# Opposition Response Report to Nevada County Project Application (U16-003; MGT16-010): Van Norden Dam Spillway Modification by Truckee Donner Land Trust



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# **Executive Summary**

This report is a response to the project application, (U16-003; MGT16-010): Van Norden Dam Spillway Modification, submitted by the Truckee Donner Land Trust to Nevada County. Contained in the report are comments on the application and supporting documents that specify serious deficiencies in the application. Multiple instances of inaccurate and incorrect statements and information are identified as well as serious omissions of important relevant information necessary to evaluate the project.

The report also identifies fundamental flaws in the preparation and scope of the application that should be corrected before the application is accepted by Nevada County.

- The application incorrectly attempts to set the baseline condition of Van Norden Lake as being drained. Documentation is presented that show that while the lake is in a seasonally drained condition for a small portion of the year, the lake is present for more than 6 months out of the year between January and July just as it has for the last 40 years. Moreover, the lake is present in spring and early summer during the start of the growing season and amphibian and avian breeding seasons. The impact of the project must consider the permanent environmental impact for the entire seasonal cycle and not just for a small snap shot of the year.
- The status of the property that will be impacted by this project has been intentionally manipulated by the applicant to avoid thorough environmental scrutiny. The originally acquired parcel on which the dam and lake reside is in the process of being re-parceled to isolate the ecological effects of work on the dam from the lake and wetland area. This obvious attempt to piecemeal this project to avoid thorough environmental evaluation is contrary to the intent of the CEQA process and should not be considered by the County in its current form.
- The applicant has announced plans to sell the portion of the parcel containing the lake and wetlands to the US Forest Service as part of their piecemeal strategy. This project is just the first in a series that will be brought before the County to make changes in the Donner Summit Valley. No mention of this is made in the application or the management plan even though the Forest Service is implicitly an integral part of the project. The role of the Forest Service in post project conditions should be included in the application and management plan.
- Information and document pertinent to the actual current conditions in the Donner Summit
   Valley are presented that correctly characterize the rich diversity that now exists in the
   lacustrine, marsh and wetlands habitats that are supported by Van Norden Lake. In light of the
   drastic change that this project would have on the current ecosystem, it behooves the County
   that there be a thorough evaluation of the far reaching effects of this project will have and that
   a full and complete Environmental Impact Report be performed and evaluated before any
   decision is made about the project.
- The severity and permanence of the changes that this project will have on the Donner Summit Valley are not necessary. The report also outlines a compromise solution that could result in the preservation of a smaller lake and wetland area that would maintain at least some of the valuable open water and wetland habitat in the valley. A less than 50 acre-feet lake would be compliant with California State and would maintain a significant portion of the lake and wetlands while also offering moderate flood control.

This report is being submitted in opposition to this project application and we ask that it be seriously considered by Nevada County in their evaluation process.

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All photographs and graphics used in this report were created by the author unless otherwise stipulated.

# Introduction

# Van Norden Lake and Meadow Acquisition History

Prior to 2011 the land on which Van Norden Dam and Lake sits was on a Nevada County parcel owned by the Royal Gorge LLC company. That company went into receivership in 2011 and the parcel containing the dam was acquired by the Truckee Donner Land Trust (TDLT) with a Placer County parcel that encompassed an additional portion of the lake and meadow area. The original Nevada County parcel included the remnants of Van Norden Dam and 163 acres of the Van Norden Lake and surrounding wetlands. Subsequently TDLT expanded the Placer County parcel through a land swap with Sugar Bowl Corporation to include the entire Van Norden Lake and meadow area. TDLT purchased the

land with funds from supporters with the clear mandate to preserve the land in its state at the time which they acknowledged in their publications and presentations (see Figure 1 and this link).

# Van Norden Dam and Lake History

While dams were built as early as the 1870s in Donner Summit Valley, the remnants of the current dam were originally built in 1910. The 24 foot high dam impounded 5800 acre-feet of water and was owned and operated by Pacific Gas and Electric to supplement flow to their hydro-electric plants further downstream on the South Yuba River. In 1976 the dam was breached to a height of 10 feet at the spillway which is its current

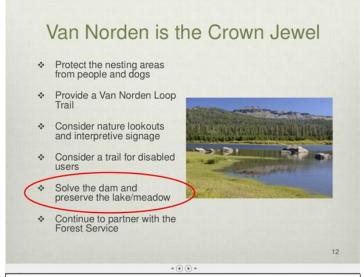


Figure 1: Slide from TDLT online presentation at the time of the acquisition in 2011 explicitly listing preservation of Van Norden Lake as a goal of the acquisition.

configuration. The dam was removed from the jurisdiction of the California Division of Safety of Dams (DSOD) from 1976 until 2011. In 2011 the dam was determined to impound more than 50 acre-feet of water and was returned to the jurisdiction of the State. DSOD notified the then receiver that the dam was out of compliance with current codes and then subsequently notified TDLT when they acquired the land. For more information consult the Division of Safety of Dams <a href="https://dx.doi.org/10.1001/jib.2011/">https://dx.doi.org/10.1001/jib.2011/</a> in the dam was determined to impound more than 50 acre-feet of water and was returned to the jurisdiction of the State. DSOD notified the then receiver that the dam was out of compliance with current codes and then subsequently notified TDLT when they acquired the land. For more information consult the Division of Safety of Dams <a href="https://dx.doi.org/10.1001/jib.2011/">https://dx.doi.org/10.1001/jib.2011/</a> in the property of Dams <a href="https://dx.doi.org/10.1001/jib.2011/">https://dx.doi.org/10.1001/</a> in the property

# Van Norden Lake Water Rights

Pre-1914 water rights for 5800 acre-feet of water were licensed to PG&E while they operated the dam. When PG&E breached the dam in 1976 they only transferred licensed rights to 2200 acre-feet of storage to Fordyce Lake. Rights to the water remaining 3061 acre-feet of water in Van Norden Lake were abandoned by PG&E and there was no further action by the Water Quality Control Board (WQCB) concerning the water rights until 2011. At that time the WQCB notified TDLT that they must apply to license rights to any water impounded between April and November by Van Norden Dam. TDLT took no action to secure the water rights and under a drought emergency mandate in October 2015 the WQCR issued an order for TDLT to drain the lake. (See discussion below for more information)

#### **Current Hydrological Status of Van Norden Lake and Wetlands**

Van Norden Dam remains in its 1976 configuration with a 10 foot high spillway. There is a 24 inch drainpipe at the spillway which remains open and drains the lake at approximately 30 cfs (cubic feet per second). The Donner Summit Valley experiences drastic seasonal changes in the amount of precipitation it receives during the year. Drainage from approximately 6000 acres of watershed in the Donner Summit area flow through the spillway. The area receives 61 inches of precipitation on average which translates into over 20,000 acre-feet of runoff each year. The precipitation season runs from October to May every year. Initial rains in late fall and early winter will fill the Van Norden lake basin with flows over the spillway well in excess of 30 cfs which results in formation of the lake behind the dam by January. The lake freezes and heavy snow accumulates on the ice from December to the spring thaw in April. Normal snow accumulation of 35 feet melt in the spring and early summer producing high flows in the thousands of cubic feet per second (>30 cfs) over the spillway. It is not until the end of June in a normal year that the flow into the lake is below 30cfs and the lake starts to drain and goes dry by the middle of July.

Contrary to the statements made in the application, currently water does accumulate behind the dam to form Van Norden Lake and surrounding wetlands between the months of January (November in wet years) and July. The conditions critical to the support of the environmental habitats in the Summit Valley are discussed below. The consequences of this project will be the permanent draining of the existing lake that will have serious detrimental effects on these habitats and will constitute drastic and destructive changes to the environment as well as the hydrology in the Donner Summit Valley. These changes should be held to the highest environmental scrutiny.

# Responses to Submitted Application Documentation

Upon analysis of the supporting documentation for this project this section of the report focuses on errors, inaccuracies and missing information that contradicts the supporting statements. Comments are listed by the submitted documents.

# Document: Nevada County Project Information Questionnaire (<u>link</u>)

Section 1b. Are any exceptions to required standards proposed or required for this project (a Variance, a Petition for Exceptions or a Management Plan to encroach into any sensitive resources)? If yes, identify the nature of the proposed variance, exception or management plan:

This statement is not correct.

No, the water was released prior to this project to comply with other emergency orders and the Governor's Drought Proclamation. Because TDLT does not own water rights the reservoir will remain unfilled.

Although the water in the lake was removed last fall the lake reforms by January as a result of winter rain and snow melt. The watershed drainage flow is much greater than the 30 cfs flow of the drainpipe in the dam and the lakebed fills up and remains filled until the beginning of July. During that period the lake supports a fishery and surrounding wetland habitat. In the spring the lake provides over 16 acres of prime breeding habitat for the Western Toad whose populations are decreasing in the Sierras due to habitat destruction (see below). Migratory birds also use the lake and wetlands as a stopover on their migration north. Waterfowl, shorebirds and songbirds use the willow thicket wetlands for nesting. Lowering the dam and draining the lake is a serious encroachment on very sensitive natural resources.

Section 1 c. Code Violations: To your knowledge, are there any Code violations occurring on this property, including the issuance of a Warning Notice or a Citation for the subject property? \_\_\_\_ yes ② no If yes, describe:

The following statement is not correct

The Division of Dam Safety has mandated that the spillway be lowered at least five feet.

Instructions from the DSOD clearly state that the dam only has to be lowered to a level that will reduce the size of the lake to less than 50 acre-feet (personal communication with Aspet Ordoubigian, DSOD Area Engineer in charge of Van Norden dam). According to bathymetry analysis performed by Balance Hydrologics, that would only be a decrease of 2.2 feet (see Figure 2).

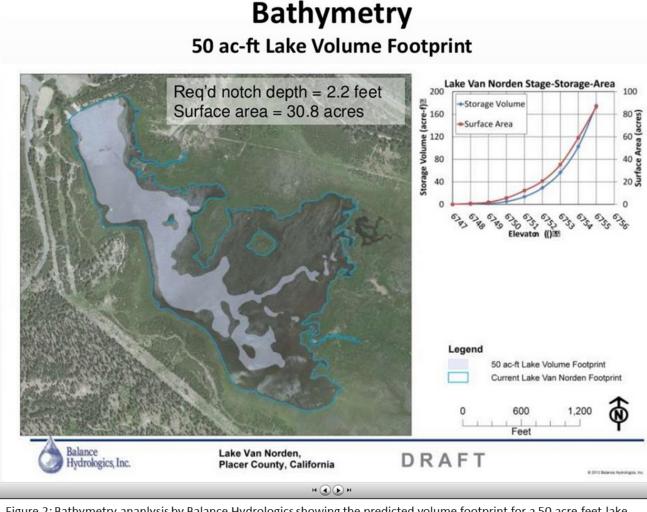


Figure 2: Bathymetry ananlysis by Balance Hydrologics showing the predicted volume footprint for a 50 acre-feet lake. As indicated the notch lowering depth is only 2.2 ft.

The statements in the questionnaire cite dam safety considerations and county code as well as the Martis Creek dam. While the implication to Van Norden dam is implicit, there is no data to indicate that Van Norden dam is at risk of failure. While the original dam was deemed incapable of holding 5800 acrefeet of water, the remnants of that dam currently hold less than 3% of that volume. Reduction of the

current spillway by 2.2 feet to hold a less than 50 acre-feet lake would not be considered by DSOD to pose no risk.

## Section 2 a. Does this project have a relationship to a larger project or a series of projects?

While there is no current project filed, this project is only the first step in a series of projects that TDLT and the USFS are planning for this area. Trying to isolate this project is a clear attempt at piecemealing a much larger series of projects that will have drastic effect on the area (see discussion below).

# Section 2 d. Describe project potential to change the character of the surrounding area, including the loss of open space

The statement that there will be no changes in the surrounding area are blatantly false. Currently there is a 70 acre open water lake area and an additional 90 acres of surrounding wetlands. The flora and fauna supported by these habitats is well documented in the Biological Report. While the statements in this application imply that the lake has been drained that is not the case for at least 6 months including the spring and early summer when the growing season occurs and plant and wildlife thrive. The lake and wetlands support a diverse fishery, breeding habitat for Western Toads (see discussion below) and Chorus Frogs, waterfowl breeding habitat, stopover habitat for migratory birds and feeding habitat for Osprey, Bald Eagles and special-status White Pelicans. All of that will be destroyed. This is not a supposition. When the lake dried up this July after it drained, all these events occurred as shown in Figure 3. The removal of over 6 million gallons of water from the Summit Valley as a result of this project will have drastic effects on the environment.

This statement could not be further from the truth.

In summary, the character of the surrounding area will not change because the land use will remain open space and the habitat types in adjacent areas are not dependant on a functional dam

"Open space" is hardly a specific enough classification in which to compare pre and post project conditions with regard to the serious ecosystem changes that will result from this project. I would simply refer you to the comparison photographs in Figure 3. In this case a picture is truly worth a thousand words.

And again. As much as the application tries to raise the specter of dam safety, there is no credible data to show that the dam in its current state is dangerous and it certainly would pose no risk if lowered 2.2 ft to hold less than 50 acre-feet of water.

There is also an attempt to claim that the ground water levels would not be affected by draining the lake. Please see the response below concerning this claim made by D.Shaw.

This statement has no basis in fact.

The TDLT will not apply for additional water rights to support wetlands and/or wildlife because its unfeasible for many reasons (water rights availability and 20+-year processing time for SWQCB permit)

There is no evidence or documentation to support this statement. In fact, in personal communications with Michael Contreras from the WRCB and a prominent Sacramento water rights attorney, I was



Figure 3: Comparison aerial photos of Van Norden Lake on June 21, 2016 and August 8, 2016. These photos document the presence of a full lake in the Donner Summit Valley. The photos on August 8 document that without the lake water the lake bed goes completely dry.

assured that water rights were available and that the normal process would not be longer than a few years. This was also communicated to us by the Director of TDLT, the applicant, in an email dated 11/12/14 in which Mr Norris acknowledges that water rights processing time was 3-5 years (see Attachment C). This refusal to obtain proper water rights by TDLT is a red herring that they are purposely using to justify their destruction of the lake and wetlands (see discussion below).

Section 3f. Are there existing erosion problems or geologic hazards occurring on this site, such as landslides, mudslides, ground failures, earthquake faults or similar hazards? If yes, describe:

Again the statements paint the existing dam with the problems of the previous configuration before the spillway was notched in 1976. A spillway reduction of 2.2 feet would maintain a less than 50 acre-feet lake and be of no risk according the DSOD.

This statement is antithetical.

The Truckee Donner Land Trust mission is to preserve and protect scenic, historic and recreational lands with high natural resource values in the greater Truckee Donner region.

How is the destruction of sensitive and unique scenic and environmental habitat being preserved or protected by its destruction? When TDLT was raising money for this acquisition, they promised exactly this proposition. And here we are four years later and they are completely destroying it (again I would draw your attention to Figure 1).

With respect to the natural state of the South fork of the Yuba River. The presence of the existing dam is the only thing that maintains any part of the South Yuba River in the Donner Summit Valley during the summer months. See Attachment A to see what happens to the South Yuba river without the dam.

There is no obligation by TDLT to dismantle the dam. Their obligation is to stand by their promise to their donors to preserve the rich habitats that made the Donner Summit Valley a scenic and precious natural resource.

#### 4g. Are there any wetlands or riparian areas on this site? \_\_\_\_ yes 2no

This may be technically true since TDLT has used re-parceling to "piecemeal" this project (<u>see discussion below</u>). They have deliberately split the existing parcel so that they can try to isolate this project from its effects on the lake and wetlands. This is blatantly against the spirit of environmental protection statutes and the CEQA process and there is plenty of case-law against this practice. This would certainly be grounds for future legal action if this application was approved.

# Document: GroundwaterEffectsduringDrawdown20160209 (link)

To follow up on statements made above in the Questionnaire, the response to this document concerns the statement that ground water levels would not be affected by draining Van Norden Lake. This document is a report by Balance Hydrologics which ostensibly describes groundwater measurements over a period from August 2013 to November 2015. The last month of this period included the "draw down" (aka draining) that TDLT was forced to do on the lake because they failed to obtain water rights. The conclusion that the study supposedly supports is that the level of the lake has no effect on groundwater levels in the Summit Valley. A premise that is hard to understand since one definition of a lake is the "exposed level of the ground water level".

Consider the data in the Figures 1 & 2 of the document. The first point that the report makes is that the groundwater levels are higher than the lake which may give the impression that he lake does not contribute much to ground water levels. What is misleading is the fact that all of these measuring stations are significantly higher in elevation than the lake. The lake is of course at the lowest point in the valley since water flows downhill. Moreover, unlike the groundwater, the lake has a set height which is the level of the spillway. What is really important here is the depth of the groundwater which determines the availability of the groundwater to plant life.

The real problem with this document lies in the interpretation by Balance Hydrologics of the data during the draining of the lake in October 2015. The draining is evident by the precipitous fall in the lake level. When you look at the ground water levels for the measuring stations near the lake during the draining they are going up. The conclusion made by Balance Hydrologics is that lowering the lake has no effect on

groundwater levels. In fact, from this interpretation of the data you could conclude that lowering the lake increases groundwater levels. Completely counter intuitive, but seemingly supported by this data.

Of course this conclusion makes no sense and is not at all supported by this data. Looking at the October-November periods from 2013 and 2014 shows the same phenomenon. It is only when the small footnote on page 1 of the report is considered that the data makes any sense.

"1.76 inches of precipitation was recorded on October 1, 2015; 1.32 inches was recorded on October 17, 2015, and periodic smaller precipitation events occurred in November, as measured at the Central Sierra Snow Laboratory, located approximate 0.25 miles north of Van Norden Meadow. Data provided by the Western Regional Climate Center."

The reason that lowering the lake had no effect on groundwater levels is because the fall rains had come and the groundwater was being recharged from the surrounding watershed as it is every fall. In fact, we even had a little snow during that period. The reality is that this data is completely useless in determining the effects of draining the lake on ground water levels. The critical time to observe the effects of the lake on groundwater levels is in the summer (red boxes) when groundwater levels are no longer being charged by melt water (like they are at the writing of this report). While we haven't seen the data for the summer of 2016, it would only make sense that during the critical summer period, groundwater levels will plummet without the lake to charge them when the discharge has stopped.

Statements in this document and references to it in the Questionnaire are completely unsupported and should not be given any weight in this application.

# Document: Hydraulic Memo 20150715 (link)

This hydraulic evaluation done by Balance Hydrologics is used in support of implications that the dam may be unsafe. This response discusses the results of the report and consideration for its interpretation.

Balance Hydrologics has used standard practices to perform the analysis. There is one parameter that is very important to the analysis that should be noted. The Breach Formation Time on page 5 was determined to be 1 hour. This means that we are not talking about a sudden failure that releases a wall of water down the Yuba which they state in the report.

The crux of the report starts with the RESULTS section on page 7. The first section, the Sunny Day Breach, makes it clear that while it would be an event to see, the banks of the Yuba would contain the added flow from a breach under normal conditions. The real question of course is what happens if the breach were to occur during a storm. That scenario is covered by the Design Flood scenario. This quickly gets complicated, but the results can be visualized in Figure 4.

The important results of the scenario are:

- The design flood was theoretically designed to be at the "tipping point" in which the level of the Yuba would be at the bottom of the living quarters for the only 2 houses in the inundation zone of the flood. This 1 in 120 year event was to measure the added contribution of a breach. There will still be property damage to the lower non-living sections of the homes at this level.
- The added contribution of a breach for the existing 190 acre-ft lake raised the level of the water in the living quarters by 47 inches over the one hour breach time. There would still be property damage to the home.

- Under conditions in which the lake contained only 50 acre-ft, the level only rose 28 inches. There would still be minor property damage.
- Under conditions in which the lake only contained 5 acre-ft (the level described in this project),
   the level only rose 1 inch into living quarter. However, there would still be property damage.

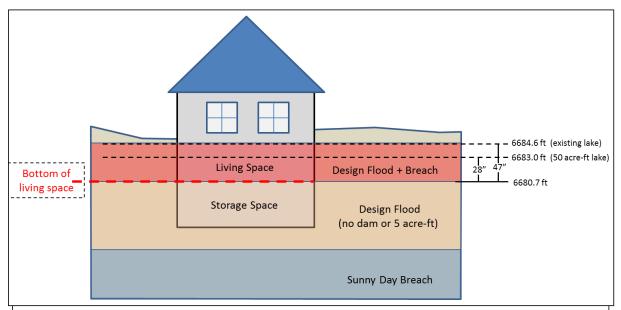


Figure 4. Flooding scenarios for house in innunundation zone along Yuba River in Soda Springs. The Sunny Day Breach has little or no effect. The Design Flood inundates the house up to the bottom of the living space, causing water damage to storage space area. This would also be the case for a breach with a 5 acre-ft lake or if no dam were present. The Design Flood + Breach would either inundate up to 47" in the living space with the existing lake present or 28" if a 50 acre-ft lake were present. The probability for loss of life would be very low (.0024) for either breach scenario. In each scenario of the Design Flood, there would be property damage.

The most important part of the report of course is the evaluation of the hazard posed to loss of life in this scenario. The crucial finding from the detailed discussion in the report is that they find there are only two homes in the vicinity of the dam that are affected and there is only a very low probability of .0024 for loss of life under this severe scenario. Just to put this into perspective, this means that in 1 out of every 420 storm events of this magnitude there was the probability of 1 loss of life. Given the fact that this storm event occurs only once in 120 years, this means that there is a probability of one loss of life every 50,400 years (420 x 120 years). Remember that this probability is only in the equally improbable event that the dam were to breach in the first place. The report takes a swing at estimating that risk and comes up with a range over two orders of magnitude. The upper value of the range would be 1 in 50,000 (you would be 6x more likely to die in a plane crash). The bottom value of the range is 1 in 5 million (you would be 12x more likely to be struck by lightning). The bottom line is there is no added hazard to loss of life.

What this report touches on but fails to stress is that the Van Norden dam provides significant hazard prevention in the form of flood control. As shown in the last column of Table 2 of the report, the dam provides flood control potential except in the cases of reducing the lake to 5 acre-ft or removing the dam completely. And as the report clearly states, if the lake is left at 50 acre-ft it can provide moderate flood control that will serve to mitigate rather than increase the hazard of downstream flooding. The flood control effects are not seen in this type of report because the effects occur upstream of the dam. Attenuation of the storm surge by the dam would mean that in order to attain the flow rates for the

Design Flood described here, the severity of the storm would have to be higher (something that would occur even less often), or in more practical terms, the same severity storm would cause less damage due to surge attenuation.

# Document: Bio Report 20140217 (link)

My first comment concerns the definition of the Study Area. We commend Dudek in clearly stating that the Study area that will be affected by the project does in fact include the entire 721 acre Van Norden Lake and meadow area which includes both Nevada and Placer County parcels. As stated below, the project described in this application is an attempt to piecemeal the effects that this project will have on the entire study area by artificially isolating the lowering of the dam by re-parceling the property (see discussion below). Any biological analysis of this project would be deficient and inaccurate in not considering its consequences to the entire Summit Valley ecosystem that is described in the study area.

Unfortunately, Dudek used an out of date Soils Map (Figure 4 in the report) from ESRI to illustrate soil types. The ESRI map still shows the profile of Lake Van Norden before it was breached in 1976. This inaccuracy is important because much of the effects of this project will be on the area that is now shown as water on the map. Any soils analysis, especially hydric soils that will be affected by lowering the current lake are not represented on this map. Because this project will have its most serious effects on the incorrectly depicted area, the applicant should be required to have this part of the study corrected with accurate data before this application is acted on.

Fortunately, the Vegetation Communities map used in Figure 5 of the report did accurately show the current lake configuration. It should be evident to anyone looking at the map that it is the presence of the lake that supports the Willow Thickets wetland community that is such a valuable habitat in the Donner Summit Valley. These thickets are composed of Lemmon's Willow which has a root depth of only 24 inches and requires a high ground water table to grow. This project will drain the lake year round and lower the water table at the east end of the meadow by 5 feet. The willows will wither without the lake and 90+ acres of habitat will be lost. This is borne out by examining photographs of the Valley as the one shown in Figure 5 which shows only grasses in a dry meadow with no willows. As the study states, willow communities provide unique habitat especially for endangered species like the Willows Flycatcher. Reduction of the Willow Community by removal of the lake will destroy that valuable habitat. Please see more discussion of the threat to Willow Flycatcher in the Additional Comments section below.

I commend Dudek for performing a good report on the current biological status in the Donner Summit Valley. It should be evident to anyone that reads this report that Van Norden Lake and wetlands is a unique natural resource in the Sierras. However, as the authors state, their short study period in the area did not allow them do a comprehensive study. As a resident of the Summit area and a naturalist that studies the area year round I would add the following observations.



Figure 5. This slide is a comparison of photos taken in 1867 before the railroad or dam was completed and the current time. The 1867 photo (see next slide) shows the Summit Valley only 23 years after the first wagons came through the summit area. There is very little development in the area and pretty much reflects the configuration of the valley prior to settlement. The red box shows the portion of the valley seen in the photos. This area will be directly affected by this project and as the comparison shows, there will be a dramatic change in the valley from lacustrine, marsh and Willow thicket wetland habitat to a much drier montane wet/dry meadow with a narrow riparian corridor.

While the Western Toad was mentioned as a resident amphibian in the study area, the size and vitality of this population could not be appreciated from such a short study period. In fact, the Donner Summit Valley has one of the most robust populations of Western Toad in the Sierras. The unique habitat created by the shallow areas of Van Norden Lake (other lakes in the area are too deep) produced tens of thousands of toads each year. Please refer to a complete discussion of the Western Toad phenomenon at Van Norden lake in Attachment B for more information. This project will drain all of the more than 16 acres of shallow lake that now provides prime breeding habitat for this amphibian. The Western Toad is now

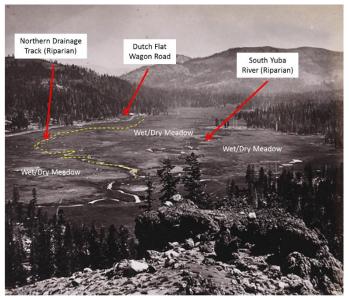


Figure 6: The drainage features in 1867 of the Summit Valley are shown in here in greater detail in this 1867 photo by Alfred A. Hart. The Northern Drainage track that drains Boreal Ridge (in yellow) formed a stream fork that joined the South Yuba about midway in the valley. Both the South Yuba and Northern Track were riparian stream beds bordered by seasonal wet/dry meadow. There are no apparent wetlands evident other than the riparian river courses.

classified at near-Threatened by the ICxxx and populations throughout the Sierra are dropping, except in the Donner Summit Valley. Moreover, the main cause of the population decrease is habitat

destruction. As amphibian populations decrease world wide, it makes no sense to allow for the destruction of prime breeding habitat like that provided by Van Norden Lake.

With respect to special status animals. Dudek has rightly identified Van Norden Lake as prime habitat for the special status animals such as the Bald Eagle and White Pelican. To supplement their observations I can confirm and document that in fact both of these species do take up summer residence in Van Norden Lake. Please refer to the photographs in Figures 10 and 11 which shows both species at the lake. In fact,

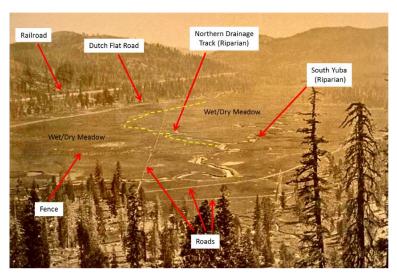


Figure 7: This photo by Carleton Watkins from the 1870s after the completion of the railroad shows a similar area of the Summit Valley as the photo from 1867 although it includes more of area at the western end of the valley where the current lake is. There is more signs of development with distinct roads and fences presumably for stock grazing. The Northern Track and South Yuba are still present. It is easier to see the areas of seasonal wet/dry meadow that bordered the water courses in this photo. Again, no wetland areas are evident.

Van Norden lake due to its shallow waters and abundant fish population supports a group of 10-20 white pelicans every year. This year the white pelicans were at the lake until the end of July when the lake finally drained to a level too low to support them. This project will drain the lake completely year round which will remove the fishery that support the Eagles and Pelicans thus extirpating these species from the Donner Summit Valley. Certainly changes as drastic as this require a more comprehensive study as suggested by Dudek to determine the feasibility of destroying this habitat.

The thorough report done by Dudek showing the intricate dependencies of the current biological

**Donner Summit Valley** clearly show that it is not possible to isolate the effects of this project on this complex ecosystem as has been done in this application. Permanently draining Van Norden Lake will cause drastic habitat changes that will have far reaching consequences throughout the Valley. Moreover, there will be destruction of unique

conditions in the

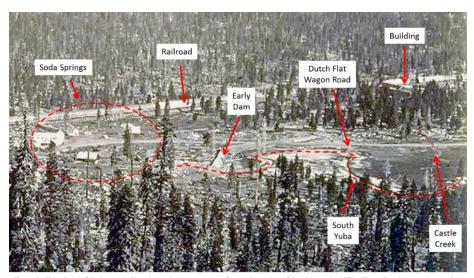


Figure 8: This photo of Carleton Watkins shows the construction of an early version of the dam in the 1870s. The railroad is complete and the Dutch Flat Wagon Road is shown going through the original Soda Springs station area. This shows the course of the South Yuba prior to the dam's completion which is currently now covered by lake and wetland. The Yuba did a big meander just upstream of the dam which may be the remnant water course that exists now. Castle Creek. It appears that Castle Creek entered pretty much where it does now. While it is hard to tell in black and white, there does not appear to be any wetlands present.

biological habitats that will serve to decrease the biodiversity within the Valley as well as further threat sensitive species.

# Document: MgmtPlan-Att1 and 2 only compressed (link)

This document purported describes the management plan for pre and post project conditions. Unfortunately, this is another attempt by the applicants to set a false baseline condition for this project. Consideration of this project should take into account the seasonal changes that occur in the Donner Summit Valley, primarily the shifting hydrology through the Spring and Summer months. It is impossible to evaluate the effects of a project such as this by "snap shotting" certain times during the season as has been done in this management plan.

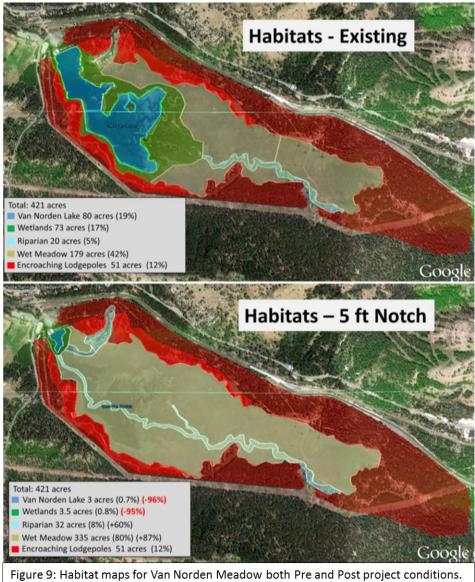


Figure 9: Habitat maps for Van Norden Meadow both Pre and Post project conditions The draining of the lake will drastically reduce the lake, marsh and willow thicket wetlands (95% reduction).

#### Consider the following points:

# Section 1.1 Historic Van Norden Reservoir Habitat Pre-Project Prior to Emergency Water Release

It seems obvious that the preparer of this report, Lori Carpenter, had not read the Biological Report. This is a pretty clumsy attempt to simplify the project management to only the open water habitat when in fact the reservoir has traditionally consisted of open water, marsh and palustrine willow thicket wetland habitats that will all be drastically affected by the project and have to be managed. The existing habitats and predicted post project habitats if the dam was lowered 5 ft is shown in Figure 9.

The existing habitats provided a rich ecosystem that supported a fishery, migratory birds, breeding waterfowl and predatory raptors as shown in Figure 10.

#### Section 1.2 Current Van Norden Reservoir Habitat Pre-Project

It is in this section that the applicant is trying to establish a false baseline to this project. It was certainly by design that they chose to wait until July to do their aerial shots. Contrary to Ms Carpenter's statement that no previous published aerial photos existed, the aerial photos shown in Figure 3 were taken by me in June. In addition, there were also aerial videos that were published on our Facebook page and available to the public at our <a href="SaveVanNordenLake.Org">SaveVanNordenLake.Org</a> website and <a href="Facebook page">Facebook page</a> (see these links: <a href="video1">video 1</a>, <a href="video2">video 2</a>). As the photos clearly show, the word current is a very ambiguous word to describe the pre project status of Van Norden Lake. From January (see this <a href="video link">video link</a>) until the end of June there was in fact a full lake present in the valley as there has been for the last 40 years. It should also be noted that the only reason that the lake drained was because TDLT has refused to apply for proper water rights (see the discussion below).

So again the list of Van Norden Reservoir habitat pre-project is incomplete and misleading. There were still marsh and palustrine habitats present even two weeks before July 7<sup>th</sup> when TDLT took their "convenient" pictures. Not only was the habitat present, but it was being used by migratory aquatic birds as shown in Figure 10.

## Section 1.3 Historic Van Norden Reservoir Habitat under Post-Project Conditions

It is a shame that Ms Carpenter didn't do a follow up on her aerial pictures before listing all the "new" habitat that was going to appear after all the water was removed. As the aerial photos and video (see this link) show from August 8 in Figure 3, only a month later the Van Norden Reservoir Habitat area was completely dry. In fact, this would be the case much earlier if in fact the dam was lowered and the lake drained. Contrary to applicant's unsupported statements, the existing willow thicket wetlands (which were seemingly missed in Section 1.2 above) will wither and die without the lake water. This was already evident as shown in Figure 12. The word "facultative" is used to describe the eventual habitat but I believe "fictional" might have been a better adjective to use.

This attempt at "fixing" the pre and post conditions for the management plans to support this project is disingenuous to say the least.

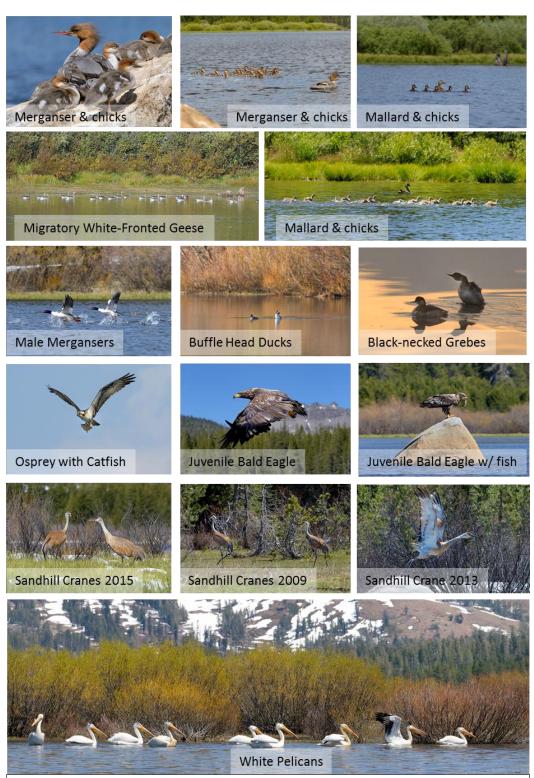


Figure 10: Photos taken in the past ten years of both breeding water fowl, migratory birds and predatory birds that all use Van Norden Lake (including the special status species Bald Eagles and White Pelicans. All photos were taken in the Van Norden Lake and wetlands area by the author.

The prediction that the lakebed and surrounding willow thicket wetlands will be transformed into much drier alpine montane wet/dry meadow has been discussed above. In addition to the historical photos in Figures 5-8, the current configuration of the Donner Summit Valley that is shown in Figure 13 indicates that once the water is removed from Van Norden Lake at the west end of the valley, it will revert back to the same wet/dry meadow status depicted in the historical photos (see <a href="Attachment E">Attachment E</a> for more discussion).



Figure 11: Photos taken in May and late June that show the presence of the lake as well as waterfowl, a migratory Sand Hill Crane, and special status White Pelicans using the lake before it started draining in early July.

#### Section 2.1.2.2 Evaluation of Historic Open Water Areas

This section is a monument to the concept of piling on superfluous data to overwhelm the reader. I would also be hard to find a section that doesn't have more initials and acronyms. The supposed "watershed" approach that the applicant claims to be using does nothing more that raise the "noise" level to decrease the impact of this project. The attempt at comparing the Van Norden wetland ecosystem to every lake meadow and vernal pool in a 63 sq mile is an obvious attempt at burying any consequences of this project and belies the uniqueness of the Van Norden ecosystem. Comparing the unique shallow Van Norden lake with its rich ecosystem with the other deeper glacial tarn lakes in the area, many of which are dammed and have very sparse ecosystems is a complete obfuscation. This is a pretty obvious attempt at putting the changes out of context with respect to the environmental effects of this project on the Donner Summit Valley. While it makes sense to consider the impacts of the project on the watershed, evaluation should be focused on the Donner Summit Valley watershed where the impact will be the greatest.

There is also an effort made here to justify classifying the pre habitat as only open water without the existing marsh and willow thicket wetlands. The approach here is to put enough forest out there that it's hard to see the trees. However, if you look carefully through the forest there are some snags that need attention. As stated above, it is not possible to consider the effects of this project on the Valley without including the existing lake, marsh and willow wetlands.



Figure 12: Lemmon's Willow along shore of drained Van Norden lakebed taken Aug 14, 2016. The willow are already withering due to the removal of the lake water and the concomitant decrease in groundwater levels.

The following statement is incorrect.

There are several similar open water lake habitats within the study area for wildlife use.

This unsupported statement that implies alternative habitats that are similar to Van Norden Lake is not true. Van Norden Lake is unique in the area because is very shallow with an average depth of only 2 ft due to its location on a flat floodplain in the Summit Valley. Every other lake in the area is much deeper and poorer in vegetation or are completely surrounded by shoreline development. As discussed below the unique shallow waters make for prime breeding habitat for water fowl and the Western Toad.

The following statement is not true

The post project wetland habitat will be more diverse and adjacent to existing high alpine wetland meadows and riparian habitat, increasing the overall watershed functions.

The post project wetlands will be much drier earlier in the season. Without open water and willow wetlands there will be no fishery or breeding habitat for waterfowl and western toad and no food source for predatory raptors and White Pelicans. The result will be a reduction in diversity of fish, amphibians and birds. The project converts the highly diverse lacustrine, marsh and willow thicket wetlands into more of the existing drier montane wet/dry meadow (see Attachment E). The fact is the result of the project will be a decrease in diversity.

The existing willow wetlands are already adjacent to high alpine meadow and riparian habitat and there will be no increase in watershed function. It is more likely that without the lake water to recharge the alpine meadow aquifer, there will be less watershed function during late summer and fall.

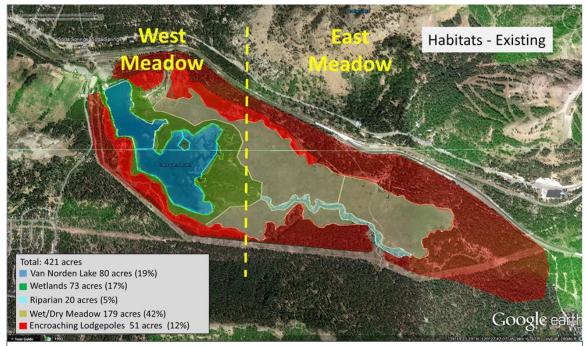


Figure 13: Habitat maps for Van Norden Meadow showing the natural separation of habitats at the east and west ends of the Donner Summit Valley. At the drier east end of the valley the meadow is predominantly alpine montane wet/dry meadow. The presence of Van Norden Lake at the west end supports the surrounding marsh and willow thicket wetlands. The removal of the lake will transform the west end in more of the same wet/dry meadow already at the east end.

This statement is incredible considering what is really happening.

Adding a wetland complex of almost 100 acres adjacent to existing wetland meadows/riparian habitat within the Summit Valley could be a significant benefit considering that high alpine wetland complexes of this size are rare, especially at the top of watershed in this area.

The removal of over 6 million gallons of water stored in Van Norden Lake which is what this project will do can in no way add wetland habitat. The simple truth is that the existing 90+ acres of willow thicket wetland will be drained and replaced by much drier alpine meadow that will be dry meadow by midsummer without the lake water to maintain the water table. Moreover, overall diversity and health of the meadow will be severely reduced by the loss of the precious lacustrine habitat of Van Norden Lake and wetlands. The severe de-watering of the area is shown in the aerial photos in Figure 3 and will much worse if this project permanently drains the lake.

#### Section 2.1.2.3 Wetlands

As above the applicant attempts to use a drained lake baseline to describe conditions that only exist for a portion of each year. This "desktop delineation" of the wetland areas in the Donner Summit Valley is flawed because it ignores the presence of a full lake for more than half of the year. There is also an

attempt made again to piecemeal this project and isolate it from the effects it will have on the entire Summit Valley ecosystem (see discussion below).

In an attempt to snap shot conditions, the applicant describes the area as freshwater mudflats. This was true when they took their photographs in July. However, it was only for a short period of approximately 4 weeks during the entire year that this condition was true. Photos in Figure 3 clearly show the area was inundated by Van Norden Lake until the end of June and there were 90+ acres of willow wetlands surrounding the lake. Photos in Figure 3 also show that the mudflats that formed when the lake drained in July, were dry by the first week in August. It would therefore be incorrect to use the conditions described in the application to assess the conditions of the wetlands during most of the year.

#### Section 2.1.4 Impact to Rare, Threatened or Endangered Species

The following statement is incorrect.

Direct impacts of the Project on rare, threatened, or endangered species within the Van Norden Dam project area are not expected to be significant.

Again Ms Carpenter must have missed this section in the Biology Report. There are several special status species that will be drastically affected by this project including the Bald Eagle and White Pelican. In addition, there will be serious habitat reduction for the near-endangered Western Toad (see discussion below). Finally, there will be a drastic reduction of the willow thicket wetlands surrounding the lake the will drastically reduce habitat for the endangered Willow Flycatcher (see discussion below). Threats to any of these species should be of concern when considering the project. The omission of these threats in the application are a serious deficiency that should be corrected before the application is considered.

# **Additional Comments**

In addition to the comments on specific supporting documents I would like Nevada County to consider the following general comments concerning this project.

# Piecemealing the Project

As discussed in comments above, this application is a blatant attempt at isolating the lowering of the dam from its effects on the entire lake and wetland ecosystem. TDLT has intentionally split off the land on which the dam sits from the original parcel that included the dam and the lake (see Figure 14). The intent is clear. By isolating a new parcel with the dam on it from the lake and wetland portion they hope to avoid the environmental scrutiny that such a drastic change in the Summit Valley requires. This maneuver is not only dishonest but it is contrary to the intent of the CEQA process. There is ample case law against this type of activity and provides grounds for future legal action if it is not corrected in this application.

# Setting an Artificial No-lake Baseline

This is another attempt by the applicant to avoid a thorough environmental review. As discussed above like most meadows in the Sierra Nevada, the Donner Summit Valley experiences seasonal changes in precipitation that effect the hydrology of the Valley. With the heavy snowfall and winter rains as shown in Figure 15, there are large volumes of water that flow through the valley during winter, spring and early summer. In its current configuration with the 10 ft high spillway in place and a 24 inch diameter

drainpipe, water is stored in Van Norden Lake starting as early as November (if the rains are heavy) and lasting until the beginning of July. Flows through the spillway are greater than 2000 cfs during heavy runoff periods which overcome any effects of the drainpipe which can has a maximum flow of approximately 30 cfs or less.

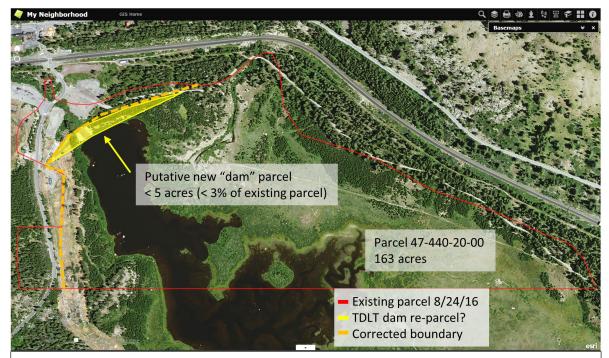


Figure 1: Satmap from Nevada County GIS showing the original parcel that was acquired by TDLT and the "piece-meal" parcel they are trying to use for this project. At the time of this report, Nevada County GIS still showed the original parcel. The new parcel would represent less than 3% of the original parcel and would include none of the lake and wetland. This is an obvious attempt at trying to separate the impact of the project on the remainder of the original parcel containing much of the lake and wetlands. This is a clear violation and goes against the intent of the CEQA process.

The attempt by the applicant to characterize the pre project conditions as having no lake present are based upon only a short seasonal period during the summer when traditionally dry conditions exist. They do not represent conditions which are present for more than half of the year. Moreover, the lake is present during the most critical period with respect to the growing season for meadow vegetation as well breeding season for most of the wildlife in the Valley. The lake is also present during the spring bird migration and is used as a stopover area by migrating birds including Sand Hill Cranes (see Figure 11).

Any meaningful environmental review of this project must take into account its effects on the entire hydrological and environmental seasonal cycle in the valley and not just a short summer snapshot.

# Threats to Special Status and Endangered Species

The Biological Report clearly identifies threats to the Bald Eagle and White Pelican that are summer residents at Van Norden Lake. In addition, this project will drastically reduce the breeding habitat of the

near-threatened Western Toad (<u>see Attachment B</u>). But most critically, the project will have profound effects on the endangered Willow Flycatcher.

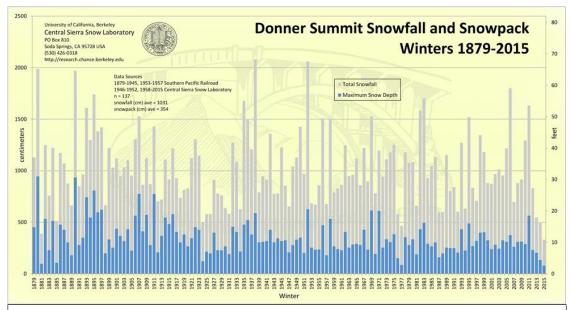


Figure 15: Donner Summit snowfall and snowpack statistics from the Central Sierra Snow Lab. Average snowfall is 34 feet of snow.

The Biological Report states quite clearly that the large Willow Thicket wetland habitat that surrounds the lake is prime Willow Flycatcher breeding habitat. More important, Willow Flycatcher breeding habitat is dependent upon the presence of open water (personal communication with Ted Beedy). Contrary to the unsupported claims by the applicant, removal of the lake water will not convert the dry lake bottom to more Willow Thickets. Lemmon's Willow requires a high water table because it has a shallow root system (24 inches max). This project would lower the groundwater level by five feet in the lakebed permanently during the entire year. This would not support a Willow Thicket community. This can be clearly seen at the eastern end of Van Norden Meadow which is alpine montane meadow and too dry to support Willow growth. Without lake water, the dry lakebed will convert to the same drier montane meadow. This prediction is supported by historic photos in Figures 5-8 that clearly show wet/dry meadow and no willow thickets.

The applicant has continually promoted this project by using misleading assumptions and unsupported claims that removing the lake will increase Willow Flycatcher habitat. This claim is not only not supported by any data, but is in fact refuted by historic photos and the condition of the meadow adjacent to the lake which does not support willow thicket habitat. Considering the critical status of the Willow Flycatcher (which has been identified in the Van Norden Meadow – Ted Beedy personal communication) the question of the effects on the habitat for this endangered bird should be thoroughly studied before any decision is made concerning this application.

# Water Rights for Van Norden Lake

The applicant for this project states in several documents that they do not have the water rights to keep water in Van Norden Lake. The history of the water rights for Van Norden Lake are very well laid out in a letter from Michael Contreras from the Water Resources Control Board (see Attachment D). It is clear

that currently the water rights for water in the Summit Valley have reverted to the state after PG&E abandoned them in 1976 when they breached the dam. The letter clearly lays out the alternatives for TDLT to proceed and the first one is to apply to WRCB for the water rights. In personal communications with Mr. Contreras in May of 2014, he assured me that the water rights were available and that there were no a priori reasons that would preclude TDLT from obtaining the rights. I followed up on this conversation by contacting a prominent Sacramento water rights attorney who confirmed that obtaining the water rights was not only possible but probable. Finally, in discussions with the US Forest Service about their subsequent ownership of the Summit Valley Land I was told by the district ranger Johanne Robique that she did not doubt that water rights could be obtained.

In an effort to solve this water rights issue, our organization SaveVanNordenLake.Org, made an offer to the applicant to buy the land on which the dam and lake reside and assume responsibility for procuring the water rights to keep a less than 50 acre-feet lake on the property (see Attachment C). Our plan was to put a permanent conservation easement on the property and maintain is as a nature preserve. Unfortunately, TDLT would not agree to this solution. We then negotiated with TDLT in which our group would finance the procurement of water rights with the stipulation that they retain ownership of the land that the dam was on (see Attachment C). This solution also failed due to the refusal of the forest service as future owners of the land to participate in the agreement.

The relevance of this information is that contrary to the claims that the applicant has made that it was impossible to procure the water rights, the simple truth is they who have refused to apply for these rights. It seems pretty obvious that they have intentionally avoided applying for the rights knowing full well that the State would have no alternative but to make them drain the lake. This is a simple legal maneuver that the applicant is using to absolve themselves of the habitat destruction that this project would cause in the Summit Valley. And to be clear, our organization is still willing to finance procurement of the water rights to a less than 50 acre-feet lake by the applicant as one form of mitigation that would preserve at least some of the habitat in the Valley.

# Recommendations

- In light of the numerous incorrect and inaccurate statements made in this application and supporting documents, it would seem only prudent to delay the acceptance of the application until the deficiencies are thoroughly addressed by the applicant.
- The impact of this project on the entire ecosystem of the Van Norden Lake and wetlands and the west end of the Donner Summit Valley should be taken into consideration when evaluating this project. The evaluation should not be restricted to the small dam parcel artificially created by the applicant in an attempt to isolate the effects of this project on the entire environment.
- Due to the transformative changes that this project would make in the existing ecosystem, many of which would be detrimental, a thorough examination of the environmental impact of the project is warranted and a full Environmental Impact Report should be submitted for evaluation before any decision is made by Nevada County.
- In any evaluation of the project an alternative compromise solution that maintains a State compliant less than 50 acre-feet lake and wetland area in the Donner Summit Valley should be seriously considered. This solution would go a long way in mitigating the drastic changes in the ecosystem and would be more in line with the preservation of the area which the applicant professes in their intent.

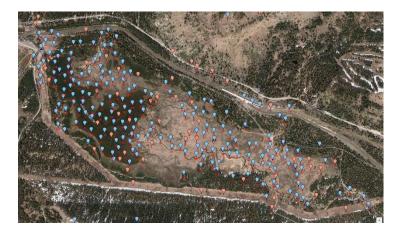
# About the Author



Dr George Lamson has owned a cabin in the Serene Lakes Community since 1998 and has been a full time resident of the summit area since 2009. Dr Lamson finished an undergraduate degree in biochemistry at UCSB and received a PhD in Molecular Immunology from UC Berkeley. He worked for 30 years as an academic scientist and then as Director of Bioinformatics at Chiron Corporation in the Bay area. Dr Lamson is an accomplished nature photographer and naturalist and has photographed and studied the Donner Summit area for over 20 years including over 6000 photos of the

Summit Valley (see map). For the last five years Dr Lamson has led natural history hikes

around the Summit area including the Van Norden Lake and wetlands area and has documented the ecosystem through his photography and online publishing at his website <a href="OnTheSummit.net">OnTheSummit.net</a>. Dr Lamson is a founding member of the <a href="SaveVanNordenLake.Org">SaveVanNordenLake.Org</a> organization.



# **Attachment A**

Downstream Effects of Van Norden Lake on the South Yuba River

The following attachment is a post published in the online blog Van Norden Log at the SaveVanNordenLake.Org website at the following link

http://onthesummit.net/wordpress/savevannorden/2015/12/05/draining-van-norden-lake-absurd-assertions-2-van-norden-lake-bad-yuba/

Please see the online article to access the accompanying video.



← Draining Van Norden Lake - Absurd Assertions #1

# Draining Van Norden Lake – Absurd Assertions #2 – Van Norden Lake is bad for the Yuba

Posted on December 5, 2015 by admin

#### The Claims

This week's absurdity comes from the people at SYRCL, specifically their River Science Director that is coordinating the Environmental Assessment of TDLT's plan to drain the lake and wetlands. We would refer you to her latest comments at the following link. It has been stated by some, that the "science" will decide the fate of Van Norden Lake. Unfortunately, as most working scientists know, scientific data can be inherently ambiguous and prone to multiple interpretations. In this article we will take a look at some of this ambiguity as it applies to the Donner Summit Valley.

While we recommend that you read the full article, we would like to address what we believe is the primary point of the article which is that Van Norden Lake has adverse effects on the Yuba River downstream of the dam. To support this assertion the article cites the "serial discontinuity" theory that states that impoundments of water in lakes within a river system will have significant effects on that system. The references are pretty technical and while Van Norden Lake doesn't really fit into the strict tenets of this theory, I don't think anyone would be surprised that there would be differences between lake and river habitats and they would affect each other. If you dive into the literature concerning lake and river systems you quickly realize that these fields of study are not always in agreement (see this paper supporting the advantages of the integration of lakes and rivers in a drainage system). Unfortunately, as with many complex ecological systems, there is not enough data to provide a definitive description of all the processes that are involved and their positive and negative effects.

#### The Reality

Fortunately, we don't really have to be concerned about whose theory is correct or even, contrary to the SYRCL article, whether Van Norden Lake adversely affects the downstream Yuba. To understand why Van Norden Lake doesn't really have profound effects on the Yuba downstream, let's take a look at some of the data provided by none other than, SYRCL. In their article, SYRCL included a pretty much unreadable graph that purportedly points to Van Norden Lake as the cause of a temperature elevation in the downstream Yuba. However, if you go to the actual raw data that they provide (kudos to whoever designed their interactive webpage) you can get a clearer



Don't miss the flyover of the dry

picture of what is actually going on. You can view the water temperature data in detail for 2014 in Figure 1.

In order to understand this data it is important to know the locations of the monitoring stations which are shown on the map above the graph in Figure1 and the yearly seasonal cycle of Donner Summit Valley. The monitoring sites at Castle Creek (site 40) and the South Yuba headwaters (site41) are above the meadow and lake and sites 38, 39, 58 and are below the dam (Unfortunately, the colors for Sites 40 and 58 are very similar and those sites are identified on the maps).

The yearly water cycle of the Donner Summit Valley is

#### **BLUE PAPER**

# OPEN LETTER TO TDLT

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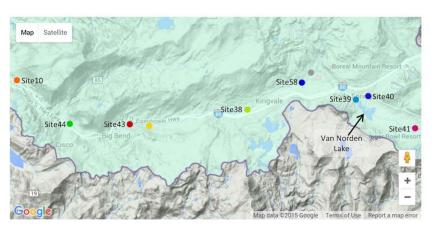
somewhat unique in that the area experiences some of the highest snowfall amounts in California with an average of 34 ft (see this <a href="link">link</a>). As a result water is sequestered as snow from the months of November to April or May and the South Yuba, Castle Creek, and Van Norden Lake remain frozen during this period. In normal and dry years the flow down the Yuba is minimal during this period (unless there are heavy winter rains).

It is not until the spring melt in April and May that the flow down the Yuba starts in earnest and as we will see by the data discussed below, that flow comes to an end in mid summer. The reality is that other than



Yuba dry riverbed in Setember upstream of Van Norden meadow

the period from April to July, for much of the year the Donner Summit Valley and Van Norden Lake and Meadow are effectively disconnected from the flow of the downstream South Yuba and as a result have very little influence on it.



Click and drag on chart to zoom.

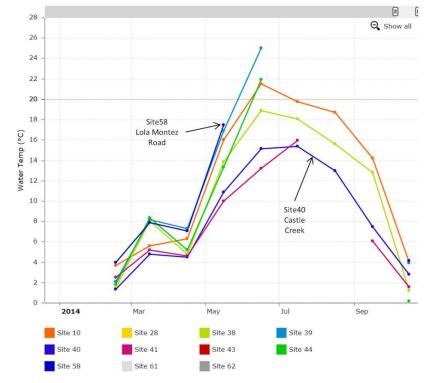
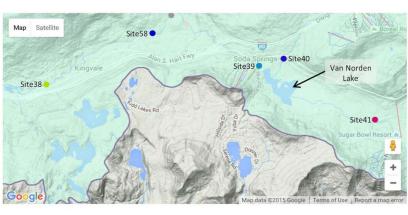


Figure 1. Temperature monitoring data from SYRCL monitoring of sites on the South Yuba River headwaters area for the year 2014. The site locations are shown in the map above the graph of the data

#### Taking a closer look - The big disconnect

As with most things in this world the devil is in the details, so let's look a little closer at the data. The same temperature data for 2014 is shown in Figure 2 for just the sites immediately upstream and downstream of the lake and meadow. The site at Kingvale is also included for reasons that will be explained below.



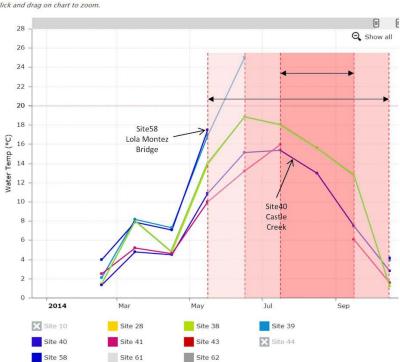


Figure 2. Temperature monitoring data from SYRCL monitoring of sites directly above and below Van Norden Lake on the South Yuba River headwaters area for the year 2014. The site locations are shown in the map above the graph of the data. The gaps in measurements shown in red represent absence of readings due to lack of water at the sites as the Yuba dries out. The arrows show periods of partial and total disconnection of the Yuba from the flow downstream.

As is often the case in science it is important to look at all aspects of the data. In order to understand that Van Norden Lake has very little influence on the downstream Yuba it is important to look at the frequencies of the temperature readings at the upstream and downstream sites instead of the values of the temperature readings.

You will notice that there are not contiguous readings for Sites 58, 39 and 41 during the summer and early fall. The reason for these gaps is due to the fact that during these months there is no water flowing to take temperature readings. What this data shows is really the crux of the situation with the Yuba River in the Summit Valley. The fact is that vast majority of water

drains out of the Summit Valley from April through June and there is not enough water coming out of the watershed during the summer and early fall to keep the River flowing past July. As a result, the Donner Summit Valley is disconnected from the downstream Yuba River during that period.



Dry input of Yuba into Van Noden Lake - September

As the data shows, the disconnect starts downstream at Site 58 in early summer and then moves up to the output of the dam in midsummer and is finally disconnected from the upper Yuba when it goes dry in late summer (see the August flyover video below).

While the input from Castle Creek continues during the summer, it is at such a low flow that it is dissipated when it enters the meadow and is not enough to supply the Yuba. The simple truth of the matter is, contrary to what has been stated by SYRCL, for most of the summer and early fall Van Norden Lake is disconnected from the downstream Yuba and really has no effect at all. And lest you think that this disconnection is due to the dam, keep in mind that the 180 acre-ft of water that is in the current lake is less than a day of flow down the Yuba during the melt. This natural disconnection has always occurred in the Summit Valley except in the heavier snowfall years. It is part of the reason that the valley probably never supported a fish population. The yearly occurrence of this phenomenon is shown



Dry input of Castle Creek into Van Noden Lake – October

in Figure 3 which shows data for the last 3 years showing that each year the Yuba disconnects during the summer months.

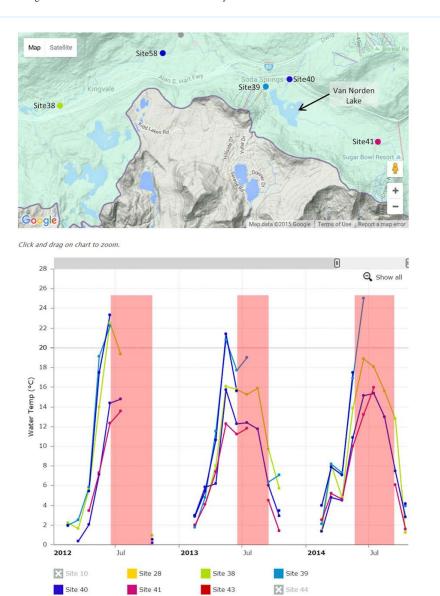


Figure 3. Temperature monitoring data from SYRCL monitoring of sites directly above and below Van Norden Lake on the South Yuba River headwaters area for the years 2012-14. The site locations are shown in the map above the graph of the data. The gaps in measurements shown in red represent absence of readings due to the yearly lack of water at the sites as the Yuba dries out and disconnects from the downstream flow.

#### **Looking Downstream**

Site 58

It is SYRCL's claim that Van Norden Lake adversely affects the downstream Yuba River by raising the temperature above 20° C. Their own data show that this in fact cannot really happen because the Yuba realy goes dry below Van Norden Lake (see our flyover of the Yuba below). You may be saying to yourself right now, wait a minute, what about site 38 just below Kingvale which shows continuous flow all year? This is where things get really interesting. If water is not coming down the Yuba above Kingvale, how is it that there can be a nice cool supply of water running all year from Kingvale down to Cisco and beyond. The answer to that riddle is shown in Figure 4. It turns out that there are three small lakes, Kidd and Upper and Lower Cascade, up on the ridge south of Kingvale that have PG&E dams on them.

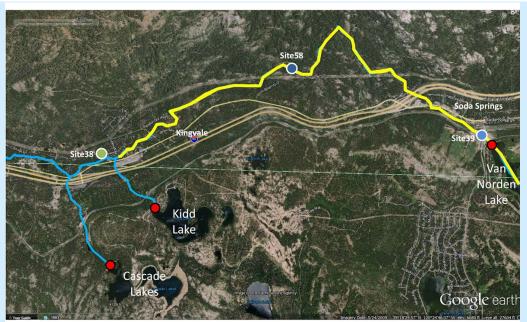


Figure 4. A satellite map of the course of the South Yuba River from Van Norden Lake to just downstream of Kingvale. The yellow line shows the portion of the river that goes dry during the middle summer and early fall in a normal snowfall year. The blue lines show the flow of Cascade and Kidd Lakes which feed the South Yuba below Kingvale during this period when water is released from the PG&E dams on those lakes. This explains why there is a constant flow of water at the SYRCL monitoring site 38 while both sites 58 and 39 have a gap in reading during summer and early fall.

During the summer months water is released from these lakes and it flows down into the Yuba just below Kingvale and provides the water to keep the Yuba alive from Kingvale on. The real irony is that when Van Norden Lake was operated as a full 5800 acre-ft lake, cool water was released from the bottom of the lake every year to keep a continuous flow of the Yuba all year. You really have to scratch your head and wonder how the SYRCL Science Director can claim that they are concerned about keeping the river connected when the only time the river was truly connected was when there was much more "cement" involved. It is unfortunate that SYRCL cannot let go of its overpowering anti-dam bias to see that in fact the only reason that there is a flowing upper Yuba River for a good part of the year is due to strategically placed dams.

We should point out another misconception that is being fostered by SYRCL and TDLT concerning their proposed plan for breaching Van Norden dam. The Science Director claims that the plan will "reconnect" the Yuba flowing in the Summit Valley. This is incorrect. The announced plan by TDLT calls for a breach of the dam to lower it 5 ft. While lowering the dam to this level will effectively drain the lake and lower the water table in the valley by 5 ft, the spillway will remain and the Yuba in the Summit Valley will continue to disconnect from the downstream river every summer. The plan will do nothing to change the downstream flow (or no flow) of the Yuba. What it will do is remove the lake so that TDLT can sell the land to the US Forest Service for \$2 million dollars.

One of the tenets of the scientific method is to try to minimize bias in the collection and analysis of data. There is a real danger when science is done to further an agenda. The literature is littered with discredited work done to further a personal bias or agenda. The Donner Summit Valley and Van Norden Lake and Meadow are unique high elevation resources sitting at the headwaters of the South Yuba River. The unique combination of local weather and habitats requires that any analyses take those unique attributes into account. Applying principles and methods from different ecological environments can not only lead to invalid conclusions, but can also be detrimental. Van Norden Lake and its surrounding wetlands are the result of some very unique influences, both natural and manmade. The result is a unique combination of habitats that foster increased biodiversity in the Summit Valley. Considering the local contribution that these unique habitats make to the Donner Summit Valley and the fact that they do not really affect the downstream Yuba River, it seems only prudent to preserve them.

#### And for Next time

We would expect that SYRCL and TDLT might respond to this article with a claim that their future "meadow restoration" plan will magically provide more water to the valley. In our next installment we will discuss some of the fallacies and misconceptions of what meadow restoration can really do in the Donner Summit Valley.

Fly over the Summit Valley during the dry summer

The following flyover is from Google Earth in August of 2012. It shows how the Yuba goes dry in summer down to Kingvale. The Yuba stays dry until the rains come in the fall and it is covered by snow in the winter.



© 2015 - Save Van Norden Lake and Wetlands

Normalization Proudly powered by WordPress. 2010 Weaver by WPWeaver.info

# **Attachment B**

Effects of this project on the Western Toad populations in Van Norden Lake.

The following attachment is a post published in the online blog Van Norden Log at the SaveVanNordenLake.Org website at the following link

http://onthesummit.net/wordpress/savevannorden/2016/06/10/toadal-tragedy/

Please see the online article to observe the accompanying video.



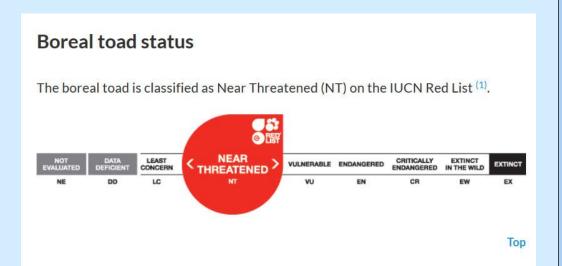
 $\leftarrow$  The Try to Hide Van Norden Lake Scam

Welcome to Donner Summit Dry Time - August Reality Check

# **Toadal Tragedy**

Posted on June 10, 2016 by George Lamson

8/21/16 Update – The Western or Boreal Toad is now considered near threatened worldwide (see this link). The chief cause is HABITAT DESTRUCTION.



One of the unique biological wonders of the Donner Summit Valley is the prolific breeding season of the <u>Western Toad (Anaxyrus boreas)</u> in Van Norden Lake.

## **BLUE PAPER**

#### **OPEN LETTER TO TDLT**

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- Toadal Tragedy
- The Try to Hide Van Norden Lake Scam
- Absurd Assertions #4 Meadow restoration will make Donner Summit Valley into another Perazzo



In a world where amphibian populations are decreasing everywhere, the wetlands of Van Norden Lake in the Donner Summit Valley are an oasis for the Western (or Boreal) Toad. Due to the unique shallow waters of Lake Van Norden there are over 16 acres of shoreline in the back bay that is optimum breeding habitat for the toads. The conditions are perfect and the toads take full advantage of them.

## The Cycle

Every spring right after the snow melts (April-June depending how heavy a winter) along the shore of the back bay of Van Norden Lake and the shallow waters are warmed by the sun, the male and female toads start their courtship. The smaller males will attach themselves piggy-back to the larger females to form a mating pair. The female will start laying eggs in long gelatinous strands and the male will fertilize them as the eggs are extruded (see video below). Each mating pair can produce up to 16,000 eggs. The young hatchling tadpoles emerge in 2-3 weeks depending on the temperature of the water and begin grazing on the rich aquatic plant and algae in the wetlands along the shore. While many of the tadpoles are gobbled up by

Mating pairs start the process as soon as the snow melts (May-June)

the fish and aquatic birds (including the White Pelicans), a large number will complete metamorphosis into young toads in the next 4-6 weeks.

Anyone who has visited the Summit Valley in late July and early August has experienced the bloom of young toads. In a normal breeding year there can be as many as 100 mating pairs laying eggs in the lake shallows. That means

100 mating pairs x 16,000 egg/pair = 1.6 million eggs

If only 10% of those eggs make it to young toads that is 160,000 young hoppers that invade Van Norden Meadow in the middle of summer. The meadow literally comes alive as the new amphibians leave the lake and invade the meadow in search of food. It is a sight to behold. Many of the young toads may fall prey to some predation but the toads do produce toxins in their skin that make them unpalatable to many predotors.



Long stands of eggs are laid by mating pairs (>15,000 eggs/pair)

As summer ends and the meadow dries out the surviving young toads will bury themselves in the mud at

Meadows

#### Site Map

- Save the Lake and Wetlands
- Van Norden Log
  - Past Posts
- What you can do
- Information
  - Summit Valley Historical Information
  - Technical Information
- Links
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the bottom of the lake and hibernate through the harsh winter waiting for the next spring.

### The Tragedy

Unfortunately, if the plans to drain Van Norden Lake and the surrounding wetlands are carried out by the Truckee Donner Land Trust, this amphibian extravaganza will go down the drain with the lake. There will be no shallow water lake in the spring for the toads to lay their eggs in and the Donner Summit Valley will no longer be an oasis for the Western Toads. The valley will experience the same destruction of sensitive habitat that is currently going on throughout the world that has resulted in the drastic decrease in amphibian populations. A Toadal tragedy indeed.



Tadpoles feed on the algae in the lake and complete metamorphosis into



This entry was posted in **Uncategorized**. Bookmark the **permalink**.

← The Try to Hide Van Norden Lake Scam

Welcome to Donner Summit Dry Time - August Reality Check

 $\rightarrow$ 

## Leave a Reply

Your email address will not be published. Required fields are marked \* Comment

Name \*

# **Attachment C**

Documents pertaining to negotiations between TDLT and myself concerning an offer to buy the property and subsequently an offer to finance an application for water rights and maintenance of the dam. The documents below include correspondences and draft agreements. Unfortunately, agreement could not be reached due to the refusal of the US Forest Service to participate in the agreement. These documents provide supporting documentation for the discussion of the water rights issue as well as dam safety concerns.

From: Perry Norris

Sent: Wednesday, November 12, 2014 11:00 AM

To: MARK HIMELSTEIN

Cc: George Lamson; Bill Oudegeest; John Svahn; Anne Chadwick

Subject: Van Norden Reservoir and Meadow

## Mark,

We think it's a great idea to have George meet with Randy Westmoreland from the USFS. I think Randy can explain better than anyone why meadow restoration is important and how badly VNM has been screwed-up I will do what I can to help set up a meeting before the snow flies in earnest.

I have also attached a paper Anne wrote after a tour last summer of Van Norden Meadow and Perazzo Meadow with a team of scientists. I am not sure you have seen it. I have spoken to a few Land Trust members who own second homes in Serene and it seems there are pretty wild assumptions about what meadow restoration and a five-acre reservoir means.

TDLT is working under your assumption that, despite good faith efforts by both parties, we are not going to reach an agreement with George and Bill. As you know TDLT has been given notice to correct the illegal dam at VNM and stop illegally storing the State's water. With a team of scientists from SYRCL, American Rivers, Truckee River Watershed Council, Point Blue and The Nature Conservancy, we will begin restoration of the meadow, likely in 2016.

Many alternatives will be considered under the CEQA process, including the one we discussed, a 49-acre foot reservoir, but based on extensive research and consultation with science and conservation experts, the most reasonable and best outcome for conservation is to maximize the amount of restored meadow.

I also want to make sure that George and Bill understand what water rights are available, if any. The Yuba River is 100% allocated from June 15<sup>th</sup> to November 1st. This means that between the two dates, the volume of water flowing into the reservoir must equal the water flowing out of it. The estimated time frame for processing a water rights application is at least three-five years. A successful application would secure an appropriation to fill the reservoir between November 2<sup>nd</sup> and June 14<sup>th</sup>. Notwithstanding that the reservoir is frozen for much of that

time, there would be the opportunity to fill the reservoir in some years when the reservoir is ice free, and the runoff occurs before June 14<sup>th</sup>. In addition to being dependent on timing with spring, the Land Trust's water right would be the most junior right in the basin. Therefore, in times of drought, Van Norden would be the last fill permitted by DWR, and may not be allowed to fill in some years.

Thank you for all of your efforts.

Perry

July 9, 2014

Anne Chadwick President, Truckee Donner Land Trust P.O. Box 8816 Truckee, CA 96162

Re: Van Norden Meadow

Dear Anne:

George Lamson and Bill Oudegeest have asked me to reply to your letter to them dated July 2, 2014, with an alternate proposal meant to preserve the lake and wetlands at the Van Norden Meadow.

They propose that the Van Norden Meadow be partitioned in both Nevada and Placer Counties in order to create separate parcels, one which would constitute meadow only and would be transferred to the US Forest Service by the Land Trust, as presently planned and the second, which would include the area from the spillway east, to include the lake and wetlands, which would be held in perpetuity as a water source and as wetlands. A map is enclosed showing the details of the suggested partition, which is estimated to be about 25% of the total Meadow.

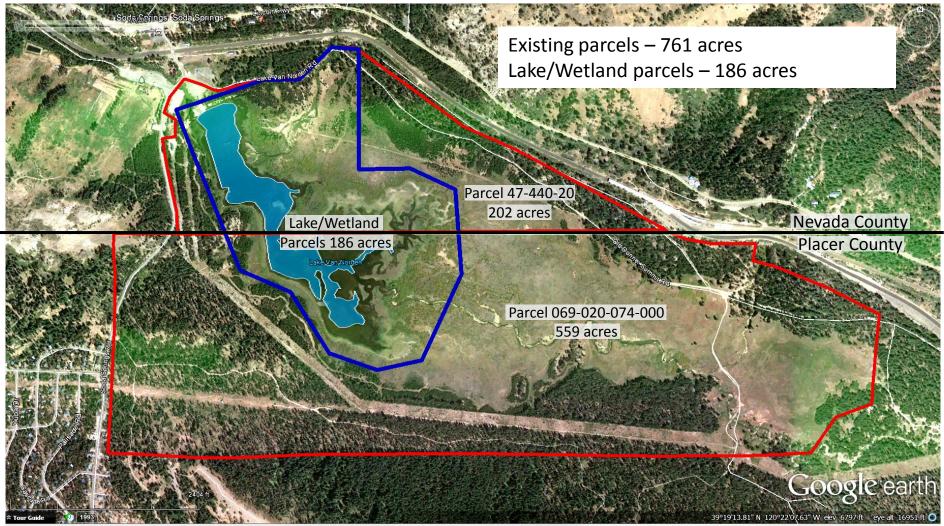
They have funding in place of \$400,000 toward the purchase of the new bi-county parcels containing the lake and wetlands. The actual amount of the purchase would be subject to a written appraisal by an appraiser agreeable to all parties, so long as the appraised value does not exceed \$400,000. Ownership of the property would be through a non-profit 501(c) (3) organization to be formed to preserve the area as open space and wetlands into perpetuity. As an alternative, they are open to transferring stewardship of the wetlands parcel to a federal or state agency or other conservation organization so long as the conditions set forth herein are guaranteed.

This offer is conditioned on the Land Trust agreement with the following conditions: (1) The purchase would not occur until 2015 to permit the completion of the financing of the original Royal Gorge land purchase by the Land Trust; (2) The spillway would be breached a maximum of 2.2 feet to permit 50 acre feet of water to remain in the Van Norden Meadow, in perpetuity; (3) A successful application to secure water rights to preserve the wetlands be initiated by the Land Trust; (4) A conservation easement or similar restriction be placed across the lake and wetlands portion of the parceled property to ensure it not be developed in any way; and, (5) Agreement of the U.S. Forest Service to take that portion of the dry Meadow caused by the suggested partition.

In addition, George and Bill would be willing to take an active part to support the Land Trust's application in the CEQA process, as the Land Trust may request.

I hope this offer will be received by the Board in good faith as we all try to find a path to preserving and maintaining this precious mountain real estate in our midst.

# Donner Summit Valley - Proposed Lake/Wetland Re-parceling map



Prepared by George Lamson 7/8/14

#### SETTLEMENT AGREEMENT AND RELEASE

This SETTLEMENT AGREEMENT AND RELEASE ("Agreement" or "Settlement Agreement") is executed and made as of the Effective Date set forth below by and between the Truckee Donner Land Trust (hereafter, "TDLT"), a California non-profit corporation with its principal place of business at P.O. Box 8816, Truckee, CA 96162, on the one hand, and George Lamson, Linda Cashion, Bill Oudegeest, and Nancy Oudegeest (each an individual and together, the "Group") on the other hand, by and through their respective authorized representatives, signing below. Each of the above-listed parties is referred to individually herein as a "Party" and all are collectively referred to herein as the "Parties."

#### Recitals

This Agreement is made and entered into with reference to the following facts:

WHEREAS, TDLT is a 501(c)(3) non-profit, public benefit corporation which holds title to that certain area located in Nevada and Placer Counties, State of California, commonly known as the "Royal Gorge Property" (alternatively, the "Property"), as more particularly described in Exhibit A attached hereto and incorporated herein to this Agreement; and

WHEREAS, the Royal Gorge Property encompasses and includes an area known as Van Norden Meadow ("Meadow"); and

WHEREAS, Upper Castle Creek and extensions of the South Yuba River flow through the Meadow and, due to a dam constructed around 1908 (the "Van Norden Dam" or "Dam"), create a body of water informally known as "Lake Van Norden;" and

WHEREAS, TDLT acquired the Royal Gorge Property with an intent to transfer the Property to the Tahoe National Forest, administered by the United States Forest Service ("Service") under the jurisdiction of the United States Department of Agriculture; and

WHEREAS, in 2011 the state of California indicated that the Van Norden Dam was out of safety compliance in relation to the size of its reservoir pool (i.e., Lake Van Norden); and

WHEREAS, the Service has represented to TDLT that, for safety reasons related to the condition of the Van Norden Dam, it cannot acquire the Royal Gorge Property unless and until the height of the Dam is reduced to create a maximum impoundment of 5 acre-feet of water; and

WHEREAS, the Service additionally would require, as a precondition of its acquisition, that Van Norden Dam be removed from the jurisdiction of the California Division of Safety of Dams ("DSOD"); and

WHEREAS, a dam is non-jurisdictional if it is a) less than 6-feet high; b) less than 25 feet high with less than 50 acre-feet of storage capacity; or c) or impounds less than 15 acre-feet of water; and

WHEREAS, Lake Van Norden is currently estimated to be approximately 87 acres in area with a storage capacity of approximately 174.6 acre-feet and the Van Norden Dam currently has a spillway elevation of 6,754.6 feet; and

WHEREAS, in 2014, the California Department of Water Resources ("DWR") notified TDLT that the storage/impoundment of water in Lake Van Norden was and is unpermitted and illegal; and

WHEREAS, to bring the impoundment into compliance, DWR instructed TDLT to take one of the following actions: (1) perfect a legal right to impound the water; (2) lower the dam so that it stores less than 10 acre-feet; or (3) remove the dam entirely; and

WHEREAS, after careful consideration of its options, TDLT made initial plans to "notch" (i.e., lower) Van Norden Dam to reduce the capacity of Lake Van Norden to 5 acre-feet, a solution that would comply with DWR's instructions and place the Dam in a "Low Hazard" classification that would allow the Service to purchase the Royal Gorge Property as planned; and

WHEREAS, the notching of the Dam (the "Project") would require a grading permit from Nevada County, which, potentially among other approvals, could trigger the need for an analysis of the environmental impacts of the Project in accordance with the California Environmental Quality Act ("CEQA"), Cal. Pub. Resources Code, Section 21000 *et seq.*; and

WHEREAS, the Project might require additional permits, authorizations, or approvals issued by federal, state, or local government agencies (together with the county grading permit, the "Project Approvals and Entitlements");

WHEREAS, the Group desires that TDLT preserve as much of Lake Van Norden as possible, taking into account safety concerns, water rights, and a desire to remove Van Norden Dam from the jurisdiction of the DSOD; and

WHEREAS, prior hydrological analysis of the Van Norden Dam performed by Balance Hydrologics, Inc. indicated that lowering the Dam by 2.3 feet (notching the Dam to an elevation of 6,752.3 feet), would result in an approximately 61 acre impoundment with a storage capacity of 47 acrefeet; and

WHEREAS, the Group has accordingly recommended that TDLT apply for a license to legally impound up to 49 acre-feet of water, which would satisfy the Group's interests; and

WHEREAS, to store more than 5 acre-feet of water behind the Dam and still proceed with the planned sale of the Property to the Service, TDLT would need to subdivide the Royal Gorge Property to exclude the Dam (and impounded a portion of the water) from the property to be transferred to the Service; and

WHEREAS, the Group has asserted, and in the absence of settlement would continue to assert, opposition to the permitting, construction and operation of, or otherwise with respect to, the Project as proposed by TDLT and has expressed an intention to legally challenge the Project Approvals and Entitlements that have been or will be granted for the Project; and

WHEREAS, TDLT denies that the Project Approvals and Entitlements have been or would be granted in violation of any law; and

WHEREAS, the Parties now wish to finally resolve all past, present and future disputes between them related to the Project and the Approvals and Entitlements without legal or other formal proceedings as further described herein.

NOW, THEREFORE, based on these Recitals, each of which is true and correct and is incorporated into the terms below, and in consideration of the terms, conditions and covenants set forth below, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, TDLT and the Group agree, promise, and covenant as follows:

#### <u>Terms</u>

- 1. <u>TDLT Obligations</u>. In exchange for the agreements, promises and covenants by each of the Group members contained herein, and subject to the conditions herein, TDLT shall undertake the following activities:
  - (a) TDLT will file an application, which application shall be subject to review and input from the Group prior to submittal, with the State Water Resources Control Board ("Board") to obtain an appropriative water right in TDLT's name, for the reservoir of up to 49 acrefeet of water in the Meadow and in good faith will take all reasonable measures, in TDLT's judgment, to obtain a decision by said Board on the merits of TDLT's application.
  - (b) TDLT will request that DSOD enter into a binding commitment to refrain from bringing an enforcement action against TDLT regarding the safety of the Dam and any required upgrades for five (5) years.
  - (c) TDLT will request that the Service confirm an interest in acquiring the Property minus the Retained Property (as further described below in subsection 1(d)(ii)).
  - (d) If the DSOD agrees to temporarily forgo an enforcement action and concurs that the Dam can be lowered [2.2 or 2.3] feet, and the Service agrees to acquire the Royal George Property minus the Retained Property on or before December 31, 2016, then
    - (i) TDLT will submit plans to DWR's DSOD to lower the spillway to the Dam in the Meadow by no more than 2.3 feet to create a lake with a capacity of no more than 49 acre-feet in the Meadow, which will result in the release of all other water presently being stored in the Meadow (approximately 130 acre-feet) to flow downstream for the benefit of downstream water users.
    - (ii) TDLT will file a boundary line adjustment with Nevada County, in concert with the Service, to segregate approximately \_\_ acres, including the Dam (the "Retained Property") from the Royal Gorge Property so that the remainder of the Royal Gorge Property may be acquired by the Service.
  - (e) If the DSOD grants permission to lower the Dam, the Board grants TDLT's application for water rights of 49 acre feet and TDLT succeeds in recording the necessary documents to establish the separate Retained Property by \_\_\_\_\_\_\_, 2015, title to the Retained Property, as more specifically described in Exhibit B attached hereto and incorporated herein, shall remain in the name of TDLT and TDLT agrees to maintain the Retained

Property preserved by the reservation of water rights for a minimum period of twenty-five (25) years plus one renewal term as set forth in Section \_\_\_ below. TDLT further agrees not to sell, transfer or assign the Retained Property to any third party without the express written consent of the Group or their "successor in interest," as described below. Notwithstanding the foregoing, or any other provision of this Agreement, no term or provision herein is intended to prevent the sale of the Retained Property to the Service in the event that the Service's concerns about the safety of an impoundment greater than 5 acre-feet are resolved or, due to circumstances beyond TDLT's control, a government entity or agency requires that TDLT reduce the volume of Lake Van Norden to an amount less than 49 acre-feet.

## 2. <u>Obligations of the Group</u>.

- (a) In consideration of the above promises and covenants made by TDLT, the Group, individually and on behalf of their respective successors, assigns, agents, principals, and representatives, hereby agrees, promises and covenants to do the following:
  - (i) Not to commence or maintain any lawsuit, litigation, administrative claim, demand, appeal, complaint, protest, charge, intervention or other written communication or formal involvement of any kind before any court, administrative body, or governmental entity ("Challenge"), whether against TDLT or any other trustee or owner of the Royal Gorge Property, whether in any of the Group members' own names or in the name of any other person(s) or entity(ies), arising out of, or related in any way to the Project Approvals and Entitlements.
  - (ii) Not to participate, or seek to participate, in any governmental actions relating to efforts to obtain the Project Approvals and Entitlements before or with any public entity.
  - (iii) Not to contest a boundary line adjustment for the Royal Gorge Property, if necessary, or the transfer of the Royal Gorge Property, in whole or in part, to the Service.
  - (iv) Not to contest the notching of the Dam (lowering of the dam spillway) by up to 5 feet, or the removal of the Dam entirely, in the event DWR refuses to grant the water rights for a reservoir of a maximum size of 49-acre feet.
  - (v) Not to challenge, contest, or participate in the restoration of Van Norden Meadow or litigate against or file any lawsuit against TDLT or it successors or partners undertaking restoration of Van Norden Meadow.
  - (vi) Not to provide any other person or entity with financial support for the purpose of engaging in any of the activities described in Section 2(a)(i) through (iv).
- (b) The Group further agrees to, no later than \_\_\_\_\_\_, make a \$200,000 payment to TDLT, the uses of which shall be limited to securing the water rights necessary to impound up to 49 acre-feet of water behind the Dam and for maintaining, repairing, and operating the Dam. This payment shall be due and nonrefundable

notwithstanding the fact that the minimum notching allowed or required by government entities with authority over the Project Approvals and Entitlements exceed the Group's objectives and preferred notching height. Notwithstanding the foregoing, any portion of the payment unused and remaining at the time of any sale of the Retained Property to the Service in accordance with this Agreement may be refunded to the Group.

#### 3. Scope of CEQA Analysis for the Project

The Parties understand and agree that, to facilitate the timely permitting of the Project, in light of the uncertainty surrounding the feasibility of the Group's preferred notching of [2.2 or 2.3 feet], government entities with authority to issue the Project Approvals and Entitlements may need to analyze Dam notching alternatives that might include notching proposals ranging from 2 to 5 feet and removing the Dam altogether. The Parties agree that TDLT's proposal of such alternatives is consistent with this Agreement.

#### 4. Term

The Parties agree that the initial term of this Agreement shall be twenty five (25) years commencing on October 1, 2014, through September 30, 2039, at which time the term shall automatically renew for a subsequent term of twenty five (25) years, unless one of the Parties elects to terminate the Agreement by giving the other Parties ninety (90) days' written notice thereof.

#### 5. Waiver of Cal. Civ. Code § 1542

The Parties have considered the possibility that they may not now fully know the number and magnitude of all claims they have or may have against each other and each other's interests. Nevertheless, the Parties intend to assume the risk that they are releasing such unknown claims. To that end, the parties expressly waive their rights under Section 1542 of the California Civil Code (or any similar statute of any other applicable jurisdiction), which provides:

A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM OR HER MUST HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR.

The Parties each respectively represent that they have the authority to enter into this release and waiver and that they understand and acknowledge that the significance and consequence of this waiver of California Civil Code Section 1542 is that, even if a Party should discover additional claims that accrued prior to the Effective Date, and that arise out of the facts and circumstances described in this Agreement, such Party will not be able to make any claims related to the Project or otherwise as waived and released herein. Furthermore, the Parties acknowledge that they each intend these consequences even as to claims, for damages or otherwise, that may exist as of the Effective Date or that may exist in the future, regardless of changes in the nature of the Project, but that the Parties do not know exist, and that, if known, would materially affect their decisions to execute this Agreement and the release set

forth herein. The claims covered by this waiver include, but are not limited to, the expression of any opposition, in any forum or media, challenging the approval of and Project Approvals and Entitlements.

Acknowledgement by TDLT (initials to be inserted here):
Acknowledgement by Bill Oudegeest (initials to be inserted here):
Acknowledgement by Nancy Oudegeest (initials to be inserted here):
Acknowledgement by George Lamson (initials to be inserted here):
Acknowledgement by Linda Cashion (initials to be inserted here):

#### 6. <u>Notices</u>

All communications, notices and demands of any kind which either Party may be required or desire to give or serve upon the other Party shall be made in writing (unless expressly provided otherwise) and will be effective (i) immediately upon delivery by facsimile, email or in person, provided delivery is made during regular business hours or receipt is acknowledged by a person reasonably believed by the delivering Party to be employed by the recipient, or (ii) twenty-four (24) hours after deposit with a commercial courier or delivery service for overnight delivery, provided delivery is made during regular business hours or receipt is acknowledged by a person reasonably believed by the delivering Party to be employed by the recipient, or (iii) three (3) days after deposit with the United States Postal Service, certified mail, return receipt requested, postage prepaid. All notices must be properly addressed and delivered to the Parties at the addresses set forth below.

To TDLT: Perry Norris

P.O. Box 8816, Truckee, CA 96162

perry@tdlandtrust.org

To the Group: Bill Oudegeest and Nancy Oudegeest

P.O. Box 728, Soda Springs, CA 95728

Bill@Oudegeest.com

George Lamson and Linda Cashion P.O. Box 1054, Soda Springs, CA 95728

lamsongf@yahoo.com

## 7. Waiver

Any failure of any Party to comply with any obligation, covenant, agreement, or condition may be waived by the Party entitled to the benefits thereof only by a written instrument signed by the Party granting such waiver, and such waiver or failure to insist upon strict compliance with an obligation, covenant, agreement, or condition shall not operate as a waiver of, or estoppel with respect to, any subsequent or other failure to comply.

## 8. <u>Binding Effect on the Parties</u>

This Agreement governs the rights of, binds, and inures to the benefit of all Parties hereto, their predecessors and successors, and past, present, and future affiliates, subsidiaries, parent or related entities, joint ventures, organizations, sureties, partners, partnerships, assigns, officers, directors, shareholders, employees, agents, consultants, insurers, attorneys, administrators, nominees, agencies, departments, trustees, officials, estates, beneficiaries and representatives.

## 9. <u>Equitable Relief and Specific Performance</u>

The Parties agree (i) that the performance of the obligations of this Agreement are paramount; (ii) that, in the event of a breach, monetary damages will provide inadequate relief; and (iii) that each Party is entitled to equitable relief, including specific performance, to enforce the terms of this Agreement. No Party is precluded from seeking all remedies available at law or in equity.

#### 10. Compromise

It is understood and agreed that this Agreement is the result of a good faith compromise settlement of disputed claims, and that this Agreement and the releases contained herein shall not be taken or construed to be an admission of any liability, responsibility, fault, or wrongdoing by any of the Parties hereto, each of whom continues to deny and disclaim any such liability, responsibility, fault or wrongdoing. Each of the Parties hereto is entering into this Agreement to avoid the expense, disruption and uncertainty of future litigation.

#### 11. <u>Confidentiality</u>

Each Party will hold the "Confidential Information" (defined below) in confidence and trust, and will not disclose, or provide access to, any Confidential Information, directly or indirectly, to any person other than their employees, officers, consultants, and lawyers who need to know it in connection with their duties and who also agree to keep the Confidential Information confidential, except (a) with the prior written consent of the other Party or (b) to the extent otherwise ordered by a court. A Party may also disclose the Confidential Information to its directors, officers, employees, agents, and advisors (including, without limitation, prospective purchasers of the Property, investors, financing parties, financial advisors, attorneys and accountants), and their successors and assigns, however each Party is responsible for any disclosure of Confidential Information by all persons to whom such Party discloses Confidential Information.

"Confidential Information" means this Agreement and the terms of this Agreement, together with any proposals relating to the Project, and the other information or materials disclosed by the other Party in connection with the negotiations leading up to this Agreement.

Consistent with the terms in this Section, any public announcement of this Agreement, including its terms or its mere existence, must be jointly approved in writing by the Parties.

#### 12. Representation by Counsel

This Agreement is entered into freely and voluntarily. The Parties hereto acknowledge that they have been represented by counsel of their own choice in the negotiations that preceded the execution of this Agreement, and in connection with the preparation and execution of this Agreement. Each of the Parties hereto executes this Agreement with full knowledge of its significance and with the express intention of affecting its legal consequences.

#### 13. <u>Entire Agreement</u>

This Agreement and all other documents executed and delivered pursuant hereto constitute the entire agreement between the Parties relating to the settlement of any disputes and obligations among them. This Agreement and all other documents executed and delivered pursuant hereto supersede all prior agreements and/or obligations between the Parties with respect to the subject matter hereof, all of which are merged into this Agreement and all other documents executed and delivered pursuant hereto.

### 14. Successors and Assigns.

The covenants and conditions contained in this Agreement shall apply and bind the heirs, successors, executors, administrators and assigns of the Parties hereto.

#### 15. <u>Assignment of Rights</u>

Neither TDLT nor the Group may assign any of its rights or duties under this Agreement without the prior written consent of the other Parties, except that the Group may assign its rights and duties to a single public benefit corporation, if any, formed by the Group to further the Group's objectives as described herein.

## 16. Applicable Law

This Agreement shall be construed under and shall be deemed to be governed by the laws of the State of California, without giving effect to any principles of conflicts of law if such principles could operate to construe this Agreement under the laws of any other jurisdiction.

#### 17. Construction of Agreement

This Agreement is the product of negotiation and preparation by and among each Party hereto and its attorneys. Therefore, the Parties acknowledge and agree that this Agreement shall not be deemed to have been prepared or drafted by one Party or another, and that it shall be construed accordingly. The Parties expressly waive the provisions of California Civil Code Section 1654.

## 18. <u>Severability</u>

If any term, covenant or condition of this Agreement or the application thereof to any person or circumstances shall be invalid or unenforceable, the remainder of this Agreement, or the application of such term or provisions to persons or circumstances other than those to which it is held invalid or unenforceable, shall not be affected thereby, and each term shall be valid and enforceable to the fullest extent permitted by law.

### 19. <u>Modification of Agreement</u>

No supplement, modification, waiver, or amendment with respect to this Agreement shall be binding unless executed in writing by the Party against whom enforcement of such supplement, modification, waiver or amendment is sought.

## 20. <u>Counterparts of Agreement</u>

This Agreement may be signed in counterparts by the Parties hereto and shall be valid and binding on each party as if fully executed all on one copy. Facsimile signatures shall be deemed originals.

## 21. <u>Signatories' Authority</u>

All individuals who execute this Agreement warrant and represent that they have the authority to do so both on their own behalf and, if they execute this Agreement on behalf of a legal entity, that they have the authority to do so and to bind the legal entity on whose behalf they have acted.

IN WITNESS WHEREOF, each of the Parties hereto has executed this Agreement or has caused this Agreement to be executed by its duly authorized representatives.

So Agreed on this day of	, 2014 (the "Effective Date").	
Truckee Donner Land Trust		
Ву		
Perry Norris, Executive Director	Anne Chadwick, President	

So Agreed this day of August, 2014.

	<del></del>
George Lamson	Linda Cashion
Bill Oudegeest	Nancy Oudegeest

# **Attachment D**

Letter from the Water Quality Control Boart to TDLT explaining the water rights situation for Van Norden Lake.





## **State Water Resources Control Board**

APR 3 0 2014

In Reply Refer to: MC:UN000707

Mr. Perry Norris, Executive Director Truckee Donner Land Trust 10069 West River Street, Suite C-1 Truckee, CA 96161

Dear Mr. Norris:

NOTICE OF FAILURE TO FILE A STATEMENT OF WATER DIVERSION AND USE AND NOTICE OF WATER RIGHT REQUIREMENTS FOR WATER STORAGE AT LAKE VAN NORDEN, SOUTH FORK YUBA RIVER, NEVADA AND PLACER COUNTIES

The State Water Resources Control Board (State Water Board), Division of Water Rights (Division) received a copy of the letter dated September 29, 2011 sent by the Department of Water Resources (DWR), Division of Safety of Dams (DOSOD) to Royal Gorge, LLC (Royal Gorge), the former owner of the properties containing Lake Van Norden and its dam. The letter notified Royal Gorge of the determination by DOSOD that the dam at Lake Van Norden was in need of repairs. The letter prompted Division staff to investigate whether the storage of surface water at Lake Van Norden had a valid basis of right. As explained further below, Division staff have researched the available records and conclude that there is neither an appropriative water right permit or license, a valid pre-1914 or riparian claim, nor a current Statement of Water Diversion and Use (Statement) associated with Lake Van Norden. Consequently, this letter serves as notice that the diversion and storage of water at Lake Van Norden is unauthorized and identifies possible courses of action to address the unauthorized status of the diversion.

## Timeline of Staff Investigation

On August 2, 2012, Division staff accompanied DOSOD staff on its site inspection of the partially deconstructed dam. At the time of the field inspection, Division staff understood that the Lake Van Norden project undertaken by Royal Gorge was in default, that the project would be managed by a receiver appointed by the Placer County Superior Court, and that the Nevada and Placer County properties where Lake Van Norden and its dam are situated were in the process of ownership change. Currently, the properties containing Lake Van Norden are held by the Truckee Donner Land Trust (Trust).

In response to the Division's initial request to identify the basis of right for water held at Lake Van Norden, Division staff received a letter dated August 29, 2012 from Robert Maddow, legal counsel to the receiver/operator of the Lake Van Norden project, who stated that neither the receiver nor

FELICIA MARCUS, CHAIR | THOMAS HOWARD, EXECUTIVE DIRECTOR

1001 | Street, Sacramento, CA 95814 | Mailing Address: P.O. Box 100, Sacramento, Ca 95812-0100 | www.waterboards.ca.gov

Royal Gorge can file a Statement because the water rights are held entirely by the Pacific Gas and Electric Company (PG&E) and because water is not taken under control and stored for beneficial purpose. Mr. Maddow enclosed copies of pertinent documents, including a copy of an application submitted by PG&E to the California Public Utilities Commission (CPUC) dated June 7, 1996 to transfer ownership of the properties containing Lake Van Norden and its dam. The CPUC application provided background information which explained that PG&E decided to decommission and breach the dam in 1976 rather than repair it to meet DWR seismic safety standards. Mr. Maddow also provided a copy of PG&E's letter dated July 18, 1979 sent to the State Water Board, which stated that PG&E will transfer 2,200 AF of its 5,261 AF pre-1914 water right claim at Lake Van Norden under Statement S000947 to Lake Fordyce, which also had a separate PG&E pre-1914 claim under Statement S009033.

Mr. Maddow also provided a copy of the grant deed transferring the relevant properties to Royal Gorge dated July 31, 1998. The grant deed included language to reserve "... all riparian and appropriative rights which are annexed to, inherent in and parts and parcel of said real property being conveyed, whether prescriptive or other, together with all right, title, and interest of any nature whatever in and to waters which now or hereafter flow in the Yuba River and any tributaries thereof."

In an e-mail sent on December 4, 2013 in response to Division staff's inquiry, Joseph Ray, a PG&E water rights engineer, provided a summary of the company's activities regarding the transfer of the properties at Lake Van Norden together with supporting documents that describe PG&E's proposal to move its pre-1914 water storage rights at Lake Van Norden to Lake Fordyce. Supporting documents that were provided include PG&E's June 18, 1979 letter to the Division proposing the relocation of its storage rights to Lake Fordyce, and a letter dated August 17, 1979 from the Division to DOSOD indicating that the Division's review found that PG&E had sufficient water rights to cover the proposed transfer to Lake Fordyce and that the Division concurred with the proposed transfer, provided that others are not injured. Additionally, a copy of a letter from PG&E to the Division dated June 29, 1982 was included which listed several Statement numbers that PG&E asked to discontinue, including Statement S000947 which PG&E indicated was abandoned. In his e-mail, Mr. Ray explained that language in the grant deed reserving water rights was intended to preclude the new owner from diverting water from the river under riparian or any other claim; however, Mr. Ray also stated that all water rights at Lake Van Norden have been transferred to Lake Fordyce or had been abandoned and that PG&E does not claim any water right at Lake Van Norden.

According to the Division's records, the last Supplemental Statement submitted by PG&E for Statement S000947 for Lake Van Norden was dated September 21, 1979, and it indicated that the dam had been breached in September 1976 and 2,200 acre-feet of storage have been transferred to Lake Fordyce. PG&E has also regularly submitted Supplemental Statements under Statement S009033, which included comments stating that the amount of water reported includes water stored under its licensed rights (License 986, A002750) and 2,200 acre-feet of water transferred from Lake Van Norden. It appears that PG&E's intent was to abandon any remaining pre-1914 rights at Lake Van Norden that were not otherwise transferred to Lake Fordyce.

The letter from DOSOD dated September 29, 2011 received by the Division summarized DOSOD's finding that Lake Van Norden dam was within its jurisdiction. The report enclosed with DOSOD's letter indicated that the Lake Van Norden dam was only lowered and was not entirely breached in 1976 and that the breach was subsequently raised again by five feet. DOSOD concluded that the reservoir currently has an actual capacity of approximately 300 acre-feet. Division staff currently understands that DOSOD is working with the Trust to alter the dam to bring it outside of DOSOD's jurisdiction.

## **Determination of Unauthorized Diversion**

PG&E did not entirely breach Lake Van Norden dam and, consequently, surface water continues to be collected in the reservoir today. Division staff's review of the information received and contained in the Division records indicate that PG&E retained riparian water rights in the properties containing Lake Van Norden and its dam but no longer has any pre-1914 water rights at Lake Van Norden due to transfer to Lake Fordyce and through abandonment. The riparian right reserved by PG&E may only be exercised by PG&E or with PG&E's authorization, and Division staff understands that the riparian right is currently not being exercised. Nevertheless, water that may be diverted under PG&E's riparian right is not pertinent to the status of water stored at Lake Van Norden because water diverted under a riparian right may not be put into seasonal storage. Division staff has concluded that there is currently neither a pre-1914 claim nor an appropriative water right permit or license associated with Lake Van Norden. During the August 2012 inspection, Division staff observed recreation and fish and wildlife enhancement as current beneficial uses of the water diverted and stored at Lake Van Norden. Consequently, Division staff has determined that water from the South Yuba River is being diverted to storage at Lake Van Norden without a valid basis of right and is, therefore, an unauthorized diversion.

## Requirement to Obtain Post-1914 Appropriative Water Rights

The Division is responsible for the administration of appropriative water rights in California initiated after 1914, commonly referred to as "post-1914 appropriative water rights." In most cases, any diversion initiated after 1914 that collects surface water requires an appropriative water right permit issued by the State Water Board, unless the water diversion is conducted under another claimed basis of water right, such as pre-1914 or a riparian claim. Any diversion undertaken without a valid basis of water right is considered to be a trespass against the state of California, and the property owner/diverter is subject to appropriate enforcement action, including the imposition of an administrative civil liability complaint in the amount of up to \$500 per day, or a cease and desist order with penalties of up to \$1,000 for every day of its violation.

Additionally, current water law requires that an Initial Statement of Water Diversion and Use (Statement) be on file to cover every diversion that is not covered by a post-1914 appropriative water right with few exceptions not applicable here. The Statement form includes a section to identify the basis of right for the diversion. California Water Code section 5107 provides that property owners who, after being notified, fail to file a required Statement within 30 days are also subject to enforcement penalties of up to \$1,000 plus five hundred dollars per day for each additional day on which the violation continues. This letter serves as notice that the Trust has failed to file a Statement for the diversion and use of water at Lake Van Norden.

Because natural water flows that are within the State Water Board's permitting authority are currently stored at Lake Van Norden without a valid basis of right, the Truckee Donner Land Trust is required to do the following within 30 days of receipt of this letter:

- a) Submit an application to obtain an appropriative water right for the reservoir. An appropriative water right may be obtained by permit or through one of the available water right registrations if the reservoir meets the registration specifications. Information about obtaining a water right is available at the Division's website at:
  - http://www.waterboards.ca.gov/waterrights/water\_issues/programs/applications/

Or

- b) Notify the Division of its intention to render the reservoir incapable of storing water and submit a reasonable plan and schedule for removing or modifying the existing dam structure. If this option is selected, the Trust should be aware that various agencies have jurisdiction and requirements for work undertaken in natural waterways, and the Trust will be responsible for obtaining all required authorizations.
- 2. File an Initial Statement of Water Diversion and Use (Statement) for water diverted in 2012, and continue to file triennial Supplemental Statements until an appropriative water right has been obtained or the dam has been rendered incapable of storing water. Information regarding Statements is available at the Division's website at: http://www.waterboards.ca.gov/waterrights/water\_issues/programs/diversion\_use/

Your prompt attention and response to this notice is requested, as the Division can initiate appropriate enforcement action without further notice.

If you have questions regarding this notice of actions required, please contact Mr. Michael Contreras of my staff by telephone at (916) 341-5307 or via e-mail at Michael.Contreras@waterboards.ca.gov. Written correspondence or inquiries should be addressed as follows:

State Water Resources Control Board Division of Water Rights Attn.: Michael Contreras P.O. Box 2000 Sacramento, CA 95812-2000

Sincerely,

Victor Vasquez

Senior Water Resource Control Engineer

**Enforcement Unit 3** 

Division of Water Rights

Please see next page. CC:

cc: David A. Gutierrez, Chief
Division of Safety of Dams
Department of Water Resources
1416 Ninth Street,
P.O. Box 942836
Sacramento, CA 94236-0001

Robert Maddow, Esq. 500 Ygnacio Valley Road, Suite 325 Walnut Creek, CA 94596-3840

Pacific Gas and Electric Company Attn: J.R. Ray P.O. Box 770000-N11E San Francisco, CA 94177 Via e-mail: jrr9@pge.com

Central Valley Regional Water Quality Control Board Attn.: Steve Rosenbaum 11020 Sun Center Drive, Suite 200 Rancho Cordova, CA 95670-6114

Department of Fish and Wildlife Habitat Conservation Planning Branch 1416 Ninth Street, 12<sup>th</sup> Floor Sacramento, CA 95814

# **Attachment E**

Discussion of the different habitats in the Donner Summit Valley as a result of the distribution of water in the valley.

The following attachment is a post published in the online blog Van Norden Log at the SaveVanNordenLake.Org website at the following link

http://onthesummit.net/wordpress/savevannorden/2015/05/12/tale-meadows/

## A Tale of Two Meadows

"It was the best of times, it was the worst of times, it was the age of reason, it was the age of foolishness, it was the wettest of meadows, it was the driest of meadows..."

Please forgive the literary theft of Charles Dickens words, but they seem to apply so well to the present situation in the Donner Summit Valley. In an amazing turn of events over the last two years, the preservation of the Summit Valley has been transformed into "restoration" of a valley that may never have existed. In a rather self-fulfilling manner, Truckee Donner Land Trust (TDLT) has created a rationale that will completely transform the Valley destroying a unique combination of open water lake and rare alpine marshland habitats in the name of an alleged scientific restoration. It is all based on a clever little ploy that takes advantage of the current asymmetric distribution of water in the valley.

When you examine the current habitat configuration of the Summit Valley as shown in Figure 1 (for a more in depth discussion of habitats <u>see this post</u>), it is easy to see how TDLT could formulate its current plan. The plan is based on a myopic view of the valley, choosing to concentrate on one half of the valley and ignore the other. The Valley today currently contains a shallow water lake and its adjacent marshland habitat at its west end and the remaining eastern portion of the valley is seasonal wet/dry meadow. It is easy to separate the valley into two "meadows" based on this asymmetric distribution of water and their associated habitats, one at

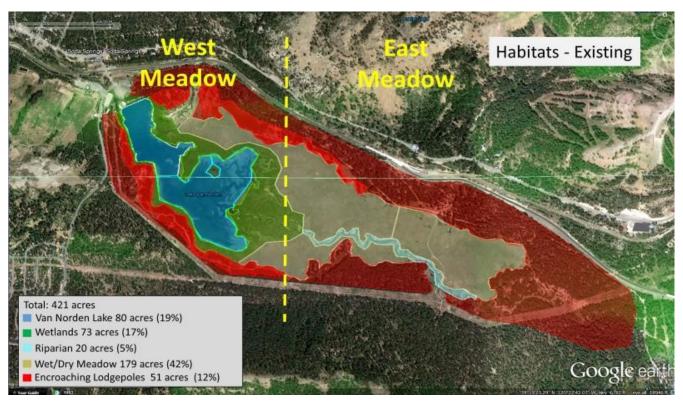


Figure 1. Currently the habitats in the Donner Summit valley are configured asymmetrically with lake and marshlands at the western end and seasonal wet/dry meadow at the eastern

the west end and one at the east. It is also easy to see how TDLT has chosen to concentrate on only one of those meadows at the expense of the other.

In most respects the eastern meadow is pretty much in the same state as it was prior to the appearance of the pioneers in the 1840s. The historic photo in Figure 2, taken in the 1870s, prior to the construction of the first dam, clearly shows that the entire meadow was pretty much a seasonal wet/dry meadow just as the east end is today. It is true that there has been sporadic historical development of the meadow with the advent of the railroad and various buildings as hotels and barns and that the meadow was heavily grazed by sheep and cattle. However, for over 100 years most of the west end of the valley was at the bottom of Lake Van Norden when PG&E was maintaining the lake. After it was drained in 1976 the valley has been in its current configuration for the last 4 decades, pretty much untouched. It is in that time that the open lake and wetland habitat at the west end matured to what it is today.

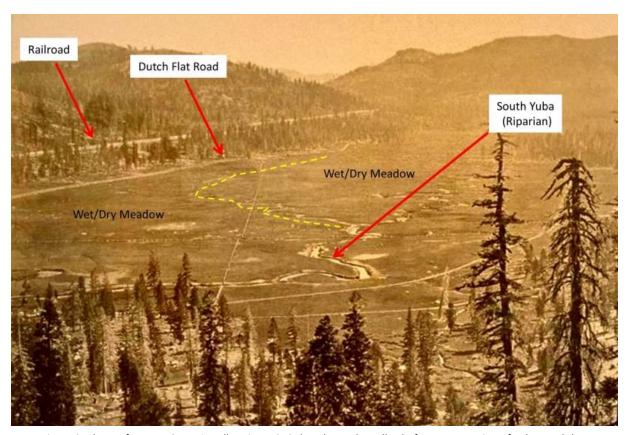


Figure 2. Photo of Donner Summit Valley circa 1870 that shows the valley before construction of a dam and the meadow as seasonal wet/dry meadow.

It is true that the current dam is out of compliance with the state and impounds water without the proper rights. This is indeed an issue that has to be worked out with the state of California. It is also true that the dam and the water it impounds have serendipitously created the rare and biodiverse lake and wetland habitat in the west end of the valley. When TDLT acquired the

Summit Valley property they made their intentions clear that they would work to preserve the Valley including the lake. As it became clear that this would require considerable effort and could complicate their plan to transfer the land to the USFS, they chose the more expedient solution of draining the lake and wetland habitat. In order to rationalize this reversal, TDLT came up with a strategy that completely ignores the destruction of the lake and wetland habitat and concentrates on the seasonal wet/dry meadow portion of the Valley. It is this intentional distortion that allows TDLT to make the claims of scientific and environmental improvements of their restoration plan.

#### Half truths

When you put your blinders on and choose to only consider the seasonal wet/dry meadow habitat in the Summit Valley then all the arguments that you hear from TDLT make sense. Who wouldn't like to see them re-establish drainage systems and increase the water distribution to raise the water table of the east end of the meadow. Of course doing those things will improve the habitat and the biodiversity of the wet/dry meadow. That is why TDLT can claim that they have the support of scientists and hydrologists. In fact, it makes perfect sense if you realize that bringing more water into the east end of the valley will make it more like what currently exists at the west end of the valley.

And that's the rub, they are only telling the truth for half of the valley. What TDLT is not saying is that while their plan will increase the water and make the east end of the meadow more like the west end, they will be destroying the west end and making it much drier by removing hundreds of acre-ft of water and significantly lowering the water table. While they may make the east end wetter for a longer period during the summer, the unique open lake and wetlands at the west end will be destroyed and the overall water level in the entire valley will be significantly decreased.

## **Reality Check**

You will hear from TDLT and others about things like water course modification and plug and pond methodology. These methods have been proven to work to increase water retention in mountain meadows and would probably significantly increase water retention at the east end of Summit Valley. However, the reality is that these methods are not by any means "natural". All of these methodologies require heavy excavation to create the infrastructure to support them. Moreover, because they are not really



Plug and pond restoration does require the help of invasive species.

natural processes (show me a Sierra meadow in which plugs and ponds occur naturally), they require continuous maintenance and repair.

You will hear that these methods "reconnect" the drainage with the floodplain. That sounds like a good thing and it probably is. However, it is not the "natural process". In fact, river and stream formation by erosional down cutting is the natural process. The South Yuba River flowed through Summit Valley long before any settler came through the valley. This begs the question of what is the Summit Valley going to be restored **to**. The assumption implicit in the word restoration is that you are returning something to a previous state. Plug and pond restoration is really a reset of the water drainage with the original floodplain. It has been thousands of years since the South Yuba river was connected with its floodplain. The reality is that meadow restoration of the east end of the valley will improve its health and vitality, but its restoration will by no means be "natural". The feasibility and sustainability of the restoration state, whatever it is, will be uncertain.

#### What we lose

It has always been our intention to work towards preserving the rare and unique blend of habitats that have been created in the Donner Summit Valley. We applaud any efforts toward improving those habitats, including many of the proposals by TDLT for the east end of the valley. However, unlike TDLT, we cannot justify the improvement of some of the habitat such as the wet/dry meadow at the expense of destroying existing lake and marshland habitats. Retaining more water in the wet/dry meadow may improve that habitat, but removing the lake and wetland habitat will also remove all of the species that depend on that habitat. I was really shocked when I spoke with a biologist from Point Blue that told me it was OK to lose the lake habitat in the Valley to increase the wet/meadow habitat because that was more valuable in some way. This sort of statement can only have been made in ignorance of just how special the lake and marshlands are. Lake Van Norden is a unique lake in the Sierras because unlike the scooped out glacial tarn lakes that predominate in the area, Van Norden is a shallow lake that spreads across the floodplain and provides unique habitat for many species of flora and fauna. That flora and fauna will cease to inhabit the Summit Valley if the lake is removed. In my mind any decrease in biodiversity within the valley is just biologically unacceptable. We think that the best solution for the Summit Valley is a comprehensive one that combines preservation of the valuable lake and wetland habitats with restoration of the wet/dry meadow to provide an overall healthy and diverse valley.