# WRITTEN TESTIMONY OF KENNETH W. KNOX REGARDING WATER RIGHT APPLICATIONS 31487 AND 31488 AND PETITIONS TO CHANGE LICENSE 3723, LICENSE 4126, PERMIT 11605, AND LICENSE 101806

### **Introduction**

I, Kenneth W. Knox have been employed as a Principal Water Resources Engineer for URS Corporation (URS) since July 2008. Part of my responsibilities include providing professional consultation services to a variety of government, industrial, corporate, and private interests in water resources engineering and water supply planning, development, and management activities within the United States and the international community. I am a registered professional engineer in Colorado and have a Bachelor of Science Degree in Chemical Engineering and a Master of Science and Ph.D. in Civil Engineering from Colorado State University.

I have been asked to provide written testimony in this proceeding concerning pending Water Right Applications 31487 and 3148 filed by the United States Bureau of Reclamation and petitions to change License 3723 by Washoe County Water Conservation District, License 4196 by Truckee Meadows Water Authority, and Permit 11605 and License 10180 by the United States Bureau of Reclamation in the Truckee River Watershed. Within the ensuing testimony, the basis for my opinions is provided as well as terms and conditions that are appropriate, reasonable, and necessary to prevent injury to existing water rights in the Truckee River system.

Prior to working for URS, I was employed as the Chief Deputy State Engineer for the Colorado Division of Water Resources. As part of my varied duties, I was responsible for litigation activities, water administration, the water supply branch that included both surface and ground water resources, interstate river compacts, and the modeling branch in the State Engineer's Office. I have served as the lead witness and representative of the State of Colorado in intrastate and interstate litigation. In a similar manner, I have served as the Hearing Officer on behalf of the State Engineers Office and have served as the lead witness in other rule-making hearings. I was responsible for the development, defense, and implementation of the Rio Grande Decision Support System and Republican River Compact Ground Water Model used to quantify the time, amount, and location of depletions from surface water diversions and groundwater withdrawals. These comprehensive and complex computational systems were developed in compliance with enabling legislation and within budget. They were developed in a manner that is consistent with professional engineering and modeling protocols and meet the objectives of representative water users and management officials as a viable tool to assist in water resources planning and management activities. The Rio Grande Decision Support System and Republican River Compact Ground Water Model were accepted by the Colorado Supreme Court and United States Supreme Court, respectively. I also have extensive experience in the day-to-day management of river basins and the administration of water rights in conjunctive surface water, reservoir storage, and groundwater systems. My curriculum vitae, which further documents my education and professional experience, is provided as Attachment 1.

EXHIBIT .ssign

### **Background**

The testimony provided herein is based upon my education and professional experience. In preparation of this written testimony, I have reviewed:

- Water Right Applications 31487 and 3148 and petitions to change License 3723, License 4196, and Permit 11605 and License 10180 TCID-198;
- the Truckee River Agreement (1935) TCID-19;
- the Final Decree in the *United States of America vs. Orr Water Ditch Company*, et al. (1944) **TCID-49**;
- the Final Decree in *The United States of America vs. Alpine Land & Reservoir Company*, et al. (1980) **TCID-134**;
- Public Law 101-618 [101<sup>st</sup> Congress, Second Session (1990)] **TCID-221**;
- the Adjustments to 1988 Operating Criteria and Procedures (OCAP) For The Newlands Irrigation Project in Nevada (1997) TCID-222;
- the Truckee River Operating Agreement (September 2008) TCID-227;
- the Final Environmental Impact Statement/Environmental Impact Report for the Truckee River Operating Agreement (January 2008) **SWRCB-7**;
- the Application to Appropriate Water filed by the Truckee-Carson Irrigation District (9330) **TCID-228**;
- Ruling on Remand #4659 by the Office of the State Engineer of the State of Nevada **TCID-229**;
- the Application to Appropriate Water by the Pyramid Lake Paiute Tribe (48494) TCID-212;
- the Permit to Appropriate Water (48494) TCID-212;
- the Application to Appropriate Water by the Pyramid Lake Paiute Tribe (48061) TCID-211;
- the Permit to Appropriate Water (48061) TCID-211;
- Application 5169 TCID-4;
- Permit 3723, Application 9247, License 4196 TCID-268;
- License 10180 TCID-269;

- Application 18006 filed February 18, 1958 TCID-102;
- Documents relevant to Stampede Reservoir [Application 15672 and 15673 filed January 7, 1954; TCID-80 (note this is the application for App 15673);
- Decision No. D 913 regarding Applications 15672 and 15673 dated September 29, 1958
  TCID-111;
- Order of the State Water Resources Control Board dated July 7, 1982, Permit No. 11605 dated October 27, 1958, **TCID -274**;
- Permit Terms for Application 15673 dated October 27, 1958 TCID-114;
- Application 31486 filed December 5, 2005 TCID-198;
- Application 31487 filed December 5, 2005 TCID-198;
- Documents relevant to Prosser Creek Reservoir [Application 18006 filed February 18, 1958 TCID-102;
- Application 31488 filed December 5, 2005 TCID-198;
- Application to Appropriate Water by Permit, Environmental Information TCID-198;
- Letter from E.F. Sullivan to Jerome E. Gilbert, dated January 13, 1971 TCID-126;
- email from Tom Scott to Kenneth Parr dated 9/2/2004 TCID-181;
- email from Martha Kaiser to Susan Wilson dated 6/14/2006 TCID-193.

# Water Resources and Supply for Stampede Reservoir and Prosser Creek Reservoir

Stampede Reservoir and Prosser Creek Reservoir are on-channel impoundment structures located on the Little Truckee River and Prosser Creek respectively. Both of these streams are tributary to the mainstem of the Truckee River and are located within the State of California. The water stored and subsequently released from these structures is used to supplement streamflows in the Truckee River and assist toward meeting the demands of downstream water rights and the Floriston Rate and Reduced Floriston Rate targets (hereinafter referred to collectively as the Floriston Rate targets) specified in the Truckee River Agreement (1936). The Truckee River Agreement, including designation of the Floriston Rate targets, was approved and adopted by the Federal District Court and made part of the Final Decree in *United States of America vs. Orr Water Ditch Company* (1944) that is binding upon the parties to the agreement, including the United States of America, the Truckee-Carson Irrigation District, Washoe County Water Conservation District and Sierra Pacific Power Company (predecessor in interest to the water rights controlled by the Truckee Meadows Water Authority).

The water supplies that are passed through Stampede and Prosser Creek Reservoirs, or water that is temporarily captured and released, is part of a conjunctive water supply system used to meet existing downstream demands. In a similar manner, the reservoirs cited in the change petitions in this action have been operated to supplement streamflows in the Truckee River and assist toward meeting the Floriston Rate targets.

Opinion No. 1

The applications sought for Stampede Reservoir and Prosser Creek Reservoir seek an expansion of the original water right adjudications granted to these structures. Said expansion will cause a diminution in the amount of water available to meet the historic and lawful demands of downstream senior water rights in the Newlands Project by altering the amount and timing of water available for diversion at Derby Dam. In a similar manner, the same alteration in the amount of water stored and released in the reservoirs cited in the change of water right petitions will further extend the material injury to existing and senior water rights in the Newlands Project.

#### Term and Condition No. 1-1

To prevent the expansion of existing storage rights, it is appropriate and necessary to impose the requirement that operational criteria be developed and imposed that replace the depletions of the out-of-priority storage of water under the water rights sought in this petition in amount, timing, and location so as to prevent injury to the senior water rights in the Newlands Project. In the absence of developing said operational criteria for the reservoirs, it is reasonable and appropriate for the State Water Resources Control Board to deny the applications or order the subject water rights be held in abeyance until the out-of-priority depletions are identified, quantified, and addressed to prevent injury to senior downstream water rights.

### Existing Water Rights within the Newlands Project

There are approximately 3,000 individuals with water rights in the Newlands Project that retain senior water right priorities in the Truckee River system as defined by federal court decrees that serve multiple beneficial. The owners of these senior water rights continue to divert water that is physically available and in priority in the Truckee River system to beneficial use(s). The Newlands Project, as it is now known, was the first reclamation project undertaken by the federal government under the June 17, 1902 Reclamation Act.

#### Orr Water Ditch Decree (1944)

Pursuant to Claim No. 3. in the Final Decree in United States of America vs. Orr Water Ditch Company, et al. (1944), the Truckee Canal was granted a senior water right in the amount of 1,500 cubic foot per second (cfs) water right with a July 2, 1902 priority, along with a right to store 290,000 acre-feet in Lahontan Reservoir. This federal court decree may be described as general adjudication of the historic water diversions, storage, and application of water to beneficial use in the Truckee River system. Impetus for the final decree was a lawsuit filed by the United States in 1913 that sought to adjudicate water rights to the Truckee River for the benefit of the Pyramid Lake Indian Reservation and the Newlands Project [Nevada v. U.S., 463 U.S. 110, 103 S. Ct. 2906, 77 L. Ed. 2d 509 (1983)].

The Orr Ditch Decree explicitly specifies the water right awarded to the Newlands Project may be used for irrigation, of lands on the Newlands Project, for storage in Lahontan Reservoir (an on-channel impoundment structure on the Carson River), for generating power, for domestic purposes and supplying water for inhabitants in the cities and towns on the project, and other purposes under control, disposal, and regulation by the Truckee-Carson Irrigation District.

Alpine Land & Reservoir Decree (1980)

In a parallel manner to the Orr Ditch Decree, the Final Decree in *The United States of America* vs. Alpine Land & Reservoir Company, et al. (1980) was a general adjudication of water rights on the Carson River and its tributaries. The federal district court declared the Carson River and its tributaries are fully appropriated as a factual finding. The court also recognized the reservation of lands for the first reclamation project under the 1902 Reclamation Act that is now known as the Newlands Project. In section IV of the Finding of Fact in the Decree, the court cited the diligent progression of work and the expenditure of funds to construct water distribution and storage facilities that apply waters of the Carson River to use on the Newlands Project, including construction of Lahontan Reservoir with a capacity of 295,149 acre-feet at the spillway crest and with a capacity of 317,280 acre-feet when 20-inch flashboards are installed on the crest.

The Truckee-Carson Irrigation District Ditch System was awarded an 1876 priority date under Claim Number 792 for irrigation, power generation, municipal, reclamation of arid lands, watering livestock, domestic, and other beneficial uses. The United States was granted a storage right for Lahontan Reservoir for fishing and recreation under a range of priority dates from 1865 to 1902 based upon subsequent claim numbers. The federal district court further awarded a direct flow water right of 40 cfs to the reservoir for generating power with an 1882 priority date. The direct flow water rights and storage water rights that serve the Newlands Project, similar to all other water rights adjudicated in the federal decree, are afforded a significant measure of protection by the court through explicit language that all claimants or potential claimants are "enjoined and restrained from taking, diverting, or using any of the water allowed to them, in any manner or at any time while this Decree remains in force so as to in any way interfere with the prior rights of any other persons or parties having prior rights under this decree" (page 158).

Opinion No. 2

The diversion and storage water rights retained by the water right owners within the Newlands Project that receive water by diversion at Derby Dam, conveyance in the Truckee Canal and its lateral delivery system, and from Lahontan Reservoir are senior in priority to the subject water rights in this proceeding. Water rights within the Truckee River, and its tributaries, that are junior or later in priority to the senior water right priority specified in Claim No. 3. in the Orr Ditch Decree must be curtailed in time and amount necessary to prevent injury to the senior water rights owned and operated within the Newlands Project.

### **Competing Permits and Applications**

The Truckee-Carson Irrigation District filed application 9330 on September 9, 1930 and an amended application on March 9, 1931. The application seeks to appropriate 1,500 cfs, with an annual volumetric limit up to 100,000 acre-feet, of waters from the Truckee River and its

tributaries for storage in Lahontan Reservoir for domestic purposes and irrigation of lands within the Newlands Project. It is proposed that the water will be conveyed to Lahontan Reservoir through diversion at Derby Dam and using the same infrastructure and distribution system currently in use. Application 9330 was denied by the Nevada State Engineer on August 14, 1998 (Ruling on Remand #4659) and is currently under appeal.

The Pyramid Lake Paiute Tribe filed an application to appropriate water from the Truckee River and its tributaries with the Nevada State Engineer's Office on October 17, 1984, approximately 54 years after the filing the Truckee-Carson Irrigation District. The Nevada State Engineer issued Permit No. 48494 that granted 477,851 acre-feet per year as a temporary allowance. Receipt of a final water right obtained under this permit is dependant upon the amount of water placed to recreational beneficial use that is documented by accurate measurement. This permit was subject to appeal and was heard by Judge William A. Maddox in the Third Judicial District Court of the State of Nevada (Case No. 25219/25227). Judge Maddox upheld the decision of the State Engineer and affirmed the permit. However, and specifically germane to the instant applications and change petitions before the California State Water Resources Control Board, Judge Maddox unequivocally determined Application 48494 does not allow for storage in upstream reservoirs in the Truckee River system as anticipated by the Truckee River Operating Agreement (TROA). The court found "it will be necessary as a matter of State law for the Tribe to file change applications and to obtain the Nevada State Engineer's approval in order for the water to be stored and used as anticipated by the draft TROA" (page 12).

### Opinion No. 3

It is premature to grant the requested applications and change petitions in this action before the State Water Control Board until the issue of whether or not there is water available for appropriation in these reservoirs, and by whom is resolved. It is premature because the applicants' ability to perfect these water rights to their claimed purposes is dependant upon the storage and subsequent release to meet the objectives specified in TROA and claimed in Application/Permit No. 48494. No application to include storage in upstream reservoirs within the permitted conditions of Permit No. 48494 has been filed to the Nevada State Engineer as required by law and confirmed by Judge Maddox.

# The Truckee River Operating Agreement May Not Interfere with Decreed Water Rights

For foundation, the requirement for creating the Truckee River Operating Agreement may be attributed to the Truckee-Carson Pyramid Lake Water Rights Settlement Act of 1990 (Public Law 101-618). Under Section 205 of the Act, which is entitled Truckee River Water Supply Management, several requirements are provided that describe the potential control and operations of the reservoirs in the Truckee River system. A significant component of the Act is the requirement that the operation of the Truckee River reservoirs shall be operated to "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" [Section 205(a)(2)(D)]. Section 1.C of the TROA reiterates the protection of water rights is required by the Act.

# Opinion No. 4

The TROA, in its present state, does not provide the assurance that water rights will be protected. The requested change in water rights and applications in this proceeding reflect a change in the amount, time, and location of use of the water stored/released from these structures that will expand the existing water rights and their respective administrative priorities beyond that contemplated in their original adjudication in the federal decrees. This expansion will create new and additional shortages in the water supply available for diversion at Derby Dam and storage in Lahontan Reservoir that are injurious to individuals within the Lahontan Valley that are reliant upon these water supplies for the irrigation of crops, domestic water supplies, generation of hydropower, and other beneficial uses of water that are protected by federal decrees. Adjudication of the applications and change petitions in their present state, that is reliant upon the provisions of TROA, would be in conflict with the aforementioned subsection of Public Law 101-618 that requires assurance the water stored in and released in these Truckee River reservoirs is in compliance with the Orr Ditch Decree and Truckee River General Electric Decree.

### Term and Condition 4-1

To enter into effect, the TROA shall be submitted and approved by the Orr Ditch Court and the Truckee River General Electric Court for approval of any necessary modifications in the provisions of those decrees. A term and condition that holds the subject water right applications and petitions for change under this proceeding in abeyance until such time as TROA is approved by the Orr Ditch Court and Truckee River General Electric Court is reasonable and appropriate

### Agency Regulations Cannot Interfere with Decreed Water Rights

The responsibility to administer water rights is vested to state government authorities. In 1952, the McCarran Amendment was enacted to address the tension between federal, state, and tribal authorities over which entity would serve as the government regulatory authority to administer water resources and how federal water rights would be integrated within the water rights owned/operated by other private and public government parties. The Statement of Purpose in the Act clearly provides for a waiver of sovereign immunity for the dual purposes of adjudicating federal water rights within the state court system and administration of water rights by state officials under state law (43 U.S.C. § 666 (1988)).

Opinion No. 5

The federal government as an applicant in these proceedings and as an appropriator of water resources and owner/operation of water diversion, conveyance, and storage infrastructure is viewed as a water right owner with the same rights and responsibilities as any other public or private entity that owns/operates a water right. The creation and implementation of rules and policies by a government agency such as the Adjustments to the 1988 Operating Criteria and Procedures (OCAP) for the Newlands Irrigation Project in Nevada are often helpful to document and describe the procedures taken by said agency personnel in water resources management activities. Agency regulations and policies, including those issued by federal, state, and local government agencies, should properly be constructed and interpreted to complement decrees. However, they may not circumvent, replace or diminish a decreed water right issued by an adjudicatory body or court of law. By its own terms, the OCAP may not interfere with decreed water rights in the Truckee River system.

#### **Petitions to Change Water Rights**

The process to change or transfer water rights is often complicated. However, the basic concept is a change in water right proceeding that includes a change in the type of use the water resources may be applied toward, a change in the point of diversion or storage, a change in the place of use, or a combination of all these elements may occur as long as other water rights in the tributary stream system are not adversely impacted. By its nature, a change in water right involves a deviance from historic conditions or a change in the status quo within a river system. In highly-developed systems such as the Truckee River, the impacts of a change in water right may be significant. However, a fundamental protection in change of water right proceedings is the requirement for the applicant to demonstrate the change will not adversely impact the water supply in time, amount, or location to other existing water rights in a tributary stream system if the change of water right is approved.

In succinct terms, the four petitions seek to change License 3723 - Boca Dam and Reservoir; License 4196 – Independence Dam and Reservoir; License 10180 – Prosser Creek Dam and Reservoir; and Permit 11605 – Stampede Dam and Reservoir. The stated purpose of the four change petitions is to accommodate the implementation of TROA. The applicants seek additional points of diversion, redistribution, and rediversion be added to the existing licenses. Further, the petitions seek to coalesce the licenses and permit into a common place of use and common purpose of use. The United States Bureau of Reclamation also requests that a permit term be eliminated in License 10180 and be replaced by operating criteria in TROA.

Applicants seek the insertion of a term and condition that essentially holds the requested changes in abeyance until the Truckee River Operating Agreement is in effect and all diversions, storage, and use of water and operations under these licenses comply in strict accordance with the terms in the licenses/permit and the provisions of TROA.

#### Opinion No. 6

The Truckee River Operations Agreement is not in effect. It has not been submitted to the Orr Ditch Court, nor has it been approved. The provisions contained within TROA may change or be altered and it is illogical to impose conditions in this proceeding that are yet undetermined and may be deemed necessary in another judicial proceeding. For this reason, it is illogical and premature to seek confirmation of a water right in which the terms of diversion, storage, use, and operation are not known with certainty. Further, the suggested term and condition falls short in context that it includes a silent assumption that TROA does not adversely impact or injure the vested water rights of downstream appropriators. It is my opinion that TROA does adversely impact the senior water rights owned/operated in the Newlands Project. If these change applications are granted, it is the intent of the applicants to use the approval as a license to transfer and/or credit store waters from the various reservoirs at the applicant's sole discretion, without the need to submit future reservoir storage and operational change petitions to the State of California or State of Nevada for review and approval. Granting these applications, as proposed, will remove the upstream reservoirs in the Truckee River from the State of California change in water right process, and will prevent the opportunity for other water rights to protect their interests on such change petitions.

Opinion No. 7

The change petitions appear to be wholly reliant upon TROA. No additional or independent water resource engineering or analyses are evident that describe in detail the change in storage/release patterns, the amount of water physically and legally available at each of the discrete points of diversion, storage, and rediversion that are requested, the change in return flow amounts, timing, and location, and other critical factors that must be identified and quantified to demonstrate the requested change does not expand or enlarge the existing licenses/permit beyond their original adjudication to the detriment and injury of existing water rights in the Truckee River system. Moreover, the ability of the applicant to circumvent the change of water right process in California in the future for water stored in these reservoirs under these applications, as some form of carte blanche management authority, is not in the public interest.

### Term and Condition No. 7-1

As a precursor to the suggested term and condition tendered by applicants, it is reasonable and appropriate for this court to hold these change petitions in abeyance in a similar manner until such time as applicants provide evidence that implementation of TROA, in its final form, will not cause material injury to other water rights in the Truckee River Basin as determined by a court of competent jurisdiction. Also, it is appropriate and reasonable to require any future changes to the water storage rights under these applications be subject to a change of water right proceeding under California law to provide the opportunity for review and evaluation by the State Water Resources Control Board and other interested parties to understand the potential impact on existing water rights, and to protest the new applications, if warranted.

### Water Storage and Operations in Stampede Reservoir

Application 31487 was filed for the purpose of accommodating the implementation of the provisions of the Truckee River Operating Agreement (TROA) and to supplement Permit 11605. The application seeks to appropriate 350 cfs by direct diversion January 1 through December 31 and increase the permitted storage from 126,000 acre-feet to 226,500 acre-feet annually. The application includes a justification section that reflects applicant's intent to use TROA as the mechanism to "make more efficient use of existing Truckee River reservoirs, and to provide multiple benefits" (Section 5 – Justification of Amount). According to the Nevada State Engineer, the Truckee River is fully appropriated. This application would add an additional 100,000 acre-feet of demand to the amount of water that is already appropriated on the Truckee River, which is in excess of limited river supplies. No additional information, engineering, or technical analysis was provided that describes the water available (physical and legal availability in priority) for these requests, the proposed schedule of storage/releases, and/or the change in water deliveries and return flow patterns that may impact downstream water rights.

### Opinion No. 8

The requested application is an expansion of use, and amount, to the water right claimed and permitted in the original adjudication for this structure. The justification section cites several beneficial uses and a general characterization that the intent of the applicant is to optimize the use of this water storage vessel, independently and in conjunction with other upstream reservoirs in the Truckee River system, to accommodate multiple beneficial uses of water. However, the

engineering and technical analysis to support this application is incomplete and inadequate to support its adjudication at this time. The Truckee River system, similar to other river basins, has a finite supply of water available for application to multiple and competitive beneficial uses of water. Extension of the storage and release schedule to accommodate the additional uses contemplated herein, including the expansion of 100,500 acre-feet under the same priority and the shift in the storage and release schedule, will have a corresponding decrease in the amount of water available to existing water rights downstream of this reservoir. Moreover, since the Truckee River is fully appropriated under California Water Code section 1206, no application for a permit to appropriate water may be accepted for filing on these waters. The application fails to describe the source, amount, timing, and other pertinent information relevant to the replacement water supplies that will be used to offset the additional depletions caused by this conjunctive management scheme that are necessary to protect existing water rights from adverse impact from operations under TROA.

### Term and Condition 8-1

The requested permit for Stampede Reservoir should be denied since there is no water to appropriate. If it is approved, it should reflect the requested changes in use and amount of storage in this application as a junior water right which may only appropriate flood waters which exceed all other senior entitlements. Succinctly, the impact of this recommended term and condition would leave the existing 126,000 acre-feet under Permit 11605 intact for the beneficial uses awarded in that original action. The additional 100,500 acre-feet would retain a junior water right priority and the beneficial uses of water cited in Section 5 would retain this same junior water right priority for the entire 226,500 acre-feet volume.

### Term and Condition 8-2

The request to use Stampede Reservoir as part of an integrated and conjunctive upstream reservoir system contemplated by implementation of the TROA is premature and should be denied or held in abeyance. This action is not reasonable and is inappropriate until such time as a detailed water resources engineering analysis is provided and evaluated that describes the amount of water physically and legally available to each reservoir in this conjunctive water supply system; the incremental impacts or changes in water supply and use that will result by the inclusion of this reservoir in the conjunctive reservoir system; and how the potential injury to downstream water rights will be addressed.

### Water Storage and Operations in Prosser Creek Reservoir

Application 31488 was filed for the purpose of accommodating the implementation of the provisions of the Truckee River Operating Agreement (TROA). The application seeks to increase the permitted storage from 20,162 acre-feet to 30,000 acre-feet annually and extend the fill season from October 1 to August 10. This contemplated water right is intended to supplement License 10180. The application includes a justification section that reflects applicant's intent to use TROA as the mechanism to "make more efficient use of existing Truckee River reservoirs, and to provide multiple benefits" (Section 5 – Justification of Amount). According to the Nevada State Engineer, the Truckee River is fully appropriated and this application would add an additional 9,838 acre-feet to the amount of water demand on the Truckee River. No additional information, engineering, or analysis was provided that describes

the water available (physical and legal availability in priority) for these requests, the proposed schedule of storage/releases, and/or the change in water deliveries and return flow patterns that may impact downstream water rights.

#### Opinion No. 9

Similar to Application 31487, this application is an expansion of use to the original water right and application for this structure. The justification section cites several beneficial uses and a general characterization that the intent of the applicant is to use TROA to optimize the use of this water storage vessel, independently and in conjunction with other upstream reservoirs in the Truckee River system and to accommodate multiple beneficial uses of water. However, since the Truckee River is fully appropriated under California Water Code section 1206, no application for a permit to appropriate water may be accepted for filing on these waters. The engineering and technical analysis to support this application is incomplete and inadequate for adjudication at this time for the same reasons as previously articulated, and not repeated here to minimize redundancy.

#### Term and Condition 9-1

The requested permit for Prosser Creek Reservoir should be denied since there is no water to appropriate. If it is approved, it should reflect the requested changes in use and amount of storage in this application as a junior water right which may only appropriate flood waters that exceed all other senior entitlements. Succinctly, the impact of this recommended term and condition would leave the existing 20,162 acre-feet under License 10180 intact for the beneficial uses awarded in that original action. The additional 9,838 acre-feet would retain a junior water right priority and the beneficial uses of water cited in Section 5 would retain this same junior water right priority for the entire 30,000 acre-feet volume.

#### Term and Condition 9-2

The request to use Prosser Creek Reservoir as part of an integrated and conjunctive upstream reservoir system contemplated by the implementation of the TROA is premature and should be denied or held in abeyance. This action is unreasonable and inappropriate until such time as a detailed water resources engineering analysis is provided and evaluated that describes the amount of water physically and legally available to each reservoir in this conjunctive water supply system; the incremental impacts or changes in water supply and use that will result by the inclusion of this reservoir in the conjunctive reservoir system; and how the potential injury to downstream water rights will be addressed.

# Injury to Existing Water Right Owners—Shortages to Newlands Project from EIS/EIR

The primary purpose of the proposed Truckee River Operating Agreement in the Final Environmental Impact Statement/Environmental Impact Report (EIS/EIR) is "to implement section 205(a) of Public Law (P.L.), which directs the Secretary to negotiate an agreement with California and Nevada to increase the operational flexibility and efficiency of certain reservoirs in the Lake Tahoe and Truckee River basins" (ES-2). The selection of TROA as the proposed action and preferred alternative was based upon its creation of storing and managing "Credit Water" (ES-5).

Opinion No. 10

In review of the EIS/EIR, it is apparent that shortages to water rights in the Newlands Project will periodically occur by implementation of the TROA and these shortages were determined through application of the Truckee River Operations Model. It is not apparent what, if any, alternatives were developed or evaluation was conducted that sought to replace the shortages that will incur in the Newlands Project or the actions necessary to mitigate these injurious impacts.

# **Impact to Public Interest and Public Trust**

The Truckee River Agreement (TRA, 1935) was negotiated to effectively manage the water resources in the Truckee River system. The primary parties to the TRA included the United States of America, Truckee-Carson Irrigation District, Washoe County Water Conservation District, and Sierra Pacific Power Company (predecessor in interest to water rights owned/controlled by the Truckee Meadows Water Authority). In the succeeding years, a series of Congressional Acts, U.S. Supreme Court and Federal District Court decisions, and numerous other state laws, regulations, and actions have formed a composite body of law to govern the Truckee River system and influence the application of water to beneficial use. Approximately fifty-three years after the TRA, the Truckee River Operating Agreement was released. The TROA is also intended to effectively manage the limited water resources in this basin among many different and competitive demands. The parties to this agreement include the United States, the States of California and Nevada, Washoe County Water Conservation District, Truckee Meadows Water Authority and eleven additional parties that represent tribal, county, municipal, and other water user organizations.

The management of water resources, in context of public trust and public interest, is a challenging and complex endeavor. The applicants in the change petitions and applications before the State Water Resources Control Board reference their intent to effectively manage the upstream reservoirs in the Truckee River system to enhance streamflows and habitat for wildlife and fish species in the Truckee River system. However, the impacts of declining water supplies within the Carson River Basin, that is adjacent to and hydraulically connected via storage and release of water storage in Lahontan Reservoir, do not appear to be included in the definitive criteria in TROA or in the alternatives evaluated in the subsequent EIS/EIR.

Opinion No. 11

The interests of the approximate 3,000 owners of water rights within the Newlands Project were not included in the TROA; neither are citizens from Churchill County or the City of Fallon, Nevada. It is my opinion the failure to include these parties in the development process of the TROA violates the principles of the public trust doctrine by their exclusion in a process that must include representation from a broad array of the public. This flaw is particularly acute because operations under TROA will knowingly cause shortages to the water supply delivered to water right owners in the Newlands Project. Further, the insensible and illogical approach to exclude these major water users is adverse to the stated intent of the signatory parties to provide an effective water management scheme through omission of key water interests with practical knowledge and extensive experience in water management in the Truckee River system; thereby deteriorating the viability of the agreement to meet its stated objectives.

#### Opinion No. 12

In perspective of this proceeding that seeks to use the TROA to manage reservoirs in the upper reaches of the Truckee River system, it is my opinion that the public trust doctrine applied in context of the water adjudication process should include a reasonable and measured balance of the benefits and disadvantages of the pending applications. In this instance, it is appropriate to include the impacts the proposed change in the reservoir operations near the headwaters of the Truckee River will have upon downstream areas and entities, including those in the Carson River because the water supplies to this area will be impacted by the pending applications. The EIS/EIR does not reflect a rigorous exploration and objective evaluation of all the reasonable alternatives or impacts TROA would cause. This failure is caused, in part, by the failure to take a "hard look" at the environmental consequences of the proposed action or to make information known to the public that is in regard to the consequences TROA will have upon communities in the Lahontan Valley, the Stillwater National Wildlife Refuge, Carson Lake and Pasture, and ecology in the lower Carson River Basin.

#### **Conclusion**

Based upon my review of the aforementioned documents and my professional experience in the administration of water rights and management of water resources, the applications and change petitions are not supported with adequate engineering or technical evidence. In their present state, the applications and petitions for change will impose additional shortages in time, amount, and location that will injure vested water rights in the Truckee River system and should be denied. In the alternative, imposition of the recommended terms and conditions are reasonable, necessary, and appropriate to assist government officials in the administration of these water rights and prevent material injury to other water rights that are dependent upon the Truckee River.

Respectfully submitted this 28<sup>th</sup> day of June, 2010.

Kenneth W. Knox, Ph.D., P.E.

Then The