County is the largest dairy producer in northern Nevada. Agriculture is a valuable contributor to an export economy bringing dollars into the community. This paragraph should be restated to accurately reflect the overall agricultural picture (utilizing the latest information - it's available on the Internet!)

for all of the users of Truckee River water whether in the Truckee Meadows or the lower Carson Division of the Newlands Project, most specifically those in the Carson Division.

Page 3-323 - 2. Employment and Income Affected by Changes in Water Use - the section is entirely silent on the effect upon Carson Division economy. Please address this issue.

Page 3-325 - 4. Groundwater Pumping Costs - This section is silent with respect to groundwater pumping costs in the Lahontan Valley. There are nearly 5,000 individual wells in the shallow aquifer that may be affected as a result of the combined actions of Public Law 101-618 including TROA. Why isn't the Carson Division more fairly addressed?

Page 3-325 - C. Recreation-Related Employment and Income, 1. Method of Analysis - although the last paragraph mentions portions of Churchill County, Nevada as being a part of the study area, no further reference is made in this section on the impacts to the community. For example, if the analysis is only intended to include Donner Lake, Prosser Creek, Stampede and Boca Reservoirs in the analysis, will there be a reduction in recreation-related employment and income due to reduced downstream storage at Lake Lahontan and water availability at the wetlands in the lower Carson Division? Or, did the authors mean to imply an increase in recreation-related employment and income in the lower Carson Division due to some sort of shift away from agriculture to recreation due to wetlands enhancement?

Page 3-326 - no mention is made of the inclusion of Churchill, Lyon and Washoe Counties in either the Economic or Recreation Model discussion yet the Method of Analysis ((page 3-325) indicates that the model considered them among others including El Dorado, Nevada, Placer and Sierra Counties in California. Does the model only derive economic benefit to the California counties? If so, what are the economic losses to the affected Nevada counties?

Page 3-329 - Table 3.84. - Recreation visitation and expenditures - The compilation is silent with respect to impacts to recreation and visitation expenditures at Lahontan Reservoir in the Carson Division. The cumulative impacts associated with Public Law 101-618 and associated prior actions have already impacted visitor days at Lake Lahontan, the second largest warm water recreation area in Nevada. The State of Nevada has already expended sums to extend boat launch ramps and improve docks in an attempt to accommodate the annual wide fluctuation in lake elevation, which would certainly be exacerbated under TROA as it relates to prolonged drought. Please state what the anticipated loss in recreation expenditures for the Lahontan Reservoir might be in a prolonged drought condition.

Page 3-330 - D. Employment and Income Affected by Changes in Water Use - Impacts to the Carson Division of the Newlands Project is dismissed as insignificant since a negligible amount of water rights would be transferred as a result of TROA. Yet in the very next sentence at the top of page 3-331, TROA is touted as allowing greater flexibility in the Truckee Meadows to meet future water demand as a result of greater amounts of M&I water stored in the upper basin reservoirs. The scheme will work as long as the conditions are conducive to storage of flows in excess of demands (i.e., high water years). Very little effort is expended on addressing multi-year drought conditions which are likely to worsen if the prospects for precipitation continue to lessen based upon the long-term climatological record and the findings of those respected in the paleoclimatological sciences. In the event there are longer term drought conditions beyond those derived from the 100-year record and minimum end of year storage targets for Lahontan Reservoir coupled with Project delivery demands cannot be met, what is the potential cumulative economic impact to Carson Division employment and income? While water rights may not be "transferred" from the Carson Division, the storage, timing of releases and volume of flows in the upper Truckee River will surely affect the reliability of water available to irrigators in the Carson Division. The model indicates that the greatest impact to Project irrigators is during a dry year condition when Credit Water storage for fish flows and M&I drought protection take precedence. How many years of very dry conditions would it take before the agricultural industry would collapse?

Page 3-331 through 3-333 - 4. Evaluation of Effects - is completely silent with respect to impacts to Carson Division employment and income affected by changes in water use. This section (along with other sections) needs to be revised to include those impacts to the Carson Division resulting from the loss of a reliable water supply.

Page 3-235 No Action. How does a reduction of 4,490 acre-feet of inflow to Pyramid Lake Result in a significant adverse impact? This amount of water is almost undetectable; it represents less than 1 percent of the total average inflow into the Lake and is within the margin of measurement error. There are inconsistencies throughout the document in the way "significant impact" is defined differently between upstream interests and downstream interests.

Page 3-235. Please explain how an additional flow of 9,730 acre-feet on average would result in significant beneficial impacts over the current conditions. Page 3-235 indicates that the greatest benefits would occur in dry and very dry years which are most critical for Cui-ui survival.

Page 3-340. Social Environment, I. Affected Environment, 4. Agricultural Lands on the Newlands Project, 1st full par. - it is true that agriculture contributes to the economic vitality of Fallon and Churchill County. However, the paragraph should also be expanded to indicate that agriculture contributes substantially to a rural way of life that includes green open spaces, wildlife habitat and stability that comes from a diverse economy.

Page 3-342 C. Urbanization of Truckee Meadows - no mention is made with respect to growth in the urban population of Fernley or the city of Fallon and surrounding urbanizing areas of Churchill County. Again, upstream urbanization appears to be valued more greatly by authors than downstream urbanization.

Page 3-343 through 3-345 - D. Air Quality - this section is completely silent with respect to air quality impacts in the area of Swingle Bench on the Truckee Division located in Churchill County. Significant wind erosion and resultant air quality impacts have been documented by qualified experts retained by Churchill County. While the AQI may have been stabilized or even improved in the Truckee Meadows, the air quality in Churchill County (specifically in the Swingle Bench area) has been negatively impacted. Perhaps it can be said that TROA and the related actions contemplated under PL 101-618 are simply exporting urban ills to a rural area. Increased fallowing of agricultural lands as a result of WRAP in the lower Carson Division is also coming under increased scrutiny as a contributor to a worsening AQI and noxious weed infestations. This section needs to be fleshed-out to include downstream impacts as a result of actions contemplated under TROA as well as other related measures as set forth in PL 101-618.

Page 3-347 - Environmental Consequences - this section simply ignores the effects on the social environment indicators of population, urbanization of the Truckee Meadows, and air quality on surrounding areas impacted by the proposed actions. This section needs to be expanded to include the Truckee Division in the vicinity of Fernley, the Swingle Bench in Churchill County and the cumulative impacts of the proposed action occurring on the Carson Division in the vicinity of Fallon. Growth in the Truckee Meadows is impacting its downstream neighbors on the Truckee and Carson Divisions of the Newlands Project.

Page 3-351 - E. Air Quality. This entire section is extremely weak in that it fails to include any consideration of air quality degradation on neighboring communities resulting from growth in the Truckee Meadows enabled by a greater reliability of the M&I water supply. Such growth fuels the need for mitigation such as the WQSA with its purchase of Truckee Division water rights and reduction in irrigation water reliability to meet demands on the Carson Division of the Newlands Project. Other related actions specifically included in the enabling legislation for TROA such as affirmation of OCAP and the resulting WRAP further contribute to potential air quality degradation. There is a serious omission of factual details regarding this element.

Page 3-388 1st par. Please add "the Newlands Project becomes increasingly dependent upon Truckee Canal Diversions during dry periods."

Page 3-388 Newlands Project Operations-General Comment. The analysis in this section is misleading at best. Again, the analysis does not consider multiple dry year periods. Beginning storage targets are inflated and do not resemble actual data and the analysis assumes that full and reduced Floriston rates are being met. The averages are not a realistic representation because they smooth out actual impacts that would occur over a one or two year period but not be as impactive over a ten-year period.

Chapter 4 - Cumulative Effects

General comments:

Nowhere in the TROA DEIS/EIR document is there any mention of the need to implement a long-range monitoring program to ensure the anticipated outcome resulting from the implementation of TROA is achieved with a minimum amount of impact to the affected areas, both upstream on the Truckee River and in the lower reaches of the Newlands Project, specifically in the Carson Division. Suggest that a long-term periodic study be proposed to ensure that the interests of the affected parties is addressed and that adequate provision be made to provide mitigation for both direct and indirect impacts resulting from TROA.

Page 4-5 - Table 4.1 - Status of selected actions authorized by P. L. 101-618 -
Section 206(a)(1) WRAP - indicates that CE analysis is not required because EIS authors feel TROA would not affect measures to fully implement WRAP. This position fails to acknowledge that storage, timing and flows of Truckee River water will likely affect water available for Carson Division. Water rights and water available to meet demand are two entirely different concepts.

Section 206(d) - regarding cost sharing for protection of Lahontan Valley Wetlands indicates "no CE analysis is required because this is a coordination action only with no effect on acquisitions" assumes that the Department of the Interior will not expend Federal resources to acquire additional water. In the event that Federal dollars will be used to acquire additional water rights, an EA will be required and acquisitions will further affect the total amount of private water available for irrigation possibly increasing O&M for the Truckee-Carson Irrigation District.

Section 206(b) - Project Efficiency Study assumes that no CE is required because this was a study only. But, authors have overlooked the outcome which resulted in higher efficiencies that may drive upstream Credit Storage in Truckee Reservoirs for Project irrigation water users, which has not been included in the Draft TROA agreement.

Section 210(b)(16) - assumes that no CE required because the authors have overlooked the legislative record for P.L. 101-618 to determine the meaning of the term "address" in the language of this section. While the current studies have not identified any immediate

negative impacts, the authors have dismissed the long-term impacts and ignored the reasonably foreseeable impacts on groundwater recharge and availability resulting from the modification to timing of storage, timing of releases and flows of the upper Truckee River Reservoirs on the potential availability of irrigation water in the Carson Division. While there may be a number of studies extant on the lower Carson River Basin, there is no study quantifying and analyzing the cumulative impacts all of the actions proposed under Public Law 101-618 will create. Suggest that this entire table be reviewed to reflect the variability of storage, timing and flows on the availability of water to the Carson Division.

Page 4-8 through 4-9, actions 1, 3 and 4 - in these three Water Management Elements of P.L. 101-618 under *Potential Impacts* the statement that TROA in combination with WRAP and OCAP would not have a significant impact on the priority of Newlands Project water rights or the ability to divert water from the Truckee River to Lahontan Reservoir is, perhaps, a "half-truth." TROA affects storage, timing of releases and flows, which if managed in a manner adverse to Project water right owners could potentially impact the total amount of water received. This situation is more likely to occur in low-flow drought periods than in times of relative plenty.

Page 4-11 - 7. Section 209(j) OCAP, *Potential Impacts* - the potential impacts delineated in this section are downplayed by stating that "TROA would not affect the priority of Newlands Project water rights, calculation of Newlands Project maximum allowable diversions, or the ability to divert water from the Truckee River to Lahontan Reservoir to achieve monthly storage targets" claiming that it would therefore have no cumulative effect on the implementation of OCAP. It is entirely possible that while satisfying the letter of TROA, the spirit and intent of the *Orr Ditch Decree and the Truckee River Agreement* as limited by OCAP could not be met with respect to diversions to meet those allowed forcing Project water right owners to go through a lengthy appeals process and possibly court action built into TROA while foregoing the diversion of the full amount of water to which they might be entitled. Since the model upon which this and other statements, with respect to the protection of Newlands Project water and water rights, is based upon the limited information on flows in the Truckee River for the past 100-years, we feel that the authors of this document overstate the ability to divert water to the Carson Division when the TROA calls for storage in the upper Truckee reservoirs. It's not the high flow water years that give us pause; it is the prolonged drought-periods that do not seem to have been adequately analyzed in the model.

Page 4-13 - 1. Urban Development Plans, *Potential Impacts* - We totally reject the statement that TROA would have no effect on community planning activities. By encouraging a FIRM drought supply, Truckee Meadows sprawl proceeds at an unchecked pace consuming ever-greater amounts of natural resources such as land, water and air. Such growth creates ever-growing wastewater discharge problems requiring mitigation through the acquisition of irrigation water to offset increases in TDS and nutrient loading.

The WQSA is a prime example of this. The acquisition of water from the Truckee Division of the Newlands Project, in turn, has already created air quality problems arising from fallowed lands on Swingle Bench choking the canals and laterals with sand and increasing costs and otherwise hampering the remaining agricultural water users. We also contend that TROA in conjunction with OCAP has the potential to further limit the amount of water reaching the irrigators in the Carson Division of the Newlands Project. This is based upon the overly optimistic year-end storage target projections in Lahontan Reservoir used for modeling results, which are proving faulty based upon actual storage numbers for the past four years. Coupling the erroneous assumptions in the TROA model with the storage, timing of releases and duration of flows to ensure upstream retention of water for in-stream flows and drought reserves only serve to embolden urban planners who seek to maximize the resources thought to be at hand.

Page 4-16 - e. *Churchill County, Nevada, Potential Impacts.* The seemingly innocuous statement that "TROA would have no direct impact on development of local water systems or on water rights on the Newlands Project" begs the relationship of TROA to the storage, timing of releases and duration of flows with potential impact to allowed diversions from the Truckee River under OCAP. 100% of all water for domestic M&I uses in the Lahontan Valley comes from groundwater. USGS studies have determined that the perennial yield in the valley is between 1300 and 2500 AFA with a demand in excess of 10,000 AFA. Yet to date, there has been very little reduction in groundwater elevation except in the vicinity of irrigation canals and laterals on a seasonal basis. As the seeds of Public Law 101-618 bear fruit, the resulting reduction in total water available in the Lahontan Valley will diminish. The State Engineer recognized the relationship of irrigated agriculture and groundwater some time ago when he issued State Engineer Order #1116 limiting the appropriation of groundwater for new quasi-municipal wells to not greater than 4000 GPD (that's less than four households). The near term impact of this order has been to dramatically increase the value of groundwater and the adoption of stringent development standards and water right dedication requirements in the unincorporated areas surrounding the city of Fallon (which we concede are appropriate actions). The long-term impacts are less confidence inspiring. They include the potential of having developed a significantly expanded community (we have a right to grow too) utilizing a steadily decreasing groundwater resource with increased water treatment requirements to meet public health standards, the potential devaluation of property and loss of economic value and viability due to the lack of adequate water resources. Does the document deal equally with and value equally upstream and downstream interests?

Page 4-21 - F. Water Quality. It should be noted that without the WQSA, growth in the Truckee Meadows could be severely limited since advanced tertiary wastewater treatment to meet water quality standards on the lower Truckee River would be a financially challenging prospect. Instead, upstream interests have entered into the WQSA utilizing prime irrigation water from the Truckee Division of the Newlands Irrigation Project to supplement flows in the lower Truckee River. The resulting water is used to dilute

wastewater to meet discharge standards and mitigate growth impacts resulting from urbanization. In so doing, the environmental consequences of growth have been transferred to the Truckee Division, most specifically Swingle Bench in Churchill County, resulting in air quality degradation and soil erosion. Such impacts have translated into additional operating costs for remaining agricultural operators as well as created dust hazards and at least one traffic accident (due to reduced visibility) on US Highway 50 with resulting injuries. To date, there has been no mitigation of the impacts occurring on the Bench by any party to the agreement. What are the plans to mitigate for the impacts to improve water quality in the lower Truckee caused to the Swingle Bench area of the Project?

Page 4-27 - A. Water Resources. The introductory paragraph is overly simplistic in its explanation and extremely optimistic in its outcome. While TROA will likely result in reduced Truckee River flows to create Credit Water, the proposal, based on the model, would only be effective in high runoff years or single season dry cycles. It would not allow for satisfaction of irrigation demands in the Carson Division when TROA calls for Credit Storage in multi-year dry cycles.

Pages 4-27 through 4-29 - Table 4.2 Cumulative effects on water resources by action category and alternative. Shouldn't agriculture have its own listing of cumulative effects on water resources by action category and alternative since it contributes substantially to the current ecosystem?

Page 4-31 - 2. Potential Cumulative Effects of TROA. We question the statement that TROA would not affect the amount of storm or wastewater treated by a facility, degree of treatment, or quality of (or constituent loading by) its discharge. Growth creates greater areas of pavement and increased stormwater runoff plus wastewater flows and the increased need for dilution or replacement for land application. Doesn't TROA by virtue of creating a FIRM drought supply allow for a lower dedication rate for development thus encouraging growth beyond our current capacity to provide water to urban areas in the Truckee Meadows? Further, conservation efforts to reduce per household water consumption create greater constituent loading because of lower volume? (the solution to pollution is dilution)

Page 4-33 - Table 4.5 - Analysis of effects on sedimentation and erosion by action category and alternative. To state that water rights acquisitions and transfers would not affect dynamics of erosion and sedimentation is puzzling. While TROA is not directly responsible for wind erosion of soils at Swingle Bench, it is nevertheless a part of the cumulative impacts resulting from implementation of P.L. 101-618. The use of highly questionable assumptions for the model could make TROA more directly responsible for wind erosion in the Carson Division of the Newlands Project.

Page 4-35 through 4-38 - Tables 4.6, 4.7, 4.8 and 4.9 - Water Quality. While reduction in unit loading to water bodies could occur, the increase in population resulting from a FIRM drought water supply for M&I purposes would result in higher total loading. Has total loading to receiving bodies of water been factored, and if so, what will be the ultimate outcome of such loading and when?

Page 4-40 - Table 4.10 - Analysis of effects on recreation by action category and alternative - Water rights acquisitions and transfers. We disagree on the effects on Lahontan Reservoir under the TROA alternative as being "minimal." See prior discussions on the assumptions under the model, which overstate carryover storage and fill probability of Lahontan in a multi-year dry condition.

Pages 4-41 & 4-42 - Tables 4.11 & 4.12 - Water rights acquisitions and transfers. Why is there no detail under the TROA alternative for this category since fallowed farmlands may not be economically viable for other uses thereby devaluing them and why is there no consideration given to the health related issues relative to dust and soils erosion on Swingle Bench and in the Carson Division?

Page 4-43 Conclusion. For the proposed action the DEIS reaches the conclusion that there would be no need for mitigation and therefore none is proposed. Such a statement for a document that took in excess of fourteen years to draft because of its complexity and the controversy surrounding it is inaccurate at best and downright misleading at worse. The fact of the matter is that only a handful of parties were involved in the negotiations leading up to this document leaving in excess of 2,400 water right owners, including a number of local governments, with a cumbersome recourse in the event they are not served when calling upon their water. One of the major faults with this agreement lies with the overly complex and convoluted model used to make decisions with respect to upstream water storage on the Truckee River to the detriment of the water right owners in the Newlands Project. Only a few people seem to have been privy to the model during the initial drafting that resulted in the original agreement in May 1996. At that time, the major problem seemed to be deficient modeling and inability to validate modeling documentation and assumptions to the public. It seems that this issue has not yet been resolved. Another issue manifests itself in inadequate analysis of reasonable alternatives. NEPA and CEQ regulations afford no room for the dismissal of adequate analysis of all reasonable alternatives, negotiated agreements notwithstanding. Legal proceedings on this very issue seem to support the fact that a negotiated set of criteria does not trump 40 C.F.R § 1502.14, which requires a detailed consideration of all reasonable alternatives. This has resulted in a very narrow range of alternatives confined to No Action, LWSA and TROA. The similarity of the No Action and the LWSA alternatives further call into question the validity of the TROA DEIS/EIR conclusions. Coupling that with no baseline conditions to allow for a true comparison of alternatives creates unanswered questions and questionable conclusions.

We appreciate the opportunity to comment on the TROA DEIS/EIR but find that the document falls short of meeting the requirements of NEPA and CEQ regulations even now after years of hard work and effort.

Sincerely,

BRAD T. GOETSCH
County Manager

BTG:wm

EXHIBIT D

State Water Resources Control Board

Division of Water Rights
1001 I Street, 14th Floor, Sacramento, California 95814
P.O. Box 2000, Sacramento, California 95812-2000
(916) 341-5300 ♦ FAX (916) 341-5400 ♦ www.swrcb.ca.gov

Alan C. Lloyd, Ph.D.
Agency Secretary

Arnold Schwarzenegger
Governor

DEC 2 8 2004

Mr. Kenneth Parr
U.S. Bureau of Reclamation
705 North Plaza Street, Room 320
Carson City, NV 89701-4015

Mr. Michael Cooney
Department of Water Resources
3251 "S" Street, Room E-12
Sacramento, CA 95816

Dear Mr. Parr and Mr. Cooney:

COMMENTS ON THE TRUCKEE RIVER OPERATING AGREEMENT REVISED DRAFT ENVIRONMENTAL IMPACT STATEMENT/ENVIRONMENTAL IMPACT REPORT (CALIFORNIA STATE CLEARINGHOUSE NO. 2004042078)

This letter transmits the State Water Resources Control Board (SWRCB), Division of Water Rights' (Division) comments on the August 2004 Revised Draft Environment Impact Statement/Environmental Impact Report for the Truckee River Operating Agreement (DEIS/EIR) prepared by the U.S. Bureau of Reclamation (USBR) and the California Department of Water Resources (DWR). The SWRCB received the DEIS/EIR on September 7, 2004 and the final comment period for the DEIS/EIR closes on December 30, 2004. The SWRCB is a responsible agency for this project pursuant to the California Environmental Quality Act (CEQA). As such, the SWRCB may use the final EIS/EIR to act on two water right applications filed by USBR (Applications 31487 and 31488) and four petitions to change the points of diversion, places of use, and purposes of use filed by USBR (Licenses 11605 (Application 15673) and 10180 (Application 18006)), Washoe County Conservation District (License 3723 (Application 5169)), and Truckee Meadows Water Authority (License 4196 (Application 9247)). The following comments pertain to the DEIS/EIR's discussion of the California water right applications and petitions.

The DEIS/EIR does not adequately address the project level water right actions under consideration by the SWRCB. USBR/DWR should include a clear description of the applications and petitions in the EIS/EIR. Specifically, the EIS/EIR should include a description of the applications' sources of water (including points of diversion), the quantities requested for appropriation, the seasons of diversion, the availability of water for appropriation, the purposes of use, and places of use. Additionally, USBR/DWR should discuss the impacts associated with the SWRCB's potential approval of the applications or change petitions. For example, the EIS/EIR should include a discussion of any potential impacts to beneficial uses of water and public trust resources associated with approval of the applications. The EIS/EIR should also include a description of the changes sought in the petitions and any potential impacts of those

changes on other legal users of water. Further, USBR/DWR should discuss the proposed groundwater recharge component of the applications and change petitions in the EIS/EIR, including potential impacts to the environment and other legal users of water.

In addition to the above, USBR/DWR should specify whether the "transfers" discussed in the DEIS/EIR are proposed to be transfers pursuant to the California Water Code or whether the transfers are proposed to take place through approval of the change petitions discussed above. If transfers outside of the change petitions on file with the SWRCB are proposed, USBR/DWR should discuss the specifics of those transfers, including what section(s) of the California Water Code they will be filed under and any potential impacts to other legal users of water. If the transfers discussed in the DEIS/EIR are not proposed as transfers pursuant to the California Water Code, USBR/DWR should specify that the transfers are proposed to occur through approval of the petitions to change the places of use, purposes of use, and points of diversion.

The Division has not yet accepted the applications and petitions as complete and may require additional information. USBR/DWR should include a discussion of any substantial new information the Division may request in the EIS/EIR. In addition, USBR/DWR should include the final completed applications and petitions as attachments to the final EIS/EIR.

Thank you for the opportunity to comment on the DEIS/EIR. If you have any questions concerning this letter, please contact Diane Riddle, the Environmental Scientist assigned to this matter, at (916) 341-5297.

Sincerely,

James W. Kassel

James W. Kassel, Chief
Hearings and Special Projects Section

RECEIVED DEC 3 0 2004