Chris C. Mahannah, P.E., SWRS

EXPERT REPORT

DATE: 28 June 2010

TO:	Mike Van Zandt, Esq.
	Nathan Metcalf, Esq.
	Rusty Jardine, Esq.

RE: Unappropriated Water Analysis – BOR SWRCB Applications 31487 & 31488

I. Introduction

FROM:

The Bureau of Reclamation (BOR) has filed applications 31487 and 31488 with the California State Water Resources Control Board (Board) seeking new appropriations from the Little Truckee River (31487) and Prosser Creek (31488) both of which are tributary to the Truckee River in California before entering Nevada. See exhibit TCID-198 which summarizes these applications and the Petitions to change waters already appropriated. These applications were protested by the Truckee Carson Irrigation District (TCID), Churchill County (Churchill) and City of Fallon (Fallon) on numerous grounds which included the position that there was no unappropriated water to appropriate. This report will primarily focus on that issue. The applications are summarized as follows:

APP #	PRIORITY DATE	APPLICANT	RATE	DUTY	POINT OF DIVERSION	PLACE OF USE	MANNER OF USE	STATUS
			·(cfs)	(afa)				
31487	01/08/04	USDOI - BOR	350	226,500	Stampede Dam	Truckee Meadows, Newlands Project, Truckee Canyon, Pyramid Lake, Tahoe. 96,800 acres of inigation in Truckee Meadows & Newlands Project	ILA	Pending protested application before SWRCB. Application seeks to add 100,500 af of storage capacity to permit 11605 Issued for 126,000 af.
31488	01/08/04	USDOI - BOR		30,000	Prosser Creek Dam	Truckee Meadows, Newlands Project, Truckee Canyon, Pyramid Lake, Tahoe. 96,800 acres of imgation in Truckee Meadows & Newlands Project	All .	Pending protested application before SWRCB. Application seeks to increase maximum withdrawl in any one year beyond the 20,162 af identified in License 10180 for Prosser reservoir.

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TRUCKEE RIVER & TRIBUTARY PENDING APPLICATIONS TO APPROPRIATE BEFORE SWRCB

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EXHIBIT

Applications 31487 and 31488 seek to utilize the full storage capacity of Stampede reservoir at 226,500 af and Prosser Creek reservoir at 30,000 af. The applications will supplement the existing Stampede permit 11605, Prosser License 10180 and associated Petitions to change those rights.

The Truckee River, which originates from Lake Tahoe, and its tributaries headwater in California from the Sierra Nevada mountain range and then flow into Nevada near Farad, California. The Little Truckee River which supplies Stampede and Boca reservoirs is the largest tributary to the main stem of the Truckee, having a watershed area of 173 mi² and an average annual discharge of 135,000 afa. Prosser Creek has a watershed area of 50 mi² and an average annual discharge of 64,000 afa. Surface runoff of precipitation is the primary water supply in the Truckee River basin and most available Truckee River supply in Nevada is generated upstream of the USGS stream gage at Farad, California. Runoff generated in California produces approximately 95% of the Truckee River water available in Nevada. (SWRCB-7, pages 3-39-42). See TCID-265 which is a map of the contributing watershed areas for Stampede, Boca, Prosser and Independence reservoirs.

II. Pending Applications to Appropriate in Nevada

The following applications are pending before the Nevada State Engineer seeking new appropriations from the Truckee River or tributaries having points of diversion and places of use both within California and/or Nevada.

APP #	PRIORITY DATE	APPLICANT	RATE	DUTY	POINT OF DIVERSION	PLACE OF USE	MANNER OF USE	STATUS
			(cfs)	(afa)				
9330	09/09/30	TCID	1,500	100,000	Lahontan Dam	Newlands Project - 150,000 acres	Irr & Dom	Denied under Ruling 4659, but remanded to SE by Court
15664	05/24/54	USDOI - BOR		125,000	Stampede Dam	Truckee Meadows & Newlands Project - 96,800 acres	Irr & Dom	Pending application to appropriate from Little Truckee River - see 8/2/05 letter from DOI to NV State Engineer
24310	01/08/68	USDOI - BOR	350	100,000	Stampede Dam	Truckee Meadows & Newlands Project - 96,800 acres	Irr & Dom	Pending application to appropriate from Little Truckee River - see 8/2/05 letter from DOI to NV State Engineer
24311	01/08/68	USDOI - BOR	350	225,000	Stampede Dam	Truckee Meadows, Newlands Project, Truckee Canyon, Pyramid Lake, Tahoe	Wld & Rec	Pending application to appropriate from Little Truckee River - see 8/2/05 letter from DOI to NV State Engineer
24312	01/08/68	USDOI - BOR	350	225,000	Stampede Dam	Truckee Meadows, Newlands Project, Truckee Canyon, Pyramid Lake, Tahoe	M&I	Pending application to appropriate from Little Truckee River - see 8/2/05 letter from DOI to NV State Engineer

TRUCKEE RIVER & TRIBUTARY PENDING APPLICATIONS TO APPROPRIATE BEFORE NEVADA STATE ENGINEER

These applications are all senior in priority to the pending applications 31487 and 31488 to appropriate before the Board. These applications and supporting maps are included in TCID-228, 82, 121, 122, and 123.

TCID Application 9330 was originally denied by the Nevada State Engineer under Ruling #4659 (TCID-229), however the Third Judicial District Court in and for the County of Churchill in an Order dated October 15, 2008 (TCID-209) has remanded it back to the State Engineer to take several steps, including:

- a. hear additional evidence regarding the TROA and PSA
- b. define "public interest" for purposes of his decision
- c. to assign values and magnitudes to his findings of detrimental and benefit and indicate how the comparison of benefits and detriments lead to his final conclusion

Therefore, TCID's application is in good standing and is the most senior in priority of all outstanding pending applications before the Nevada State Engineer or the Board.

The BOR applications 15664, 24310 – 24312 dating back to 1954 and 1968 are still pending before Nevada State Engineer seeking a combined direct diversion right of 350 cfs and a duty of 225,000 afa. It is unclear why the Nevada State Engineer did not consider these applications in the unappropriated water hearings in 1994 and 1996. On September 13, 1994, the State Engineer sent the director of Conservation and Natural Resources an internal memo stating the BOR's applications had not been dealt with in the unappropriated water hearings and suggested one immediate resolution would be for the BOR to withdraw the applications to alleviate any further litigation concerning the Truckee River. (TCID-142). On May 11, 2005 the State Engineer sent the BOR a letter (TCID-189) requesting information as to their intentions for these applications since they were attempting to take action. The BOR responded in their August 2, 2005 letter (TCID-191) stating in part:

"We have identified the subject applications as potentially important to the TROA process and future implementation. Thus, we ask that the Nevada State Engineer continue to hold the Stampede related Water Right Applications 15664, 24310, 24311, and 24312 in abeyance until TROA is approved and implemented."

The BOR then references the petitions and applications filed before the Board and states:

"These change petitions and applications are intended to accommodate implementation of TROA and may be coordinated with the pending Nevada applications. Consequently, it would appear prudent for the State Engineer to defer any formal action on the

Applications in question until the TROA process and related California water right actions have come to completion."

It appears these pending applications in Nevada which predate the California application 31487 by 36 and 50 years are seeking to appropriate and store the same waters of the Little Truckee River. The BOR's senior pending applications in Nevada should be withdrawn or acted upon by the Nevada State Engineer before the Board acts on junior applications for the same waters in California.

Furthermore, TCID application 9330 which has the most senior priority (1930) of all the Nevada or California applications is still in good standing and has been remanded to the State Engineer for further consideration and is currently being scheduled for hearing in Nevada. Therefore it would be premature for the Board to act on junior applications (31487 & 31488) when there is a senior Application 9330 pending on the same source.

III. Unappropriated Water

In 1994 and 1996 unappropriated water hearings were held before the Nevada State Engineer on a number of competing applications including the TCID application 9330 and the Pyramid Lake Indian Tribe's (PLIT) applications 48061 and 48494. In State Engineer Ruling 4659, they found there was unappropriated water on the Truckee River, however application 9330 was denied primarily on public interest grounds associated with the competing PLIT applications 48061 and 48494 for in-stream flow and recreation purposes in the Truckee River and Pyramid Lake below Derby Dam. As stated above, Ruling 4659 was appealed and has been remanded back to the State Engineer to consider the issues relating to TROA and public interest.

In 1998 the State Engineer denied other competing applications and granted the PLIT Permits 48061 (TCID-221) and 48494 (TCID-212) under Ruling 4683 (TCID-230). There was testimony at the February 1996 hearing supporting the availability of unappropriated water. Additionally the PLIT witness' provided considerable testimony regarding the flows they felt were necessary to support the fishery in the lower Truckee River below Derby Dam and recovery of Pyramid Lake levels which are summarized in Attachment "A" supporting applications 48061 and 48494:

PLIT PERMIT 48061 & 48494 FISH & RECREATION FLOW REQUIREMENTS BELOW DERBY DAM

MONTH	FLOW	VOLUME		
	(cfs)	(af)		
Jan	150	9,226		
Feb	150	8,333		
Mar	200 - 600	27,181		
Арг	700 - 1500	61,505		
May	2000 - 3000	163,680		
Jun	2200 - 3000	153,166		
Jul	150	9,226		
Aug	150	9,226		
Sep	150	8,928		
Oct	150	9,226		
Nov	150	8,928		
Dec	150	9,226		
	Total:	477,851		

Attachment "A" also stated:

"2A. These flows are <u>required</u> for the recreational purpose of natural spawning of Lahontan cutthroat trout and cui-ui in the Truckee River below Derby Dam, to fulfill the purposes of the establishment of the Pyramid Lake Indian Reservation, to provide sustenance for the members of the PLIT, to prevent the loss of and to conserve the endangered cui-ui and the threatened Lahontan cutthroat trout, for operation of the Marble Bluff Dam and Pyramid Lake Fish-way in support of that fishery and to maintain Pyramid Lake at a stable level to support the lake's use for recreation.

2B. The second component of the amount of water applied for is for the maintenance of the level of Pyramid Lake. For this purpose, the average annual inflow of the Truckee River to the lake of approximately 400,000 acre-feet is required. Based upon the historic flows of the Truckee River and the existing diversions from and depletions of those flows, the Applicant's intent is to appropriate all of the water in the Truckee River and its tributaries that is not subject to valid existing rights." (TCID-221 & 212, emphasis added)

In Ruling 4683 the State Engineer found: "the unappropriated water applied for under applications 48061 and 48494 is necessary to maintain the threatened and endangered species in Pyramid Lake, and is reasonably required for that purpose." (page 22-23) Permits 48061 and 48494 were issued for a total combined duty of 477,851 afa and rates not to exceed 3,000 cfs. Clearly the State Engineer relied upon the PLIT testimony and the supporting flow requirements summarized in Attachment "A" of the applications. Additionally the State Engineer found in issuing these permits:

"This permit is issued for <u>all the unappropriated water of the Truckee River and its</u> <u>tributaries</u>, and as such is issued junior in priority to all existing rights on the Truckee River and its tributaries, and can only be exercised in those years where there are high flows in the river in excess of the senior rights. In addition, this permit is issued subject to any interstate allocation of the Truckee River."

Subsequently in TROA (Exhibit #16) at Section 1.E.1 states:

"The Signatory Parties agree that water under Permits 48061 and 48494 <u>shall flow to</u> <u>Pyramid Lake</u> for the purposes described therein and that the <u>Truckee River and its</u> <u>tributaries, in Nevada, is fully appropriated and therefore closed to any new</u> <u>appropriations.</u>" Emphasis added

Furthermore before TROA can go into effect, pursuant to Section 12.A.4(f), the Orr Ditch Court shall have confirmed the PLIT permits 48061 and 48494 and amended the Orr Ditch Decree to provide that the Truckee River and its tributaries, in Nevada, is fully appropriated and therefore closed to any new appropriations.

Following the State Engineer granting the PLIT all unappropriated waters of the Truckee River and tributaries, the State Engineer, PLIT and TMWA have supported that decision in protests to new appropriations of Truckee River to tributary waters and State Engineer Rulings. See Ruling 5747 (TCID-205, page 9) and Ruling 5972 (TCID-232) confirming and declaring the Truckee River and tributaries fully appropriated. Since the State Engineer and TROA signatory parties agree the Truckee River and tributaries, in Nevada, are fully appropriated and approximately 95% of the flow in the river originates in California watersheds, it is reasonable to conclude the entire Truckee River and tributary system in both states are fully appropriated, subject to any interstate allocation. Therefore, new and junior appropriations sought under Applications 31487 and 31488 should be denied by the Board on similar grounds found by the Nevada State Engineer declaring the system fully appropriated.

IV. Storage

It appears the intent of the applications to appropriate 31487 and 31488 are actually intending to change and store a portion of unappropriated water Permits 48061 and 48494 granted to the PLIT by the Nevada State Engineer. Supporting documentation provided with the applications under Item 4. Purpose of Use, Amount and Season state:

"Water stored in this Reservoir pursuant to future permits issued by the Nevada State Engineer under Nevada Law and recognized pursuant to the provisions of California Water Section 1231 and 1232 shall not be considered as water stored pursuant to the provisions of this permit."

Additionally, Section 7.C.2 of TROA state:

"Establishment of Fish Credit Water In Lieu of Infows to Pyramid Lake. To the extent allowed by changes under applicable Nevada law to the water right under Nevada State Engineer Ruling No. 4683, the water available to satisfy that right may be retained in Truckee River Reservoirs for Establishment only as Fish Credit Water."

The issue of storage of the PLIT Permits 48061 and 48494 came up on appeal of State Engineer

Ruling 4683 which resulted in Ruling on Remand 4683A (Exhibit #232) which found:

"The State Engineer finds Permits 48061 and 48494 only authorize the use of the unappropriated water for <u>instream/in situ</u> use in the Truckee River. Applications 48061 and 48494 did not seek authorization for storage in upstream reservoirs, are not permits for the storage in upstream reservoirs and <u>cannot be used for storage under the permits at issue here</u>. The State Engineer finds he did not and does not have before him applications for storage of water in upstream reservoirs.

The issue of storage and exchange contemplated under the TROA is not relevant to the State Engineer's decision on Applications 48061 and 48494 since <u>the applications were</u> not filed for storage in upstream reservoirs and cannot be used in that manner under current permits." Emphasis added

State Engineer Rulings 4683 and 4683A were appealed and the District Court issued an Order (TCID-208) affirming both rulings and found:

"Since Applications 48061 and 48494 do not currently allow for the storage of water as anticipated by the draft TROA, <u>it will be necessary as a matter of State law for the Tribe</u> 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. NRS 533.325, 533.440. This will require the State Engineer to determine whether the proposed storage and use will conflict with existing rights or threaten to prove detrimental to the public interest at that time." Emphasis added

Since no applications to change Permits 48061 or 48494 have been filed with the State Engineer seeking to store the remaining waters of the Truckee River in upstream California reservoirs, it is premature for the Board consider Applications 31487 and 31488. Furthermore, the Nevada Senior Deputy Attorney General has stated during argument on appeal of Rulings 4683 and 4683A, that if the water granted under Permits 48061 and 48494 is already being stored, then enforcement action needs to be taken since the water may not be stored and that

TROA may anticipate storage but it doesn't authorize storage, only the State Engineer gets to authorize storage. (TCID-207, pages 41 & 45) The PLIT agreed, indicating it had to go to the State Engineer to ask for a change application to store any of its water granted under Permits 48061 and 48494 if they ever sought to store it. (TCID-207, page 60)

V. Summary

Applications 31487 and 31488 are seeking new appropriations on tributaries to the Truckee River which the Nevada State Engineer and TROA signatory parties have deemed and agreed are fully appropriated. In Ruling 4683 the State Engineer granted the PLIT Permits 48061 and 48494 for all unappropriated water of the Truckee River and its tributaries for a total combined duty of 477,851 afa and rates not to exceed 3,000 cfs. In Ruling 4683A, the State Engineer found the Permits 48061 and 48494 issued to the PLIT were for instream/*in situ* use below Derby Dam and did not allow for upstream storage of those waters. The District Court affirmed Rulings 4683 and 4683A stating it will be necessary as a matter of State law for the Tribe to file change applications and obtain Nevada State Engineer's approval in order for the water to be stored and used as anticipated in TROA. TROA may anticipate storage but it doesn't authorize storage, only the State Engineer gets to authorize storage. No applications to change Permits 48061 or 48494 have been filed with the State Engineer seeking to store the remaining waters of the Truckee River in upstream California reservoirs therefore it is premature for the Board consider Applications 31487 and 31488.

Since the State Engineer and TROA signatory parties agree the Truckee River and tributaries, in Nevada, are fully appropriated and approximately 95% of the flow in the river originates in California watersheds, it is reasonable to conclude the entire Truckee River and tributary system in both states are fully appropriated, subject to any interstate allocation. Therefore, new and junior appropriations sought under applications 31487 and 31488 should be denied by the Board on similar grounds found by the Nevada State Engineer declaring the system fully appropriated. Approving new appropriations on a fully appropriated system will harm existing rights and prove detrimental to the public interest.

Senior pending applications in Nevada should be dealt with before the Board acts on applications 31487 and 31488. BOR applications to appropriate 15664, 24310 - 24312 pending in Nevada for decades for 350 cfs or 225,000 afa should be withdrawn by applicant or denied by

the State Engineer before any action is taken on applications 31487 and 31488. TCID application to appropriate 9330, having a priority date of 1930 and being the most senior of all pending applications is in good standing and has been remanded to the State Engineer for further consideration. It would be premature for the Board to act on any applications to appropriate which are junior to other pending applications from the same source.

EXHIBIT LIST - TCID-xxx

Exhibit

- TCID-198 SWRCB Notice of Applications to Appropriate
- SWRCB-7 Truckee River Operating Agreement FEIS/EIR, January, 2008
- TCID-265 Map of Prosser, Boca, Stampede, Independence Contributing Watersheds
- TCID-228 TCID Application 9330 & supporting maps
- TCID-82 USDOI-BOR Application 15664 & supporting map
- TCID-121 USDOI-BOR Application 24310, Supplement & supporting map
- TCID-122 USDOI-BOR Application 24311 & Supplement
- TCID-123 USDOI-BOR Applications 24312 & Supplement
- TCID-229 State Engineer Ruling on Remand #4659
- TCID-209 Third Judicial District Court of Nevada Order, Application 9330
- TCID-142 Memorandum dated 9/13/94 from Mike Turnipseed to Pete Morros
- TCID-189 State Engineer letter to BOR dated 5/11/05
- TCID-191 BOR letter to State Engineer dated 8/2/05
- TCID-230 State Engineer Ruling #4683
- TCID-221 PLIT Permits & Applications 48061 & supporting exhibits
- TCID-212 PLIT Permits & Applications 48494 & supporting exhibits
- TCID-227 TROA, September 2008
- TCID-205 State Engineer Ruling 5747
- TCID-232 State Engineer Ruling **5972**
- TCID-232 State Engineer Ruling on Remand 4683A

TCID-208	Third Judicial District Court of Nevada, Churchill Co. Order dated June 13, 2008
TCID-207	Transcript of proceedings hearing on pending motions before the Third Judicial District Court (Judge Maddox), May 2, 2008
TCID-266	Mahannah & Associates, LLC Statement of Qualifications