

*Tahoe Donner Association's Equestrian Center*



**Delineation of Potential  
Jurisdictional Wetlands and Waters  
Under Section 404 of the Clean Water Act**

**July 2008**

**Prepared by:**

**Denise Duffy & Associates, Inc**  
**Contact: Josh Harwayne**  
947 Cass Street, Suite 5  
Monterey, CA 93940



**Prepared for:**

**U.S. Army Corps of Engineers**  
**Regulatory Branch**  
1325 J Street  
Sacramento, California 95814-2922

**Regional Water Quality Control Board**  
**Lahontan Region**  
2501 Lake Tahoe Boulevard  
South Lake Tahoe, California 96150



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## Chapter 1. Introduction

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The U.S. Army Corps of Engineers (ACOE) is the primary federal agency responsible for regulating wetlands and waters of the United States (waters). The ACOE and the Environmental Protection Agency (EPA) define wetlands as:

“Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas” (ACOE, 1982 and EPA, 1980).

*The Field Guide for Wetland Delineation: 1987 Corps of Engineers Manual (Wetland Manual)* (Wetland Training Institute, 2002) describes the three environmental parameters used in delineating jurisdictional wetlands. The three parameters are:

1. *Vegetation.* The prevalent vegetation consists of macrophytes that are typically adapted to areas having hydrologic and soil conditions described in the definition of a wetland above. Hydrophytic species, due to morphological, physiological, and/or reproductive adaptation(s), have the ability to grow effectively, compete, reproduce, and/or persist in anaerobic soil conditions;
2. *Soil.* Soils are present and have been classified as hydric or they possess characteristics that are associated with reducing soil conditions; and
3. *Hydrology.* The area is inundated either permanently or periodically at mean water depths of  $\leq$  6.6 feet, or the soil is saturated to the surface at some time during the growing season of the prevalent vegetation.

The Wetland Manual states that “evidence of a minimum of one positive wetland indicator from each parameter...must be found in order to make a positive wetland determination.” However, regional differences in climate, geology, soils, hydrology, plant and animal communities, and other factors often make it difficult to identify certain indicators. Therefore, following recommendations by the National Academy of Sciences to increase the regional sensitivity of wetland-delineation methods, ACOE developed the *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region* (Supplement) (ACOE, 2008). The Supplement provides both indicators for each parameter that are specific to the western mountains, valleys, and coast region and guidance on difficult wetland situations where indicators may be lacking. The Supplement is currently in draft form and open for peer-review and field testing until July 30, 2008.

Waters are defined by the ACOE as:

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2. All interstate waters including interstate wetlands;
3. All “other waters” such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:

- i. Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
  - ii. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
  - iii. Which are used or could be used for industrial purpose by industries in interstate commerce;
4. All impoundments of waters otherwise defined as waters of the United States under the definition;
  5. Tributaries of waters identified in paragraphs [1-4] of this section;
  6. The territorial seas;
  7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs [1-6] of this section (ACOE, 1982).

As noted above, “other waters,” including lakes, ponds, and streams, are subject to ACOE jurisdiction. “Other waters” are characterized by an ordinary high water (OHW) mark, which is defined as:

“that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the characteristics of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas” (ACOE, 1982).

In the field, “other waters” are identified by the presence of a defined river or stream bed, a bank, and evidence of the flow of water.

On June 5, 2007, the ACOE and the EPA developed a Memorandum Regarding *Clean Water Act Jurisdiction Following Rapanos v. United States* (ACOE and EPA, 2007), which states that the agencies will assert jurisdiction over the following categories of water bodies:

- TNWs [traditional navigable waters] and wetlands adjacent to TNWs and
- Non-navigable tributaries of TNWs that are relatively permanent (i.e., the tributaries typically flow year-round or have continuous flow at least seasonally) and wetlands that directly abut such tributaries

In addition, the following waters will also be found jurisdictional based on a fact-specific analysis that they have a significant nexus with a TNW:

- Non-navigable tributaries that do not typically flow year-round or have continuous flow at least seasonally;
- Wetlands adjacent to such tributaries; and
- Wetlands adjacent to but that do not directly abut a relatively permanent non-navigable tributary.

A significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or an insubstantial effect on the chemical, physical, and/or biological integrity of a TNW. Principal considerations when evaluating significant nexus include the volume, duration, and frequency of the flow of water in the tributary and the proximity of the tributary to a TNW, plus the hydrologic, ecologic, and other functions performed by the tributary and all of its adjacent wetlands.

The term “navigable waters of the U.S.” is defined to include:

“all those waters that are subject to the ebb and flow of the tide, and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce” (ACOE, 1982).

This wetlands and waters delineation report was prepared for the Tahoe Donner Association’s Equestrian Center (Equestrian Center) located north of the city of Truckee on Alder Creek Road (Figure 1). On April 25, 2007, the Lahontan Water Board issued a Cleanup and Abatement Order that required the Tahoe Donner Association to cleanup and abate the effects of discharging horse manure and sediment from the Equestrian Center to surface waters. The evaluation area consists of the Dude Pen area and surrounding potential jurisdictional areas on the Equestrian Center property (Appendix A and Figure 2). An unnamed, several-branched stream (henceforth referred to as “the unnamed stream”) runs along the northern and eastern edges of the evaluation area. The purpose of this study is to delineate wetlands and waters on the Equestrian Center property within the evaluation area and suggest appropriate areas for the relocation of the Dude Pens such that horse manure and sediment will not be transported to surface waters.

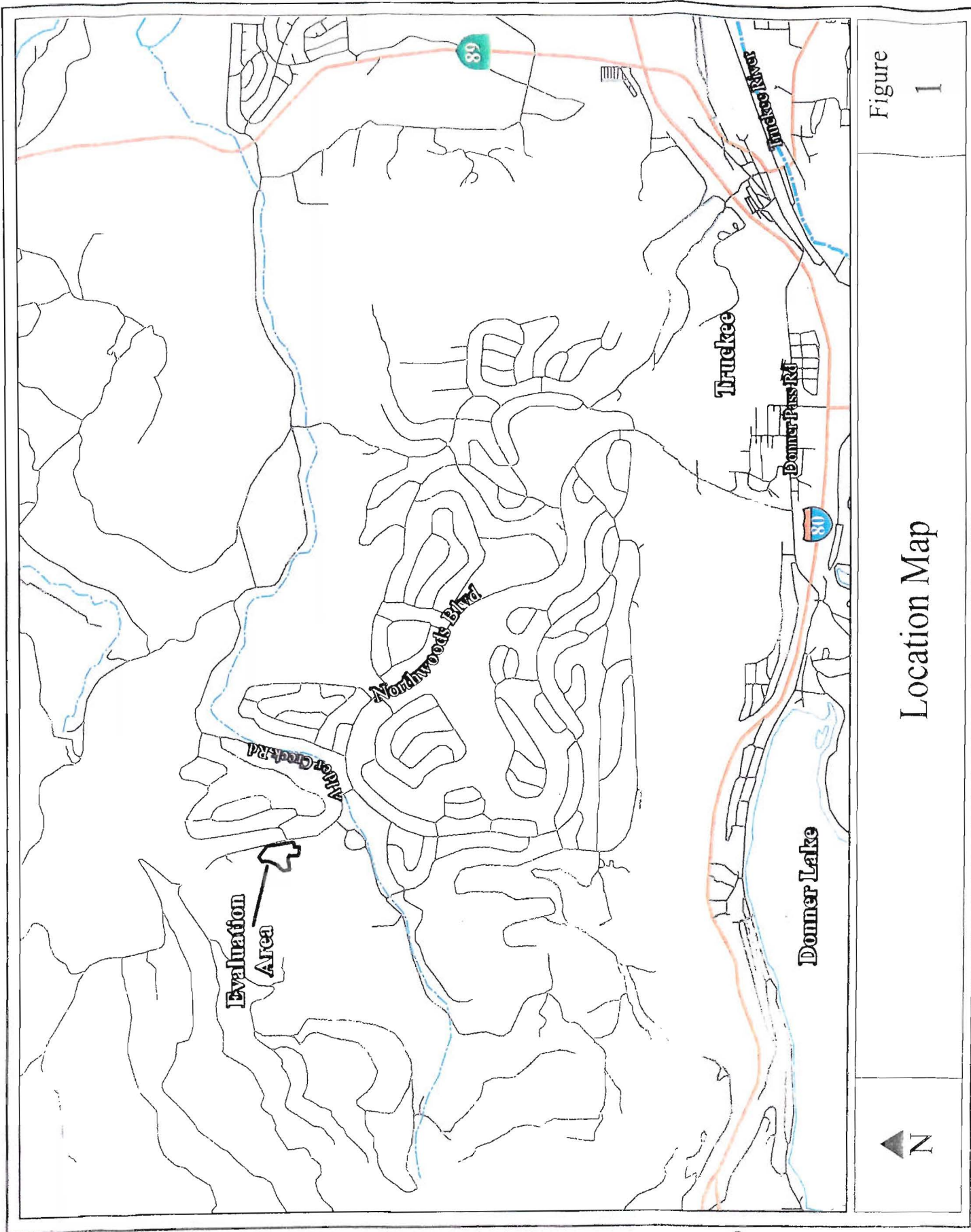
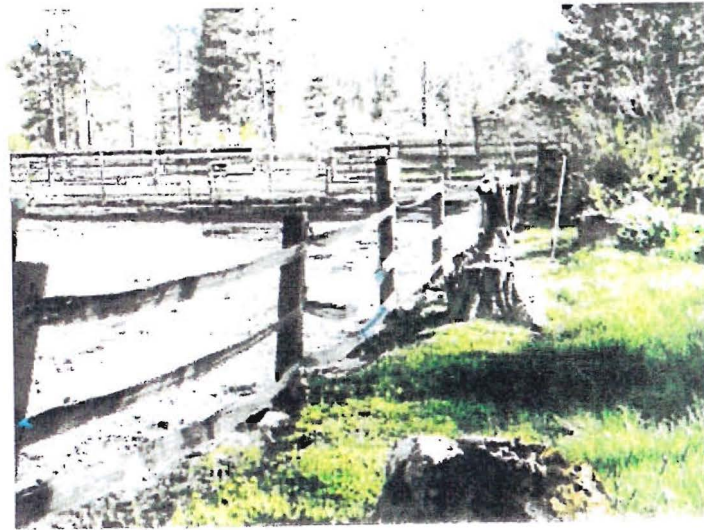


Figure  
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Location Map



1. Dude pens (wetland)



2. Hydrology daylighting at edge of disturbance



3. Wetlands north of dude pen



4. Uplands west of dude pen

Site Photos



## Chapter 2. Methods

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This wetland delineation was conducted in accordance with the requirements set forth in both the Wetland Manual and the Supplement as appropriate.

An analysis of ACOE jurisdiction within the evaluation area was conducted with guidance from the *U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook* (ACOE and EPA, 2007), as required by the June 5, 2007 ACOE/EPA Memorandum discussed above.

Prior to conducting field surveys, available reference materials were reviewed, including *The National Cooperative Soil Survey* (Soil Survey) for the Tahoe National Forest Area, California (USDA, 2008) and aerial photographs of the site. Field surveys were conducted on May 29-30 and June 18, 2008 by Senior Environmental Scientist/Wetland Scientist, Josh Harwayne, and Assistant Environmental Scientist, Jami Davis. The methods for evaluating the presence of wetlands and waters are described in detail below.

### 2.1. Field Methods

The data collected during the field surveys were recorded on Wetland Determination Data Forms for the Western Mountains, Valleys, and Coast Region provided in the Supplement (Appendix B). Nineteen sampling points were taken within the evaluation area (see the Wetland and Waters of the U.S. Delineation Map in Appendix A). Two additional sampling points were taken as a reference; one within a historic, undisturbed wet meadow immediately south of the survey area and one north of the lower corner of the upper pen in an upland area. Each sampling point was mapped using a Trimble Pro XH GPS unit and a picture of the area immediately surrounding the point was taken using a Minolta Dimage Z1 digital camera. All points were subsequently displayed in GIS using ArcGIS software. Additionally, all waters within the evaluation area were mapped using GPS.

Indicators described in the ACOE Manual and Supplement that were used to make wetland determinations at each sampling point are described below.

#### 2.1.1. VEGETATION

During the May 2008 survey, most of the vegetation at the site was unidentifiable because it was early in the growing season and many species had not yet bloomed. Therefore, a second visit in June 2008 was necessary for plant identification.

Vegetation was broken into four strata for evaluation: tree, sapling/shrub, herb, and woody vines. Dominant plant species and approximate percent cover within five feet of the sampling point were recorded for the sapling/shrub and herb strata and within 30 feet for the tree and woody vine strata. Plant species were identified using *A Sierra Nevada Flora* (Weeden, 1996), *Wildflowers of Nevada and Placer Counties, California* (CNPS Redbud Chapter, 2007), *Plants of the Tahoe Basin* (Graf, 1999), and *The Jepson Manual: Higher Plants of California* (Hickman, 1993), and were assigned a wetland status according to the *National List of Plant Species That Occur in Wetlands: 1988 National Summary* (Reed, 1988). For plant species not on this list, the *National List of Vascular Plant Species That Occur in Wetlands: 1996 National Summary* (USFWS, 1996), a draft revision of the 1988 list that is currently under review, was used to assign wetland status. This wetland classification system is based on the expected frequency of occurrence in wetlands as described in Table 2-1.

Table 2-1: Wetland Vegetation Classification System

Symbol	Indicator Category	Definition	Frequency of Occurrences
<b>OBL</b>	Obligate Wetland Plants	Always found in wetlands	>99%
<b>FACW</b>	Facultative Wetland Plants	Most often occur in wetlands	67-99%
<b>FAC</b>	Facultative Plants	Equal likelihood of occurring in wetlands and non-wetlands	33-67%
<b>FACU</b>	Facultative Upland Plants	Most often occur in non-wetlands	1-33%
<b>UPL</b>	Obligate Upland Plants	Always found in non-wetlands	<1%
<b>NI</b>	No Indicator (Assumed Upland)	Insufficient information available to determine an indicator status	
<b>NL</b>	Not Listed (Assumed Upland)		

The “dominance test,” as described in the Supplement, was applied for each sampling point. If greater than 50 percent of the dominant plant species across all strata were rated OBL, FACW, or FAC, then the plant community “passed” the dominance test and the vegetation was determined to be hydrophytic. Neither the prevalence index of morphological adaptations indicators were used as the conditions described in the manual for each were absent (i.e., plant community failing the dominance test with presence of both hydric soil and wetland hydrology).

### 2.1.2. SOILS

The National Technical Committee for Hydric Soils (NTCHS) defines a hydric soil as:

“A soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part” (USDA-NRCS, 1995).

The soil at each sampling point was evaluated by digging a hole to a depth of 20 inches, when possible, and identifying soil horizons, color, and texture, as well as any hydric soil indicators (as described in the Supplement). Soil color was evaluated by comparing a small wetted piece of soil to a Munsell Soil Color Chart (Munsell, 2000). The last digit of the Munsell Soil Notation refers to the chroma of the sample. This notation consists of numbers beginning with 0 for neutral grays and increasing at equal intervals to a maximum of about 20. Chroma values of the soil matrix which are one or less, or of two or less if mottling is present, are typical of soils which have developed under anaerobic conditions and indicate hydric soils, unless otherwise noted in the Supplement for certain soil types. This hydric soil indicator is called a depleted matrix. A surface horizon of eight inches or more thick of organic soil material, called a histic epipedon, underlain by a mineral soils with a chroma of two or less also indicates a hydric soil. Although each sampling point was evaluated for all of the hydric soil indicators described in the Supplement, these two indicators were identified most often.

### 2.1.3. HYDROLOGY

The Wetland Manual defines “wetland hydrology” as:

“Encompassing all hydrologic characteristics of areas that are periodically inundated or have soils saturated to the surface at some time during the growing season. Areas with evident characteristics of wetland hydrology are those where the presence of water has an overriding influence on characteristics of vegetation and soils due to anaerobic and reducing conditions, respectively. Such characteristics are usually present in areas that are inundated or have soils that are saturated to the surface for sufficient duration to develop hydric soils and support vegetation typically adapted for life in periodically anaerobic soil conditions.”

Each sampling point was evaluated for wetland hydrology using the indicators described in the Supplement. Evidence of one Primary Indicator sufficiently identified wetland hydrology; however, two or more Secondary Indicators were necessary if no Primary Indicators were observed.

### 2.2. Analysis

Data collected at each sampling point was analyzed to determine if wetlands and other waters were present. As described above, evidence of a minimum of one positive wetland indicator from each parameter was necessary in order to make a positive wetland determination. Waters were identified based on the presence of bed and bank features which held flowing water at the time of the site visit. The data were then displayed on an aerial photograph using ArcGIS software (Appendix A).

The data were also analyzed to determine whether or not the wetlands and waters are under ACOE jurisdiction using the *Approved Jurisdictional Determination Form* (Appendix B).

## Chapter 3. Results

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### 3.1. Vegetation

Historically, the majority of the evaluation area was likely a continuous wetland, connecting the existing wetland areas north and south of the evaluation area, along the floodplain of the unnamed stream. The area was probably a mosaic of open wet meadow, short willow riparian, and patchy forested wetland, much like the least disturbed portions of the evaluation area and immediate vicinity.

Today, vegetation in the wetland area is highly influenced by the amount of disturbance it receives. The turn-around area and pens closest to Alder Creek Road are completely un-vegetated as these are the most highly used areas of the equestrian center. Pens higher up on the slope are covered mostly with very small, low-growing herbaceous species, such as popcorn flower (*Plagiobothrys cognatus*, FACW) and alpine mouse-tail (*Myosurus apetalus*, OBL), and bulbous bluegrass (*Poa bulbosa*, FACW<sup>1</sup>). Some pens also contain lodgepole pines (*Pinus contorta*, FAC). Outside of the pen area, disturbance is greatly reduced. Lodgepole pines create a patchy canopy over a combination of grass, sedge, rush, and herbaceous species such as bulbous bluegrass, short-awn foxtail (*Alopecurus aequalis*, OBL), Mannagrass (*Glyceria* sp., OBL), Nebraska sedge (*Carex nebrascensis*, OBL), rusty sedge (*C. subfusca*, FAC), Sierra rush (*Juncus nevadensis*, FACW), Colorado rush (*J. confusus*, FACW), Baltic rush (*J. balticus*, FACW), western bistort (*Polygonum bistortoides*, OBL), small flowered camas lily (*Camassia quamash* ssp. *breviflora*, FACW), corn lily (*Veratrum californicum*, OBL), California buttercup (*Ranunculus californicus*, FAC), plantain buttercup (*R. alisimifolius*, FACW), and slender larkspur (*Delphinium gracilentum*, NL); scattered shrubs, such as white-stemmed gooseberry (*Ribes inerme* var. *inerme*, FAC) and serviceberry (*Amelanchier utahensis*, NI); and a riparian corridor with shrubby willows (*Salix* sp., FACW).

Upland portions of the evaluation area are either developed or relatively undisturbed, open pine forest. The forested areas are a mixture of lodgepole pine and ponderosa pine (*Pinus ponderosa*, UPL) that create a canopy over an open patchwork of herbaceous species such as Sierra snakeroot (*Sanicula graveolens*, NL), pussy paws (*Calyptidium umbellatum*, NL), and small-flowered blue-eyed mary (*Collinsia parviflora*, NL), and shrubby species such as serviceberry, rabbit brush (*Chrysothamnus* sp., NL), white-stemmed gooseberry, and squaw mat (*Ceanothus protstratus*, NL).

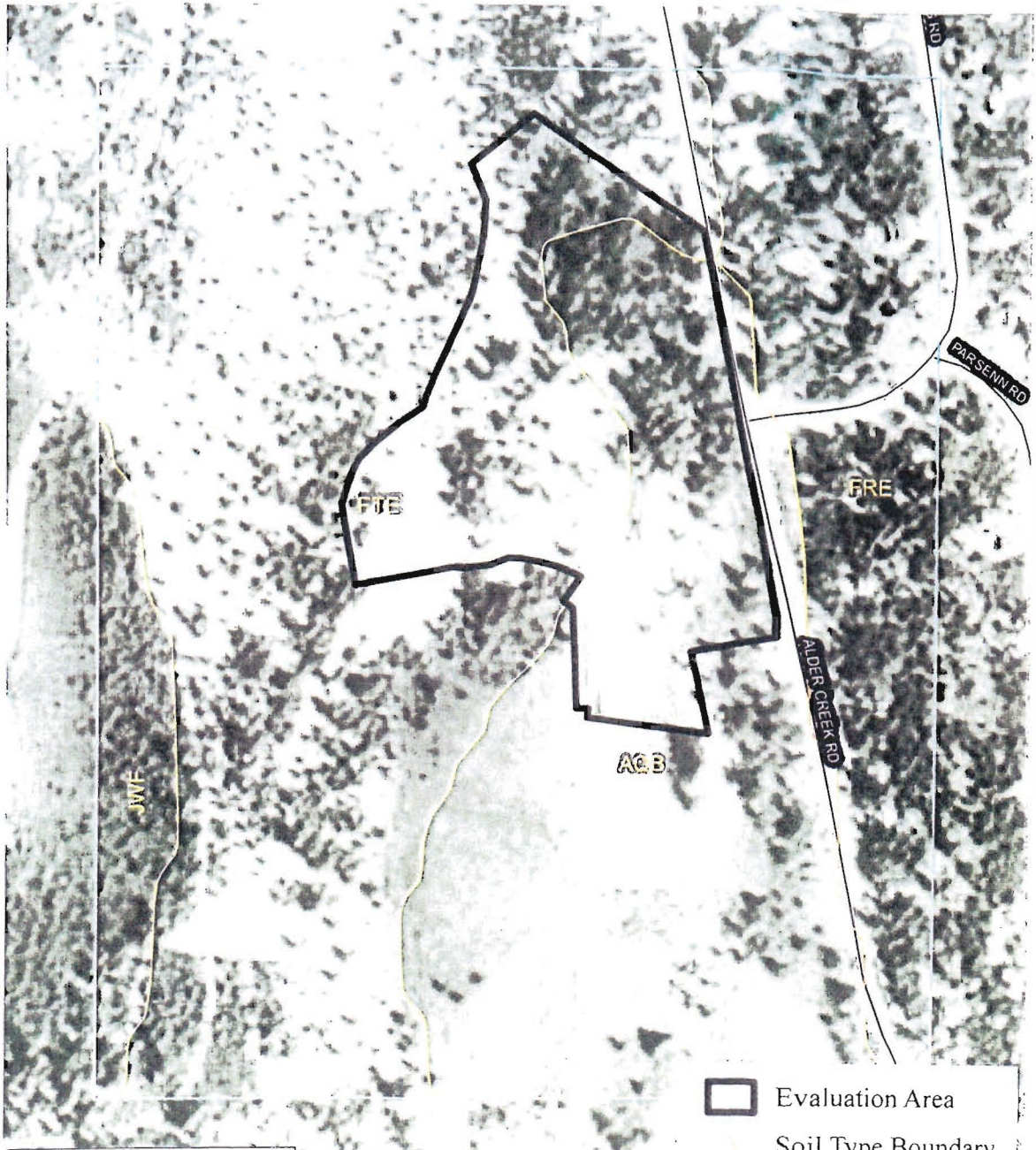
### 3.2. Soils

The Soil Survey (USDA, 2008) identifies two map units within the evaluation area (Figure 3). The Soil Survey descriptions of these mapping units are presented below with an indication of whether the soils are classified as hydric or not.

*Aquolls and Borolls, 0-5% slopes:* Aquolls make up 45% of the map unit, which are on marshes and valleys. The parent material consists of alluvium derived from igneous, metamorphic, and sedimentary rock. This soil is very poorly drained. Borolls make up another 45% of the map unit and are located on swales. The Soil Survey notes that Aquolls are hydric soils.

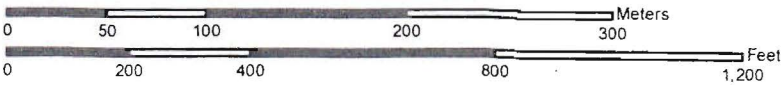
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<sup>1</sup> Please note that while *Poa bulbosa* is not listed on the national wetland indicator plant lists, further research has indicated that in certain areas of northern California, this species is associated with seasonally wet habitats, such as vernal pools (Consortium of California Herbaria, 2008). Within the Tahoe Donner Equestrian Center site, *P. bulbosa* consistently occurs only in the wettest portions of the site along side other FACW and OBL species as described above. Therefore, this species has been assigned an indicator status of FACW for the purposes of this delineation.



Tahoe National Forest Area, California (CA719)

Map Unit Symbol	Map Unit Name
AOB	Aquils and Borolls, 0 to 5 percent slopes
FRE	Fugawee-Rock outcrop-Tahoma complex, 2 to 30 percent slopes
FTE	Fugawee-Tahoma complex, 2 to 30 percent slopes
JWF	Jorge-Waca-Tahoma complex, 30 to 50 percent slopes



Source: Web Soil Survey - <http://websoilsurvey.nrcs.usda.gov> - accessed June 16, 2008



# Soils Map

Figure  
3

*Fugawee-Tahoma Complex, 2-30% slopes:* This map unit is composed of 50% Fugawee and 40% Tahoma. These soils are on mountains and mountain slopes and the parent material consists of residuum weathered from igneous rock (Fugawee) and basic tuff (Tahoma). These soils are well drained and are not hydric.

Within the evaluation area soils consisted of two to three layers, the majority of which were not clearly defined, but instead intergraded with one another over several inches. Throughout the site the texture of the upper soil layer was loamy or silty loam and the majority of the lower layers were silty clay. Other textures of the lower layers included silt, loamy silt, clayey loam, and clay. The hue of all the soils was between 5YR (yellow-red) and 10YR; however, the value and chroma varied significantly between sampling points.

Within the wetland, most sampling points exhibited the depleted matrix indicator. In addition, sampling point 19 exhibited a histic epipedon. One sampling point (12) did not exhibit any soil indicator. Although this sampling point was problematic (only 12 inches deep due to cobbles), it was not likely that it would exhibit a hydric soil indicator if dug deeper because vegetation and hydrologic indicators were also absent. Lacking an indicator for all three parameters, this sampling point is located within an upland; however, this sampling point is immediately surrounded by wetlands. A small number of upland inclusions exhibiting characteristics of this sampling point are present within the wetland area, particularly associated with the area under large pine trees. However, these upland inclusions were not distinguished from wetlands because the delineation was not conducted at a scale that would facilitate this level of detail.

Three sampling points (4, 5, and 11) within the upland also exhibited the depleted matrix indicator; however, these sampling points lacked wetland hydrology indicators and two of the sampling points (4 and 11) also lacked wetland vegetation indicators. The presence of hydric soils in these upland areas is likely the result of a transition area between wetland and uplands where certain characteristics of each overlap.

### 3.3. Hydrology

The project area lies within the boundaries of the North Lahontan Watershed, which consists of 139,515 acres. Drainages within the watershed are ultimately carried by the Truckee River to Pyramid Lake in Nevada. The unnamed stream is a multi-branched, ephemeral stream that conveys water to Alder Creek, which then runs into Prosser Creek Reservoir and is drained by Prosser Creek into the Truckee River, a TNW (Figure 4).

The unnamed stream within the study area is a combination of gently sloped channels exhibiting bed and bank features and wetland areas with no defined channel. Natural hydrologic sources for the area include precipitation and sheet flow; however, much of the hydrology that sustains the wetlands and unnamed stream is snowmelt that flows as groundwater and daylights as seeps. The wetland portions of the stream exist within the historic wetland corridor where sand, gravel, and cobble deposits likely act as a subsurface hydrologic conduit allowing the groundwater to daylight and go subsurface again multiple times throughout the area. Within undisturbed portions of the wetlands, the seeps sustain wet meadows with little standing water. Alternatively, in disturbed areas where soils have been excavated or compacted, the seeps become flowing surface water. Areas with flowing surface water sufficient to result in obvious bed and bank features are considered waters. Several other drainages exist within the evaluation area; however, it is likely that these drainages only carry flowing water immediately following precipitation events or during periods of high snow melt and are therefore not considered waters. Nevertheless, these drainages have the potential to become jurisdictional waters by state agencies as a

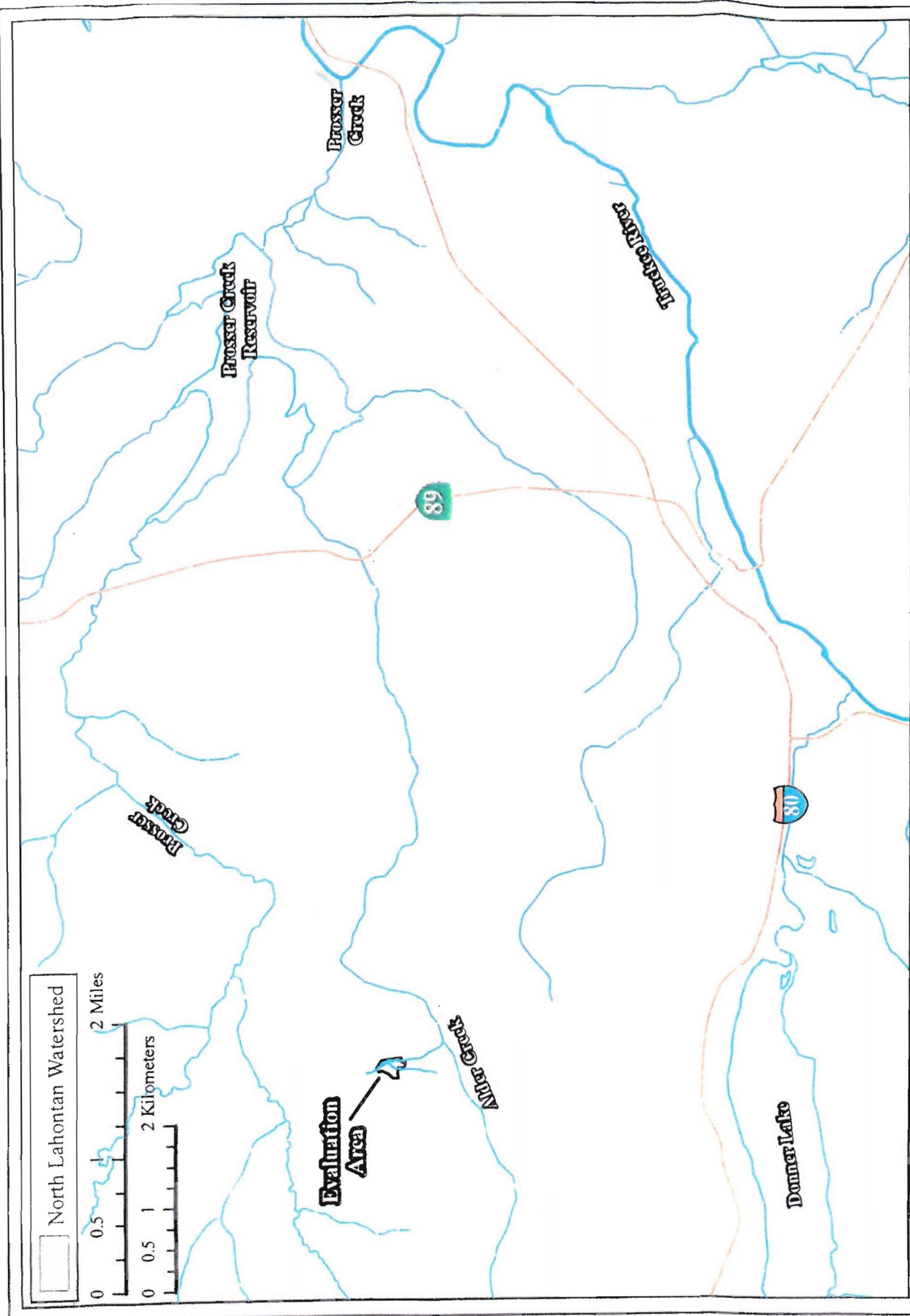


Figure 4

Hydrology Map

result of their ability to convey pollutants into other jurisdictional resources if equestrian facilities were constructed within or adjacent them.

No wetland indicators were identified for any of the sampling points in upland areas. Within the wetland area, all but one sampling point (see description of sampling point 12 in Section 3.2 above) exhibited Primary Indicators of wetland hydrology. Eleven of the wetland sampling points exhibited both a high water table (standing water within the hole) and saturation within the first 12 inches of the pit, the majority of which were saturated to the top. Two additional sampling points (6 and 13) also exhibited the saturation indicator, but did not have a high water table.



## Chapter 4. Jurisdictional Determination

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Within the evaluation area, approximately 3,044 linear feet of waters, with an average width of three feet (0.21 acre), and 6.42 acres of wetlands were found to potentially be jurisdictional, based upon analysis using the *Approved Jurisdictional Determination Form* (Appendix C). The unnamed stream is considered non-relatively permanent waters (non-RPWs) and all of the wetlands evaluated directly abut the stream.

A significant nexus evaluation determined that the unnamed stream and its abutting wetlands are likely jurisdictional. Below is an explanation of the analysis that was used to make the determination that the combination of this non-RPW and all of its adjacent wetlands has more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the Truckee River, a TNW:

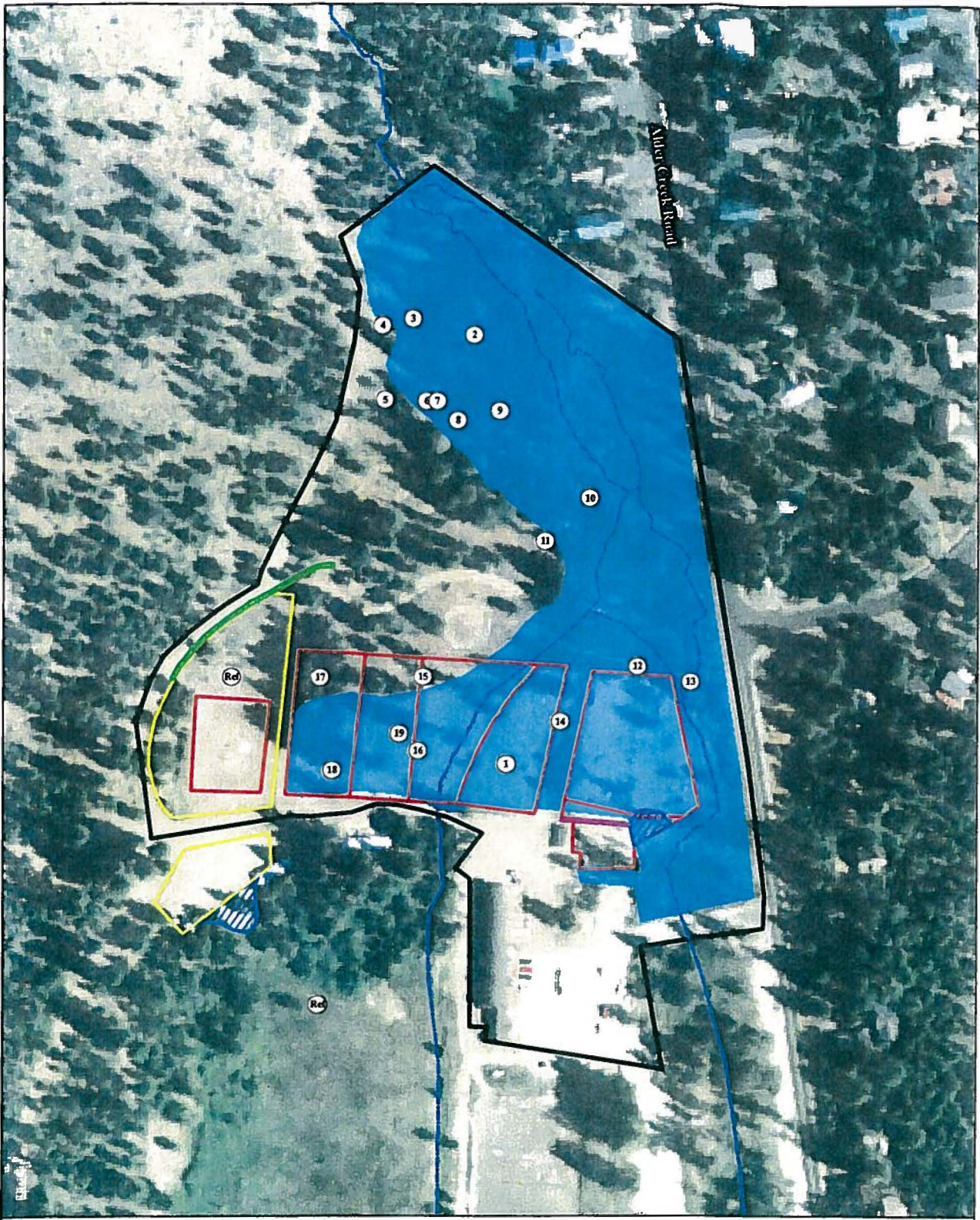
- The unnamed stream supports both riparian and wetland vegetation which provide important habitat for many species. Many raptor species protected under the Migratory Bird Treaty Act are likely to nest within the riparian corridor and in the large lodgepole pine trees. Appropriate habitat for the state listed California wolverine (*Gulo gulo*) and Sierra Nevada red fox (*Vulpes vulpes necator*) is present within the wetland; California Natural Diversity Data Base (CNDDDB) occurrences of these species are known less than one mile from the evaluation area. Additionally, the evaluation area may support Constance's sedge (*Carex constanceana*), a California Native Plant Society List 1B species, as the CNDDDB lists an occurrence of this species within the evaluation area.
- The riparian and wetland vegetation supported by the unnamed stream protect the surrounding landscape from erosion that could carry sediment and pollutants from the equestrian center, surrounding properties, and roads to the downstream tributaries. The unnamed stream and its associated wetlands and riparian vegetation likely function as a filter of these pollutants before the water reaches the Truckee River. At the same time, nutrients and organic carbon carried by the unnamed stream are likely to support food webs within the tributary, downstream RPW's, and the Truckee River.

## **Chapter 5. Conceptual Mitigation Plan**

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It is recommended that the Dude Pen area be moved from the wetlands into an upland location where it will not have an effect on the water quality of the unnamed stream and abutting wetlands. DD&A will prepare a Wetland Restoration and Monitoring Plan (Plan) for the Tahoe Donner Equestrian Center which will be of sufficient detail and format for submission to the ACOE and RWQCB. The plan shall include the following:

- Details of the engineering and hydrological components necessary to restore historic wetland function in the designated area;
- Applicable planting details which includes the use of local native plant species and the location and planting size of all planting stock;
- An irrigation plan, if necessary;
- Description of a 5-year monitoring program, including specific methods of vegetation monitoring data collection and analysis, restoration goals and objectives, success criteria, adaptive management if the criteria are not met, and a funding mechanism; and
- An outline of the specific content for monitoring requirement reports that will be submitted to the ACOE and RWQCB annually.



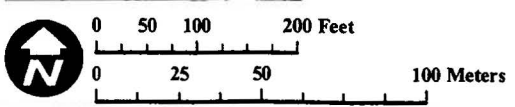
Denise Duffy & Associates, Inc.  
 947 Cass Street, Suite 5  
 Monterey, CA 93940  
[www.ddaplanning.com](http://www.ddaplanning.com)

- Ⓜ Wetland Data Points
- Waters of the U.S.
- Wetlands
- Evaluation Area
- Existing Corral
- Proposed Attenuation Basin
- Proposed Corral
- Existing Drainage Swale
- Proposed Brow Ditch

Potential ACOE Jurisdiction	
Wetlands	6.42 ac
Waters	0.21 ac

## Wetland Delineation Map Tahoe Donner Equestrian Center

Aerial Data Source: NRCS, 2005  
 Map Publication Date: 07-17-2008





## *Pacific Advocates*

July 17, 2018

Patty Z Kouyoumdjian  
Executive Officer  
Lahontan Regional Water Quality Control Board  
2501 Lake Tahoe Blvd.  
South Lake Tahoe CA 96150  
Attn. Jeff Brooks

RE: Tahoe Donner Association (TDA) Equestrian Facility 15275 Alder Creek Road,  
Truckee, CAO Rescission of Cleanup and Abatement Order No. R6T-2007-0015

Dear Ms. Kouyoumdjian,

Thank you for the opportunity to comment on the TDA proposed CAO Rescission of  
CAO No. R6T-2007-0015.

Significant progress has been made by TDA in meeting the performance standards agreed to with regard to CAO No. R6T-2007-0015, the certified interim cleanup plan in 2007 and long term operational plan, along with the conditional acceptance of Phase I and Phase II work plans and the long term plan required by the CAO.<sup>1</sup> In general, the site is in significantly better condition that it was when the CAO was issued.

Unfortunately full compliance has not been achieved. The CAO and long term plan called out the importance of the importance of removing soil compaction calling for the removal of surface and sub-surface soil compaction to restoring the wetland area and Dude Pen area identified in the wetland delineation map provided by TDA.<sup>2</sup> Instead TDA has constructed a massive entrance sign, concrete platform waste bin, and a trail through the delineated wetlands. And no fencing has been erected to protect the eastern border of these wetland areas. Under TDA rules all trails are open to horses, bikes and hiking. In addition to the compaction of these wetland areas, required to be restored under the CAO, there is also evidence that TDA has constructed these "new" features in the 100 year flood plain without proper permits. In addition, TDA has expanded bike rentals into the winter months. This expansion of human activities without compliance with CAO required

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<sup>1</sup> See the July 20,2007 CRWQCB Lahontan Region to TDA Re Acceptance of Interim Measures and Conditional Acceptance of Long-Term Plan Required by the COA R6T-2007-0015. & the August 6, 2008 Lahontan CRWQCB Conditional Acceptance of Phase I Corral Relocation Work Plan.

<sup>2</sup> See August 20, 2008 Lahontan e-mail to David Gravell, "*critical to restore the wetlands' infiltration capacity by removing surface and sub-surface soil compaction.*" Long-Term Plan (CAO Requirement No. 5) 2(c) pg 2: "*Revegetating the existing Dude Pen area (approximately two acres) with natural wetland species.*" See also August 06, 2008 Conditional Acceptance to David Gravell, TDA General Manager.

controls also raises questions regarding compliance with the Water Boards' Water Quality Control Plan for the Lahontan Region (Basin Plan). Photos are provided in the following exhibits to document the discharge or threatened discharge attributed to human activities along with earthen materials discharged to lands within the 100-year flood plain including sediment and manure and violations of the Clean Water Act prohibitions regarding construction in wetland area without proper permits and illegal discharge to the waters of the state and nation.

As mentioned substantial progress has been made in restoring the roughly 2 acre "Dude Pen" and surrounding wetlands.<sup>3</sup>

The construction of trails, placement of signs, waste bins and other objects in this sensitive area is contrary to the CAO and Basin Plan. Further protective fencing is absent on this eastern border where human use and travel is the highest. And the impact to these wetland areas are likely to increase given the regional bike races and other regional events advertised by TDA beyond the roughly 6000 TDA residents. There are numerous alternatives including the use of the adjacent paved road and interior trails. The previous signage on the opposite side of entrance, outside of the wetlands area worked for some 20 years. The construction of this new massive entrance sign, a trail, and garbage collection in this eastern wetlands area within the 100 year flood plain violates the CAO. Until they are removed, the area restored and required signage and fencing erected, no rescission of the CAO should be granted.

Sincerely,



15652 Alder Creek Road  
Truckee CA 96161

Exhibits:

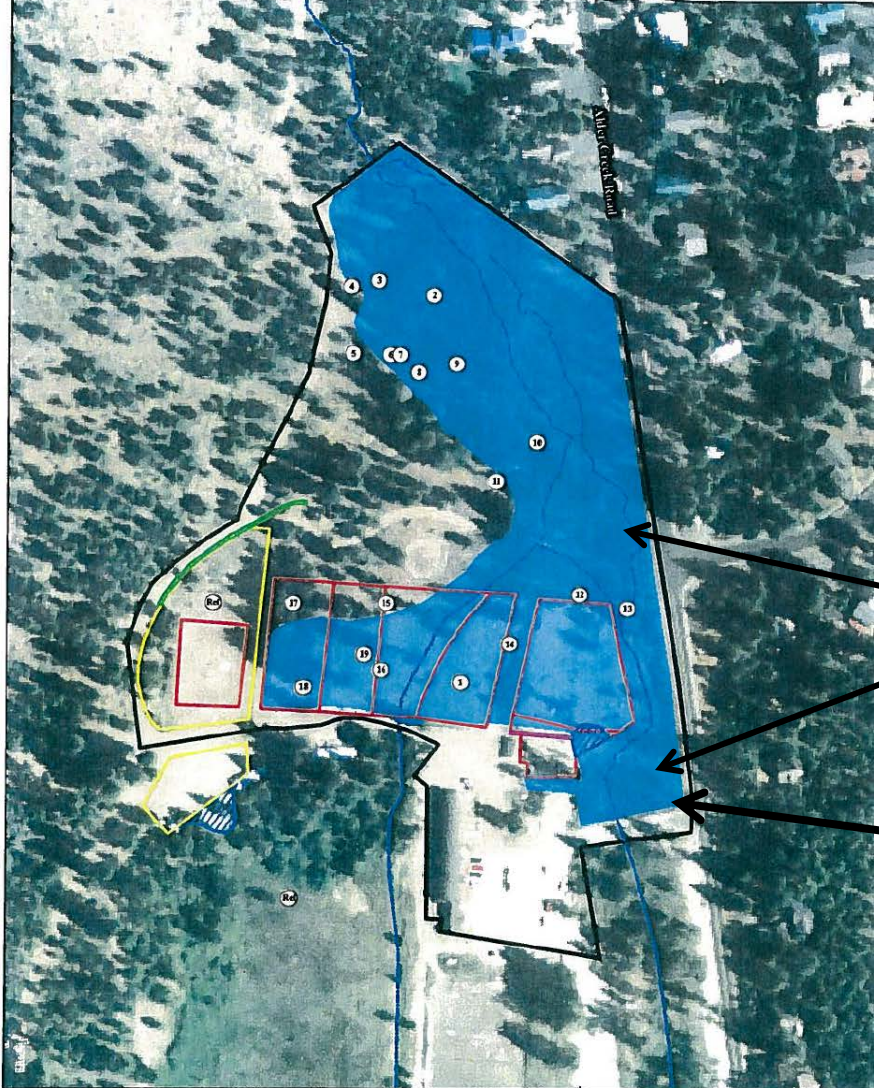
1. CAO Wetlands Delineation Map July 2008 with post 2013 construction activities.
2. Tahoe Donner- DART Industries 1972 Flood Plain Map filed with Nevada for Parcel "P" the Equestrian Center parcel.
3. TDA 2014 construction activities in the wetlands, 100 year flood plain and CAO restoration area.
4. TDA EQ Sign Construction & Garbage Bin in Wetlands & 100 Yr Flood Plain & Wetland Area.
5. July 2018, TDA EQ CAO Existing Conditions, Trail Construction & Compaction in CAO Wetlands Restoration Area.
6. 2006 Conditions Exhibit, MYLAR Map of Alder Creek tributary and EQ Center with the 50 ft Nevada County Stream buffer depicted by the orange line.

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<sup>3</sup> See Wetlands Delineation Map --Tahoe Donner Equestrian Center July 2008. And GHH Engineering TDA Sample Locations Map Figure #4 August 2008.



# EXHIBIT 1: Location of trail, sign, and garbage bin construction in delineated wetlands.



Wetland Trail  
Construction & Stream side  
Crossing 2014

2014 Sign & Garbage Bin  
Construction & Trenching

**Denise Duffy & Associates, Inc.**  
947 Cass Street, Suite 5  
Monterey, CA 93940  
[www.ddaplanning.com](http://www.ddaplanning.com)

- ⊕ Wetland Data Points
- ~ Waters of the U.S.
- Wetlands
- ⊕ Evaluation Area
- Existing Corral
- Proposed Corral
- Existing Drainage Swale
- Proposed Brow Ditch
- Proposed Attenuation Basin

Potential ACOE Jurisdiction	
Wetlands	6.42 ac
Waters	0.21 ac

0 50 100 200 Feet

0 25 50 100 Meters

**Wetland Delineation Map**  
**Tahoe Donner Equestrian Center**

Aerial Data Source: NRCS, 2005  
Map Publication Date: 07-17-2008

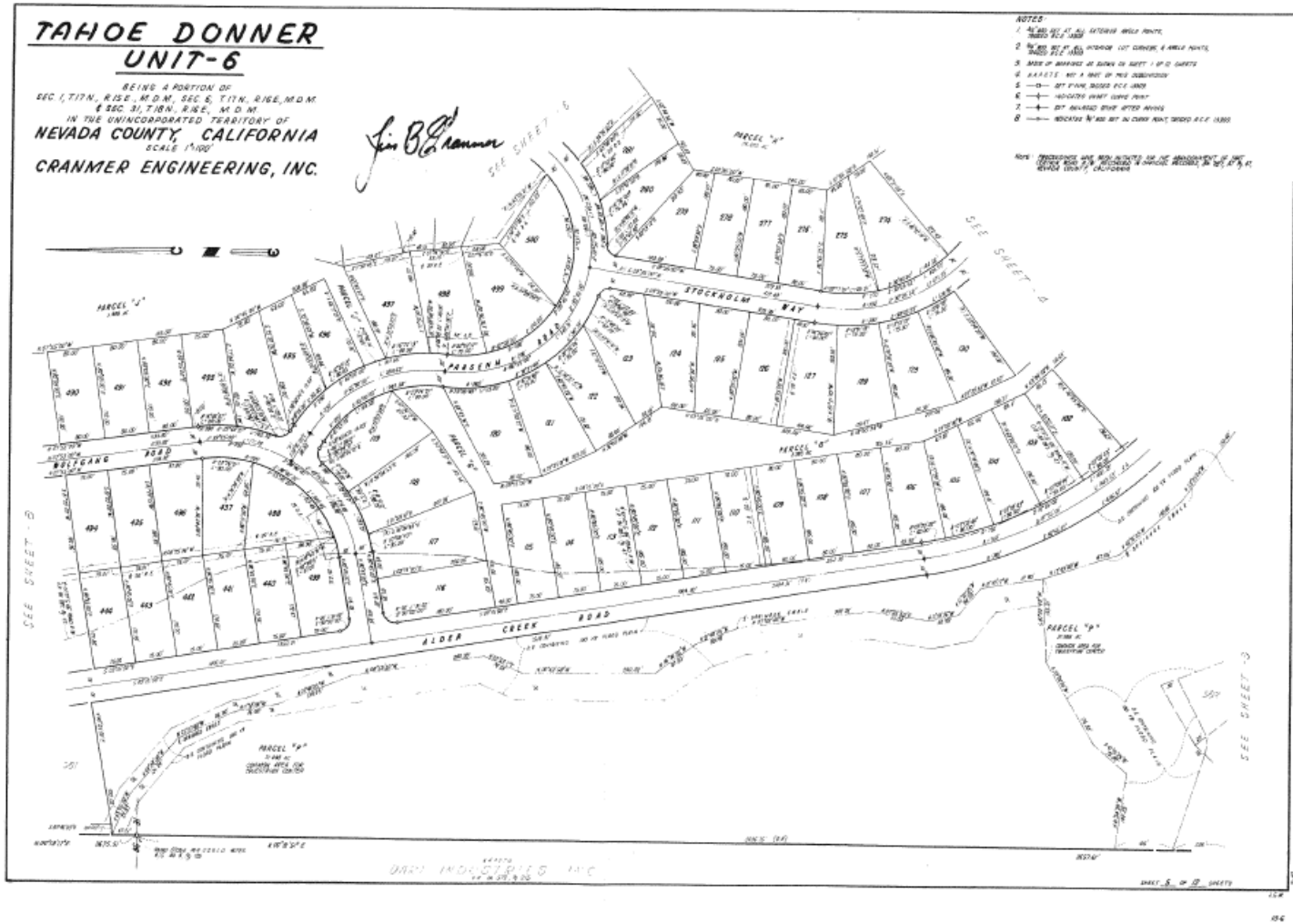


EXHIBIT 2: TDA EQ Sign Construction & Garbage Bin in Wetlands & 100 Yr Floodplain





EXHIBIT 3. July 2018 Trail Construction Compaction in CAO Wetlands



*Sect 4  
5.34  
5-12*

EXHIBIT 4: TDA 1972 County Plot Map Documenting 100 Year Flood Plain for Parcel 'P', where the TDA equestrian center is located.



TDA Entrance Wetland & 100 Yr Flood Plain Sign Trenching & Construction 9-5-14

EXHIBIT 5: TDA EQ Entrance Wetlands & 100 Yr Flood Plain Sign Construction 9-12-14



2006 MYLAR Map of Alder Creek tributary and EQ Center with the 50 ft Nevada County Stream buffer depicted by the orange line



LEGEND	
SOIL SAMPLE LOCATION	⊗
SURFACE WATER SAMPLE LOCATION	⊠

TAHOE DONNER EQUESTRIAN CENTER  
 15275 ALDER CREEK RD.  
 TRUCKEE, CA  
 SAMPLE LOCATION MAP

<b>GHH</b> <b>ENGINEERING, INC.</b> 11960 Heritage Oak Place Auburn, CA 95603 (530) 888-3100	INITIAL	MMW
	DATE	08/14/08
	JOB #	5363
	FIG #	4



2005 TD EQ Center Dude Pen, Wetlands and Flood Plain



2006 TD Dude Pen, Wetlands, & Flood Plain



52 Alder Creek Rd  
Lakeview CA 96141



USA

NON-MACHINABLE SURCHARGE



# FIRST CLASS MAIL



INSUFFICIENT ADDRESS  
NO STREET DELIVERY  
CORRECT PO BOX #  
REQUIRED FOR DELIVERY

Patty Z Kouyoumdjian  
Executive Officer  
Salmon Run WGCB  
2501 Lake Tahoe Blvd  
Tahoe City CA 96145

1710

S. Lake Tahoe?

INSUFFICIENT  
NO STREET DELIVERY  
CORRECT PO BOX #  
REQUIRED FOR DELIVERY

FIRST CLASS

FIRST CLASS

FIRST CLASS

FIRST CLASS

FIRST CLASS

FIRST CLASS

FIRST CLASS

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