APPENDIX D

BIOLOGY DATA

Denise Duffy & Associates, Inc.
PLANNING AND ENVIRONMENTAL CONSULTING

October 11, 2006

Sonia Ransom
Allen Matkins LLP
515 South Figueroa St. 7th Fl.
Los Angeles, CA 90071-3398

Subject: Snowcreek 8 – Biological Assessment

Dear Ms. Ransom,

Denise Duffy & Associates, Inc. (DD&A) was contracted by Allen Matkins to prepare a Biological Assessment for the Snowcreek 8 Project in the Town of Mammoth Lakes, Mono County, California. This letter reports the results of the assessment.

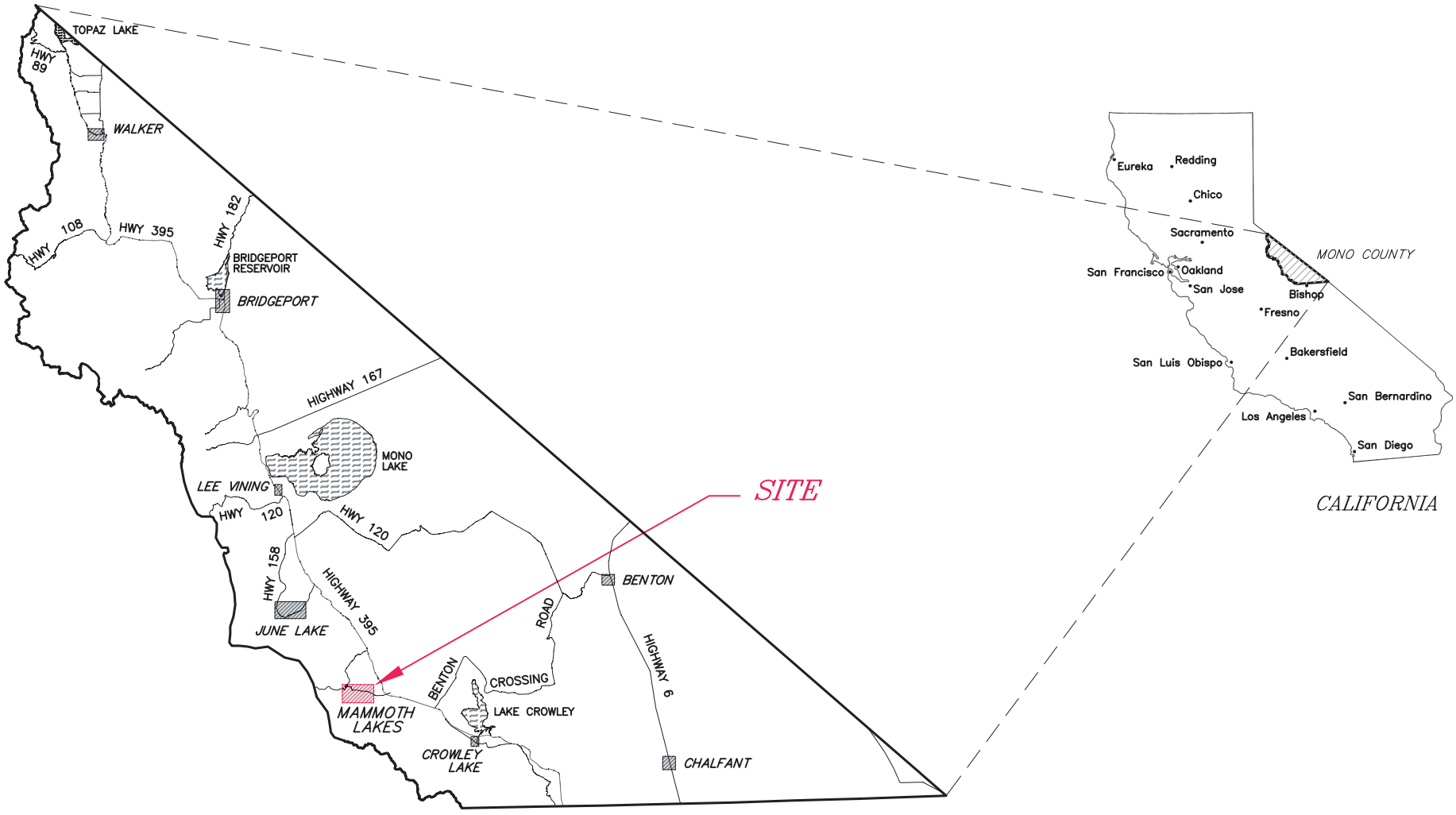
Introduction

The Snowcreek 8 Project (project) site is regionally located in east-central California, in the southwest portion of Mono County, south of Mono Lake and west of Crowley Lake (**Figure 1**). It is located at the southeastern edge of the Town of Mammoth Lakes city limits, approximately four miles west of the intersection between U.S. Highway 395 and State Route 203 (**Figure 2**). The project site is located on the south side of Old Mammoth Road and encompasses about 153 acres (**Figure 3**[1]). The site is bordered on the west by Snowcreek Unit 5 and the southeastern margin of the existing golf course, on the north-northwest by Old Mammoth Road and a detention pond previously constructed as part of the Snowcreek Resort, on the east by Sherwin Creek Road and a rock disposal site, and on the south by undeveloped land. The south boundary terminates at the boundary of Snowcreek Unit 5.

The master plan for the Snowcreek Resort includes several resort housing areas and an 18-hole golf course. Some housing areas and 9 holes of the golf course have been constructed. The Snowcreek 8 project site is planned for additional housing and the remaining 9 holes of golf course. The site currently contains the Snowcreek sales office, but is primarily vacant land. A portion of the site is used for pack station livestock grazing and contains one explosives cache container, livestock corrals, and a tack shed that have been owned and maintained by the U. S. Forest Service (USFS)/Inyo National Forest (INF).

Information in this assessment is primarily based on the Town of Mammoth Lakes General Plan Update Environmental Impact Report (EIR) (2005), and utilizes the same land area descriptors for consistency purposes (i.e., Planning Area, Municipal Boundary, and Urban Growth Boundary; these three areas are depicted on Figures 1.1.1 and 1.1.2 of the EIR). In addition, this report incorporates the results of the wetland delineation conducted by D. R. Sanders and Associates, Inc. (June 2002).

[1] References on Figure 3 to "USFS" reflect the ownership status of that portion of the project site that was owned by the U.S. Forest Service in 2002. That portion has since been the subject of a land exchange, and is no longer owned by the Forest Service. It is now part of the project site owned by the Snowcreek project proponent.



Source: SIERRA GEOTECHNICAL SERVICES INC.

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Vicinity Map

Figure 1

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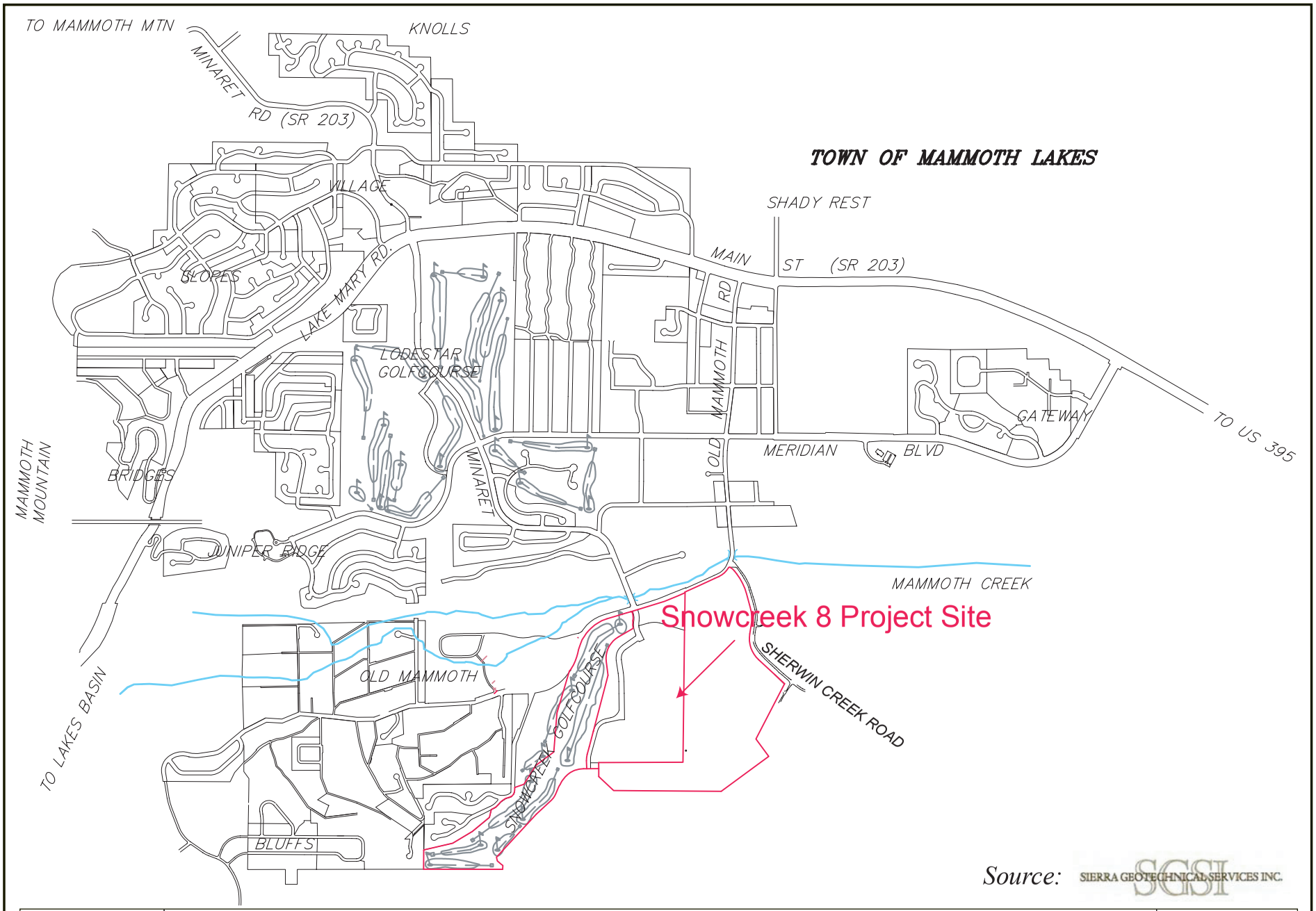

Source: SIERRA GEOTECHNICAL SERVICES INC.

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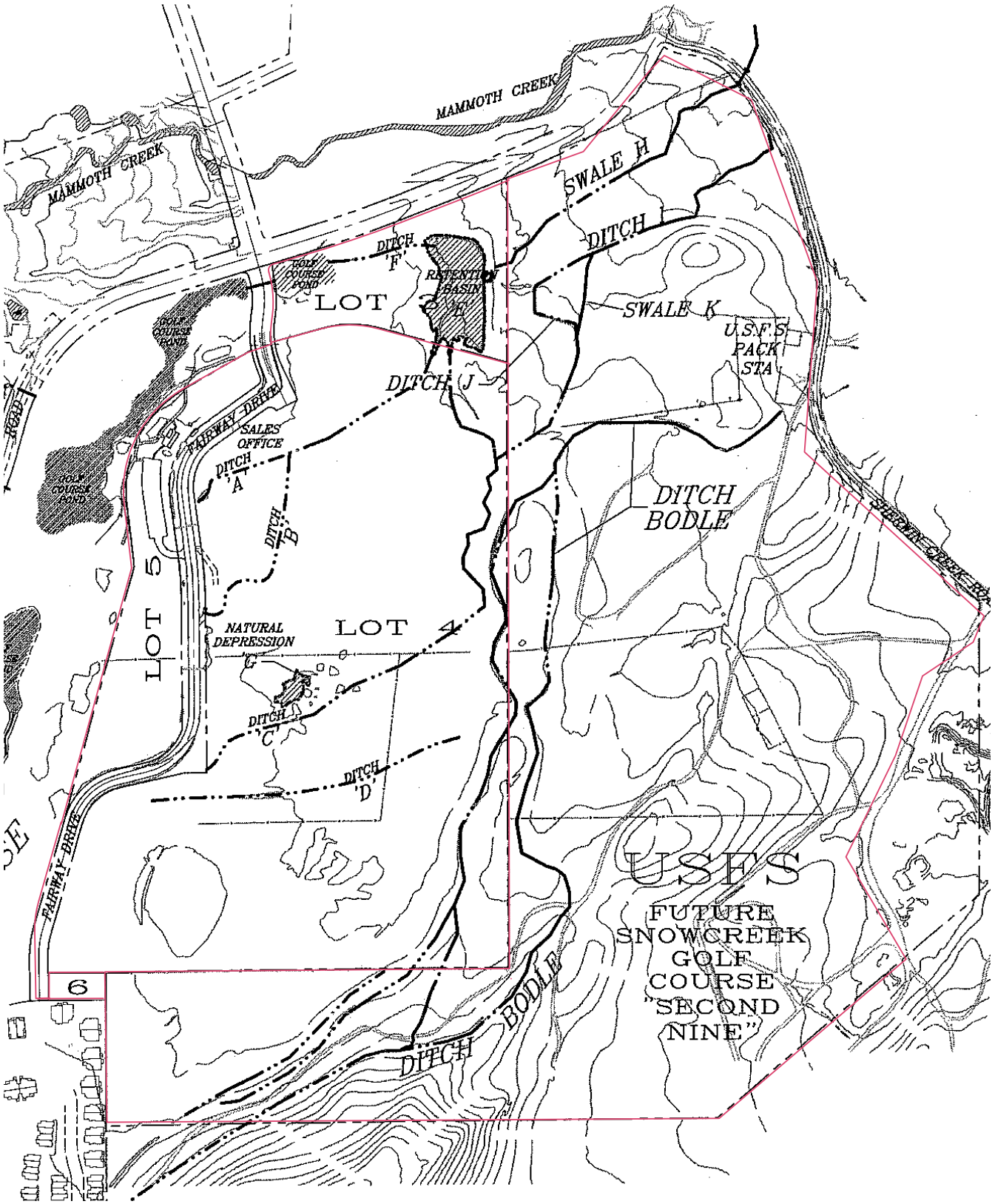
Location Map

Figure 2

DENISE DUFFY & ASSOCIATES, INC.



Source: triad/holmes associates, June 2002

N	Project Site	Figure 3

The purpose of this biological assessment is to: 1) provide a description of the existing biological conditions on the project site; and 2) determine the potential for special-status botanical and wildlife species and sensitive habitats to occur within the project site; 3) identify potential impacts to biological resources that may occur as a result of the project, including potential impacts resulting from construction activities; and 4) provide avoidance and mitigation measures to reduce potential impacts in accordance with the California Environmental Quality Act (CEQA).

Methods

Personnel and Survey Dates

Biological surveys were conducted on August 8-10, 2005, to assess the environmental conditions of the site and its surroundings, and identify special-status species and sensitive habitats, if present. Surveys were conducted by DD&A's Natural Resources Division. DD&A visited the site again on August 24, 2006, to conduct a reconnaissance-level survey to determine whether environmental conditions had changed on the site within the last year.

Data Sources

DD&A reviewed recent environmental documents and publications from the Mammoth Lakes and Mono County areas, including:

- *Draft EIR for the Town of Mammoth Lakes 2005 General Plan Update* (Town of Mammoth Lakes 2005);
- *Mono County General Plan* (Mono County 2000);
- *Snowcreek Parcels Phase I Environmental Site Assessment* (Sierra Geotechnical Services, Inc. 2005);
- *Draft EIR/EIS for Changes in Mammoth Creek Instream Flow* (Mammoth Community Water District and U.S. Forest Service 2000); and
- *Identification/Delineation of Wetlands on a Portion of Snowcreek Resort Property in Mammoth Lakes (Mono County), California* (D. R. Sanders and Associates, Inc. 2002).

The following botanical references were also reviewed: *A Flora of Valentine Eastern Sierra Reserve* (Howald and Orr 2000); *A Sierra Nevada Flora* (Weeden 1996); *Sierra Nevada Tree Identifier* (Paruk 1997); and *Jepson Manual* (Hickman 1993). All plants observed within the Study Site were identified to species or intraspecific taxon using keys and descriptions in these resources.

The generalized vegetation classification schemes for the Study Site were based on the U.S. Forest Service (USFS) CALVEG system, following the methods of the Town of Mammoth Lakes General Plan Update EIR (General Plan Update). The CALVEG system is a hierarchical classification system of actual vegetation designated to assess vegetation-related resources throughout California. Information regarding the distribution and habitats of local and state vascular plants were reviewed (Munz and Keck 1973; Hickman 1993).

In addition, global positioning system (GPS) data was collected during the survey by DD&A GIS Specialist to delineate habitat communities and map any special-status species observed. Habitat community maps were created in GIS format to be utilized in the site design process.

Special-Status Species

Plants and animals that have been formally listed or proposed for listing as Rare, Endangered, Threatened, or are Candidates for such listing under the federal Endangered Species Act (ESA) or the California Endangered Species Act (CESA) are afforded protection under the ESA and CESA. Species designated as California "species of special concern" by the California Department of Fish and Game (CDFG), federal "species of concern" by the U.S. Fish and Wildlife Service (USFWS), and List 1B (Plants Rare, Threatened, or Endangered in California and elsewhere) and List 2 (Plants Rare, Threatened, or Endangered in California, but common elsewhere) species in the California Native Plant Society (CNPS) *Inventory of Rare and Endangered Vascular Plants of California* (Tibor 2001) are also considered special-status species. In addition, the U.S. Forest Service (USFS) defines sensitive species as those plant and animal species identified by a regional forester for which population viability is a concern, based on documentation of a significant current or predicted downward trend in habitat capability that would reduce a species' existing distribution. Raptors (e.g., eagles, hawks, and owls) and their nests are protected under various federal and state laws and regulations, including the Migratory Treaty Act (1918) and California Fish and Game Code.

In addition to the above resources, the following data sources were reviewed in order to determine the occurrence or potential for occurrence of plant and wildlife species at the Study Site: current agency status information from the Service and CDFG for species listed, proposed for listing or candidates for listing as Threatened or Endangered under the federal Endangered Species Act (ESA) or California Endangered Species Act (CESA), and those considered federal "species of concern" and CDFG "species of special concern;" the CNPS *Inventory of Rare and Endangered Vascular Plants of California* (2001); and the CNDDB RareFind occurrence reports for the Old Mammoth, Bloody Mountain, Crystal Crag, and Mammoth Mountain quadrangles, as well as Mono and Inyo Counties (reports were generated for both field visits in 2005 and 2006).

Sensitive Habitats

The site was surveyed for sensitive habitats. Sensitive habitats include riparian corridors, wetlands, habitats for legally protected species, areas of high biological diversity, areas supporting rare or special-status wildlife habitat, and unusual or regionally restricted habitat types. Habitat types considered sensitive include those listed on the CNDDB's working list of high priority and rare natural communities habitats (i.e., those habitats that are Rare or Endangered within the borders of California) (CDFG 2003), and those that are critical habitat in accordance with the Endangered Species Act.

Results

Vegetation

Regionally, the project site is situated along the eastern slope of the Sierra Nevada where the Sierra Nevadan and Great Basin geographical regions and biotic communities converge. Vegetative communities in this area are adapted to cold, snowy winters and arid summers. The field survey in 2005 identified four vegetation communities within the project site: 1) basin sagebrush; 2) meadow; 3) irrigation ditches/retention basins; and 4) developed/disturbed (**Figure 4**). **Figure 5** includes representative photos of the project site. The subsequent field survey in 2006 found that site conditions have not significantly changed and no new biological resources were identified.

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Habitat Map

Figure 4

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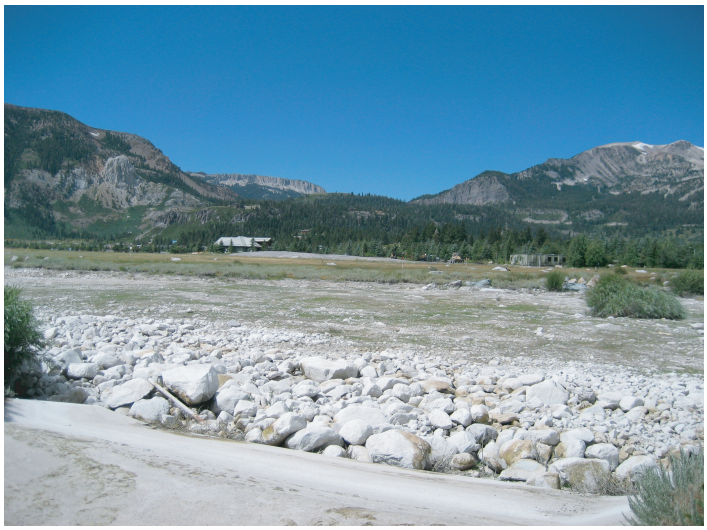
Developed/Disturbed

Meadow



Retention Basin

Basin Sagebrush

Representative Site Photos	Figure 5

Basin Sagebrush
Generally, the basin sagebrush community occurs on dry slopes and plains at low elevations within the region, mainly from 3600 – 9800 feet (1098 – 2990 m). Basin sagebrush is usually found on frigid soils having little or no soil profile development and in coarse depositional areas, being strongly associated with other Great Basin or dry-site shrubs. The community is dominated by soft, woody shrubs, including basin sagebrush (*Artemisia tridentata*), antelope bitterbrush (*Purshia tridentata*), gray rabbitbrush (*Chrysothamnus nauseosus*), mountain snowberry (*Symphoriocarpus vaccinoides*), and squaw currant (*Ribes cereum*). Other associated species include annuals and perennial bunchgrasses that are sparsely distributed between shrubs. Within the project site, this community is found on the majority of the site, but is concentrated within the USFS exchange land area. There is approximately 92 acres of basin sagebrush community within the site.

Meadow
A meadow community exists within the southwestern portion of the site, east of Snowcreek 5 and the existing golf course. This community is dominated by Baltic rush (*Juncus balticus*), Nebraska sedge (*Carex nebrascensis*), creeping wild rye (*Leymus triticoides*), and Rocky Mountain iris (*Iris missouriensis*). The meadow comprises approximately 22 acres of the project site.

Irrigation Ditches/Retention Basins
Portions of the property have been subject to historic modifications. Historically, ditches have been dug to assist in the distribution of irrigation water on the site. Retention basins have been created to hold overflow from the adjacent golf course pond. The ditches and basins are sparsely vegetated, but where vegetated they are dominated by both hydrophytic species such as Baltic rush, Nebraska sedge, Rocky Mountain iris, willow (*Salix lucida*, *S. planifolia*), and non-native, weedy species, such as toadflax and foxtail. The ditches and basins occupy approximately 2.5 acres of the project site and are shown in **Figure 3**.

Developed/Disturbed
Many portions of the project site are developed/disturbed. As described above, the site currently contains the Snowcreek sales office, corrals, tack shed, and an explosives cache. Roads have been constructed and soil and rock debris have been deposited in some areas. Other areas appear to be disturbed, but no clear indication is available as to the cause of the disturbance. In addition, pack station livestock grazing occurs within the site. Vegetation is the disturbed/developed community is typically sparse. Where vegetation is present, it is dominated by non-native, weedy species including toadflax, foxtail barley, and mustard (*Brassica* sp.). Approximately 36.5 acres are developed/disturbed within the project site.

Special-Status Species

Special-Status Plant Species
A list of special-status plant species that have the potential to occur within the project site, along with their legal status, habitat associations, and brief statement of the likelihood to occur is presented in **Table 1**. This list was developed by conducting a thorough review of the CNDDB and previous environmental documentation, and comparing the geographic ranges and habitat requirements of special-status species documented to occur or with the potential to occur in the area to those conditions found at the site.

The General Plan Update states that there is no potential habitat for any endangered, threatened, or proposed plant species within or adjacent to the project site, nor have any populations of

Table 1. Potential Special-Status Plant Species within the Project Site

Species	Status[1]				Habitat Association	Occurrence within the Municipal Boundary	Likelihood to occur within the Study Site[2]
	ESA	CESA	CNPS	USFS			
Arabis pinzlae Pinzl's rockcress	None	None	1B	S	Very steep north to east-facing avalanche chutes with deep sandy soils derived from granite; 9,800 to 11,600'.	Minaret Ridge.	Unlikely. The site lacks suitable habitat to support this species; species not observed within the site.
Botrychium crenulatum Crenulate moonwort	None	None	2	S	Lower montane coniferous forest meadows, marshes, and seeps.	Potential habitat around Twin Lakes, marshes, streams, and meadows.	Unlikely. This species was not observed within the site.
Botrychium lunaria Grape-fern moonwort	None	None	2	None	Meadows and seeps; subalpine coniferous forest; upper montane coniferous forest; 7,400 to 11,200'.	Potential habitat around Twin Lakes, marshes, streams, and meadows.	Unlikely. This species was not observed within the site.
Botrychium minganense Mingan moonwort	None	None	2	None	Upper and lower montane coniferous forest; 4,900 to 6,800'.	Potential habitat around Twin Lakes, marshes, streams, and meadows.	Unlikely. This species was not observed within the site.
Botrychium ascendens Upward-lobed moonwort	None	None	2	S	Lower montane coniferous forest (mesic).	Potential habitat around Twin Lakes, marshes, streams, and meadows.	Unlikely. This species was not observed within the site.
Epilobium howellii Subalpine fireweed	None	None	1B	S	Meadows and subalpine coniferous forest; wet areas and mossy seeps; 6,400 to 8,900'.	Twin Lakes.	Unlikely. This species was not observed within the site.
Lupinus duranii Mono Lake lupine	SC	None	1B	W	Basin sagebrush scrub, upper montane coniferous forest,' volcanic pumice substrate and barren soils, sandy and gravelly; 6,500 to 8,500'.	Northwest of town; Minaret Summit; Lincoln Knob; Upper Dry Creek.	Unlikely. Although potential habitat exists within the site (basin sagebrush scrub), the species was not observed.
Sedum pinetorum Pine City sedum	None	None	3	W	Rocky, open forest; 8,700'.	Known only from type specimen from Pine City, an old mining camp "above Mammoth Lakes" in the Mammoth Lakes Basin.	Unlikely. The site lacks suitable habitat to support this species; species not observed within the site.
Source: General Plan Update, 2005							

Species	Status[1]				Habitat Association	Occurrence within the Municipal Boundary	Likelihood to occur within the Study Site[2]
	ESA	CESA	CNPS	USFS			

[1]Status Codes:
ESA – Endangered Species Act of 1972, as amended
None = Species not listed or proposed for listing
SC = Species of Concern; species for which the USFWS has information indicating that proposing to list them as threatened or endangered species may be appropriate
CESA – California Endangered Species Act
None = Species not listed or proposed for listing
CNPS – California Native Plant Society
1B = Plants rare, threatened, or endangered in California and elsewhere
2 =Plants rare, threatened, or endangered in California but more common elsewhere
3 = Need more information
USFS – USDA Forest Service, Pacific Southwest Region
W = Watch species
S = Sensitive species

[2]Definitions of Likelihood to Occur
Known = known occurrence of plant within the Study Site from the CNDDB; presence of suitable habitat conditions and suitable microhabitat; or observed during field surveys.
Moderate = known occurrence of plant in the vicinity from the CNDDB, or other documents in the vicinity; presence of suitable habitat conditions.
Low = plant known to occur in the vicinity from the CNDDB, or other documents in the vicinity; habitat conditions of poor quality.
Unlikely = plant not known to occur in the vicinity from the CNDDB, or other documents in the vicinity; no suitable habitat is present; species was not observed during field surveys within flowering period.

federally listed or proposed plant species been reported within the planning area. **Table 1** identifies the special-status plant species listed in the General Plan Update EIR as those that are known to occur within the Municipal Boundary or those that have the potential to occur in the Urban Growth Boundary. However, based on focused field surveys and species habitat requirements, no special-status plant species were observed within the site and none are expected to occur.

Special-Status Wildlife Species
A list of special-status wildlife species that have the potential to occur within the project site, along with their legal status, habitat associations, and brief statement of the likelihood to occur is presented in **Table 2**. This list was developed by conducting a thorough review of the CNDDB and previous environmental documentation (including the General Plan Update EIR), and comparing the geographic ranges and habitat requirements of special-status species documented to occur or with the potential to occur in the area to those conditions found at the site.

There is a low potential for the following special-status bird species to utilize the site for foraging or nesting habitat: northern goshawk, sage-grouse, northern harrier, great gray owl, and other more common raptor species (e.g., red-tailed hawks). However, the site contains only marginal nesting and/or foraging habitat due to the existing disturbance within and adjacent to the site. Portions of the site are developed or disturbed, with small pockets of marginal nesting and foraging habitat scattered throughout the site. Optimal nesting and foraging habitat exists to the east and south within the Inyo National Forest, within the large, contiguous areas of sagebrush community, as well as the presence of forest and chaparral communities.

Mule deer are not a listed species, but are considered an important harvest species by the CDFG. Deer populations in the vicinity are comprised of Rocky Mountain mule deer (*Odocoileus hemiomus hemiomus*) from the Round Valley and Casa Diablo herds. Both are migratory deer herds that move from winter to summer range on a seasonal basis. In addition to migrants, the Mammoth area is used by both holdover and summer resident mule deer (USDA 1990; Kucera 1988). Maintenance of mule deer historic summer and winter ranges and annual migration routes are vital to their long-term survival. Deer herd management plans were prepared by the CDFG in the mid-1980s for both herds (Thomas 1986). The management plans are designed to give guidance to public agencies that have regulatory authority over lands that make up part of the deer hard habitat. Management objectives include enhancing important winter, hold, migratory, and fawning habitats. Of particular concern are the portions of the herds' range known as Critical Winter Range. These are areas determined by the state and federal agencies to be critical to the life cycle of migratory deer. Based on the *Snowcreek Ski Area Deer Migration Study* (Taylor 1993), no deer migration routes or ranges occur within the site.

Sensitive Habitats

A wetland delineation was conducted for the site by D. R. Sanders and Associates, Inc. (2002). The report concluded that no jurisdictional waters of the U.S. (including wetlands) were present within the project site. The U.S. Army Corps of Engineers (Corps) concurred with this finding, stating that the project site is not subject to Corps jurisdiction under Section 404 of the Clean Water Act and a Section 404 permit is not required for the project (see attached letter from the Corps dated July 8, 2003).

Table 2. Potential Special-Status Wildlife Species within the Project Site

Species	Status[1]				Habitat Association	Occurrence within the Municipal Boundary	Likelihood to occur within the Study Site[2]
	ESA	CESA	CDFG	USFS			
Accipiter gentilis Northern goshawk (nesting)	SC	None	SSC DF-S	S	Typically nests in mature or old-growth forests. Forages in both heavily forested and relatively open habitats.	Known occurrences of foraging in upper portion of Mammoth Creek drainage, Lakes Basin, Valentine Reserve. Probable nesting territory near Lake Mary. Historic nesting sites in Dry Creek.	Low. Marginal foraging habitat exists within the site.
Aplodontia rufa californica Sierra Nevada mountain beaver	SC	SC	SSC	None	Mountain streams with dense deciduous riparian vegetation.	Known to inhabit Mammoth Creek and adjacent riparian habitats. Present on the Valentine Reserve.	Unlikely. Occurrences not known in the vicinity; suitable habitat conditions are not present within the site.
Aquila chrysaetos Golden eagle (nesting and wintering)	None	None	SSC	None	Generally open country, in prairies, arctic, and alpine tundra, open wooded country, and barren areas, especially in hilly or mountainous regions. Nests on rock ledge of cliff or in large tree.	Potential nest sites in the Mammoth Rock area and proposed Sherwin Ski Area.	Unlikely. Occurrences not known in the vicinity; suitable habitat conditions are not present within the site.
Bufo canorus Yosemite toad	None	None	SSC	S	Wet mountain meadows and borders of forests. Breeds in shallow edges of snowmelt pools and ponds or along edges of lakes and slow-moving streams.	Occurrences in Lake Mary.	Unlikely. Occurrences not known in the vicinity; suitable habitat conditions are not present within the site.
Centrocercus urophasianus urophasianus Sage-grouse (nesting)	PS:C	None	SSC	S MIS	Foothills, plains, and mountain slopes where sagebrush is present. Leks are located on relatively open sites surrounded by	Occurs in sagebrush habitats adjacent to lower reaches of Mammoth Creek. One active lek reported one mile north of	Low. The site contains suitable habitat (sagebrush habitat); however, no leks are documented to occur within the site. There are

Species	Status[1]				Habitat Association	Occurrence within the Municipal Boundary	Likelihood to occur within the Study Site[2]
	ESA	CESA	CDFG	USFS			
					sagebrush, or in areas where sagebrush density is low. Nest in thick cover in sagebrush habitat, beneath a sagebrush or other shrub	Mammoth Yosemite Airport.	several known leks within the planning area defined in the General Plan Update. Lek 7, as designated by the Bureau of Land Management (BLM), is located approximately 1.25 miles north of the Mammoth Yosemite Airport, outside of the Municipal Boundary. This lek has been inactive in the recent past. There are no leks or recorded bird sitings within the site.
Circus cyaneus Northern harrier (nesting)	None	None	SSC	None	Marshes, meadows, grasslands, and cultivated fields. Nests on the ground, commonly near low shrubs, in tall weeds or reeds, sometimes in bog; or on top of low bush above water, or on knoll of dry ground, or on higher shrubby ground near water, or on dry marsh vegetation.	Observed foraging in Eastern Sierra College Center site. Same site offers high quality nesting habitat although no nests were located.	Low. Marginal nesting/foraging habitat exists within the site.
Empidonax traillii Willow flycatcher (nesting)	None	E	None	S	Strongly tied to brushy areas of willow and similar shrubs. Common in mountain meadows and along streams. The presence of water (running water, pools, or saturated soils) and willow, alder, or	Potential habitat along Mammoth Creek directly upstream of Hwy 395 and upstream from the creek's intersection with Minaret Road.	Unlikely. Occurrences not known in the vicinity; suitable habitat conditions are not present within the site.

Species	Status[1]				Habitat Association	Occurrence within the Municipal Boundary	Likelihood to occur within the Study Site[2]
	ESA	CESA	CDFG	USFS			
					other deciduous riparian shrubs are essential habitat elements.		
Falco mexicanus Prairie falcon (nesting)	None	None	SSC	None	Primarily open situations, especially in mountainous areas, steppe, plains or prairies. Typically nests in pot hole or well-sheltered ledge on rocky cliff or steep earth embankment, 10 to more than 100 meters above base.	Observed foraging above Mammoth Rock and Solitude Canyon; Minaret Summit.	Unlikely. The site does not contain suitable foraging or nesting habitat for this species.
Haliaeetus leucocephalus Bald eagle (nesting and wintering)	T, PD	E (Rev)	FP DF-S	S	Coniferous forest features (large trees, hollow trees, and snags); large fishing-bearing waters. Breeding habitat most commonly includes area close to (within 4km) coastal areas, bays, rivers, lakes, or other bodies of water that reflect the general availability of primary food sources including fish, waterfowl, and seabirds.	Winter roost sites around Lake Mary and Twin Lakes. Occasionally reported foraging along Mammoth Creek.	Unlikely. The site does not contain suitable foraging or nesting habitat for this species.
Martes americana American (=pine) marten	SC	None	None	S	Dense coniferous upland and lowland forest. May use rocky alpine areas. When inactive, occupies hole in dead or live tree or stump, abandoned squirrel nest, conifer crown, rock pile, burrow, snow cavity, etc.; uses mainly subnivean sites, often associated with	Occurs throughout the Mammoth Lakes basin and on the Valentine Reserve.	Unlikely. The site does not contain suitable habitat for this species.

Species	Status[1]				Habitat Association	Occurrence within the Municipal Boundary	Likelihood to occur within the Study Site[2]
	ESA	CESA	CDFG	USFS			
					course, woody debris, in winter. Young are born in a den, usually in a hollow tree, sometimes in rock den.		
Martes pennanti pacifica Pacific fisher	SC	None	SSC	S	Coniferous forests.	Observed in Mammoth Lodge area during 1970s.	Unlikely. The site does not contain suitable habitat for this species.
Strix nebulosa Great gray owl (nesting)	None	E	DF-S	S	Dense coniferous forest, near water, foraging in wet meadows. Special habitat features – hollow trees and standing snags.	Known occurrences in upper portion of Mammoth Creek drainage and Valentine Reserve, a probable breeding area.	Low. Marginal nesting/foraging habitat exists within the mature trees on the site.

Source: General Plan Update, 2005

[1]Status Codes:
ESA – Endangered Species Act of 1972, as amended
T = Threatened
PD = Proposed for delisting
PS = Partial status; status for an infraspecific population but not the full species indicated. The value that follows represents the status in only a portion of the species' range.
SC = Species of Concern; species for which the USFWS has information indicating that proposing to list them as threatened or endangered species may be appropriate
None = Species not listed or proposed for listing
CESA – California Endangered Species Act
E = Endangered
Rev = Status under review
SC = Species of Concern
None = Species not listed or proposed for listing
CDFG – California Department of Fish and Game
SSC = Species of Special Concern (terrestrial vertebrate animals only)
FP = Fully protected species
DF – S = Department of Forestry Sensitive species

USFS – USDA Forest Service, Pacific Southwest Region
MIS = Management Indicator Species

Species	Status[1]				Habitat Association	Occurrence within the Municipal Boundary	Likelihood to occur within the Study Site[2]
	ESA	CESA	CDFG	USFS			
S = Sensitive species							

[2] Definitions of Likelihood to Occur

Known = known occurrence of species within Study Site; presence of suitable habitat conditions and suitable microhabitat; or observed during field surveys.

Moderate = known occurrence of species in the vicinity from the CNDDB, or other documents in the vicinity; presence of suitable habitat conditions exist within the site.

Low = species known to occur in the vicinity from the CNDDB, or other documents in the vicinity; habitat conditions of poor quality or only marginal microhabitat conditions are present.

None = species not known to occur in the vicinity from the CNDDB, or other documents in the vicinity; or no suitable habitat is present and species was not observed during species-specific surveys.

Impacts and Mitigation

Standards of Significance

In accordance with CEQA Guidelines, a project impact would be considered significant if the project would:

- have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service;

- have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service;

- have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

- interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

- conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance;

- conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan; or

- impede the use of native wildlife nursery sites or directly harm nesting species protected under the provisions of the Migratory Bird Treaty Act.

Impact 1. Construction activities associated with the project will result in the removal of native and non-native vegetation, which may impact native communities adjacent to the project site. The following measures are recommended to avoid or reduce this potential impact.

- Trees and vegetation not planned for removal shall be protected during construction to the maximum extent possible. This includes the use of exclusionary fencing of herbaceous and shrubby vegetation, such as hay bales, and protective wood barriers for trees. Only certified weed-free straw shall be used to avoid the introduction of non-native, invasive species.

- Following construction, disturbed areas shall be restored to pre-project contours to the maximum extent possible and revegetated using locally-occurring native species and native erosion control seed mix, as recommended by a qualified biologist.

- Protective fencing shall be placed so as to keep construction vehicles and personnel from impacting vegetation adjacent to the project site outside of work limits.

- Grading, excavating, and other activities that involve substantial soil disturbance shall be planned and carried out in consultation with a qualified hydrologist, engineer, or erosion control specialist, and shall utilize standard erosion control techniques to minimize erosion and sedimentation to native vegetation.

Impact 2. Construction activities associated with the project may result in impacts to raptors and other protected avian species. Raptors and their nests are protected by both federal and state regulations (MBTA and CDFG Code Sections 30503 and 3503.5), which protect birds of prey and their eggs and nests. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Any loss of fertile raptor eggs or nesting raptors, or any activities resulting in raptor nest abandonment, would constitute a significant impact. Construction activities such as tree removal or site grading that disturb a nesting raptor on-site or immediately adjacent to the construction site would constitute a significant impact.

- Pre-construction surveys shall be conducted for nesting avian species (including raptors) within 300 feet of proposed construction activities, if construction is to be initiated between February 15 and August 1. If nesting raptors (or any other nesting birds) are identified during the pre-construction surveys, an appropriate buffer should be imposed within which no construction activities or disturbance should take place (generally 300 feet in all directions for raptors; other avian species have species-specific requirements) until the young of the year have fledged, as determined by a qualified biologist. Alternatively, construction activities that may affect nesting raptors or other protected avian species can be timed to avoid the nesting season (generally February 15 to August 1).

Conclusions

The site does not contain any special-status plant species and none are expected to occur. There is a low potential for the following special-status bird species to utilize the site for foraging and/or nesting habitat: northern goshawk, sage-grouse, northern harrier, great gray owl, and other more common raptor species (e.g., red-tailed hawks). However, the site contains only marginal nesting and foraging habitat due to the existing disturbance on the site and existence of optimal nesting and foraging habitat to the east and south.

Please do not hesitate to contact me if you have any questions regarding the results of the biological assessment.

Sincerely,

Erin Harwayne
Senior Project Manager/Environmental Scientist
DENISE DUFFY & ASSOCIATES, INC.

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Denise Duffy & Associates, Inc.
PLANNING AND ENVIRONMENTAL CONSULTING

October 20, 2005

Sonia Ransom
Allen Matkins
Three Embarcadero Center, 12th Floor
San Francisco, California 94111-4074

Subject: Snowcreek 7 – Preliminary Biological Assessment

Dear Ms. Ransom,

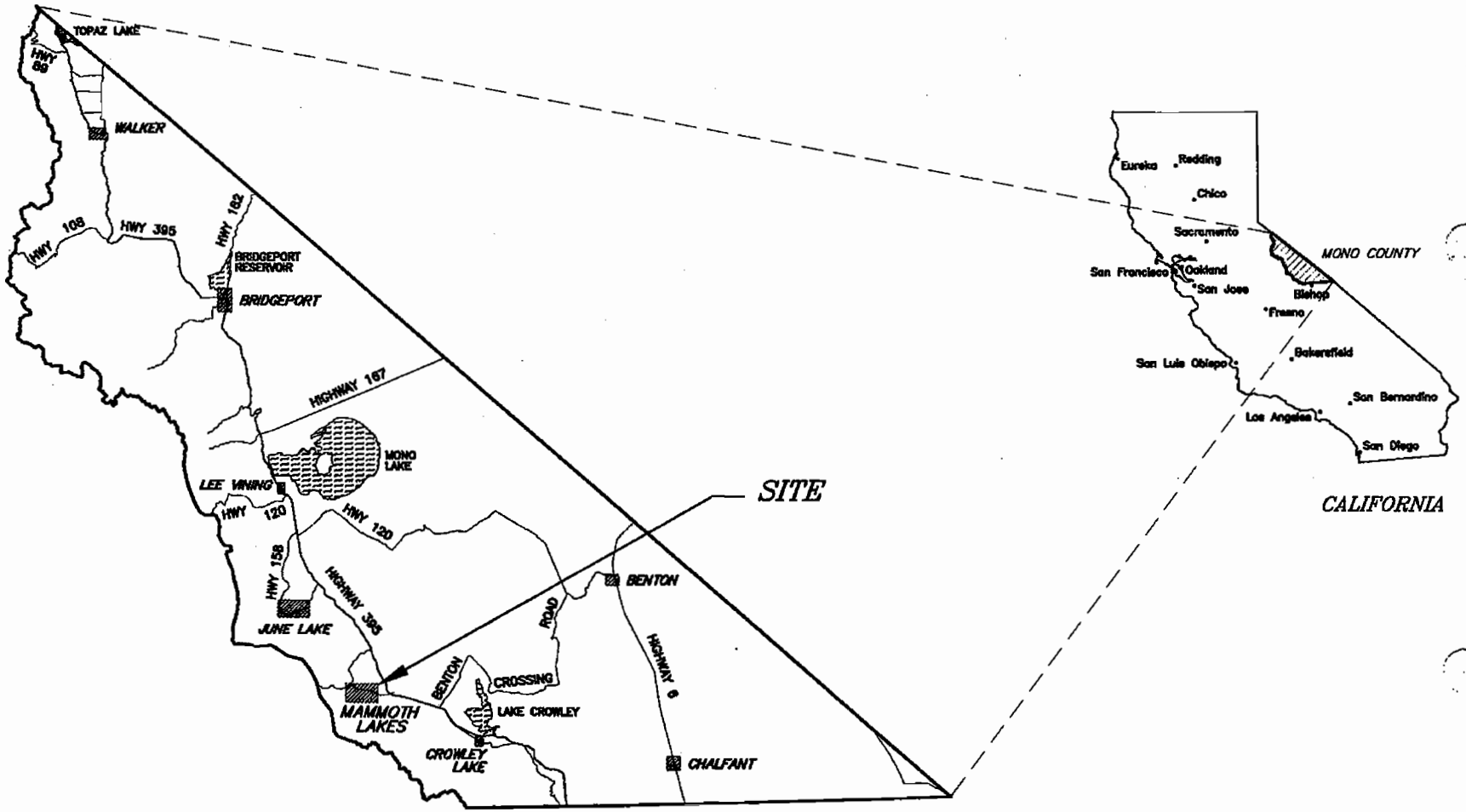
Denise Duffy & Associates, Inc. (DD&A) was contracted by Allen Matkins to provide a preliminary biological assessment for the Snowcreek 7 Project in the Town of Mammoth Lakes, Mono County, California. This letter reports the results of the preliminary biological assessment for the project.

Introduction

The Snowcreek 7 project site ("Study Site") is regionally located in east-central California, in the southwest portion of Mono County, south of Mono Lake and west of Crowley Lake (**Figure 1**). It is located at the southeastern edge of the Town of Mammoth Lakes city limits, approximately four miles west of the intersection between U.S. Highway 395 and State Route 203 (**Figure 2**). Information in this preliminary assessment is primarily based on the Town of Mammoth Lakes General Plan Update Environmental Impact Report (EIR) (2005), and utilizes the same land area descriptors for consistency purposes (i.e., Planning Area, Municipal Boundary, and Urban Growth Boundary; these three areas are depicted on Figures 1.1.1 and 1.1.2 of the EIR).

The Study Site is located on the north side of Old Mammoth Road and encompasses about 18.3 acres (**Figure 3**). The surrounding land uses include: open space to the north, which includes Mammoth Creek; residential development to the west; and golf course to the south and east. The Study Site is characterized by a small hill that is centrally located on the parcel with elevations ranging between 7946 and 7885 feet, and with drainage that flows radially off the hill and towards Old Mammoth Road on the south and towards Mammoth Creek on the north. The Study Site is used exclusively for commercial and industrial use since the 1970's, and currently contains a maintenance building and storage yard for the adjacent Snowcreek development.

The purpose of this preliminary assessment is to provide a description of the existing biological conditions on the Study Site, and determine whether special-status species and sensitive habitats occur or may potentially occur within the Study Site.



Source: SIERRA GEOTECHNICAL SERVICES INC. SGSI

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Vicinity Map

Figure 1

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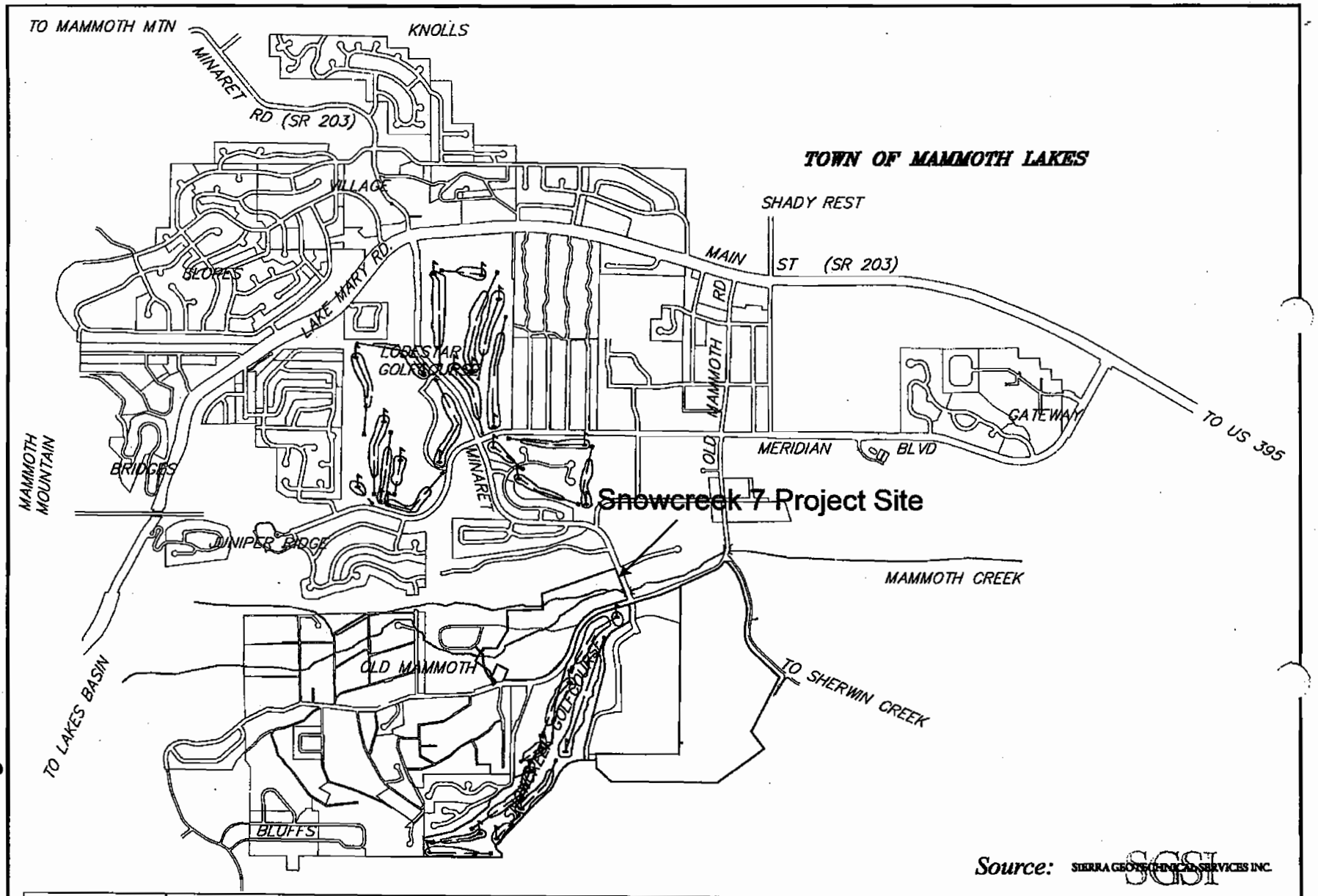

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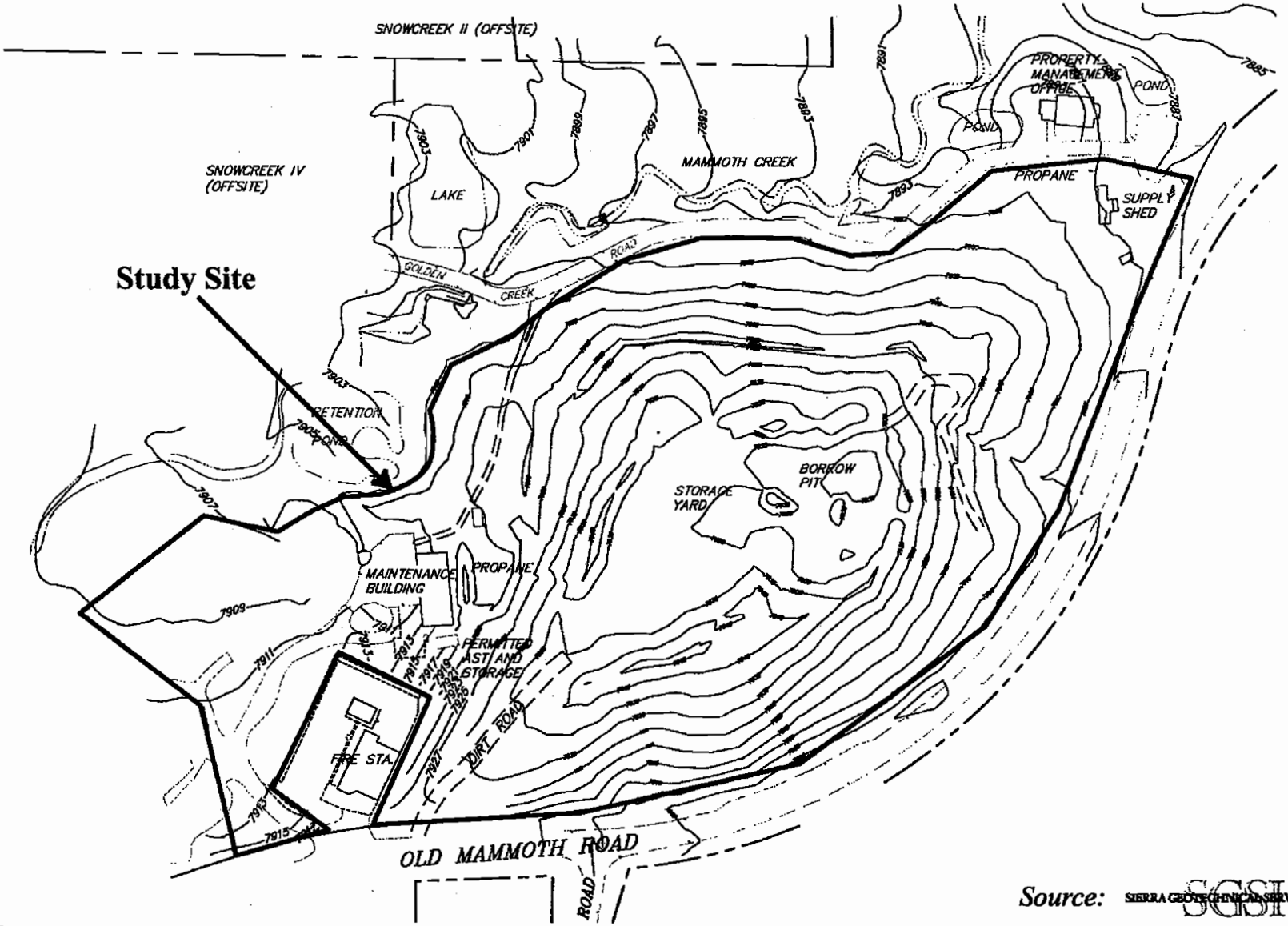

Source: SIERRA GEOTECHNICAL SERVICES INC.

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Study Site

Figure 3

DENISE DUFFY & ASSOCIATES, INC.

Methods

Personnel and Survey Dates

Biological surveys were conducted on August 8-10, 2005, to assess the environmental conditions of the site and its surroundings, and identify special-status species and sensitive habitats, if present. In addition, global positioning system (GPS) data was collected during the survey to delineate habitat communities and map any special-status species observed. Habitat community maps were created in GIS format to be utilized in the site design process. Surveys were conducted by DD&A's Natural Resources Division.

Data Sources

DD&A reviewed recent environmental documents and publications from the Mammoth Lakes and Mono County areas, including

- *Draft EIR for the Town of Mammoth Lakes 2005 General Plan Update* (Town of Mammoth Lakes 2005);
- *Mono County General Plan* (Mono County 2000);
- *Snowcreek Parcels Phase I Environmental Site Assessment* (Sierra Geotechnical Services, Inc. 2005); and
- *Draft EIR/EIS for Changes in Mammoth Creek Instream Flow* (Mammoth Community Water District and U.S. Forest Service 2000).

The following botanical references were also reviewed: *A Flora of Valentine Eastern Sierra Reserve* (Howald and Orr 2000); *A Sierra Nevada Flora* (Weeden 1996); *Sierra Nevada Tree Identifier* (Paruk 1997); and *Jepson Manual* (Hickman 1993). All plants observed within the Study Site were identified to species or intraspecific taxon using keys and descriptions in these resources.

The generalized vegetation classification schemes for the Study Site were based on the U.S. Forest Service (USFS) CALVEG system, following the methods of the Town of Mammoth Lakes General Plan Update EIR (General Plan Update). The CALVEG system is a hierarchical classification system of actual vegetation designated to assess vegetation-related resources throughout California. Information regarding the distribution and habitats of local and state vascular plants were reviewed (Munz and Keck 1973; Hickman 1993).

Special-Status Species

Plants and animals that have been formally listed or proposed for listing as Rare, Endangered, Threatened, or are Candidates for such listing under the federal Endangered Species Act (ESA) or the California Endangered Species Act (CESA) are afforded protection under the ESA and CESA. Species designated as California "species of special concern" by the California Department of Fish and Game (CDFG), federal "species of concern" by the U.S. Fish and Wildlife Service (USFWS), and List 1B (Plants Rare, Threatened, or Endangered in California and elsewhere) and List 2 (Plants Rare, Threatened, or Endangered in California, but common elsewhere) species in the California Native Plant Society (CNPS) *Inventory of Rare and Endangered Vascular Plants of California* (Tibor 2001) are also considered special-status species. In addition, the U.S. Forest Service (USFS) defines sensitive species as those plant and animal species identified by a regional forester for which population viability is a concern, based on documentation of a significant current or predicted downward trend in habitat capability that

would reduce a species' existing distribution. Raptors (e.g., eagles, hawks, and owls) and their nests are protected under various federal and state laws and regulations, including the Migratory Treaty Act (1918) and California Fish and Game Code.

In addition to the above resources, the following data sources were reviewed in order to determine the occurrence or potential for occurrence of plant and wildlife species at the Study Site: current agency status information from the Service (2005) and CDFG (2005) for species listed, proposed for listing or candidates for listing as Threatened or Endangered under the federal Endangered Species Act (ESA) or California Endangered Species Act (CESA), and those considered federal "species of concern" and CDFG "species of special concern;" the CNPS *Inventory of Rare and Endangered Vascular Plants of California* (2001); and the CNDDB occurrence reports for the Old Mammoth, Bloody Mountain, Crystal Crag, and Mammoth Mountain quadrangles, as well as Mono and Inyo Counties (2005).

Sensitive Habitats

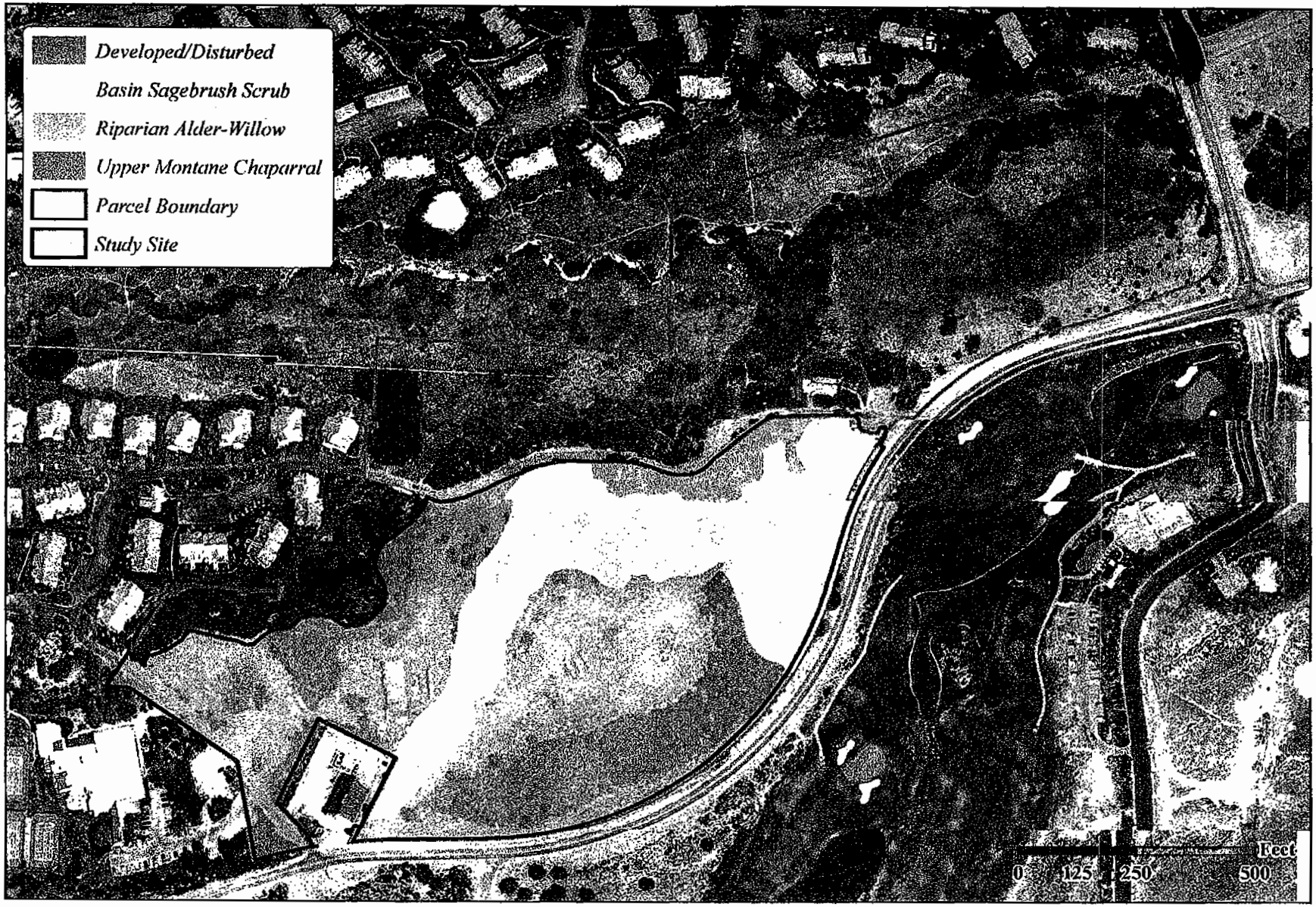
The site was surveyed for sensitive habitats. Sensitive habitats include riparian corridors, wetlands, habitats for legally protected species, areas of high biological diversity, areas supporting rare or special-status wildlife habitat, and unusual or regionally restricted habitat types. Habitat types considered sensitive include those listed on the CNDDB's working list of high priority and rare natural communities habitats (i.e., those habitats that are Rare or Endangered within the borders of California) (CDFG 2003), and those that are critical habitat in accordance with the Endangered Species Act.

Results

Vegetation

Regionally, the Study Site is situated along the eastern slope of the Sierra Nevada where the Sierra Nevadan and Great Basin geographical regions and biotic communities converge. The Study Site contains four vegetation communities that are adapted to cold, snowy winters and arid summers: 1) basin sagebrush; 2) upper montane chaparral; 3) alder-willow riparian; and 4) developed/disturbed (**Figure 4**).

Basin Sagebrush
Generally, the basin sagebrush community occurs on dry slopes and plains at low elevations within the region, mainly from 3600 – 9800 feet (1098 – 2990 m). Basin sagebrush is usually found on frigid soils having little or no soil profile development and in coarse depositional areas, being strongly associated with other Great Basin or dry-site shrubs. The community is dominated by soft, woody shrubs, including basin sagebrush (*Artemisia tridentata*), antelope bitterbrush (*Purshia tridentata*), gray rabbitbrush (*Chrysothamnus nauseosus*), mountain snowberry (*Symphoriocarpus vaccinoides*), and squaw currant (*Ribes cereum*). Other associated species include annuals and perennial bunchgrasses that are sparsely distributed between shrubs. Within the Study Site, this community is found primarily on the north- and west-facing slopes of the hill and intermixes with species associated with disturbed and riparian communities, such as foxtail barley (*Hordeum jubatum*), toadflax (*Linaria* sp.), quaking aspen (*Populus tremuloides*), and shining willow (*Salix lucida*). In addition, conifers including Jeffery pine (*Pinus jeffreyi*), white



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Vegetation Communities Within the Study Site

Figure 4

DENISE DUFFY & ASSOCIATES, INC.

fir (*Abies concolor*), and lodgepole pine (*Pinus contorta*) concentrated at the top of the hill surround the storage area intermix with the sagebrush community. There is approximately 5.7 acres of basin sagebrush within the Study Site.

Upper Montane Chaparral
This community occurs intermixed with the coniferous forests habitats, occupying open areas created by disturbance or on steep slopes or rocky sites not suitable for conifers. It often occurs on south-facing slopes and in drier areas. It is a mid-elevation shrub type in which no single species is dominant. Included in the mixture are greenleaf manzanita (*Arctostaphylos patula*), tobacco brush (*Ceanothus veluntinus*), and bitter cherry (*Prunus emarginata*). Site differences, especially fire history, account for variations in species composition and over the long-term, succession may favor forest trees as indicated by scattered young red firs. Within the Study Site, this community occurs on the south-facing slope and comprises approximately 2.8 acres.

Alder-Willow Riparian
The riparian community within the Study Site can be classified as alder-willow riparian community. It is dominated by quaking aspen, mountain alder (*Alnus tenuifolia*), and willow (*Salix lucida, S. planifolia*). This community totals approximately 0.7 acres.

Developed/Disturbed
Almost half of the Study Site (9.1 acres) is developed and/or disturbed. The site contains a large storage yard and maintenance building, and areas cleared of vegetation for construction staging purposes. Vegetation in this community consists of weedy, non-native species including toadflax, foxtail barley, and mustard (*Brassica* sp.). In addition, there are some scattered conifers, willows, and quaking aspen throughout this community.

Special-Status Species

Special-Status Plant Species
A list of special-status plant species that have the potential to occur within the Study Site, along with their legal status, habitat associations, and brief statement of the likelihood to occur is presented in **Table 1.** This list was developed by conducting a thorough review of the CNDDB and previous environmental documentation, and comparing the geographic ranges and habitat requirements of special-status species documented to occur or with the potential to occur in the area to those conditions found at the Study Site.

Search radius

The General Plan Update states that there is no potential habitat for any endangered, threatened, or proposed plant species within or adjacent to the Study Site, nor have any populations of federally listed or proposed plant species been reported within the planning area. **Table 1.** identifies the special-status plant species listed in the General Plan Update EIR as those that are known to occur within the Municipal Boundary or those that have the potential to occur in the Urban Growth Boundary. However, based on focused field surveys and species habitat requirements, no special-status plant species were observed within the Study Site and none are expected to occur.

Table 1. Potential Special-Status Plant Species within the Study Site

Species	Status[1]				Habitat Association	Occurrence within the Municipal Boundary	Likelihood to occur within the Study Site[2]
	ESA	CESA	CNPS	USFS			
Arabis pinzlae Pinzl's rockcress	None	None	1B	S	Very steep north to east-facing avalanche chutes with deep sandy soils derived from granite; 9,800 to 11,600'.	Minaret Ridge.	Unlikely. The Study Site lacks suitable habitat to support this species; species not observed within the Study Site.
Botrychium crenulatum Crenulate moonwort	None	None	2	S	Lower montane coniferous forest meadows, marshes, and seeps.	Potential habitat around Twin Lakes, marshes, streams, and meadows.	Unlikely. The Study Site lacks suitable habitat to support this species; species not observed within the Study Site.
Botrychium lunaria Grape-fern moonwort	None	None	2	None	Meadows and seeps; subalpine coniferous forest; upper montane coniferous forest; 7,400 to 11,200'.	Potential habitat around Twin Lakes, marshes, streams, and meadows.	Unlikely. The Study Site lacks suitable habitat to support this species; species not observed within the Study Site.
Botrychium minganense Mingan moonwort	None	None	2	None	Upper and lower montane coniferous forest; 4,900 to 6,800'.	Potential habitat around Twin Lakes, marshes, streams, and meadows.	Unlikely. The Study Site lacks suitable habitat to support this species; species not observed within the Study Site.
Botrychium ascendens Upward-lobed moonwort	None	None	2	S	Lower montane coniferous forest (mesic).	Potential habitat around Twin Lakes, marshes, streams, and meadows.	Unlikely. The Study Site lacks suitable habitat to support this species; species not observed within the Study Site.
Epilobium howellii Subalpine fireweed	None	None	1B	S	Meadows and subalpine coniferous forest; wet areas and mossy seeps; 6,400 to 8,900'.	Twin Lakes.	Unlikely. The Study Site lacks suitable habitat to support this species; species not observed within the Study Site.
Lupinus duranii	SC	None	1B	W	Basin sagebrush scrub, upper montane coniferous forest,'	Northwest of town; Minaret Summit; Lincoln	Unlikely. Although potential habitat exists

Species	Status				Habitat Association	Occurrence within the Municipal Boundary	Likelihood to occur within the Study Site[2]
	ESA	CESA	CNPS	USFS			
Mono Lake lupine					volcanic pumice substrate and barren soils, sandy and gravelly; 6,500 to 8,500'.	Knob; Upper Dry Creek.	within the Study Site (basin sagebrush scrub), the species was not observed within the Study Site.
Sedum pinetorum Pine City sedum	None	None	3	W	Rocky, open forest; 8,700'.	Known only from type specimen from Pine City, an old mining camp "above Mammoth Lakes" in the Mammoth Lakes Basin.	Unlikely. The Study Site lacks suitable habitat to support this species; species not observed within the Study Site.

Source: General Plan Update, 2005

[1]Status Codes:
ESA – Endangered Species Act of 1972, as amended
None = Species not listed or proposed for listing
SC = Species of Concern; species for which the USFWS has information indicating that proposing to list them as threatened or endangered species may be appropriate
CESA – California Endangered Species Act
None = Species not listed or proposed for listing
CNPS – California Native Plant Society
1B = Plants rare, threatened, or endangered in California and elsewhere
2 =Plants rare, threatened, or endangered in California but more common elsewhere
3 = Need more information
USFS – USDA Forest Service, Pacific Southwest Region
W = Watch species
S = Sensitive species
[2]Definitions of Likelihood to Occur
Known = known occurrence of plant within the Study Site from the CNDDB; presence of suitable habitat conditions and suitable microhabitat; or observed during field surveys.
Moderate = known occurrence of plant in the vicinity from the CNDDB, or other documents in the vicinity; presence of suitable habitat conditions.
Low = plant known to occur in the vicinity from the CNDDB, or other documents in the vicinity; habitat conditions of poor quality.
Unlikely = plant not known to occur in the vicinity from the CNDDB, or other documents in the vicinity; no suitable habitat is present; species was not observed during field surveys within flowering period.

Special-Status Wildlife Species

A list of special-status wildlife species that have the potential to occur within the Study Site, along with their legal status, habitat associations, and brief statement of the likelihood to occur is presented in **Table 2**. This list was developed by conducting a thorough review of the CNDDB and previous environmental documentation (including the General Plan Update EIR), and comparing the geographic ranges and habitat requirements of special-status species documented to occur or with the potential to occur in the area to those conditions found at the Study Site.

There is a low potential for the following special-status bird species to utilize the Study Site for foraging or nesting habitat: northern goshawk, golden eagle, sage-grouse, northern harrier, willow flycatcher, bald eagle, great gray owl, and various raptor species (e.g., eagles, hawks, and owls). However, the Study Site contains only marginal nesting and foraging habitat due to the existing disturbance on the Study Site. The Study Site is primarily developed or disturbed, with small pockets of marginal nesting and foraging habitat scattered throughout the site. In addition, optimal nesting and foraging habitat exists to the north within the Mammoth Creek corridor and within the large, contiguous areas of sagebrush habitat to the south. Due to the regional availability of optimal foraging and nesting habitat and the disturbed nature of the site, there is only a low likelihood that these species may utilize the site.

Mule deer are not a listed species, but are considered an important harvest species by the CDFG. Deer populations in the vicinity are comprised of Rocky Mountain mule deer (*Odocoileus hemiomus hemiomus*) from the Round Valley and Casa Diablo herds. Both are migratory deer herds that move from winter to summer range on a seasonal basis. In addition to migrants, the area is used by both holdover and summer resident mule deer (USDA 1990; Kucera 1988). Maintenance of mule deer historic summer and winter ranges and annual migration routes are vital to their long-term survival. Deer herd management plans were prepared by the CDFG in the mid-1980s for both herds (Thomas 1986). The management plans are designed to give guidance to public agencies that have regulatory authority over lands that make up part of the deer hard habitat. Management objectives include enhancing important winter, hold, migratory, and fawning habitats. Of particular concern are the portions of the herds' range known as Critical Winter Range. These are areas determined by the state and federal agencies to be critical to the life cycle of migratory deer. Based on the *Snowcreek Ski Area Deer Migration Study* (Taylor 1993), no migration routes occur within the Study Site.

Sensitive Habitats

The Study Site contains 0.7 acres of alder-willow riparian community. The construction of Golden Creek Road likely resulted in the fragmentation of the riparian corridor associated with Mammoth Creek, creating this isolated pocket of riparian vegetation within the Study Site. The fragmentation and proximity to the roadway reduces the habitat value of this riparian community.

Table 2. Potential Special-Status Wildlife Species within the Study Site

Species	Status[1]				Habitat Association	Occurrence within the Municipal Boundary	Likelihood to occur within the Study Site[2]
	ESA	CESA	CDFG	USFS			
Accipiter gentilis Northern goshawk (nesting)	SC	None	SSC DF-S	S	Typically nests in mature or old-growth forests. Forages in both heavily forested and relatively open habitats.	Known occurrences of foraging in upper portion of Mammoth Creek drainage, Lakes Basin, Valentine Reserve. Probable nesting territory near Lake Mary. Historic nesting sites in Dry Creek.	Low. Marginal nesting/foragiing habitat exists within the mature trees on the Study Site.
Aplodontia rufa californica Sierra Nevada mountain beaver	SC	SC	SSC	None	Mountain streams with dense deciduous riparian vegetation.	Known to inhabit Mammoth Creek and adjacent riparian habitats. Present on the Valentine Reserve.	Unlikely. Occurrences not known in the vicinity; suitable habitat conditions are not present within the Study Site.
Aquila chrysaetos Golden eagle (nesting and wintering)	None	None	SSC	None	Generally open country, in prairies, arctic, and alpine tundra, open wooded country, and barren areas, especially in hilly or mountainous regions. Nests on rock ledge of cliff or in large tree.	Potential nest sites in the Mammoth Rock area and proposed Sherwin Ski Area.	Low. Marginal nesting/foraging habitat exists within the mature trees on the Study Site.
Bufo canorus Yosemite toad	None	None	SSC	S	Wet mountain meadows and borders of forests. Breeds in shallow edges of snowmelt pools and ponds or along edges of lakes and slow-moving streams.	Occurrences in Lake Mary.	Unlikely. Occurrences not known in the vicinity; suitable habitat conditions are not present within the Study Site.
Centrocercus urophasianus urophasianus Sage-grouse	PS:C	None	SSC	S MIS	Foothills, plains, and mountain slopes where sagebrush is present. Leks are located on relatively	Occurs in sagebrush habitats adjacent to lower reaches of Mammoth Creek. One active lek	Low. The Study Site contains suitable habitat (sagebrush habitat); however, no leks are

Species	Status[1]				Habitat Association	Occurrence within the Municipal Boundary	Likelihood to occur within the Study Site[2]
	ESA	CESA	CDFG	USFS			
(nesting)					open sites surrounded by sagebrush, or in areas where sagebrush density is low. Nest in thick cover in sagebrush habitat, beneath a sagebrush or other shrub	reported one mile north of Mammoth Yosemite Airport.	documented to occur within the Study Site. There are several known leks within the planning area defined in the General Plan Update. Lek 7, as designated by the Bureau of Land Management (BLM), is located approximately 1.25 miles north of the Mammoth Yosemite Airport, outside of the Municipal Boundary. This lek has been inactive in the recent past. There are no leks or recorded bird sitings within the Study Site.
Circus cyaneus Northern harrier (nesting)	None	None	SSC	None	Marshes, meadows, grasslands, and cultivated fields. Nests on the ground, commonly near low shrubs, in tall weeds or reeds, sometimes in bog; or on top of low bush above water, or on knoll of dry ground, or on higher shrubby ground near water, or on dry marsh vegetation.	Observed foraging in Eastern Sierra College Center site. Same site offers high quality nesting habitat although no nests were located.	Low. Marginal nesting/foraging habitat exists within the mature trees on the Study Site.
Empidonax traillii Willow flycatcher (nesting)	None	E	None	S	Strongly tied to brushy areas of willow and similar shrubs. Common in mountain meadows and along streams. The presence of water (running	Potential habitat along Mammoth Creek directly upstream of Hwy 395 and upstream from the creek's intersection with Minaret Road.	Low. The species is known to occur in the vicinity; however, the riparian habitat within the Study Site provides only marginal microhabitat

Species	Status				Habitat Association	Occurrence within the Municipal Boundary	Likelihood to occur within the Study Site
	ESA	CESA	CDFG	USFS			
					water, pools, or saturated soils) and willow, alder, or other deciduous riparian shrubs are essential habitat elements.		conditions for nesting and foraging.
Falco mexicanus Prairie falcon (nesting)	None	None	SSC	None	Primarily open situations, especially in mountainous areas, steppe, plains or prairies. Typically nests in pot hole or well-sheltered ledge on rocky cliff or steep earth embankment, 10 to more than 100 meters above base.	Observed foraging above Mammoth Rock and Solitude Canyon; Minaret Summit.	Unlikely. The Study Site does not contain suitable foraging or nesting habitat for this species.
Haliaeetus leucocephalus Bald eagle (nesting and wintering)	T, PD	E (Rev)	FP DF-S	S	Coniferous forest features (large trees, hollow trees, and snags); large fishing-bearing waters. Breeding habitat most commonly includes area close to (within 4km) coastal areas, bays, rivers, lakes, or other bodies of water that reflect the general availability of primary food sources including fish, waterfowl, and seabirds.	Winter roost sites around Lake Mary and Twin Lakes. Occasionally reported foraging along Mammoth Creek.	Low. Marginal nesting/foraging habitat exists within the mature trees on the Study Site.
Martes americana American (=pine) marten	SC	None	None	S	Dense coniferous upland and lowland forest. May use rocky alpine areas. When inactive, occupies hole in dead or live tree or stump, abandoned squirrel nest, conifer crown, rock pile, burrow, snow cavity,	Occurs throughout the Mammoth Lakes basin and on the Valentine Reserve.	Unlikely. The Study Site does not contain suitable habitat for this species.

Species	Status				Habitat Association	Occurrence within the Municipal Boundary	Likelihood to occur within the Study Site
	ESA	CESA	CDFG	USFS			
					etc.; uses mainly subnivean sites, often associated with course, woody debris, in winter. Young are born in a den, usually in a hollow tree, sometimes in rock den.		
Martes pennanti pacifica Pacific fisher	SC	None	SSC	S	Coniferous forests.	Observed in Mammoth Lodge area during 1970s.	Unlikely. The Study Site does not contain suitable habitat for this species.
Strix nebulosa Great gray owl (nesting)	None	E	DF-S	S	Dense coniferous forest, near water, foraging in wet meadows. Special habitat features -- hollow trees and standing snags.	Known occurrences in upper portion of Mammoth Creek drainage and Valentine Reserve, a probably breeding area.	Low. Marginal nesting/foraging habitat exists within the mature trees on the Study Site.

Source: General Plan Update, 2005

[1]Status Codes:
ESA – Endangered Species Act of 1972, as amended
T = Threatened
PD = Proposed for delisting
PS = Partial status; status for an infraspecific population but not the full species indicated. The value that follows represents the status in only a portion of the species' range.
SC = Species of Concern; species for which the USFWS has information indicating that proposing to list them as threatened or endangered species may be appropriate
None = Species not listed or proposed for listing
CESA – California Endangered Species Act
E = Endangered
Rev = Status under review
SC = Species of Concern
None = Species not listed or proposed for listing
CDFG – California Department of Fish and Game
SSC = Species of Special Concern (terrestrial vertebrate animals only)
FP = Fully protected species
DF – S = Department of Forestry Sensitive species

Species	Status[1]				Habitat Association	Occurrence within the Municipal Boundary	Likelihood to occur within the Study Site[2]
	ESA	CESA	CDFG	USFS			

USFS – USDA Forest Service, Pacific Southwest Region
MIS = Management Indicator Species
S = Sensitive species

[2] **Definitions of Likelihood to Occur**
Known = known occurrence of species within Study Site; presence of suitable habitat conditions and suitable microhabitat; or observed during field surveys.
Moderate = known occurrence of species in the vicinity from the CNDDB, or other documents in the vicinity; presence of suitable habitat conditions exist within the site.
Low = species known to occur in the vicinity from the CNDDB, or other documents in the vicinity; habitat conditions of poor quality or only marginal microhabitat conditions are present.
None = species not known to occur in the vicinity from the CNDDB, or other documents in the vicinity; or no suitable habitat is present and species was not observed during species-specific surveys.

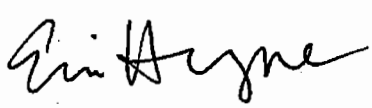
Conclusions

The Study Site does not contain any special-status plant species. There is a low potential for the following special-status bird species to utilize the Study Site for foraging or nesting habitat: northern goshawk, golden eagle, sage-grouse, northern harrier, willow flycatcher, bald eagle, great gray owl, and various raptor species (e.g., eagles, hawks, and owls). However, the Study Site contains only marginal nesting and foraging habitat due to the existing disturbance on the Study Site. The Study Site is primarily developed or disturbed, with small pockets of marginal nesting and foraging habitat scattered throughout the site. In addition, optimal nesting and foraging habitat exists to the north within the Mammoth Creek corridor and within the large, contiguous areas of sagebrush habitat to the south. Due to the regional availability of optimal foraging and nesting habitat and the disturbed nature of the site, there is only a low likelihood that these species may utilize the site.

In addition, the alder-willow riparian community comprises approximately 0.7 acres of the Study Site. However, the habitat values of this small area have been marginalized by virtue being isolated from the Mammoth Creek drainage to the north with the construction of an intervening road along the northern boundary of the Study Site.

Please do not hesitate to contact me if you have any questions regarding the results of this preliminary biological assessment.

Best regards,



Erin Harwayne
Associate Environmental Scientist
Denise Duffy & Associates, Inc.

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Denise Duffy & Associates, Inc.
PLANNING AND ENVIRONMENTAL CONSULTING

November 16, 2006

Sonia Ransom
Allen Matkins LLP
515 South Figueroa St. 7th Fl.
Los Angeles, CA 90071-3398

Subject: Snowcreek 8 – Addendum to Biological Assessment

Dear Ms. Ransom,

Per your request, Denise Duffy & Associates, Inc. (DD&A) has prepared this addendum letter to the *Snowcreek 8 Biological Assessment* (prepared by DD&A, October 11, 2006) to provide clarification on the areas surveyed for the Snowcreek 8 project.

DD&A conducted biological surveys within: Lots 3, 4, and 5; the USFS exchange parcel, which is now owned by the project proponent; and the existing first nine golf course. The biological studies were conducted August 8-10, 2005, and August 24, 2006, and included focused botanical surveys and reconnaissance-level wildlife surveys within each area. Lot 5 and the existing golf course are highly disturbed. Lot 5 functions as a staging area and is mostly bare ground with scattered non-native plant species; the golf course contains turf and other horticultural species. No special-status plant or wildlife species were observed or expected to occur within Lot 5 and the existing golf course.

Please do not hesitate to contact me if you have any questions or require additional information.

Sincerely,

Erin Harwayne
Senior Planner/Environmental Scientist
DENISE DUFFY & ASSOCIATES, INC.

PLANT SPECIES OBSERVED WITHIN SNOWCREEK 8 PROJECT SITE

Abies concolor	white fir
Abies magnifica	red fir
Achenatherum occidentale ssp. pubescens	Elmer stipa
Achnatherum occidentale	western needlegrass
Arctostaphylos patula	greenleaf manzanita
Artemisia cana ssp. bolanderi	Bolander's silver sagebrush
Artemisia tridentata	basin sagebrush
Brassica sp.	mustard
*Calamagrosti*s sp.	reed grass
Cardaria draba	hoary cress
Carex douglasii	Douglas's sedge
Carex nebrascensis	Nebraska sedge
Ceanothus veluntinus	tobacco brush
Cerastium sp.	chickweed
Chrysothamnus nauseosus	gray rabbitbrush
Collinsia sp.	collinsia
Cryptantha sp.	cryptantha
Eleocharis sp.	Spike-rush
Elymus elymoides	squirreltail
Eriogonum umbellatum	sulphur buckwheat
Eschscholzia californica	California poppy
Gnaphalium palustre	lowland cudweed
Hordeum jubatum	foxtail barley
Hypericum perforatum	Klamath weed
Iris missouriensis	Rocky Mountain iris
Juncus balticus	Baltic rush
Lepidium latifolium	broad-leaved pepper grass
Leucanthemum vulgare	oxe-eye daisy
Leymus triticoides	creeping wild rye
Linaria genistifolia ssp. dalmatica	toadflax
Machaeranthera canescens	hoary aster
Muhlenbergia asperifolia	scratchgrass
Muhlenbergia richardonis	matted muhly
Pascopyrum smithii	western wheatgrass
Penstemon speciosus	royal beardtongue
Pinus contorta	lodgepole pine
Pinus jeffreyi	Jeffery pine
Poa secunda	pine blue grass
Polygonum arenastrum	common knotweed
Populus tremuloides	quaking aspen
Potentilla gracilis	slender cinquefoil
Prunus emarginata	bitter cherry
Purshia tridentata	antelope bitterbrush
Ribes cereum	squaw currant
Sagina sp.	pearlwort
Salix lucida	shining willow

Salix planifolia	tea-leaved willow
Salsola kali	Russian thistle
Scirpus sp.	bulrush
Symphoriocarpus vaccinoides	mountain snowberry
Verbasarm thapsus	common mullein

Groeneveld study. Resource Concepts, Inc. (Resource Concepts, 2000) verified that the Groeneveld study was conducted at the appropriate time of the year and by the appropriate procedures for identifying and delineating wetlands. They further concluded that no wetlands occur on the property, and that the property is becoming drier due to the changes made in land use patterns (especially the cessation of a long-standing practice of flood irrigation). They pointed out that Groeneveld found no wetland hydrology during early Spring in a year having 25 percent greater than average precipitation. Since no areas having wetland hydrology were found during a year of greater than average rainfall, the probability that the area would exhibit wetland hydrology during years of less precipitation is very low.

Due to continuing questions about the validity of the Groeneveld study and it's review by Resource Concepts, Inc. during the Fall season when wetland hydrology normally would not be present, Dempsey engaged D. R. SANDERS AND ASSOCIATES, INC. to conduct an independent wetland investigation on the subject property. This report describes the study and its conclusions.

SITE DESCRIPTION

The study area (Figure 2) is located in the southeastern portion of the Snowcreek Resort area. The approximately 153-acre tract is bordered on the west by Snowcreek, Unit V and the southeastern margin of the existing golf course, on the north-northwest by Old Mammoth Road and a detention pond previously constructed as part of the Snowcreek Resort, on the east by Sherwin Creek Road and a rock disposal site, and on the south by undeveloped land. The south boundary terminates at the boundary of Snowcreek, Unit 5.

The vegetation of much of the subject property is dominated by Basin Sagebrush (*Artemisia tridentata*). A portion of the site has hydrophytic vegetation dominated by species such as Baltic Rush (*Juncus balticus*), Nebraska Sedge (*Carex nebrascensis*), and Rocky Mountain Iris (*Iris missouriensis*). This plant community developed due to a long history (possibly 100 years) of flood irrigation. Soils of the site are predominantly the Chesaw series (0-5% slope)[Unpublished CA 208 as cited in Resource Concepts (2000)]. The Chesaw series is nonhydric, and no other soils of the area are classified as hydric (NRCS, 1991). Considering that the Bodle ditch no longer provides irrigation water to the area, the property lacks wetland hydrology. [Note: Even when irrigated regularly, the hydrology of the site would not qualify as wetland hydrology because the water source could be (and was) eliminated without any activity requiring a Section 404.] Moreover, much of the original surface flow into the area has been re-directed through the existing golf course.

Portions of the property have been subject to historic modifications. Ditches have been dug to assist in the distribution of irrigation water on the property. Roads have been constructed and soil and rock debris have been deposited in some areas. Other areas appear disturbed, but no clear indication is available as to the cause of the disturbance.

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D. R. SANDERS AND ASSOCIATES, INC.
4017 Lake Wilma Road, Moss Point, MS 39562

27 June 2002

Mr. Gail Frampton
Dempsey Construction
P. O. Box 657
Mammoth Lakes, CA 93546

RE: Identification/Delineation of Wetlands On a Portion of Snowcreek Resort Property in Mammoth Lakes (Mono County), California

Dear Mr. Frampton:

This letter constitutes my final report on a wetlands identification/delineation study you requested on a portion of the Snowcreek Resort property in Mammoth Lakes (Mono County), California (Figure 1). The purpose of the study was to identify portions (if any) of the property qualifying as wetlands or other "Waters of the United States" pursuant to federal jurisdiction under Section 404 of the Clean Water Act of 1977 (as amended), and to delineate their boundaries. Field work for the study was conducted on 8 and 9 May, 2002.

BACKGROUND

For more than 10 years, Dempsey Construction Corporation (Dempsey) has been developing Snowcreek Resort in an area of Mammoth Lakes. The master plan for the project includes several resort housing areas and an 18-hole golf course. Some housing areas and 9 holes of the golf course have already been completed. In an area southeast of the existing housing and golf course, an additional housing area and another 9 holes of the golf course are planned for construction in the near future. As part of their efforts to complete the project, a wetlands identification and delineation study was conducted in May of 1996 by Dr. David P. Groeneveld, an Environmental Scientist with Resource Management in Bishop, California (Groeneveld, 1996). Dr. Groeneveld used appropriate wetland identification and delineation procedures to conduct the study, and he concluded that no wetlands occur on the property. He found some areas meeting the hydrophytic vegetation and hydric soil criteria listed in Environmental Laboratory (1987), but none exhibited wetland hydrology, due to historic land use patterns (irrigation) and changes in drainage (ditches) patterns. The Groeneveld study included most property considered in this study, and all parts of the tract that potentially qualified as wetlands.

After the Lahontan regional office of the California Regional Water Control Board questioned the Groeneveld study in September 2000, Dempsey enlisted Resource Concepts, Inc. of Carson City, Nevada to verify the accuracy and validity of the

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METHODS

Standard

The standard for wetlands used in this study conforms to the wetlands definition and procedures described in the 1987 Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory, 1987), as modified and clarified by 1991 and 1992 Memoranda from the Office, Chief of Engineers, Washington, D.C. Under these procedures, an area is a wetland if positive wetland indicators are in evidence for each of three parameters or criteria -- hydrophytic vegetation, hydric soil, and wetland hydrology. If positive wetland indicators cannot be ascertained for any one of the three parameters, the area is a nonwetland.

Field Procedures

Routine wetland identification/delineation procedures described in Environmental Laboratory (1987) were applied at representative sample plots. Sample plots were chosen as representing typical conditions of a particular community or area of homogeneous topography, vegetation, soil, and hydrologic conditions.

The vegetation was described at each sample plot by subjectively determining the dominant species in each stratum (e.g., tree, sapling/shrub, woody vine, herbaceous) of vegetation. Hydrophytic vegetation was concluded to be present when more than 50 percent of the dominant species at a sample plot had a wetland indicator status of OBLIGATE (OBL), FACULTATIVE WETLAND (FACW), and/or FACULTATIVE (FAC)(Reed, 1988). This information was noted on the vegetation section of the data form (Appendix A).

The upper portion of the soil profile at each sample plot was described and recorded on the data sheet. The soil was considered to be hydric when one or more indicators of hydric soil described in Environmental Laboratory (1987) were observed.

Hydrologic conditions of each site were considered. Published information was considered, including the Groeneveld (1996) and Resource Concepts, Inc. (2000) analyses. Evidence was sought regarding the presence of any indicator of wetland hydrology listed in Environmental Laboratory (1987). If any primary indicator or two secondary indicators were present, the area at the sample plot was concluded to have wetland hydrology.

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RESULTS AND DISCUSSION

General

Locations of sample plots within the study area are marked on Figure 2. Conditions at each sample plot are described on data sheets (Appendix A), as identified on Figure 2.

Wetlands

No wetlands occur on the property. At two locations (See Sample Plots 1 and 4 on Figure 2), both the vegetation and soil criteria (Environmental Laboratory, 1987) are met, but the wetland hydrology criterion is lacking. A number of other sites (6) have hydrophytic vegetation, but lack both hydric soils and wetland hydrology. The other seven sites have nonhydrophytic vegetation and all but Sample Plot 9 lack indicators of hydric soils. At least two of the three wetland criteria were lacking in all Sample Plots except Sample Plots 1 and 4.

Nonwetlands

All portions of the property qualify as nonwetlands pursuant to Section 404 of the Clean Water Act of 1977 (as amended), and are not subject to federal jurisdiction under the above statute. Discussion of the nonwetlands of the property will focus on two land form types.

(1) **Land Form: Ridges and Slopes.** This land form type typically lacks wetland indicators for all three wetland criteria, as described below.

Vegetation. The vegetation of the ridges and slopes is nonhydrophytic. Dominant species of the sample plots include Basin Sagebrush (*Artemisia tridentata*) (UPL), Douglas Sedge (*Carex douglasii*)(FAC-), and Western Wheatgrass (*Agropyron smithii*)(FAC-). Most of these sites also exhibit at least a presence of Baltic Rush (*Juncus balticus*)(OBL), Nebraska sedge (*Carex nebrascensis*)(OBL), and/or Rocky Mountain Iris (*Iris missouriensis*). However, the continued presence of these species in these locations is a relict of the long-standing practice of flood irrigation, which allowed the species to become established. When the source of irrigation water was terminated more than 10 years ago, the hydrology of the site no longer favored the continued presence of these wetter species as dominants in these areas. However, some species (i. e., Baltic rush and Rocky Mountain Iris) persist on the site, due primarily due to receiving sufficient moisture from precipitation to allow them to grow. This condition is expected to persist until species better adapted to the new, drier hydrologic regime out-compete the wetter species. In addition, the slight development of a thin organic surface due to past irrigation allowed the soil to hold moisture somewhat longer. When the

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organic surface eventually decomposes and is blown away, the site will become drier and the wetter species will disappear from the area. As a general observation, the vegetation of the entire study area is becoming increasingly drier.

Soils. Soils of the ridges and slopes typically have a matrix chroma of 3 or 4 (moist), which is indicative of nonhydric soils. These soils probably are of the Chesaw family group, all components of which are nonhydric. The Chesaw series is classified as an Entic Haploxerolls (NRCS, 2001). The Chesaw series is described as deep, somewhat excessively-drained soils on terraces, terrace escarpments, and eskers. Soils on the ridges exhibit no indicators of hydric soils.

Hydrology. The hydrologic regime on the slopes and ridges downslope of the Bodle ditch has been altered significantly during modern times. This area was subject to flood irrigation practices for many years. About 1989, the water source through the Bodle Ditch was eliminated. As a result, the hydrology on the lower slopes became much drier. Today, none of these areas have a hydrologic regime that could be considered to be characteristic of wetlands. The permeable soil, significant slope, and lack of a sufficient water source combine to prevent any portion of the area from having a wetland hydrologic regime. This factor alone prevents all of the ridges and side slopes from qualifying as wetlands.

(2) Land Form: Meadow. In the meadow portion of the study area, the vegetation is typically hydrophytic in areas having deep soils with an histic epipedon, but nonhydrophytic in areas having no histic epipedon and gravelly, sandy soils. In the latter areas, the vegetation is not significantly different than that on the ridges and side slopes. In the former areas, the vegetation is distinctly hydrophytic, in which all dominant species contribute to hydrophytic vegetation. Dominant species at a sample plot in the meadow portion typically include some combination of Baltic Rush (*Juncus balticus*) (OBL)*, Nebraska sedge (*Carex nebrascensis*)(OBL), Rocky Mountain Iris (*Iris* missouriense)(OBL), and Silver sagebrush (*Artemisia cana*)(FACW). Therefore, the wetland criterion for vegetation is met.

Soils of the meadow area are the Chesaw series (0-5% slope), the Wursten series, or the Hagga series. Characteristics of the Chesaw series were described above in the discussion on the ridges and slopes land form type. The Wursten series is described as very deep, well-drained soils on hills, fans, and terraces. This series is classified as a Typic Calcixerolls (NRCS, 1991), and Wursten soils are nonhydric. The Hagga series is described as a very deep, poorly drained soil on narrow valley bottoms and floodplains. This series is described as a Typic Fluvaquents (NRCS, 1991), and may qualify as a hydric soil in some instances. These soils have a matrix chroma of 1 or 2 and typically

* The Wetland Indicator Status categories, by definition, have significance only under natural conditions. Under altered environmental conditions, the presence of OBL species may have little significance, especially if the altered condition results in artificially wet conditions (such as occurred in this case).

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have common, distinct mottles ranging from 10YR5/3 to 7.5YR4/4. The soils at Sample Plots 1 and 9 have characteristics similar to the Hagga series. Although these areas could have been functionally hydric at one time, these characteristics could also result from the soil being formed from sedimentary deposits of low chromas and the mottles forming when the flood irrigation practice was initiated. Regardless, neither is functionally hydric and neither site is a wetland. The area at Sample Plot 1 lacks wetland hydrology, and the area at Sample Plot 9 lacks both hydrophytic vegetation and wetland hydrology.

The hydrologic regime of the meadow is much different than prior to surface alterations in the area. Prior to the removal of irrigation from the land in 1989, the property had been subject to flood irrigation practices for possibly as long as 100 years. In the lowest portion of the area (meadow), the irrigation water remained longer and combined with the snowmelt and rainfall, caused the area to have saturated soils for a significant part of the growing season. This condition promoted the establishment of species capable of growing in such areas but did not result in changes in soil characteristics. Selective grazing also caused these species to become dominant over edible species. In particular, Baltic Rush is known to be an increaser (in distribution, density, and biomass) in grazed areas. The result was a plant community that superficially resembled a native, natural wetland plant community.

After the irrigation practice ended, the meadow became much drier because a major source of water had been removed. It is very unlikely that the meadow would have qualified as a wetland prior to irrigation because there would have been no need for irrigation in an existing wetland. Moreover, other development in the area caused a shift in drainage and surface flow patterns. Consequently, the area became much drier. Now, more than 10 years after irrigation was terminated, the site clearly lacks wetland hydrology. Even when the area was 25 percent wetter than average (Groeneveld, 1996), the area did not have saturated soils in May. Resource Concepts, Inc. found no wetland hydrology on the site in 2000. No evidence of wetland hydrology was observed at any location on the site in the present study. Based on these observations and studies, I concluded that the area lacks wetland hydrology at the present time and most likely lacked wetland hydrology except possibly in some years during the irrigation era.

CONCLUSIONS

Conclusions of this wetlands identification/delineation study are:

1. No portions of the property qualify as wetlands, based on the current procedures used by the federal government to identify and delineate wetlands.

2. Portions of the property have the vegetation of wetlands, but its original establishment almost certainly was due to a long history of flood irrigation of the property. The source of irrigation water was Bodle Ditch.

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3. Current trends in the environmental conditions of the site are toward a drier hydrologic regime than when irrigation was practiced. The elimination of irrigation, coupled with changes in flow patterns, have eliminated even the artificial wetness of the site.

REFERENCES

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Reed, Porter B., Jr. 1988. "National List of Plant Species That Occur in Wetlands, Region 2: Southeast," National Wetlands Inventory, U.S. Fish and Wildlife Service, Washington, DC.

If you have questions or comments regarding this final letter report, please contact me at 228/588-1244.

Sincerely,

Dana R. Sanders, Sr.

Dana R. Sanders, Sr., PhD.

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APPENDIX A
FIELD DATA SHEETS

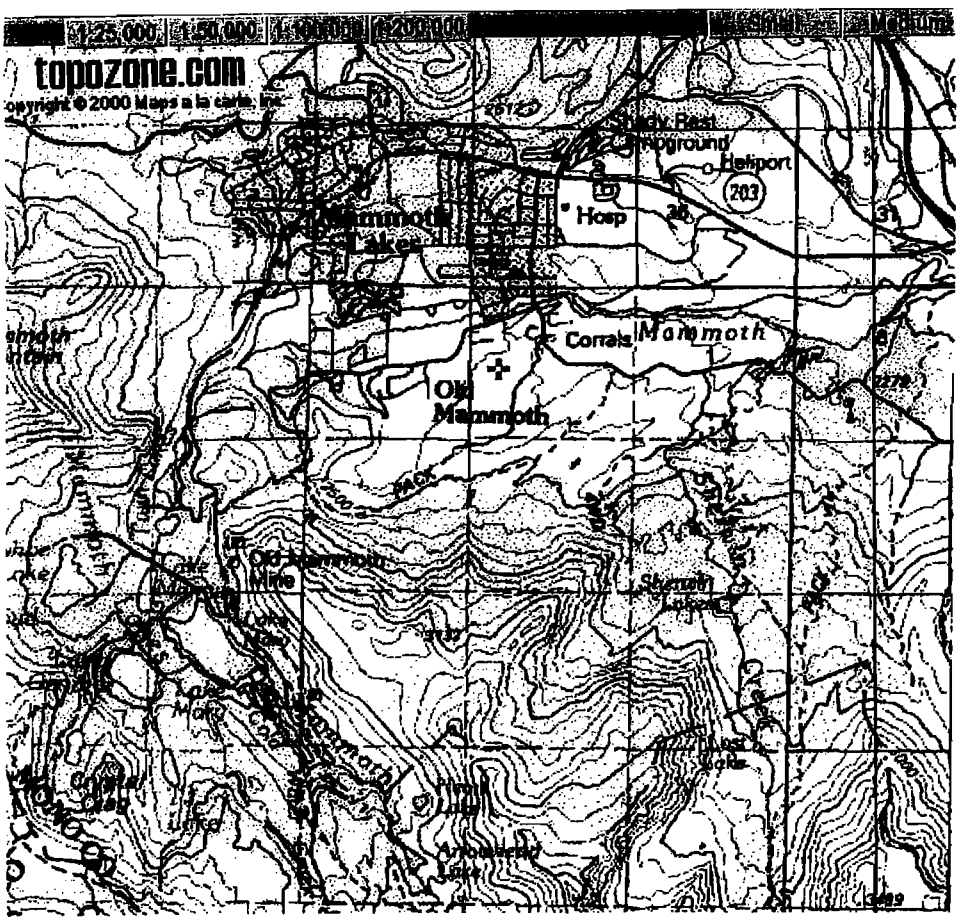

FIGURE 1. GENERAL LOCATION OF STUDY AREA. TAKEN FROM TOPOZONE (1:100,000 USGS TOPOGRAPHIC MAP)

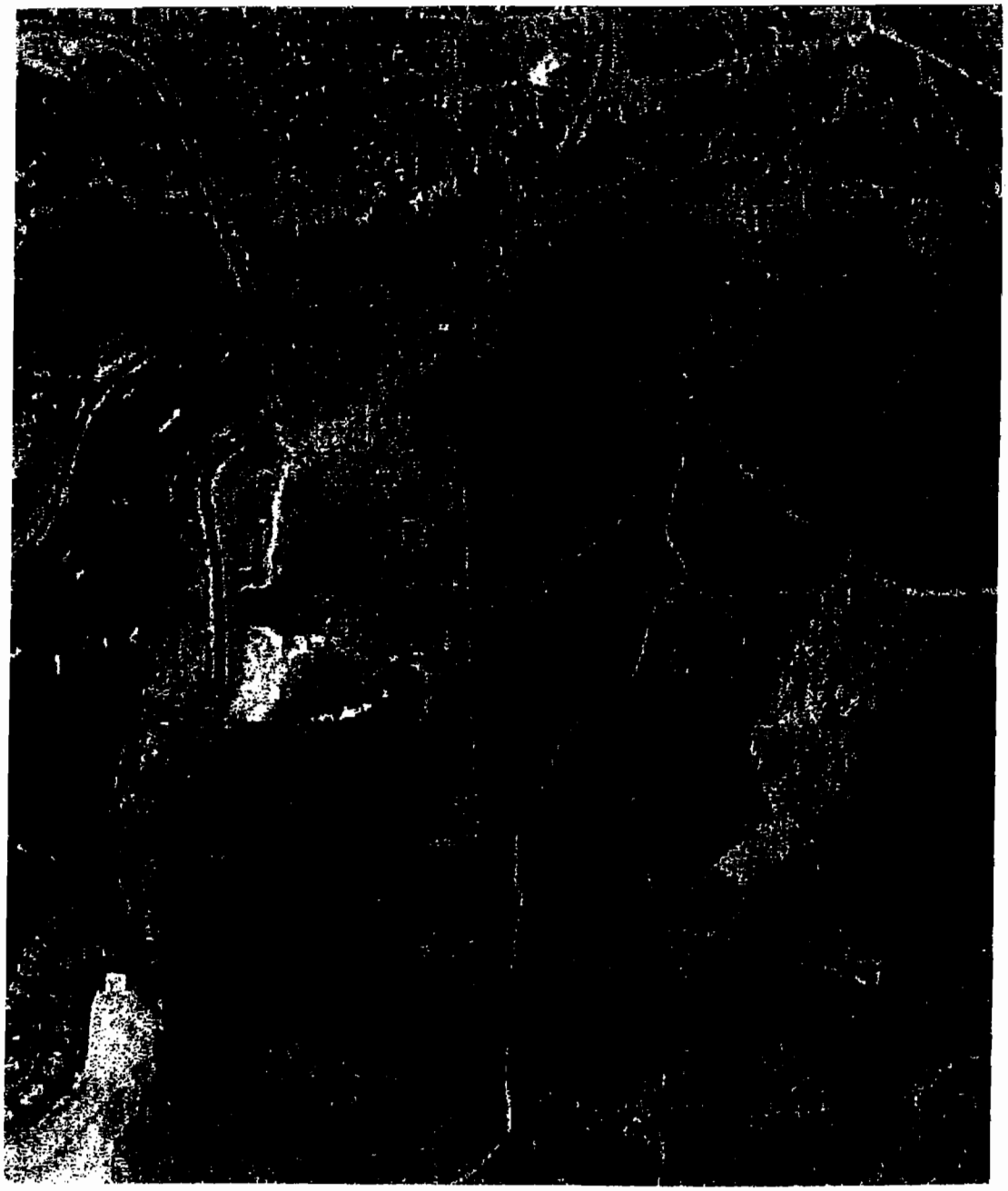

FIGURE 2. LOCATION OF SAMPLE PLOTS ON SNOWCREEK RESORT STUDY AREA. BASE MAP COPIED FROM RESOURCE CONCEPTS, INC. (2000).

#1

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Snow Creek East Applicant/Owner: Dempsey Construction Investigator: Dana R. Landers, Jr.	Date: 5/7/02 County: MONO State: CA
Do Normal Circumstances exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.) But irrigated until 10-12 years ago	Community ID: _____ Transect ID: _____ Plot ID: #1

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Juncus balticus	H	FACW	9.		
2. Carex nebrascensis	H	OBL	10.		
3. Artemisia cana	H	FACW	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: Hydrophytic vegetation

HYDROLOGY

N Recorded Data (Describe in Remarks):
- N Stream, Lake, or Tide Gauge
- N Aerial Photographs
- N Other

Y No Recorded Data Available

Field Observations:
- Depth of Surface Water: None (in.)
- Depth to Free Water in Pit: None (in.)
- Depth to Saturated Soil: None (in.)

Wetland Hydrology Indicators:
Primary Indicators:
- N Inundated
- N Saturated in Upper 12 Inches
- N Water Marks
- N Drift Lines
- N Sediment Deposits
- N Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- N Oxidized Root Channels in Upper 12 Inches
- — Water-Stained Leaves
- — Local Soil Survey Data
- — FAC-Neutral Test
- — Other (Explain in Remarks)

Remarks: Nonwetland Hydrology Ground with prominent cracks

#1

SOILS

Map Unit Name (Series and Phase): Hagga — Drainage Class: PD

Taxonomy (Subgroup): Typic Fluvaquents — Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4	Ao	10YR3/1	None	—	Organic
4-20	A	10YR3/1	None	—	Sandy loam
>20-26	B	10YR3/1	7.5YR4/4	Few, prominent	Sandy clay loam

Hydric Soil Indicators:

- N Histosol
- N Histic Epipedon
- N Sulfidic Odor
- N Aquic Moisture Regime
- N Reducing Conditions
- Y Gleyed or Low-Chroma Colors
- N Concretions
- N High Organic Content in Surface Layer in Sandy Soils
- N Organic Streaking in Sandy Soils
- N Listed on Local Hydric Soils List
- N Listed on National Hydric Soils List
- — Other (Explain in Remarks)

Remarks: Hydric Soil

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? (Yes) No DRS

Is this Sampling Point Within a Wetland? (Circle) (Yes) No

Remarks:

Nonwetland

Approved by HQUSACE 2/92

#2

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Snow Creek East
Applicant/Owner: Dempsey Construction
Investigator: Diana R. Sanders

Date: 5/07/02
County: MONO
State: CA

Do Normal Circumstances exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.) Upslope from irrigation ditch

Community ID: _____
Transect ID: _____
Plot ID: #2

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Juncus balticus	H	FACW
2. Carex nebrascensis	H	OBL
3. Artemisia cana	H	FACW
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: Hydrophytic Vegetation

HYDROLOGY

Recorded Data (Describe in Remarks):
- Stream, Lake, or Tide Gauge
- Aerial Photographs
- Other

No Recorded Data Available

Field Observations:
- Depth of Surface Water: None (in.)
- Depth to Free Water in Pit: None (in.)
- Depth to Saturated Soil: None (in.)

Wetland Hydrology Indicators:
Primary Indicators:
- Inundated
- Saturated in Upper 12 Inches
- Water Marks
- Drift Lines
- Sediment Deposits
- Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- Oxidized Root Channels in Upper 12 Inches
- Water-Stained Leaves
- Local Soil Survey Data
- FAC-Neutral Test
- Other (Explain in Remarks)

Remarks: Nonwetland Hydrology

#2

SOILS

Map Unit Name (Series and Phase): CHESAW

Drainage Class: SED

Taxonomy (Subgroup): Entic Haploxerolls

Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4	Ao	10YR3/3	None	-	Organic
4-16	A1	10YR3/3	None	-	Loamy sand with pebbles ¼" diameter

Hydric Soil Indicators:

- N Histosol
- N Histic Epipedon
- N Sulfidic Odor
- N Aquic Moisture Regime
- N Reducing Conditions
- N Gleyed or Low-Chroma Colors
- N Concretions
- N High Organic Content in Surface Layer in Sandy Soils
- N Organic Streaking in Sandy Soils
- N Listed on Local Hydric Soils List
- N Listed on National Hydric Soils List
- — Other (Explain in Remarks)

Remarks: Nonhydric Soil

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)

Wetland Hydrology Present? Yes (No)

Hydric Soils Present? Yes (No)

Is this Sampling Point Within a Wetland? (Circle) Yes (No)

Remarks: Nonwetland

Approved by HQUSACE 2/92

#3

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Snow Creek East Applicant/Owner: Dempsey Construction Investigator: Diana R. Landers, S?	Date: 5/07/92 County: MONO State: CA
Do Normal Circumstances exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.) Irrigated until 1989	Community ID: _____ Transect ID: _____ Plot ID: #3

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Juncus balticus	H	FACW	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: Hydrophytic Vegetation

HYDROLOGY

N Recorded Data (Describe in Remarks):
- N Stream, Lake, or Tide Gauge
- N Aerial Photographs
- N Other

Y No Recorded Data Available

Field Observations:

Depth of Surface Water:	None (in.)
Depth to Free Water in Pit:	None (in.)
Depth to Saturated Soil:	None (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- N Inundated
- N Saturated in Upper 12 Inches
- N Water Marks
- N Drift Lines
- N Sediment Deposits
- N Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- N Oxidized Root Channels in Upper 12 Inches
- Water-Stained Leaves
- Local Soil Survey Data
- FAC-Neutral Test
- Other (Explain in Remarks)

Remarks: Nonwetland Hydrology

#3

SOILS

Map Unit Name (Series and Phase): CHESAW — Drainage Class: SED

Taxonomy (Subgroup): Entic Haploxerolls — Field Observations: Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-1	A	10YR3/3	None	—	Organic
1-16	A	10YR3/3	None	—	Sandy loam with pebbles

Hydric Soil Indicators:

- N Histosol
- N Histic Epipedon
- N Sulfidic Odor
- N Aquic Moisture Regime
- N Reducing Conditions
- N Gleyed or Low-Chroma Colors
- N Concretions
- N High Organic Content in Surface Layer in Sandy Soils
- N Organic Streaking in Sandy Soils
- N Listed on Local Hydric Soils List
- N Listed on National Hydric Soils List
- = Other (Explain in Remarks)

Remarks: Nonhydric Soil

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? Yes (No)

Is this Sampling Point Within a Wetland? (Circle) Yes (No)

Remarks:

Nonwetland

#4

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Snow Creek East.	Date: 5/07/02
Applicant/Owner: Dempsey Construction	County: MONO
Investigator: Dana R. Sanders, Sr.	State: CA
Do Normal Circumstances exist on the site? (Yes) No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the area a potential Problem Area? Yes (No)	Plot ID: #4
(If needed, explain on reverse.) Irrigated until 1989	

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Juncus balticus	H	FACW	9.		
2. Carex nebrascensis	H	OBL	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: Hydrophytic Vegetation

HYDROLOGY

N Recorded Data (Describe in Remarks):
- N Stream, Lake, or Tide Gauge
- N Aerial Photographs
- N Other

Y No Recorded Data Available

Field Observations:
- Depth of Surface Water: None (in.)
- Depth to Free Water in Pit: None (in.)
- Depth to Saturated Soil: None (in.)

Wetland Hydrology Indicators:
Primary Indicators:
- N Inundated
- N Saturated in Upper 12 Inches
- N Water Marks
- N Drift Lines
- N Sediment Deposits
- N Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- N Oxidized Root Channels in Upper 12 Inches
- = Water-Stained Leaves
- = Local Soil Survey Data
- = FAC-Neutral Test
- = Other (Explain in Remarks)

Remarks: Nonwetland Hydrology

#4

SOILS

Map Unit Name (Series and Phase): CHESAW

Drainage Class: SED

Taxonomy (Subgroup): Entic Haploxerolls

Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-1	A_o	10YR3/3	None	—	Organic
1-16	A_1	10YR2/1	None	—	Sandy loam with pebbles

Hydric Soil Indicators:

- N Histosol
- N Histic Epipedon
- N Sulfidic Odor
- N Aquic Moisture Regime
- N Reducing Conditions
- Y Gleyed or Low-Chroma Colors
- N Concretions
- N High Organic Content in Surface Layer in Sandy Soils
- N Organic Streaking in Sandy Soils
- N Listed on Local Hydric Soils List
- N Listed on National Hydric Soils List
- — Other (Explain in Remarks)

Remarks: Hydric Soil (but only due to a low chroma parent material).

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	(Yes) No (Circle)	(Circle)
Wetland Hydrology Present?	Yes (No)	
Hydric Soils Present?	Yes (No)	Is this Sampling Point Within a Wetland? Yes (No)

Remarks: Nonwetland

Approved by HQUSACE 2/92

#5

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Snow Creek East Applicant/Owner: Dempsey Construction Investigator: Laura R. Standley, Sr.	Date: 5/07/02 County: MONO State: CA
Do Normal Circumstances exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.) Irrigated until 1989	Community ID: _____ Transect ID: _____ Plot ID: #5

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Carex nebrascensis	H	OBL	9.		
2. Iris missouriensis	H	OBL	10.		
3. Juncus balticus	H	FACW	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: Hydrophytic vegetation due to irrigation in past

HYDROLOGY

N Recorded Data (Describe in Remarks):
- N Stream, Lake, or Tide Gauge
- N Aerial Photographs
- N Other

Y No Recorded Data Available

Field Observations:

Depth of Surface Water:	None (in.)
Depth to Free Water in Pit:	None (in.)
Depth to Saturated Soil:	None (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- N Inundated
- N Saturated in Upper 12 Inches
- N Water Marks
- N Drift Lines
- N Sediment Deposits
- N Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- N Oxidized Root Channels in Upper 12 Inches
- _ Water-Stained Leaves
- _ Local Soil Survey Data
- _ FAC-Neutral Test
- _ Other (Explain in Remarks)

Remarks: Nonwetland Hydrology

#5

SOILS

Map Unit Name (Series and Phase): CHESAW
Drainage Class: SED
Taxonomy (Subgroup): Entic Haploxerolls
Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0+1	Ao	10YR3/3	None	—	Organic
1-16	A	10YR3/2	None	—	Sandy loam

Hydric Soil Indicators:

- N Histosol
- N Histic Epipedon
- N Sulfidic Odor
- N Aquic Moisture Regime
- N Reducing Conditions
- N Gleyed or Low-Chroma Colors
- N Concretions
- N High Organic Content in Surface Layer in Sandy Soils
- N Organic Streaking in Sandy Soils
- N Listed on Local Hydric Soils List
- N Listed on National Hydric Soils List
- = Other (Explain in Remarks)

Remarks: Nonhydric Soil

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? ~~Yes~~ No
Hydric Soils Present? Yes (No)

Is this Sampling Point Within a Wetland? Yes (No) (Circle)

Remarks: Nonwetland

Approved by HQUSACE 2/92

#6

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Snow Creek East Applicant/Owner: Dempsey Construction Investigator: Dana R. Sanders, Jr.	Date: 5/07/02 County: MONO State: CA
Do Normal Circumstances exist on the site? (Yes) No Is the site significantly disturbed (Atypical Situation)? Yes (No) Is the area a potential Problem Area? Yes (No) (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: #6

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Carex nebrascensis	H	OBL	9.		
2. Quercus kelloggii	H	FACW	10.		
3. Iris missouriensis	H	OBL	11.		
4. Artemisia tridentata	A	UPL	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 75%

Remarks: Hydrophytic Vegetation

HYDROLOGY

N Recorded Data (Describe in Remarks):
- N Stream, Lake, or Tide Gauge
- N Aerial Photographs
- N Other

Y No Recorded Data Available

Field Observations:
- Depth of Surface Water: None (in.)
- Depth to Free Water in Pit: None (in.)
- Depth to Saturated Soil: None (in.)

Wetland Hydrology Indicators:
Primary Indicators:
- N Inundated
- N Saturated in Upper 12 Inches
- N Water Marks
- N Drift Lines
- N Sediment Deposits
- N Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- N Oxidized Root Channels in Upper 12 Inches
- = Water-Stained Leaves
- = Local Soil Survey Data
- = FAC-Neutral Test
- = Other (Explain in Remarks)

Remarks: Nonwetland Hydrology

#6

SOILS

Map Unit Name (Series and Phase): WURSTEN Drainage Class: WD

Taxonomy (Subgroup): Typic Calcixerolls Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-3	Ao	10YR3/3	None	—	Organic
3-7	A	10YR3/2	None	—	fine Sandy loam
7-16	B	10YR6/3	None	—	fine sandy loam

Hydric Soil Indicators:

- N Histosol
- N Histic Epipedon
- N Sulfidic Odor
- N Aquic Moisture Regime
- N Reducing Conditions
- N Gleyed or Low-Chroma Colors
- N Concretions
- N High Organic Content in Surface Layer in Sandy Soils
- N Organic Streaking in Sandy Soils
- N Listed on Local Hydric Soils List
- N Listed on National Hydric Soils List
- N Other (Explain in Remarks)

Remarks: Nonhydric Soil

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? Yes (No)

Is this Sampling Point Within a Wetland? (Circle) Yes (No)

Remarks: Nonwetland

Approved by HQUSACE 2/92

#7

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Snow Creek Fatty	Date: 5/07/02
Applicant/Owner: Dempsey Construction	County: MONO
Investigator: Dana R. Landers, Jr	State: CA
Do Normal Circumstances exist on the site? (Yes) No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the area a potential Problem Area? Yes (No)	Plot ID: #7
(If needed, explain on reverse.) Irrigated until 1989	

Typical of lower sagebrush area

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Artemisia tridentata	S/S	UPL	9.		
2. Juncus balticus	H	FACW	10.		
3. Carex douglasii	H	FACU	11.		
4. Carex nebrascensis	H	OBL	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 50%

Remarks: Nonhydrophytic Vegetation

HYDROLOGY

- N Recorded Data (Describe in Remarks):
  - N Stream, Lake, or Tide Gauge
  - N Aerial Photographs
  - N Other
- Y No Recorded Data Available

Field Observations:

- Depth of Surface Water: None (in.)
- Depth to Free Water in Pit: None (in.)
- Depth to Saturated Soil: None (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- N Inundated
- N Saturated in Upper 12 Inches
- N Water Marks
- N Drift Lines
- N Sediment Deposits
- N Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- N Oxidized Root Channels in Upper 12 Inches
- Water-Stained Leaves
- Local Soil Survey Data
- FAC-Neutral Test
- Other (Explain in Remarks)

Remarks: Nonwetland Hydrology

#7

SOILS

Map Unit Name (Series and Phase): CHESAW Drainage Class: SED

Taxonomy (Subgroup): ENTIC HAPLOXEROLLS Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-0.5	Ao	10YR3/3	None	—	Organic
0.5-16	A	10YR3/2	None	—	Sandy loam

Hydric Soil Indicators:

- N Histosol
- N Histic Epipedon
- N Sulfidic Odor
- N Aquic Moisture Regime
- N Reducing Conditions
- N Gleyed or Low-Chroma Colors
- N Concretions
- N High Organic Content in Surface Layer in Sandy Soils
- N Organic Streaking in Sandy Soils
- N Listed on Local Hydric Soils List
- N Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: Nonhydric Soil

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes (No) (Circle)		(Circle)
Wetland Hydrology Present?	Yes (No)	Is this Sampling Point Within a Wetland?	Yes (No)
Hydric Soils Present?	Yes (No)		

Remarks: Nonwetland

Approved by HQUSACE 2/92

#8

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Snow Creek East	Date: 5/07/02
Applicant/Owner: Dumpsey Construction	County: MONO
Investigator: Klark K. Sanders, Sr	State: CA
Do Normal Circumstances exist on the site? (Yes) No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the area a potential Problem Area? Yes (No)	Plot ID: #8
(If needed, explain on reverse.)	

Located between 2 small channels

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Artemisia tridentata	S/S	UPL
2. Juncus balticus	H	FACW
3. Potentilla gracilis	H	FACW
4.		
5.		
6.		
7.		
8.		

Dominant Plant Species	Stratum	Indicator
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 66%

Remarks: Hydrophytic Vegetation

HYDROLOGY

- N Recorded Data (Describe in Remarks):
  - N Stream, Lake, or Tide Gauge
  - N Aerial Photographs
  - N Other
- N No Recorded Data Available

Field Observations:

- Depth of Surface Water: None (in.)
- Depth to Free Water in Pit: None (in.)
- Depth to Saturated Soil: None (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- N Inundated
- N Saturated in Upper 12 Inches
- N Water Marks
- N Drift Lines
- N Sediment Deposits
- N Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- N Oxidized Root Channels in Upper 12 Inches
- = Water-Stained Leaves
- = Local Soil Survey Data
- = FAC-Neutral Test
- = Other (Explain in Remarks)

Remarks: Nonwetland Hydrology

#8

SOILS

Map Unit Name (Series and Phase): CHESAW Drainage Class: SED

Taxonomy (Subgroup): ENTIC HAPLOXEROLLS Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-4	A	10YR3/3	NONE	—	Sandy loam*
4-16	B	10YR3/2	None	—	Sandy loam

Hydric Soil Indicators:

- N Histosol
- N Histic Epipedon
- N Sulfidic Odor
- N Aquic Moisture Regime
- N Reducing Conditions
- N Gleyed or Low-Chroma Colors
- N Concretions
- N High Organic Content in Surface Layer in Sandy Soils
- N Organic Streaking in Sandy Soils
- N Listed on Local Hydric Soils List
- N Listed on National Hydric Soils List
- — Other (Explain in Remarks)

Remarks: Nonhydric soil

* Many roots + dead stems

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes (No) (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? Yes (No)

Is this Sampling Point Within a Wetland? (Circle) Yes (No)

Remarks: Nonwetland

Approved by HQUSACE 2/92

#9

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Snow Creek Fase 2	Date: 5/07/02
Applicant/Owner: Dempsey Construction	County: Mono
Investigator: Diana L. Sanders, S	State: CA
Do Normal Circumstances exist on the site? (Yes) No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the area a potential Problem Area? Yes (No)	Plot ID: #9
(If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Agropyron Smithii	H	FAC-	9.		
2. Muhlenbergia asperifolia	H	FACW	10.		
3. Salsola kali	H	FACW+	11.		
4. Juncus balticus	H	FACW	12.		
5.* Artemisia cana	H	FACW	13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 50%

Remarks: Nonhydrophytic vegetation * 1 plant

HYDROLOGY

N Recorded Data (Describe in Remarks):
- N Stream, Lake, or Tide Gauge
- N Aerial Photographs
- N Other

Y No Recorded Data Available

Field Observations:

Depth of Surface Water:	None	(in.)
Depth to Free Water in Pit:	None	(in.)
Depth to Saturated Soil:	None	(in.)*

Wetland Hydrology Indicators:

Primary Indicators:
- N Inundated
- N Saturated in Upper 12 Inches
- N Water Marks
- N Drift Lines
- N Sediment Deposits
- N Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- N Oxidized Root Channels in Upper 12 Inches
- N Water-Stained Leaves
- N Local Soil Survey Data
- N FAC-Neutral Test
- N Other (Explain in Remarks)

Remarks: Nonwetland Hydrology * to 25" depth

#9

SOILS

Map Unit Name (Series and Phase): Hagga — Drainage Class: PD

Taxonomy (Subgroup): Typic Fluvaquents — Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-7	A	10YR3/1	None	—	Sandy loam
7-11	E	10YR4/2	None	—	Sandy loam
11-16	B	10YR7/2	7.5YR3/4	Common/prominent	Si. H loam

Hydric Soil Indicators:

- N Histosol
- N Histic Epipedon
- N Sulfidic Odor
- N Aquic Moisture Regime
- N Reducing Conditions
- Y Gleyed or Low-Chroma Colors
- N Concretions
- N High Organic Content in Surface Layer in Sandy Soils
- N Organic Streaking in Sandy Soils
- N Listed on Local Hydric Soils List
- N Listed on National Hydric Soils List
- — Other (Explain in Remarks)

Remarks: Hydric Soil

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes (No) (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? (Yes) No

Is this Sampling Point Within a Wetland? (Circle) Yes (No)

Remarks: Nonwetland

#10

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Snow Creek East	Date: 5/07/02
Applicant/Owner: Dempsey Construction	County: MONO
Investigator: Dana R. Landers	State: CA
Do Normal Circumstances exist on the site? (Yes) No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the area a potential Problem Area? Yes (No)	Plot ID: #10
(If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Artemisia tridentata	S/S	UPL	9.		
2. Juncus balticus	H	FACW	10.		
3. Iris missouriensis	H	OBL	11.		
4. Agropyron smithii	H	FAC-	12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 50%

Remarks: Nonhydrophytic Vegetation

HYDROLOGY

N Recorded Data (Describe in Remarks):
- N Stream, Lake, or Tide Gauge
- N Aerial Photographs
- N Other

Y No Recorded Data Available

Field Observations:
- Depth of Surface Water: None (in.)
- Depth to Free Water in Pit: None (in.)
- Depth to Saturated Soil: None (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- N Inundated
- N Saturated in Upper 12 Inches
- N Water Marks
- N Drift Lines
- N Sediment Deposits
- N Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- N Oxidized Root Channels in Upper 12 Inches
- = Water-Stained Leaves
- = Local Soil Survey Data
- = FAC-Neutral Test
- = Other (Explain in Remarks)

Remarks: Nonwetland Hydrology

#10

SOILS

Map Unit Name (Series and Phase): CHESAW

Drainage Class: SED

Taxonomy (Subgroup): ENTIC HAPLOXEROLLS

Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-16	A	10YR3/3	None	-	Sandy loam

Hydric Soil Indicators:

- N Histosol
- N Histic Epipedon
- N Sulfidic Odor
- N Aquic Moisture Regime
- N Reducing Conditions
- N Gleyed or Low-Chroma Colors
- N Concretions
- N High Organic Content in Surface Layer in Sandy Soils
- N Organic Streaking in Sandy Soils
- N Listed on Local Hydric Soils List
- N Listed on National Hydric Soils List
- = Other (Explain in Remarks)

Remarks: Nonhydric Soil

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes (No) (Circle)	(Circle)	
Wetland Hydrology Present?	Yes (No)		
Hydric Soils Present?	Yes (No)	Is this Sampling Point Within a Wetland?	Yes (No)

Remarks: Nonwetland

#11

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Swan Creek East	Date: 5/07/02
Applicant/Owner: Dempsey Construction	County: MONO
Investigator: David R. Saunders, Sr	State: CA
Do Normal Circumstances exist on the site? (Yes) No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the area a potential Problem Area? Yes (No)	Plot ID: #11
(If needed, explain on reverse.) Old Irrigation Ditch	

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Juncus balticus	H	FACW	9.		
2. Triglochin missouriensis	H	OBL	10.		
3. Carex nebrascensis	H	OBL	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: Hydrophytic Vegetation

HYDROLOGY

N Recorded Data (Describe in Remarks):
- N Stream, Lake, or Tide Gauge
- N Aerial Photographs
- N Other

Y No Recorded Data Available

Field Observations:

Depth of Surface Water:	None	(in.)
Depth to Free Water in Pit:	None	(in.)
Depth to Saturated Soil:	None	(in.)

Wetland Hydrology Indicators:

Primary Indicators:
- N Inundated
- N Saturated in Upper 12 Inches
- N Water Marks
- N Drift Lines
- N Sediment Deposits
- N Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- N Oxidized Root Channels in Upper 12 Inches
- Water-Stained Leaves
- Local Soil Survey Data
- FAC-Neutral Test
- Other (Explain in Remarks)

Remarks: Nonwetland Hydrology

#11

SOILS

Map Unit Name (Series and Phase): WURSTEN — Drainage Class: WD

Taxonomy (Subgroup): TYPIC CALCIXEROLLS — Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12	A	10YR4/2-3	None	—	Sandy loam
12-16	B	10YR6/2	7.5YR3/4	Common, prominent	Silt loam

Hydric Soil Indicators:

- N Histosol
- N Histic Epipedon
- N Sulfidic Odor
- N Aquic Moisture Regime
- N Reducing Conditions
- N Gleyed or Low-Chroma Colors
- N Concretions
- N High Organic Content in Surface Layer in Sandy Soils
- N Organic Streaking in Sandy Soils
- N Listed on Local Hydric Soils List
- N Listed on National Hydric Soils List
- = Other (Explain in Remarks)

Remarks: Nonhydric soil

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No DRS (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? Yes (No)

Is this Sampling Point Within a Wetland? (Circle) Yes (No)

Remarks: Nonwetland

Approved by HQUSACE 2/92

#12

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Snow Creek East	Date: 5/07/02
Applicant/Owner: Dempsey Construction	County: MONO
Investigator: Dana R. Landers	State: CA
Do Normal Circumstances exist on the site? (Yes) No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the area a potential Problem Area? Yes (No)	Plot ID: #12
(If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Juncus balticus	H	FACW	9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 100%

Remarks: Hydrophytic Vegetation

HYDROLOGY

N Recorded Data (Describe in Remarks):
- N Stream, Lake, or Tide Gauge
- N Aerial Photographs
- N Other

Y No Recorded Data Available

Field Observations:

Depth of Surface Water:	None (in.)
Depth to Free Water in Pit:	None (in.)
Depth to Saturated Soil:	None (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- N Inundated
- N Saturated in Upper 12 Inches
- N Water Marks
- N Drift Lines
- N Sediment Deposits
- N Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- N Oxidized Root Channels in Upper 12 Inches
- = Water-Stained Leaves
- = Local Soil Survey Data
- = FAC-Neutral Test
- = Other (Explain in Remarks)

Remarks: Nonwetland Hydrology

#12

SOILS

Map Unit Name (Series and Phase): CHESAW Drainage Class: SED

Taxonomy (Subgroup): ENTIC HAPLOXEROLLS Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12	A	10YR3/4	None	—	Sandy loam
12-16	B	10YR3/4	7.5YR3/4	Few, prominent	Sandy loam

Hydric Soil Indicators:

- N Histosol
- N Histic Epipedon
- N Sulfidic Odor
- N Aquic Moisture Regime
- N Reducing Conditions
- N Gleyed or Low-Chroma Colors
- N Concretions
- N High Organic Content in Surface Layer in Sandy Soils
- N Organic Streaking in Sandy Soils
- N Listed on Local Hydric Soils List
- N Listed on National Hydric Soils List
- — Other (Explain in Remarks)

Remarks: Nonhydric Soil

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? Yes (No)

Is this Sampling Point Within a Wetland? (Circle) Yes (No)

Remarks: Nonwetland

Approved by HQUSACE 2/92

#13

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Snow Creek East	Date: 5/07/02
Applicant/Owner: Dempsey Construction	County: Mono
Investigator: Diana R. Landers	State: CA
Do Normal Circumstances exist on the site? Yes (No)	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the area a potential Problem Area? Yes (No)	Plot ID: #13
(If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Salix sp.	S/S	≥FAC
2. Artemisia tridentata	S/S	UPL
3. Carex douglasii	H	FACU
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 33.3%

Remarks: Nonhydrophytic Vegetation

HYDROLOGY

N Recorded Data (Describe in Remarks):
- N Stream, Lake, or Tide Gauge
- N Aerial Photographs
- N Other

Y No Recorded Data Available

Field Observations:
- Depth of Surface Water: None (in.)
- Depth to Free Water in Pit: None (in.)
- Depth to Saturated Soil: None (in.)

Wetland Hydrology Indicators:
Primary Indicators:
- N Inundated
- N Saturated in Upper 12 Inches
- N Water Marks
- N Drift Lines
- N Sediment Deposits
- N Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- N Oxidized Root Channels in Upper 12 Inches
- = Water-Stained Leaves
- = Local Soil Survey Data
- = FAC-Neutral Test
- = Other (Explain in Remarks)

Remarks: Nonwetland Hydrology

#13

SOILS

Map Unit Name (Series and Phase): CHESAW Drainage Class: SED

Taxonomy (Subgroup): ENTIC HAPLOXEROLLS Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-16	A	10YR3/3	None	—	Sandy loam

Hydric Soil Indicators:

- N Histosol
- N Histic Epipedon
- N Sulfidic Odor
- N Aquic Moisture Regime
- N Reducing Conditions
- N Gleyed or Low-Chroma Colors
- N Concretions
- N High Organic Content in Surface Layer in Sandy Soils
- N Organic Streaking in Sandy Soils
- N Listed on Local Hydric Soils List
- N Listed on National Hydric Soils List
- _ Other (Explain in Remarks)

Remarks: Nonhydric soil

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes (No) (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? Yes (No)

Is this Sampling Point Within a Wetland? (Circle) Yes (No)

Remarks:

Nonwetland

Approved by HQUSACE 2/92

#14

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Snow Creek East	Date: 05/01/02
Applicant/Owner: Dompsey Construction	County: Mono
Investigator: Diana R. Saunders, Sr	State: CA
Do Normal Circumstances exist on the site? (Yes) No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the area a potential Problem Area? Yes (No)	Plot ID: #14
(If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Artemisia tridentata	S/S	UPL
2. Juncus balticus	H	FACW
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 50%

Remarks: Nonhydrophytic Vegetation

HYDROLOGY

- N Recorded Data (Describe in Remarks):
  - N Stream, Lake, or Tide Gauge
  - N Aerial Photographs
  - N Other
- Y No Recorded Data Available

Field Observations:

- Depth of Surface Water: None (in.)
- Depth to Free Water in Pit: None (in.)
- Depth to Saturated Soil: None (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- N Inundated
- N Saturated in Upper 12 Inches
- N Water Marks
- N Drift Lines*
- N Sediment Deposits
- N Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- N Oxidized Root Channels in Upper 12 Inches
- — Water-Stained Leaves
- — Local Soil Survey Data
- — FAC-Neutral Test
- — Other (Explain in Remarks)

Remarks: Wetland Hydrology

*Probably extreme flows only

#14

SOILS

Map Unit Name (Series and Phase): CHESAW

Drainage Class: SED

Taxonomy (Subgroup): ENTIC HAPLOXEROLLS

Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-16	A	10YR3/3	None	-	Sandy loam

Hydric Soil Indicators:

- N Histosol
- N Histic Epipedon
- N Sulfidic Odor
- N Aquic Moisture Regime
- N Reducing Conditions
- N Gleyed or Low-Chroma Colors
- N Concretions
- N High Organic Content in Surface Layer in Sandy Soils
- N Organic Streaking in Sandy Soils
- N Listed on Local Hydric Soils List
- N Listed on National Hydric Soils List
- — Other (Explain in Remarks)

Remarks: Nonhydric Soil

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes (No) (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? Yes (No)

Is this Sampling Point Within a Wetland? (Circle) Yes (No)

Remarks: Nonwetland

Approved by HQUSACE 2/92

#15

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Snow Creek East	Date: 5/27/92
Applicant/Owner: Dempsey Construction	County: MONO
Investigator: Dana R. Landers, Jr.	State: CA
Do Normal Circumstances exist on the site? (Yes) No	Community ID:
Is the site significantly disturbed (Atypical Situation)? Yes (No)	Transect ID:
Is the area a potential Problem Area? Yes (No)	Plot ID: #15
(If needed, explain on reverse.)	

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. Artemisia tridentata	S/S	UPL	9.		
2. Carex douglasii	H	FAC-	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0

Remarks: Nonhydrophytic Vegetation

HYDROLOGY

- (N) Recorded Data (Describe in Remarks):
  - (N) Stream, Lake, or Tide Gauge
  - (N) Aerial Photographs
  - (N) Other
- (Y) No Recorded Data Available

Field Observations:

- Depth of Surface Water: None (in.)
- Depth to Free Water in Pit: None (in.)
- Depth to Saturated Soil: None (in.)

Wetland Hydrology Indicators:

Primary Indicators:
- (N) Inundated
- (N) Saturated in Upper 12 Inches
- (N) Water Marks
- (N) Drift Lines
- (N) Sediment Deposits
- (N) Drainage Patterns in Wetlands

Secondary Indicators (2 or more required):
- (N) Oxidized Root Channels in Upper 12 Inches
- ( ) Water-Stained Leaves
- ( ) Local Soil Survey Data
- ( ) FAC-Neutral Test
- ( ) Other (Explain in Remarks)

Remarks: Nonwetland Hydrology

#15

SOILS

Map Unit Name (Series and Phase): CHESAW
Drainage Class: SED
Taxonomy (Subgroup): ENTIC HAPLOXEROLLS
Field Observations Confirm Mapped Type? (Yes) No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-16	A	10YR3/4	None	—	Sandy loam

Hydric Soil Indicators:

- N Histosol
- N Histic Epipedon
- N Sulfidic Odor
- N Aquic Moisture Regime
- N Reducing Conditions
- N Gleyed or Low-Chroma Colors
- N Concretions
- N High Organic Content in Surface Layer in Sandy Soils
- N Organic Streaking in Sandy Soils
- N Listed on Local Hydric Soils List
- N Listed on National Hydric Soils List
- — Other (Explain in Remarks)

Remarks: Non hydric soil

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes (No) (Circle)
Wetland Hydrology Present? Yes (No)
Hydric Soils Present? Yes (No)

Is this Sampling Point Within a Wetland? (Circle) Yes (No)

Remarks: None Hand

Approved by HQUSACE 2/92

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D. R. SANDERS AND ASSOCIATES, INC.
4017 Lake Wilma Road, Moss Point, MS 39562

5 August 2002

Mr. Bruce Henderson
Regulatory Branch
U.S.A.E. District, Los Angeles
Ventura Field Office
2151 Alessandro Drive, Suite 255
Ventura, CA 93001

RE: Revised Wetlands Identification/Delineation Report for SnowCreek Resort, Mammoth Lakes, California.

Dear Mr. Henderson:

You recently were provided a wetlands identification/delineation report for the subject property. As you know, I conducted the field work and prepared the report personally. Mr. Gail Frampton of Dempsey Construction Company, Mammoth Lakes, provided you a copy of the report. After reading the report, Mr. Frampton indicated that the original copy had one error (the date when irrigation terminated on the private property and the government property). Therefore, he asked me to modify the report accordingly to reflect the correct information. The enclosed text of the revised report reflects the correct information.

Please replace the text of the original report with the revised copy enclosed herein. All figures and data sheets remain unchanged.

If you or anyone else has questions about this letter report, please contact me at 228/588-1244.

Sincerely,

Dana R. Sanders, Sr., PhD.

Encl/as
CF: Mr. Gail Frampton

Bus: 228/588-1244 Facsimile: 228/588-0030 e-mail: drsawet@aol.com

D. R. SANDERS AND ASSOCIATES, INC.
4017 Lake Wilma Road, Moss Point, MS 39562

27 June 2002

Mr. Gail Frampton
Dempsey Construction
P. O. Box 657
Mammoth Lakes, CA 93546

RE: Identification/Delineation of Wetlands On a Portion of Snowcreek Resort Property in Mammoth Lakes (Mono County), California

Dear Mr. Frampton:

This letter constitutes my final report on a wetlands identification/delineation study you requested on a portion of the Snowcreek Resort property in Mammoth Lakes (Mono County), California (Figure 1). The purpose of the study was to identify portions (if any) of the property qualifying as wetlands or other "Waters of the United States" pursuant to federal jurisdiction under Section 404 of the Clean Water Act of 1977 (as amended), and to delineate their boundaries. Field work for the study was conducted on 8 and 9 May, 2002.

BACKGROUND

For more than 10 years, Dempsey Construction Corporation (Dempsey) has been developing Snowcreek Resort in an area of Mammoth Lakes. The master plan for the project includes several resort housing areas and an 18-hole golf course. Some housing areas and 9 holes of the golf course have already been completed. In an area southeast of the existing housing and golf course, an additional housing area and another 9 holes of the golf course are planned for construction in the near future. As part of their efforts to complete the project, a wetlands identification and delineation study was conducted in May of 1996 by Dr. David P. Groeneveld, an Environmental Scientist with Resource Management in Bishop, California (Groeneveld, 1996). Dr. Groeneveld used appropriate wetland identification and delineation procedures to conduct the study, and he concluded that no wetlands occur on the property. He found some areas meeting the hydrophytic vegetation and hydric soil criteria listed in Environmental Laboratory (1987), but none exhibited wetland hydrology, due to historic land use patterns (irrigation) and changes in drainage (ditches) patterns. The Groeneveld study included most property considered in this study, and all parts of the tract that potentially qualified as wetlands.

After the Lahontan regional office of the California Regional Water Control Board questioned the Groeneveld study in September 2000, Dempsey enlisted Resource Concepts, Inc. of Carson City, Nevada to verify the accuracy and validity of the

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Groeneveld study. Resource Concepts, Inc. (Resource Concepts, 2000) verified that the Groeneveld study was conducted at the appropriate time of the year and by the appropriate procedures for identifying and delineating wetlands. They further concluded that no wetlands occur on the property, and that the property is becoming drier due to the changes made in land use patterns (especially the cessation of a long-standing practice of flood irrigation). They pointed out that Groeneveld found no wetland hydrology during early Spring in a year having 25 percent greater than average precipitation. Since no areas having wetland hydrology were found during a year of greater than average rainfall, the probability that the area would exhibit wetland hydrology during years of less precipitation is very low.

Due to continuing questions about the validity of the Groeneveld study and it's review by Resource Concepts, Inc. during the Fall season when wetland hydrology normally would not be present, Dempsey engaged D. R. SANDERS AND ASSOCIATES, INC. to conduct an independent wetland investigation on the subject property. This report describes the study and its conclusions.

SITE DESCRIPTION

The study area (Figure 2) is located in the southeastern portion of the Snowcreek Resort area. The approximately 153-acre tract is bordered on the west by Snowcreek, Unit V and the southeastern margin of the existing golf course, on the north-northwest by Old Mammoth Road and a detention pond previously constructed as part of the Snowcreek Resort, on the east by Sherwin Creek Road and a rock disposal site, and on the south by undeveloped land. The south boundary terminates at the boundary of Snowcreek, Unit 5.

The vegetation of much of the subject property is dominated by Basin Sagebrush (*Artemisia tridentata*). A portion of the site has hydrophytic vegetation dominated by species such as Baltic Rush (*Juncus balticus*), Nebraska Sedge (*Carex nebrascensis*), and Rocky Mountain Iris (*Iris missouriensis*). This plant community developed due to a long history (possibly 100 years) of flood irrigation. Soils of the site are predominantly the Chesaw series (0-5% slope)[Unpublished CA 208 as cited in Resource Concepts (2000)]. The Chesaw series is nonhydric, and no other soils of the area are classified as hydric (NRCS, 1991). Considering that the Bodle ditch no longer provides irrigation water to the area, the property lacks wetland hydrology. [Note: Even when irrigated regularly, the hydrology of the site would not qualify as wetland hydrology because the water source could be (and was) eliminated without any activity requiring a Section 404 permit.] Moreover, much of the original surface flow into the area has been re-directed through the existing golf course.

Portions of the property have been subject to historic modifications. Ditches have been dug to assist in the distribution of irrigation water on the property. Roads have been constructed and soil and rock debris have been deposited in some areas. Other areas appear disturbed, but no clear indication is available as to the cause of the disturbance.

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METHODS

Standard

The standard for wetlands used in this study conforms to the wetlands definition and procedures described in the 1987 Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory, 1987), as modified and clarified by 1991 and 1992 Memoranda from the Office, Chief of Engineers, Washington, D.C. Under these procedures, an area is a wetland if positive wetland indicators are in evidence for each of three parameters or criteria -- hydrophytic vegetation, hydric soil, and wetland hydrology. If positive wetland indicators cannot be ascertained for any one of the three parameters, the area is a nonwetland.

Field Procedures

Routine wetland identification/delineation procedures described in Environmental Laboratory (1987) were applied at representative sample plots. Sample plots were chosen as representing typical conditions of a particular community or area of homogeneous topography, vegetation, soil, and hydrologic conditions.

The vegetation was described at each sample plot by subjectively determining the dominant species in each stratum (e.g., tree, sapling/shrub, woody vine, herbaceous) of vegetation. Hydrophytic vegetation was concluded to be present when more than 50 percent of the dominant species at a sample plot had a wetland indicator status of OBLIGATE (OBL), FACULTATIVE WETLAND (FACW), and/or FACULTATIVE (FAC)(Reed, 1988). This information was noted on the vegetation section of the data form (Appendix A).

The upper portion of the soil profile at each sample plot was described and recorded on the data sheet. The soil was considered to be hydric when one or more indicators of hydric soil described in Environmental Laboratory (1987) were observed.

Hydrologic conditions of each site were considered. Published information was considered, including the Groeneveld (1996) and Resource Concepts, Inc. (2000) analyses. Evidence was sought regarding the presence of any indicator of wetland hydrology listed in Environmental Laboratory (1987). If any primary indicator or two secondary indicators were present, the area at the sample plot was concluded to have wetland hydrology.

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RESULTS AND DISCUSSION

General

Locations of sample plots within the study area are marked on Figure 2. Conditions at each sample plot are described on data sheets (Appendix A), as identified on Figure 2.

Wetlands

No wetlands occur on the property. At two locations (See Sample Plots 1 and 4 on Figure 2), both the vegetation and soil criteria (Environmental Laboratory, 1987) are met, but the wetland hydrology criterion is lacking. A number of other sites (6) have hydrophytic vegetation, but lack both hydric soils and wetland hydrology. The other seven sites have nonhydrophytic vegetation and all but Sample Plot 9 lack indicators of hydric soils. At least two of the three wetland criteria were lacking in all Sample Plots except Sample Plots 1 and 4.

Nonwetlands

All portions of the property qualify as nonwetlands pursuant to Section 404 of the Clean Water Act of 1977 (as amended), and are not subject to federal jurisdiction under the above statute. Discussion of the nonwetlands of the property will focus on two land form types.

(1) **Land Form: Ridges and Slopes.** This land form type typically lacks wetland indicators for all three wetland criteria, as described below.

Vegetation. The vegetation of the ridges and slopes is nonhydrophytic. Dominant species of the sample plots include Basin Sagebrush (*Artemisia tridentata*) (UPL), Douglas Sedge (*Carex douglasii*)(FAC-), and Western Wheatgrass (*Agropyron smithii*)(FAC-). Most of these sites also exhibit at least a presence of Baltic Rush (*Juncus balticus*)(OBL), Nebraska sedge (*Carex nebrascensis*)(OBL), and/or Rocky Mountain Iris (*Iris missouriensis*). However, the continued presence of these species in these locations is a relict of the long-standing practice of flood irrigation, which allowed the species to become established. When the source of irrigation water to the privately owned portion of the subject property was terminated in 1979, the hydrology of the privately owned portion of the property no longer favored the continued presence of these wetter species as dominants in these areas. However, some species (i. e., Baltic rush and Rocky Mountain Iris) persist on the site, due primarily due to receiving sufficient moisture from precipitation to allow them to grow. This condition is expected to persist until species better adapted to the new, drier hydrologic regime out-compete the wetter species. In addition, the slight development of a thin organic surface due to past

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irrigation allowed the soil to hold moisture somewhat longer. When the organic surface eventually decomposes and is blown away, the site will become drier and the wetter species will disappear from the area. As a general observation, the vegetation of the entire study area is becoming increasingly drier.

Soils. Soils of the ridges and slopes typically have a matrix chroma of 3 or 4 (moist), which is indicative of nonhydric soils. These soils probably are of the Chesaw family group, all components of which are nonhydric. The Chesaw series is classified as an Entic Haploxerolls (NRCS, 2001). The Chesaw series is described as deep, somewhat excessively-drained soils on terraces, terrace escarpments, and eskers. Soils on the ridges exhibit no indicators of hydric soils.

Hydrology. The hydrologic regime on the slopes and ridges downslope of the Bodle ditch has been altered significantly during modern times. This area was subject to flood irrigation practices for many years. About 1979, the water source through the Bodle Ditch was eliminated to the privately owned portion of the site. Water continued to be supplied to the government-owned portion of the property until 2001. Since the water source through the Bodle Ditch was terminated even for the government owned portion of the property, the hydrology on the lower slopes became much drier. Today, none of these areas have a hydrologic regime that could be considered to be characteristic of wetlands. The permeable soil, significant slope, and lack of a sufficient water source combine to prevent any portion of the area from having a wetland hydrologic regime. This factor alone prevents all of the ridges and side slopes from qualifying as wetlands.

(2) Land Form: Meadow. In the meadow portion of the study area, the vegetation is typically hydrophytic in areas having deep soils with an histic epipedon, but nonhydrophytic in areas having no histic epipedon and gravelly, sandy soils. In the latter areas, the vegetation is not significantly different than that on the ridges and side slopes. In the former areas, the vegetation is distinctly hydrophytic, in which all dominant species contribute to hydrophytic vegetation. Dominant species at a sample plot in the meadow portion typically include some combination of Baltic Rush (*Juncus balticus*) (OBL)*, Nebraska sedge (*Carex nebrascensis*)(OBL), Rocky Mountain Iris (*Iris* missouriense)(OBL), and Silver sagebrush (*Artemisia cana*)(FACW). Therefore, the wetland criterion for vegetation is met.

Soils of the meadow area are the Chesaw series (0-5% slope), the Wursten series, or the Hagga series. Characteristics of the Chesaw series were described above in the discussion on the ridges and slopes land form type. The Wursten series is described as very deep, well-drained soils on hills, fans, and terraces. This series is classified as a Typic Calcixerolls (NRCS, 1991), and Wursten soils are nonhydric. The Hagga series is described as a very deep, poorly drained soil on narrow valley bottoms and floodplains.

* The Wetland Indicator Status categories, by definition, have significance only under natural conditions. Under altered environmental conditions, the presence of OBL species may have little significance, especially if the altered condition results in artificially wet conditions (such as occurred in this case).

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This series is described as a Typic Fluvaquents (NRCS, 1991), and may qualify as a hydric soil in some instances. These soils have a matrix chroma of 1 or 2 and typically have common, distinct mottles ranging from 10YR5/3 to 7.5YR4/4. The soils at Sample Plots 1 and 9 have characteristics similar to the Hagga series. Although these areas could have been functionally hydric at one time, these characteristics could also result from the soil being formed from sedimentary deposits of low chromas and the mottles forming when the flood irrigation practice was initiated. Regardless, neither is functionally hydric and neither site is a wetland. The area at Sample Plot 1 lacks wetland hydrology, and the area at Sample Plot 9 lacks both hydrophytic vegetation and wetland hydrology.

The hydrologic regime of the meadow is much different than prior to surface alterations in the area. Prior to the removal of irrigation from the private land in 1979, the property had been subject to flood irrigation practices for possibly as long as 100 years. In the lowest portion of the area (meadow), the irrigation water remained longer and combined with the snowmelt and rainfall, caused the area to have saturated soils for a significant part of the growing season. This condition promoted the establishment of species capable of growing in such areas but did not result in changes in soil characteristics. Selective grazing also caused these species to become dominant over edible species. In particular, Baltic Rush is known to be an increaser (in distribution, density, and biomass) in grazed areas. The result was a plant community that superficially resembled a native, natural wetland plant community.

After the irrigation practice ended, the meadow became much drier because a major source of water had been removed. It is very unlikely that the meadow would have qualified as a wetland prior to irrigation because there would have been no need for irrigation in an existing wetland. Moreover, other development in the area caused a shift in drainage and surface flow patterns. Consequently, the area became much drier. Now, more than 20 years after irrigation was terminated on the private land, the site clearly lacks wetland hydrology. Even when the area was 25 percent wetter than average (Groeneveld, 1996), the area did not have saturated soils in May. Resource Concepts, Inc. found no wetland hydrology on the site in 2000. No evidence of wetland hydrology was observed at any location on the site in the present study. Based on these observations and studies, I concluded that the area lacks wetland hydrology at the present time and most likely lacked wetland hydrology except possibly in some years during the irrigation era.

CONCLUSIONS

Conclusions of this wetlands identification/delineation study are:

1. No portions of the property qualify as wetlands, based on the current procedures used by the federal government to identify and delineate wetlands.

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2. Portions of the property have the vegetation of wetlands, but its original establishment almost certainly was due to a long history of flood irrigation of the property. The source of irrigation water was Bodle Ditch.

3. Current trends in the environmental conditions of the site are toward a drier hydrologic regime than when irrigation was practiced. The elimination of irrigation, coupled with changes in flow patterns, eliminated even the artificial wetness of the site.

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NRCS. 1991. "Hydric Soils of the United States of America: 1991," U.S.D.A. Natural Resources Conservation Service [formerly Soil Conservation Service], Washington, D.C.

Resource Concepts. (2000). "Supplement to the 1996 Wetland Delineation, Snowcreek Village Expansion," Conducted for Dempsey Construction Corporation.

Reed, Porter B., Jr. 1988. "National List of Plant Species That Occur in Wetlands, Region 2: Southeast," National Wetlands Inventory, U.S. Fish and Wildlife Service, Washington, DC.

If you have questions or comments regarding this final letter report, please contact me at 228/588-1244.

Sincerely,

Dana R. Sanders, Sr.

Dana R. Sanders, Sr., PhD.

Bus: 228/588-1244 Facsimile: 228/588-0030 e-mail: drsawet@aol.com

triad/holmes associates
civil engineering
land surveying
public works
land development
mammoth lakes • bishop • redwood city • napa
san luis obispo

December 2, 2002

U.S. Army Corps of Engineers
Ventura Field Office
2151 Alessandro Drive, Suite 100
Ventura, California 93001

Attention: Bruce Henderson

Re: Snowcreek, Mammoth Lakes

Dear Bruce:

Per our phone conversation of November 27, attached is a map showing the privately owned Snowcreek Parcels 3, 4, and 5, and also the 95 acre USFS trade parcel. The Sanders report covered the trade parcel as well as the private land. In fact, the area of most concern in the field was in the southwest "arm" of the USFS trade parcel. That is where Dr. Sanders pointed out the soil pits he had dug, to you and Gail and I in the field.

On behalf of Dempsey Construction, we would like to request that you send Dempsey a note confirming your acceptance of the Sanders report for the Federal parcel as well as private land. Per our conversation, I understand that this will not cover ACOE jurisdiction pursuant to Waters of the U.S., and that drainage courses in the north portion of the Federal parcel may or may not be Waters of the U.S., as well as Bodle Ditch or other drainages on the trade parcel.

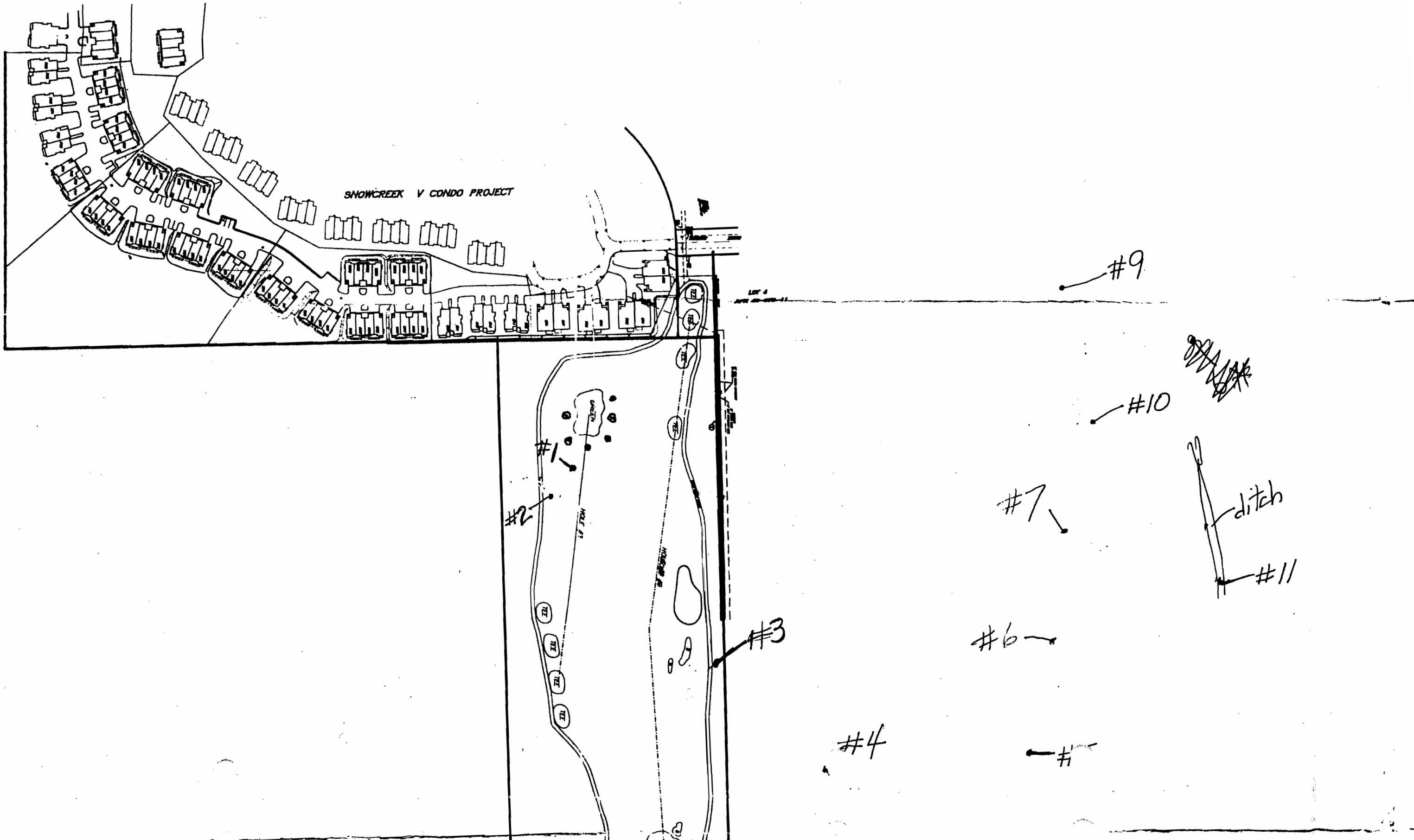
Thank you for your attention to this matter.

Sincerely,

TRIAD/HOLMES ASSOCIATES

David Laverty

Enclosure
DL:ap
cc: Gail Frampton


SNOWCREEK V CONDO PROJECT
#1
#2
#3
#4
#7
#9
#10
#11
ditch

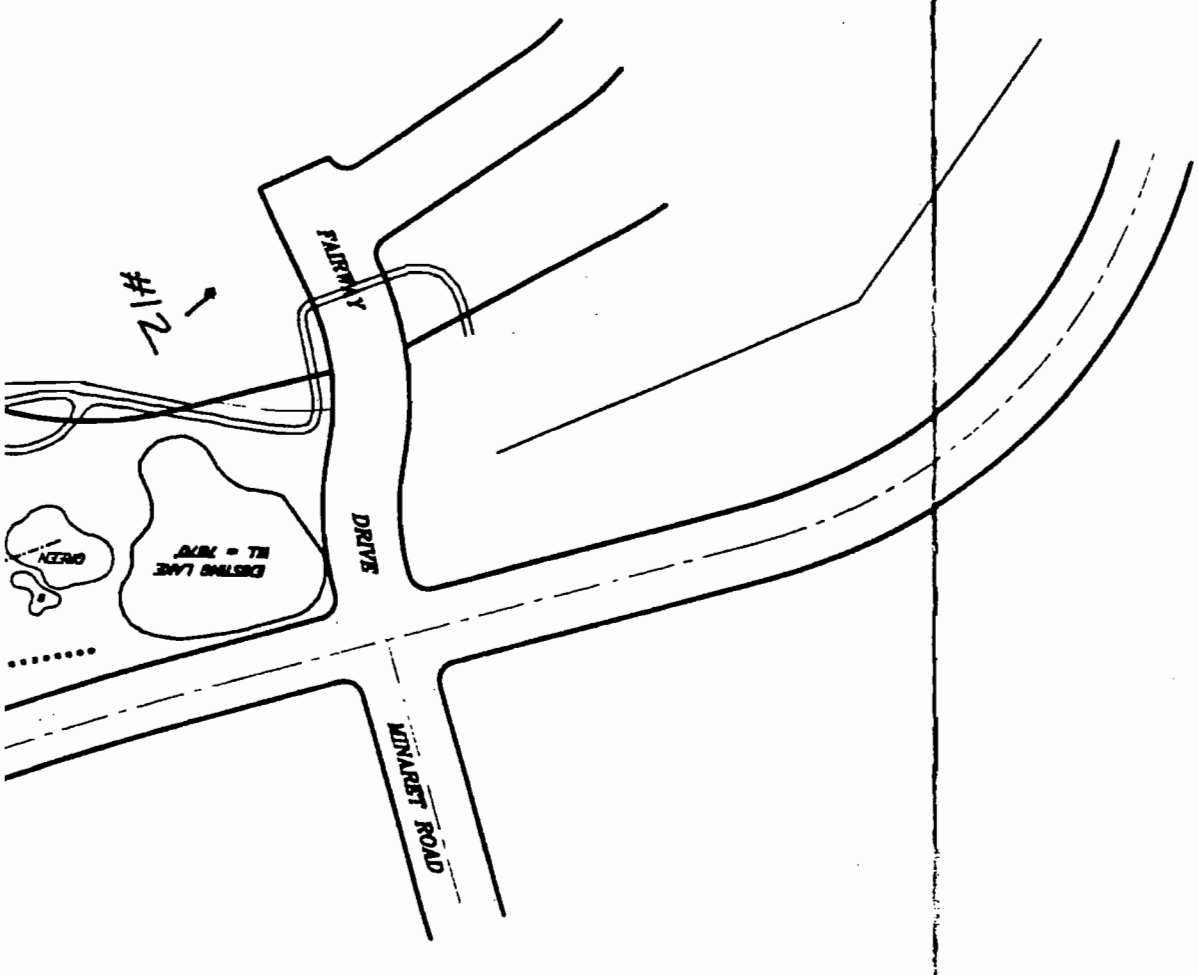
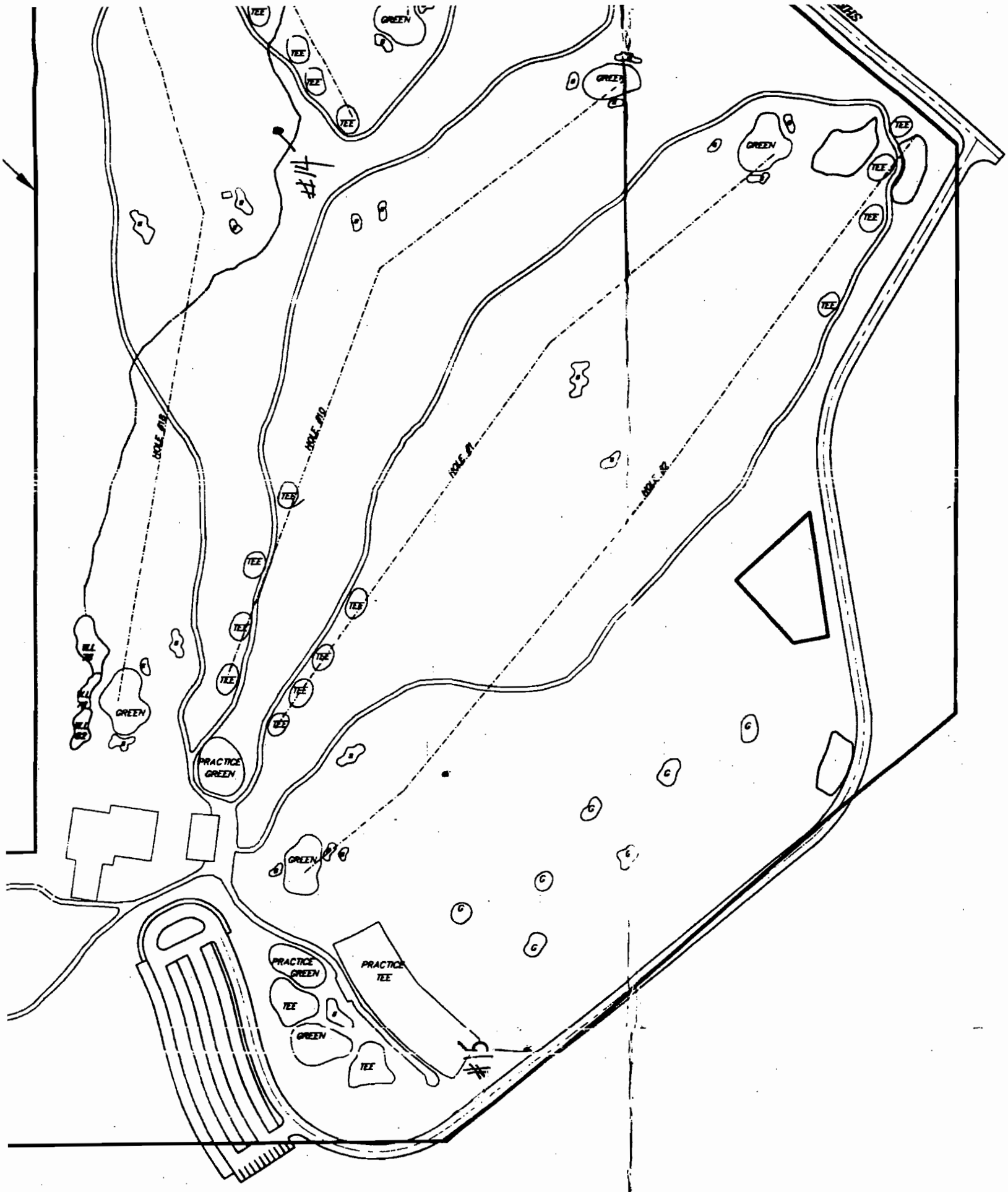


FIGURE 2.

SNOWCREEK GOLF COURSE EXPANSION

U.S. FOREST SERVICE EXCHANGE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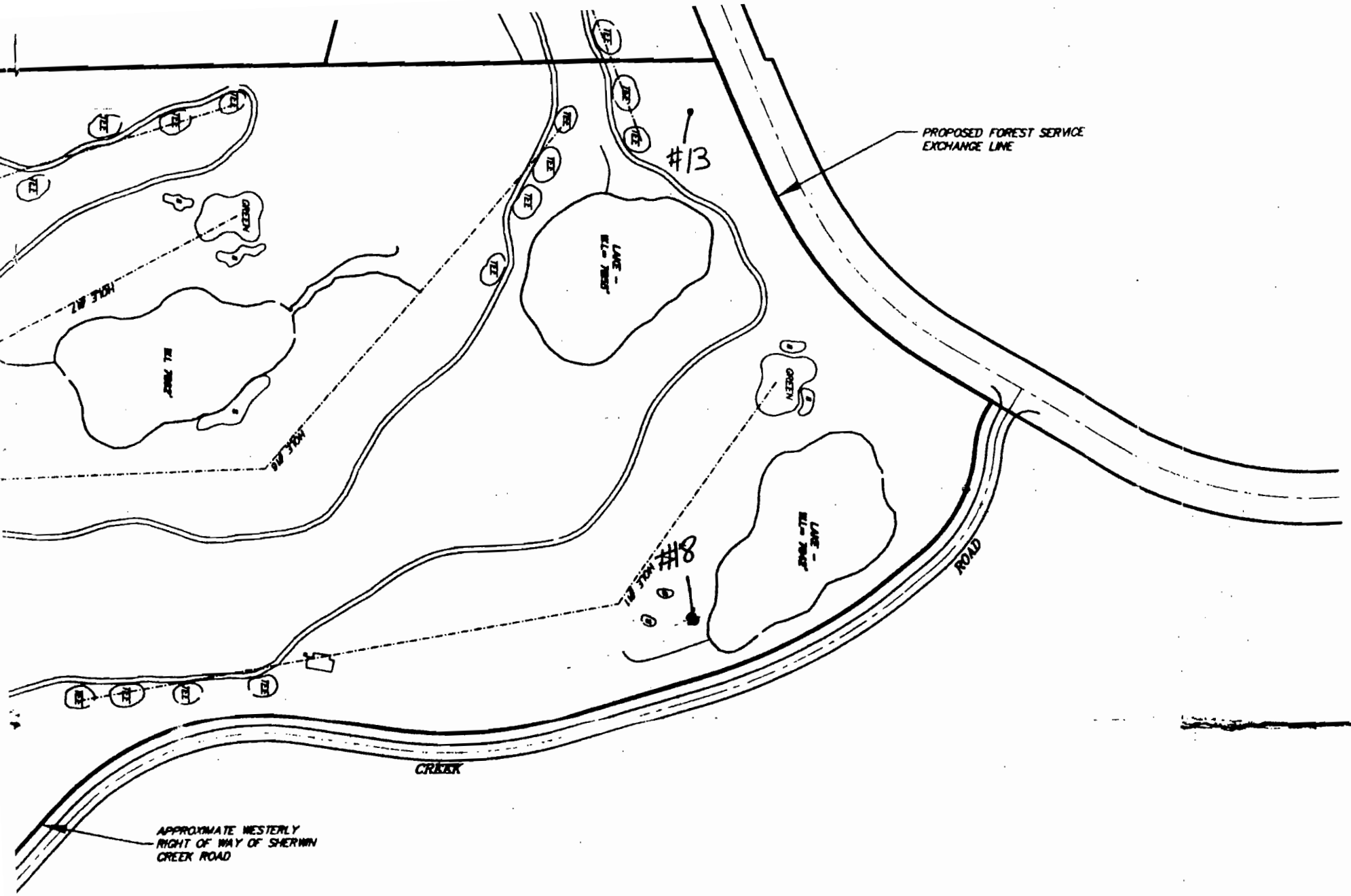
GREEN
HOLE #18
HOLE #10
HOLE #1
HOLE #2
PRACTICE GREEN
PRACTICE TEE



SCALE: 1" = 200'

TOTAL ACREAGE TO BE CONVEYED:

94 ACRES PER BLM LEGAL DESCRIPTION

107.7 ACRES PER TRIAD/HOLMES ASSOCIATES

triad/ holmes assoc.

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surveying
public works
land developmen

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LOMPOC, ca 9343
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fax (805) 742-0033
e-mail lompoc@triadholmes.com

REVISIONS	BY

DATE 5-6-02

SCALE 1" = 200'

DRAWN JSP

JOB NO. 856

DWG 856\usfs-gc.dwg

SHEET 1

HILLTOP SITE – SNOW CREEK AREA 7 WETLAND DELINEATION REPORT

AUGUST 2005

Prepared For:

CHADMAR GROUP
2716 Ocean Park Blvd., Suite 1064
Santa Monica, CA 90405

Prepared By:

RESOURCE CONCEPTS, INC.
340 North Minnesota Street
Carson City, Nevada 89703-4152
Office: (775) 883-1600
Fax: (775) 883-1656
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TABLE OF CONTENTS

File Doc: Wetland Delin 8-26-05 rpt. 05605.1 JRM-sta 8-57 Chadmar Group.doc
[August 26, 2005]

INTRODUCTION

On July 19, 2005, Resource Concepts, Inc. (RCI) completed a wetland delineation for the Hilltop Site – Snow Creek Area 7 (Hilltop Site) located at R27E, T04S, Section 3, Mono County, California. The wetland delineation of the Hilltop Site identified 15.89 acres and 3,330 linear feet of *Waters of the United States* (WOUS). The potential WOUS are identified as Mammoth Meadow and includes the main branch of Mammoth Creek, a side branch of Mammoth Creek, and adjacent emergent wetlands. In addition, two (2) open water, excavated ponds with surface water connections to jurisdictional waters are also identified as WOUS.

Waters of the United States	**On-site Area**
Section I: Mammoth Meadow (Open channels and emergent wetland)	15.72 acres and 3,330 linear feet
Section Ia: Open water pond	0.07 acres
Section Ib: Open water pond	0.10 acres

Under Sections 404 and 401 of the Clean Water Act, the Army Corps of Engineers (COE) and/or the California Regional Water Quality Control Board have jurisdiction over WOUS. This includes adjacent wetlands and other waters with an identifiable connection to interstate commerce. Any activity which involves the placement of fill, and/or excavation within these jurisdictional areas may require notification and authorization of the appropriate regulatory agency.

State Water Quality Certification, Section 401 of the Clean Water Act, ensures that discharges to waters of the state meet state water quality standards. The State and Regional Water Quality Control Boards have authority under Section 401 to regulate any discharge to waters of the State including isolated, non-navigable waters, including wetlands.

Site Description

The Hilltop Site is located within the Town of Mammoth Lakes and contains both upland, developed areas and a portion of Mammoth Meadow. The majority of the upland areas are characterized by a large, steep hill located in the southern portion of the site. Vegetation is typical of Jeffrey pine forest and sagebrush scrub. A portion of Mammoth Meadow is located in the northern half of the property and contains Mammoth Creek, a side branch of Mammoth Creek and its associated floodplain. The floodplain adjacent to the side branch of Mammoth Creek is dominated by Aspen stands. A few office and maintenance buildings are

located on-site in upland areas south of Mammoth Meadow. Golden Creek Road runs east to west through the site.

Directions to Site

From Highway 395 take the Mammoth exit into the Town of Mammoth Lakes. Turn left onto Old Mammoth Road and continue to the intersection of Old Mammoth Road and Minaret Road. The project site is located immediately northwest of the intersection of Old Mammoth Road and Minaret Road (Figure 1).

Contact Information

Prepares of this Delineation Report
Contact: JoAnne Michael
RESOURCE CONCEPTS, INC.
340 North Minnesota Street
Carson City, NV 89703
775-883-1600

Applicant
Dan McGregor
CHADMAR GROUP
2716 Ocean Park Blvd.
Santa Monica, CA 90405
714-596-6160

METHODOLOGY

The wetland delineation was performed using the routine on-site determination method as set forth by the *1987 Corps of Engineers Wetlands Delineation Manual* (TRY-87-1). The three criteria required for the determination of an area to be a wetland are 1) Hydric Soils, 2) Wetland Hydrology, and 3) Dominance of Hydrophytic Vegetation. In the absence of adjacent wetlands, ACOE jurisdiction extends its jurisdiction to the ordinary high water mark (OHWM) of the water.

In order for an area to be determined as a federally jurisdictional wetland, all three criteria must be positively identified, and the area must meet the definition of *Waters of the United States* found at 33 CFR 328.3 (a) as clarified by the *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers,* No. 99-1178.

DELINEATION SUMMARY

The wetland delineation within the Hilltop Site identified 15.89 acres and 3,330 linear feet of W*aters of the United States*. The potential WOUS are identified as a the main branch of Mammoth Creek, a side branch of Mammoth Creek and their adjacent, emergent wetlands (Section I). Two excavated ponds (Section Ia and Section Ib) with surface water connections to Section I were also identified as *Waters of the United States*.

***Waters of the United States,* including wetlands**

SECTION I: Section I includes Mammoth Creek, a side branch of Mammoth Creek and the adjacent, emergent wetlands located within Mammoth Meadow. Section I originates off-site and drains eastward across the property. The side branch flows into Mammoth Creek near the eastern property boundary before flowing under Minaret Road. The adjacent wetland is a seasonally inundated, emergent wetland dominated by sedges. An area of open water exists near the northwestern edge of the site and is described in DP11. This area was once a maintained, aesthetic pond but has since been abandoned. As illustrated by the attached wetland delineation map (Figure 2), the delineated on-site length of Mammoth Creek is 1422 linear feet (0.53 acres), the tributary to Mammoth Creek is 1,908 linear feet (0.35 acres) and are described by data points DP9 and DP15. The on-site area of the adjacent, emergent wetlands, including the open water areas is 15.72 acres and is described by data points DP1 and DP3.

Soils: The soils of the Section I are mapped as the Chesaw family within the Benton-Owens Valley Area, California, Parts of Inyo and Mono Counties soil survey (USDA-NRCS, 2002). The Chesaw family is described as being somewhat excessively drained. The observed soil color within the emergent wetland was a 10YR 2/1 mucky, loam at 10 inches below the surface (DP3). The Hydric Soil criterion is met by the presence of low chroma colors.

Hydrology: Visual observations of hydrology within Section I included inundation of twelve (12) inches within the open channel of the tributary to Mammoth Creek. The Ordinary High Water Mark (OHWM) was identified by a defined bed and bank. The channel width was approximately ten (10) feet and channel height was approximately two (2) feet (DP9). Within the adjacent, emergent wetland observation of hydrology indicators included saturation to the surface (DP3). The wetland hydrology criterion is met by presence of saturation and inundation.

Vegetation: There was an absence of vegetation below the ordinary high water mark in the open channel portion of Section I (DP9). The emergent wetland portion is dominated by greater than fifty percent hydrophytic vegetation (DP3). The vegetation is dominated by *Carex lasiocarpa* (OBL) and *Carex nebrascensis* (OBL).

SECTIONS Ia and Ib: Sections Ia and Ib are open-water ponds excavated in upland soils for aesthetic purposes; although both ponds discharge through open channels into Section I, a federally jurisdictional water. The ponds are located within maintained lawn adjacent to a Snow Creek administrative office building. The on-site area of Section Ia is 0.07 acres and the on-site area of Section Ib is 0.10 acres.

Hydrology: Hydrology to Section Ia is supplied via a subsurface, perforated pipe, which drains the adjacent, upland lawn. Discharge from the pond flows through an open, man-made channel into Section I (reference DP5 and DP5a). As water flows downslope towards Section I, a zone of saturation occurs beyond the created bed and bank of the channel. Saturation of the soils adjacent to the channel is of sufficient duration to support hydrophytic vegetation. Water within the pond ranges from four (4) inches in depth along the pond edge to twenty-four (24) inches within.

Hydrology to Section Ib is supplied via a subsurface pipe, which draws water from the side branch of Kirkwood Creek (reference DP7). Discharge from Section Ib is through a man-made, open channel into Section I.

Vegetation: Neither Section Ia or Ib have dominant vegetation below the ordinary high water mark of the excavated pond. Seepage from the open channel draining Section Ia into Section I provides sufficient hydrology to form a zone of saturation adjacent to the channel able to support hydrophytic vegetation (reference DP5a).

Soils: The soils of the Section Ia and Ib are mapped as the Chesaw family within the Benton-Owens Valley Area, California, Parts of Inyo and Mono Counties soil survey (USDA-NRCS, 2002). Soils in both Section Ia and Ib are assumed to be hydric due to the presence of an aquic moisture regime. Based on criteria established in *Hydric Soils of the United States* (1991), soils that are frequently ponded for long (7 days to 1 month) duration or very long (> 1 month) duration during the growing season are likely to meet the definition of hydric soils.

CONCLUSIONS AND RECOMMENDATIONS

The wetland delineation within the Hilltop Site identified 15.89 acres and 3,330 linear feet of WOUS. The potential WOUS are identified as the main branch of Mammoth Creek, a side branch of Mammoth Creek and the adjacent, emergent, seasonally inundated wetlands. In addition, two excavated ponds with a surface water connection to Section I are identified as WOUS.

The ACOE is the regulatory authority with regard to wetlands or other *waters of the United States*. The ACOE must make the final determination as to jurisdictional status of all areas within the project limits. It is recommended that a copy of this report be sent to ACOE for jurisdictional determination and verification.

SUMMARY OF ACRONYMS AND REFERENCES

Indicator Status Acronyms:

OBL (Obligate Wetland). Occur almost always in wetlands.

FACW (Facultative Wetland). Usually occur in wetlands.

FAC+ (Facultative). More likely to occur in wetlands than uplands.

FAC (Facultative). Likely to occur in wetlands or uplands.

FAC- (Facultative). Less likely to occur in wetlands than uplands.

FACU (Facultative Upland). Usually occur in uplands.

UPL (Obligate Upland). Occur almost always in uplands.

N/I (No Indicator). Indicator status unavailable.

(*) Indicator based on source other than USDI-F&W BR:88(26.3)

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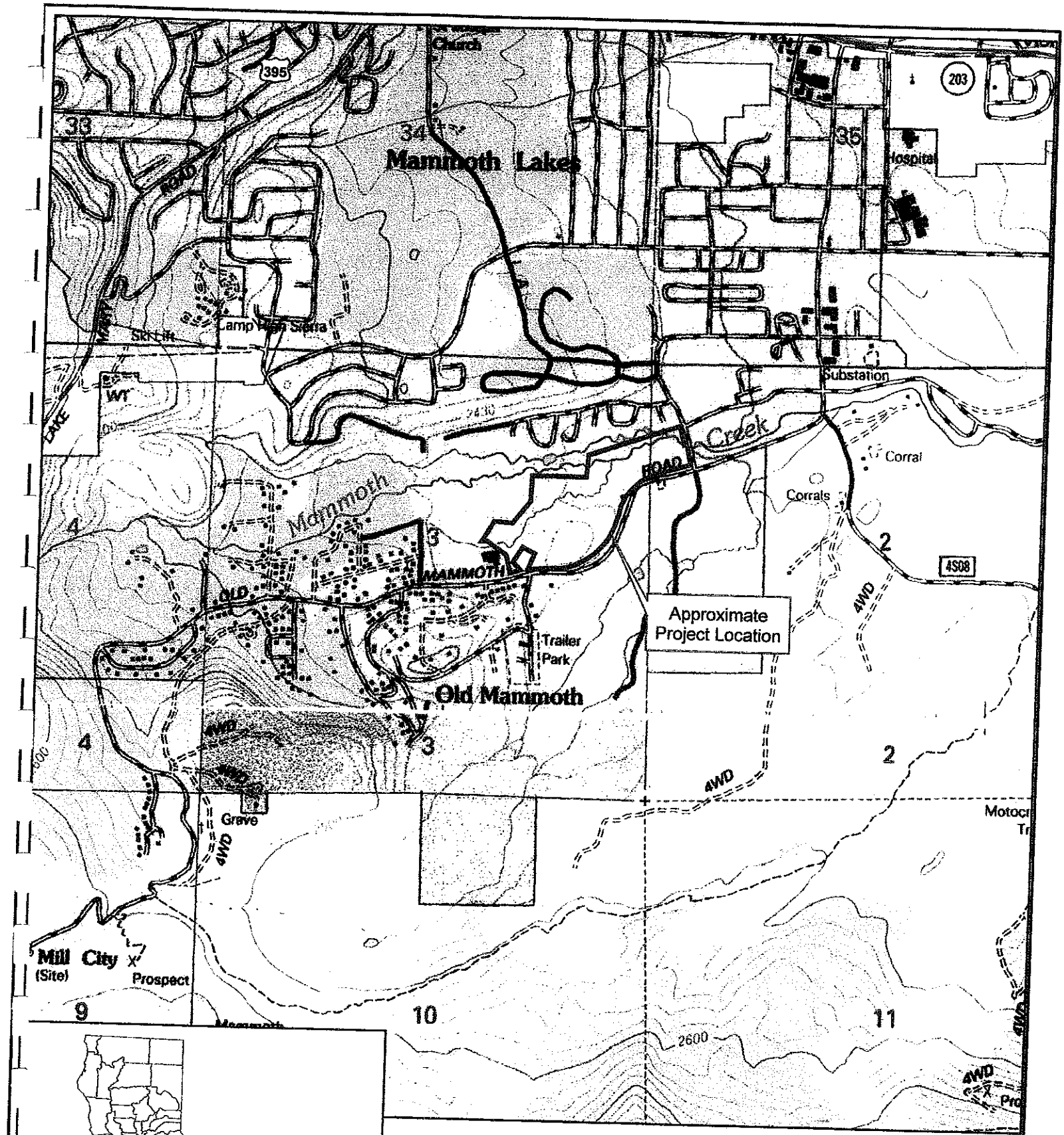


Figure 1
Location Map
Hilltop Site - Snow Creek Area 7

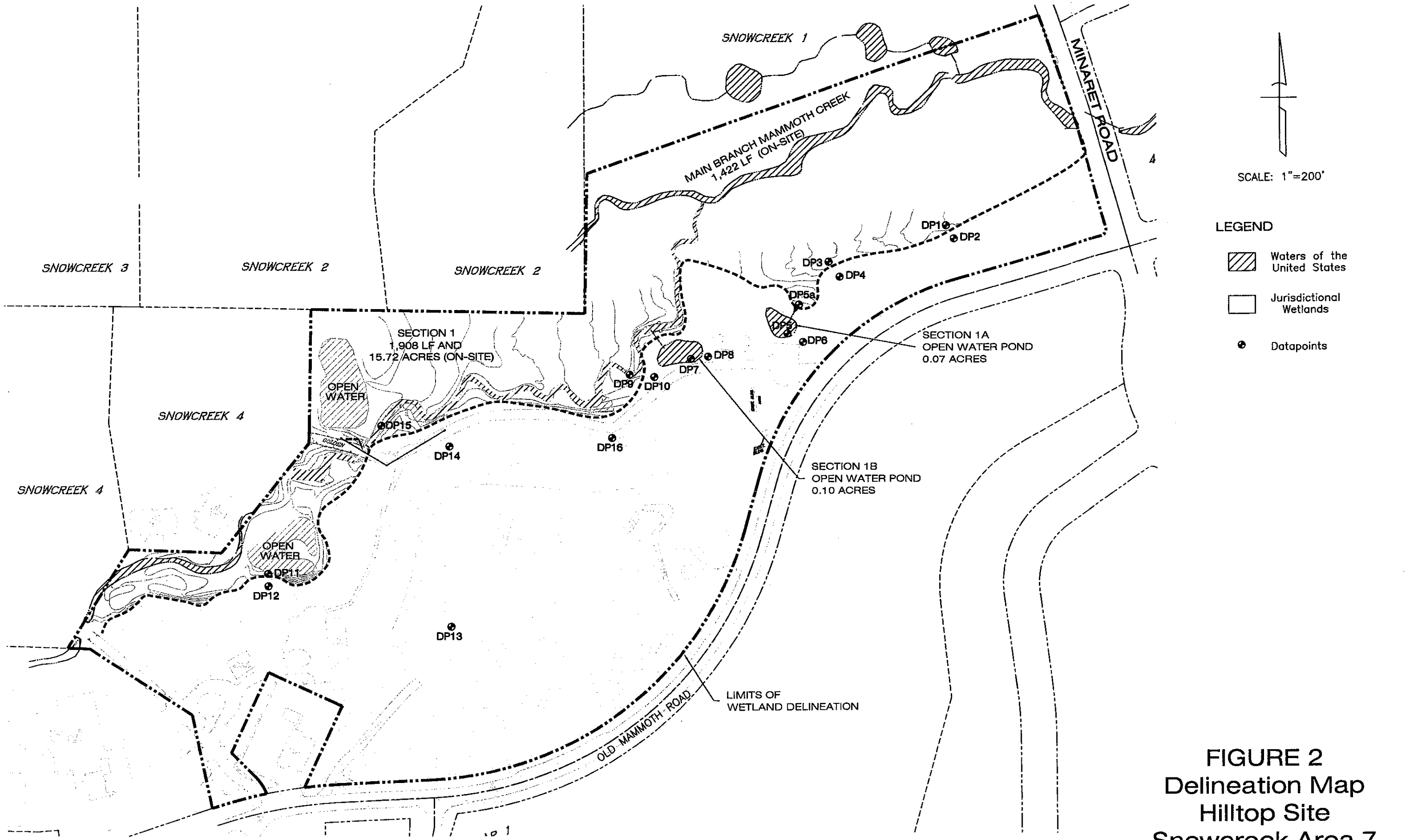


FIGURE 2
Delineation Map
Hilltop Site
Snowcreek Area 7

Appendix A

Wetland Delineation Forms

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hilltop Site
Applicant/Owner: Chadmar Group
Investigators: JoAnne Michael, Lynn Zonge

Date: June 13 and July 19, 2005
County: Mono
State: California

Do Normal Circumstances exist on the site?	Yes	No
Is the site significantly disturbed (Atypical Situation)?	Yes	No
Is the area a potential Problem Area?	Yes	No
(If needed, explain on reverse.)		

Community ID: Section I: Emergent Wetland (Mammoth Meadow)
Transect ID:
Plot ID: DP1

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Carex lasiocarpa*	herbaceous	OBL	9.		
2. *Juncus balticus*	herbaceous	OBL	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100.0%

Remarks: DOMINANCE OF HYDROPHYTIC VEGETATION.

HYDROLOGY

Recorded Data (Describe in Remarks):
____ Stream, Lake, or Tide Gauge
____ Aerial Photographs
____ Other
X No Recorded Data Available

Field Observations:
Depth of Surface Water: none (in.)
Depth to Free Water in Pit: 0 (in.)
Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators

Primary Indicators
____ Inundated
X Saturated in Upper 12 Inches
____ Water Marks
____ Drift Lines
____ Sediment Deposits
____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
____ Oxidized Root Channels in Upper 12 inches
____ Water-Stained Leaves
____ Local Soil Survey Data
X FAC-Neutral Test
____ Other (Explain in Remarks)

Remarks: PRESENCE OF HYDROLOGY AND SECONDARY INDICATORS.
Saturated to the surface at data point.

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hilltop Site Plot ID DP1

SOILS

Map Unit Name (Series and Phase): Chesaw family Drainage Class: somewhat excessively drained

Taxonomy (Subgroup): _____ Field Observations Confirm Mapped Type? Yes [No]

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.
0-4	1	10YR 2/2	none	loam
4-16	2	10YR 2/1	none	loam

Hydric Soil Indicators:

____ Histosol
____ Histic Epipedon
____ Sulfidic Odor
____ Aquic Moisture Regime
____ Reducing Conditions
X Gleyed or Low-Chroma Colors
____ Concretions
____ High Organic Content in Surface Layer in Sandy Soils
____ Organic Streaking in Sandy Soils
____ Listed on Local Hydric Soils List
____ Listed on National Hydric Soils List
____ Other (Explain in Remarks)

Remarks: PRESENCE OF HYDRIC SOIL INDICATORS.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? [Yes] No (Circle)
Wetland Hydrology Present? [Yes] No
Hydric Soils Present? [Yes] No

(Circle)
Is this Sampling Point Within a Wetland? [Yes] No

Remarks: WETLAND BASED ON PRESENCE OF POSITIVE VEGETATION, HYDROLOGY AND SOILS INDICATORS.

Wetland boundary delineated along topographic break.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hilltop Site
Applicant/Owner: Chadmar Group
Investigators: JoAnne Michael, Lynn Zonge

Date: June 13 and July 19, 2005
County: Mono
State: California

Do Normal Circumstances exist on the site?	Yes	No
Is the site significantly disturbed (Atypical Situation)?	Yes	No
Is the area a potential Problem Area?	Yes	No
(If needed, explain on reverse.)		

Community ID: Section I: Emergent Wetland (Mammoth Meadow)
Transect ID:
Plot ID: DP3

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Carex lasiocarpa*	herbaceous	OBL	9.		
2. *Carex nebrascensis*	herbaceous	OBL	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-) 100.0%

Remarks: DOMINANCE OF HYDROPHYTIC VEGETATION.

HYDROLOGY

Recorded Data (Describe in Remarks):
____ Stream, Lake, or Tide Gauge
____ Aerial Photographs
____ Other
X No Recorded Data Available

Field Observations:
Depth of Surface Water: 1 (in.)
Depth to Free Water in Pit: 0 (in.)
Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators

Primary Indicators
X Inundated
____ Saturated in Upper 12 Inches
____ Water Marks
____ Drift Lines
____ Sediment Deposits
____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
____ Oxidized Root Channels in Upper 12 inches
____ Water-Stained Leaves
____ Local Soil Survey Data
X FAC-Neutral Test
____ Other (Explain in Remarks)

Remarks: PRESENCE OF HYDROLOGY AND SECONDARY INDICATORS.

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hilltop Site Plot ID DP3

SOILS

Map Unit Name (Series and Phase): Chesaw family Drainage Class: somewhat excessively drained

Taxonomy (Subgroup): _____ Field Observations Confirm Mapped Type? Yes [No]

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.
0-12	1	10YR 2/1	none	mucky loam

Hydric Soil Indicators:

___ Histosol	___ Concretions
___ Histic Epipedon	___ High Organic Content in Surface Layer in Sandy Soils
___ Sulfidic Odor	___ Organic Streaking in Sandy Soils
___ Aquic Moisture Regime	___ Listed on Local Hydric Soils List
___ Reducing Conditions	___ Listed on National Hydric Soils List
X Gleyed or Low-Chroma Colors	___ Other (Explain in Remarks)

Remarks: PRESENCE OF HYDRIC SOIL INDICATORS.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	[Yes]	No	(Circle)
Wetland Hydrology Present?	[Yes]	No	
Hydric Soils Present?	[Yes]	No	

Is this Sampling Point Within a Wetland? [Yes] No (Circle)

Remarks: WETLAND BASED ON PRESENCE OF POSITIVE VEGETATION, HYDROLOGY AND SOILS INDICATORS.

Wetland boundary delineated along topographic break.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Hilltop Site	Date:	June 13 and July 19, 2005
Applicant/Owner:	Chadmar Group	County:	Mono
Investigators:	JoAnne Michael, Lynn Zonge	State:	California

Do Normal Circumstances exist on the site?	Yes	No
Is the site significantly disturbed (Atypical Situation)?	Yes	No
Is the area a potential Problem Area?	Yes	No
(If needed, explain on reverse.)		

Community ID: Upland adjacent to Section I south side
Transect ID:
Plot ID: DP4

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Artemisia cana*	shrub	FACW	9.		
2. *Sidalcea oregana*	herbaceous	OBL	10.		
3. *Carex lasiocarpa*	herbaceous	OBL	11.		
4. *Bromus inermis*	herbaceous	UPL	12.		
5. *Potentilla biennis*	herbaceous	FACW	13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 80.0%

Remarks: DOMINANCE OF HYDROPHYTIC VEGETATION.

HYDROLOGY

____ Recorded Data (Describe in Remarks):
____ Stream, Lake, or Tide Gauge
____ Aerial Photographs
____ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: > 16 (in.)
Depth to Saturated Soil: > 16 (in.)

Wetland Hydrology Indicators

Primary Indicators
____ Inundated
____ Saturated in Upper 12 Inches
____ Water Marks
____ Drift Lines
____ Sediment Deposits
____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
____ Oxidized Root Channels in Upper 12 inches
____ Water-Stained Leaves
____ Local Soil Survey Data
X FAC-Neutral Test
____ Other (Explain in Remarks)

Remarks: ABSENCE OF HYDROLOGY AND SECONDARY INDICATORS.

Data point taken on side slope leading into adjacent wetland.

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hilltop Site Plot ID DP4

SOILS

Map Unit Name
(Series and Phase): Chesaw family Drainage Class: somewhat excessively drained

Taxonomy (Subgroup): _____ Field Observations Confirm Mapped Type? Yes [No]

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.
0-16	1	10YR 2/2	none	sandy loam

Hydric Soil Indicators:

____ Histosol
____ Histic Epipedon
____ Sulfidic Odor
____ Aquic Moisture Regime
____ Reducing Conditions
____ Gleyed or Low-Chroma Colors
____ Concretions
____ High Organic Content in Surface Layer in Sandy Soils
____ Organic Streaking in Sandy Soils
____ Listed on Local Hydric Soils List
____ Listed on National Hydric Soils List
____ Other (Explain in Remarks)

Remarks: ABSENCE OF HYDRIC SOIL INDICATORS.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? [Yes] No (Circle)
Wetland Hydrology Present? Yes [No]
Hydric Soils Present? Yes [No]

(Circle)
Is this Sampling Point Within a Wetland? Yes [No]

Remarks: NON-WETLAND BASED ON ABSENCE OF POSITIVE HYDROLOGY AND SOILS INDICATORS.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hilltop Site	Date: June 13 and July 19, 2005
Applicant/Owner: Chadmar Group	County: Mono
Investigators: JoAnne Michael, Lynn Zonge	State: California

Do Normal Circumstances exist on the site?	Yes	No
Is the site significantly disturbed (Atypical Situation)?	Yes	No
Is the area a potential Problem Area?	Yes	No
(If needed, explain on reverse.)		

Community ID: Section Ia: excavated, open-water pond; Drains into Section I
Transect ID:
Plot ID: DP5

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1.			9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 0.0%

Remarks: NO DOMINANT VEGETATION BELOW ORDINARY HIGH WATER MARK.

HYDROLOGY

____ Recorded Data (Describe in Remarks):
____ Stream, Lake, or Tide Gauge
____ Aerial Photographs
____ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 4"-24" (in.)
Depth to Free Water in Pit: 0 (in.)
Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators

Primary Indicators
X Inundated
____ Saturated in Upper 12 Inches
____ Water Marks
____ Drift Lines
____ Sediment Deposits
____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
____ Oxidized Root Channels in Upper 12 inches
____ Water-Stained Leaves
____ Local Soil Survey Data
____ FAC-Neutral Test
____ Other (Explain in Remarks)

Remarks: PRESENCE OF HYDROLOGY AND SECONDARY INDICATORS.
Hydrology within pond is supplied through a subsurface, perpharated drainage pipe which drains the adjacent upland lawn. Outlet is through an open channel, which drains downslope into Mammoth Meadow. Reference photos 5-7.

ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hilltop Site Plot ID DP5

SOILS

Map Unit Name (Series and Phase): Chesaw family Drainage Class: somewhat excessively drained

Taxonomy (Subgroup): _____ Field Observations Confirm Mapped Type? Yes [No]

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.

Hydric Soil Indicators:

- ____ Histosol
- ____ Histic Epipedon
- ____ Sulfidic Odor
- X Aquic Moisture Regime
- ____ Reducing Conditions
- ____ Gleyed or Low-Chroma Colors
- ____ Concretions
- ____ High Organic Content in Surface Layer in Sandy Soils
- ____ Organic Streaking in Sandy Soils
- ____ Listed on Local Hydric Soils List
- ____ Listed on National Hydric Soils List
- ____ Other (Explain in Remarks)

Remarks: PRESENCE OF HYDRIC SOILS.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	[No]	(Circle)
Wetland Hydrology Present?	[Yes]	No	
Hydric Soils Present?	[Yes]	No	

(Circle)

Is this Sampling Point Within a Wetland? Yes [No]

Remarks: AREA IS IDENTIFIED AS A WATER OF THE UNITED STATES AND DELINEATED AT THE ORDINARY HIGH WATER MARK.

The pond was excavated in uplands for aesthetic puposes, but drains through an open channel (reference DP5A) into Section I, a federally jurisdictional water.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hilltop Site
Applicant/Owner: Chadmar Group
Investigators: JoAnne Michael, Lynn Zonge

Date: June 13 and July 19, 2005
County: Mono
State: California

	Yes	No
Do Normal Circumstances exist on the site?	Yes	No
Is the site significantly disturbed (Atypical Situation)?	Yes	No
Is the area a potential Problem Area?	Yes	No

(If needed, explain on reverse.)

Community ID: Section Ia: Open channel
Surface water connection between Section I and Ia
Transect ID:
Plot ID: DP5a

VEGETATION

	Dominant Plant Species	Stratum	Indicator		Dominant Plant Species	Stratum	Indicator
1.				9.			
2.				10.			
3.				11.			
4.				12.			
5.				13.			
6.				14.			
7.				15.			
8.				16.			

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-) 0.0%

Remarks: NO DOMINANT VEGETATION BELOW ORDINARY HIGH WATER MARK.
Area immediately adjacent to and hydrologically influenced by the open channel supports hydrophytic vegetation dominated by Carex spp.

HYDROLOGY

____ Recorded Data (Describe in Remarks):
____ Stream, Lake, or Tide Gauge
____ Aerial Photographs
____ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 4" (in.)
Depth to Free Water in Pit: 0 (in.)
Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators

Primary Indicators
X Inundated
____ Saturated in Upper 12 Inches
____ Water Marks
____ Drift Lines
____ Sediment Deposits
____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
____ Oxidized Root Channels in Upper 12 inches
____ Water-Stained Leaves
____ Local Soil Survey Data
____ FAC-Neutral Test
____ Other (Explain in Remarks)

Remarks: PRESENCE OF HYDROLOGY AND SECONDARY INDICATORS.
Section Ia charged by outlflow of excavated pond and drains into Section I.

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hilltop Site Plot ID DP5a

SOILS

Map Unit Name
(Series and Phase): Chesaw family Drainage Class: somewhat excessively drained

Taxonomy (Subgroup): _____ Field Observations Confirm Mapped Type? Yes [No]

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.

Hydric Soil Indicators:

____ Histosol
____ Histic Epipedon
____ Sulfidic Odor
__X__ Aquic Moisture Regime
____ Reducing Conditions
____ Gleyed or Low-Chroma Colors
____ Concretions
____ High Organic Content in Surface Layer in Sandy Soils
____ Organic Streaking in Sandy Soils
____ Listed on Local Hydric Soils List
____ Listed on National Hydric Soils List
____ Other (Explain in Remarks)

Remarks: PRESENCE OF HYDRIC SOIL INDICATORS.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes [No] (Circle)
Wetland Hydrology Present? [Yes] No
Hydric Soils Present? [Yes] No

Is this Sampling Point Within a Wetland? Yes [No] (Circle)

Remarks: AREA IDENTIFIED AS A WATERS OF THE UNITED STATES AND DELINEATED AT THE ORDINARY HIGH WATER MARK.

Section Ia is an open channel which drains an open water pond into Section I.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hilltop Site
Applicant/Owner: Chadmar Group
Investigators: JoAnne Michael, Lynn Zonge

Date: June 13 and July 19, 2005
County: Mono
State: California

Do Normal Circumstances exist on the site?	Yes	No
Is the site significantly disturbed (Atypical Situation)?	Yes	No
Is the area a potential Problem Area?	Yes	No

(If needed, explain on reverse.)

Community ID: Section Ib: excavated, open-water pond
Transect ID:
Plot ID: DP7

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1.			9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 0.0%

Remarks: NO DOMINANT VEGETATION BELOW ORDINARY HIGH WATER MARK.

HYDROLOGY

____ Recorded Data (Describe in Remarks):
____ Stream, Lake, or Tide Gauge
____ Aerial Photographs
____ Other
__X__ No Recorded Data Available

Field Observations:

Depth of Surface Water: 6"-30" (in.)
Depth to Free Water in Pit: 0 (in.)
Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators

Primary Indicators
__X__ Inundated
_____ Saturated in Upper 12 Inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
_____ Oxidized Root Channels in Upper 12 inches
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (Explain in Remarks)

Remarks: PRESENCE OF HYDROLOGY AND SECONDARY INDICATORS.
Hydrology within pond is supplied through a subsurface pipe from a tributary of Mammoth Creek. Outlet is through subsurface pipe and an open channel located along the northern edge of pond. Discharge drains into Section I.

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hilltop Site Plot ID DP7

SOILS

Map Unit Name
(Series and Phase): Chesaw family Drainage Class: somewhat excessively drained

Taxonomy (Subgroup): _____ Field Observations Confirm Mapped Type? Yes [No]

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.

Hydric Soil Indicators:

____ Histosol
____ Histic Epipedon
____ Sulfidic Odor
__X__ Aquic Moisture Regime
____ Reducing Conditions
____ Gleyed or Low-Chroma Colors
____ Concretions
____ High Organic Content in Surface Layer in Sandy Soils
____ Organic Streaking in Sandy Soils
____ Listed on Local Hydric Soils List
____ Listed on National Hydric Soils List
____ Other (Explain in Remarks)

Remarks: PRESENCE OF HYDRIC SOILS.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes [No] (Circle)
Wetland Hydrology Present? [Yes] No
Hydric Soils Present? [Yes] No

Is this Sampling Point Within a Wetland? Yes [No] (Circle)

Remarks: AREA IS IDENTIFIED AS A MAN-MADE POND EXCAVATED IN UPLAND SOILS FOR AESTHETIC PURPOSES.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hilltop Site
Applicant/Owner: Chadmar Group
Investigators: JoAnne Michael, Lynn Zonge

Date: June 13 and July 19, 2005
County: Mono
State: California

Do Normal Circumstances exist on the site?	Yes	No
Is the site significantly disturbed (Atypical Situation)?	Yes	No
Is the area a potential Problem Area?	Yes	No

(If needed, explain on reverse.)

Community ID: Upland adjacent to south side of Section I
Transect ID:
Plot ID: DP2

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Juncus balticus*	herbaceous	OBL	9.		
2. *Bromus inermis*	herbaceous	UPL	10.		
3. *Artemisia cana*	herbaceous	FACW	11.		
4. *Epilobium* sp.	herbaceous	OBL-UPL	12.		
5. *Carex nebrascensis*	herbaceous	OBL	13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-) 75.0%

Remarks: DOMINANCE OF HYDROPHYTIC VEGETATION.

HYDROLOGY

____ Recorded Data (Describe in Remarks):
____ Stream, Lake, or Tide Gauge
____ Aerial Photographs
____ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: > 14 (in.)
Depth to Saturated Soil: > 14 (in.)

Wetland Hydrology Indicators

Primary Indicators
____ Inundated
____ Saturated in Upper 12 Inches
____ Water Marks
____ Drift Lines
____ Sediment Deposits
____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
____ Oxidized Root Channels in Upper 12 inches
____ Water-Stained Leaves
____ Local Soil Survey Data
X FAC-Neutral Test
____ Other (Explain in Remarks)

Remarks: ABSENCE OF HYDROLOGY AND SECONDARY INDICATORS.

Data point taken on side slope leading into adjacent wetland.

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hilltop Site Plot ID DP2

SOILS

Map Unit Name
(Series and Phase): Chesaw family Drainage Class: somewhat excessively drained

Taxonomy (Subgroup): _____ Field Observations Confirm Mapped Type? Yes [No]

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.
0-14	1	10YR 3/2	none	loam

Hydric Soil Indicators:

- ____ Histosol
- ____ Histic Epipedon
- ____ Sulfidic Odor
- ____ Aquic Moisture Regime
- ____ Reducing Conditions
- ____ Gleyed or Low-Chroma Colors
- ____ Concretions
- ____ High Organic Content in Surface Layer in Sandy Soils
- ____ Organic Streaking in Sandy Soils
- ____ Listed on Local Hydric Soils List
- ____ Listed on National Hydric Soils List
- ____ Other (Explain in Remarks)

Remarks: ABSENCE OF HYDRIC SOIL INDICATORS.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	[Yes]	No	(Circle)
Wetland Hydrology Present?	Yes	[No]	
Hydric Soils Present?	Yes	[No]	

Is this Sampling Point Within a Wetland? Yes [No] (Circle)

Remarks: NON-WETLAND BASED ON ABSENCE OF POSITIVE HYDROLOGY AND SOILS INDICATORS.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hilltop Site
Applicant/Owner: Chadmar Group
Investigators: JoAnne Michael, Lynn Zonge

Date: June 13 and July 19, 2005
County: Mono
State: California

Do Normal Circumstances exist on the site?	Yes	No
Is the site significantly disturbed (Atypical Situation)?	Yes	No
Is the area a potential Problem Area?	Yes	No
(If needed, explain on reverse.)		

Community ID: Upland Adjacent to Section Ia
Transect ID:
Plot ID: DP6

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Poa pratensis*	herbaceous	FAC	9.		
2. *Trifolium repens*	herbaceous	UPL	10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 50.0%

Remarks: NON-DOMINANCE OF NON-HYDROPHYTIC VEGETATION.

HYDROLOGY

____ Recorded Data (Describe in Remarks):
____ Stream, Lake, or Tide Gauge
____ Aerial Photographs
____ Other
_X_ No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: _____ (in.)
Depth to Saturated Soil: _____ (in.)

Wetland Hydrology Indicators

Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 Inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
_____ Oxidized Root Channels in Upper 12 inches
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (Explain in Remarks)

Remarks: ABSENCE OF HYDROLOGY

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hilltop Site Plot ID DP6

SOILS

Map Unit Name
(Series and Phase): Chesaw family Drainage Class: somewhat excessively drained

Taxonomy (Subgroup): _____ Field Observations Confirm Mapped Type? Yes [No]

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.

Hydric Soil Indicators:

- ____ Histosol
- ____ Histic Epipedon
- ____ Sulfidic Odor
- ____ Aquic Moisture Regime
- ____ Reducing Conditions
- ____ Gleyed or Low-Chroma Colors
- ____ Concretions
- ____ High Organic Content in Surface Layer in Sandy Soils
- ____ Organic Streaking in Sandy Soils
- ____ Listed on Local Hydric Soils List
- ____ Listed on National Hydric Soils List
- ____ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	[No] (Circle)	(Circle)
Wetland Hydrology Present?	Yes	No	
Hydric Soils Present?	Yes	No	Is this Sampling Point Within a Wetland? Yes [No]

Remarks: NON-WETLAND BASED ON ABSENCE ON HYDROPYTIC VEGETATION.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Hilltop Site	Date:	June 13 and July 19, 2005
Applicant/Owner:	Chadmar Group	County:	Mono
Investigators:	JoAnne Michael, Lynn Zonge	State:	California

Do Normal Circumstances exist on the site?	Yes	No
Is the site significantly disturbed (Atypical Situation)?	Yes	No
Is the area a potential Problem Area?	Yes	No
(If needed, explain on reverse.)		

Community ID: Upland Adjacent to Excavated Pond

Transect ID:

Plot ID: DP8

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Poa pratensis*	herbaceous	FAC	9.		
2. *Trifolium repens*	herbaceous	UPL	10.		
3. *Trifolium pratense*	herbaceous	UPL	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 33.3%

Remarks: DOMINANCE OF NON-HYDROPHYTIC VEGETATION.

HYDROLOGY

____ Recorded Data (Describe in Remarks):
____ Stream, Lake, or Tide Gauge
____ Aerial Photographs
____ Other
_X_ No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)

Depth to Free Water in Pit: _____ (in.)

Depth to Saturated Soil: _____ (in.)

Wetland Hydrology Indicators

Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 Inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
_____ Oxidized Root Channels in Upper 12 inches
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (Explain in Remarks)

Remarks: ABSENCE OF HYDROLOGY

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hilltop Site Plot ID DP8

SOILS

Map Unit Name (Series and Phase): Chesaw family Drainage Class: somewhat excessively drained

Taxonomy (Subgroup): _____ Field Observations Confirm Mapped Type? Yes [No]

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.

Hydric Soil Indicators:

- ____ Histosol
- ____ Histic Epipedon
- ____ Sulfidic Odor
- ____ Aquic Moisture Regime
- ____ Reducing Conditions
- ____ Gleyed or Low-Chroma Colors
- ____ Concretions
- ____ High Organic Content in Surface Layer in Sandy Soils
- ____ Organic Streaking in Sandy Soils
- ____ Listed on Local Hydric Soils List
- ____ Listed on National Hydric Soils List
- ____ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	[No]	(Circle)
Wetland Hydrology Present?	Yes	No	
Hydric Soils Present?	Yes	No	

Is this Sampling Point Within a Wetland? Yes [No] (Circle)

Remarks: NON-WETLAND BASED ON ABSENCE ON HYDROPYTIC VEGETATION.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Hilltop Site	Date:	June 13 and July 19, 2005
Applicant/Owner:	Chadmar Group	County:	Mono
Investigators:	JoAnne Michael, Lynn Zonge	State:	California

Do Normal Circumstances exist on the site?	Yes	No	Community ID:	Section I: Open channel
Is the site significantly disturbed (Atypical Situation)?	Yes	No		Tributary to Mammoth Cr. located w/in Mammoth Meadow
Is the area a potential Problem Area?	Yes	No	Transect ID:	
(If needed, explain on reverse.)			Plot ID:	DP9

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1.			9.		
2.			10.		
3.			11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 0.0%

Remarks: ABSENCE OF VEGETATION BELOW ORDINARY HIGH WATER MARK.

HYDROLOGY

Recorded Data (Describe in Remarks):
- ____ Stream, Lake, or Tide Gauge
- ____ Aerial Photographs
- ____ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water:	12	(in.)
Depth to Free Water in Pit:	0	(in.)
Depth to Saturated Soil:	0	(in.)

Wetland Hydrology Indicators

Primary Indicators
- X Inundated
- ____ Saturated in Upper 12 Inches
- ____ Water Marks
- ____ Drift Lines
- ____ Sediment Deposits
- ____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ____ Oxidized Root Channels in Upper 12 inches
- ____ Water-Stained Leaves
- ____ Local Soil Survey Data
- ____ FAC-Neutral Test
- ____ Other (Explain in Remarks)

Remarks: PRESENCE OF HYDROLOGY AND SECONDARY INDICATORS.
Bank height = 2 feet, bank width = 10 feet.

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hilltop Site Plot ID DP9

SOILS

Map Unit Name (Series and Phase): Chesaw family Drainage Class: somewhat excessively drained

Taxonomy (Subgroup): Field Observations Confirm Mapped Type? Yes [No]

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.

Hydric Soil Indicators:

____ Histosol	____ Concretions
____ Histic Epipedon	____ High Organic Content in Surface Layer in Sandy Soils
____ Sulfidic Odor	____ Organic Streaking in Sandy Soils
_X_ Aquic Moisture Regime	____ Listed on Local Hydric Soils List
____ Reducing Conditions	____ Listed on National Hydric Soils List
____ Gleyed or Low-Chroma Colors	____ Other (Explain in Remarks)

Remarks: PRESENCE OF HYDRIC SOILS

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	[No]	(Circle)
Wetland Hydrology Present?	[Yes]	No	
Hydric Soils Present?	[Yes]	No	

Is this Sampling Point Within a Wetland? Yes [No] (Circle)

Remarks: AREA IDENTIFIED AS A WATER OF THE UNITED STATES AND DELINEATED AT THE ORDINARY HIGH WATER MARK. OHWM DELINEATED IN THE FIELD BY PRESENCE OF A DEFINED BED AND BANK AND BANK SCOUR.

OPEN CHANNEL IS LOCATED ON THE SOUTHERN EDGE OF MAMMOTH MEADOW (SECTION I) AND IS A TRIBUTARY TO MAMMOTH CREEK.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hilltop Site
Applicant/Owner: Chadmar Group
Investigators: JoAnne Michael, Lynn Zonge

Date: June 13 and July 19, 2005
County: Mono
State: California

Do Normal Circumstances exist on the site?	Yes	No
Is the site significantly disturbed (Atypical Situation)?	Yes	No
Is the area a potential Problem Area?	Yes	No

(If needed, explain on reverse.)

Community ID: Upland adjacent to Section I / Flood plain Aspen forest
Transect ID:
Plot ID: DP10

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Aspen tremuloides*	Canopy	FAC+	9.		
2. *Aspen tremuloides*	sub-canopy	FAC+	10.		
3. *Veratrum californicum*	herbaceous	OBL	11.		
4. *Equisetum laevigatum*	herbaceous	FACW	12.		
5. *Smilacina racemosa*	herbaceous	FAC	13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100.0%

Remarks: DOMINANCE OF HYDROPHYTIC VEGETATION.

HYDROLOGY

____ Recorded Data (Describe in Remarks):
____ Stream, Lake, or Tide Gauge
____ Aerial Photographs
____ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: > 14 (in.)
Depth to Saturated Soil: > 14 (in.)

Wetland Hydrology Indicators

Primary Indicators
____ Inundated
____ Saturated in Upper 12 Inches
____ Water Marks
____ Drift Lines
____ Sediment Deposits
____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
____ Oxidized Root Channels in Upper 12 inches
____ Water-Stained Leaves
____ Local Soil Survey Data
X FAC-Neutral Test
____ Other (Explain in Remarks)

Remarks: ABSENCE OF HYDROLOGY AND SECONDARY INDICATORS.

Water appears to have flowed across area described by data point during high flow events of adjacent open channel. Area slopes sufficiently toward Section I and doesn't allow for ponding of water.

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hilltop Site Plot ID DP10

SOILS

Map Unit Name (Series and Phase): Chesaw family Drainage Class: somewhat excessively drained

Taxonomy (Subgroup): _____ Field Observations Confirm Mapped Type? Yes [No]

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.
0-14	1	10YR 2/2	none	sandy loam

Hydric Soil Indicators:

- ____ Histosol
- ____ Histic Epipedon
- ____ Sulfidic Odor
- ____ Aquic Moisture Regime
- ____ Reducing Conditions
- ____ Gleyed or Low-Chroma Colors
- ____ Concretions
- ____ High Organic Content in Surface Layer in Sandy Soils
- ____ Organic Streaking in Sandy Soils
- ____ Listed on Local Hydric Soils List
- ____ Listed on National Hydric Soils List
- ____ Other (Explain in Remarks)

Remarks: ABSENCE OF HYDRIC SOIL INDICATORS.

WETLAND DETERMINATION

			(Circle)
Hydrophytic Vegetation Present?	[Yes]	No	(Circle)
Wetland Hydrology Present?	Yes	[No]	
Hydric Soils Present?	Yes	[No]	

Is this Sampling Point Within a Wetland? Yes [No]

Remarks: NON-WETLAND BASED ON ABSENCE OF POSITIVE HYDROLOGY AND SOILS INDICATORS.

Data point taken within floodplain of adjacent channel. Water level within channel was approximately 4 feet below soil surface.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Hilltop Site	Date:	June 13 and July 19, 2005
Applicant/Owner:	Chadmar Group	County:	Mono
Investigators:	JoAnne Michael, Lynn Zonge	State:	California

Do Normal Circumstances exist on the site?	Yes	No	Community ID: Section I: Open Water within Mammoth Meadow
Is the site significantly disturbed (Atypical Situation)?	Yes	No	Transect ID:
Is the area a potential Problem Area?	Yes	No	Plot ID: DP11
(If needed, explain on reverse.)			

VEGETATION

	Dominant Plant Species	Stratum	Indicator		Dominant Plant Species	Stratum	Indicator
1.				9.			
2.				10.			
3.				11.			
4.				12.			
5.				13.			
6.				14.			
7.				15.			
8.				16.			

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 80.0%

Remarks: NO DOMINANT VEGETATION BELOW ORDINARY HIGH WATER MARK.
Typha sp. and *Scirpus* sp. growing in patches along edges of pond.

HYDROLOGY

Recorded Data (Describe in Remarks):
- ____ Stream, Lake, or Tide Gauge
- ____ Aerial Photographs
- ____ Other
- X No Recorded Data Available

Field Observations:
- Depth of Surface Water: > 3 feet (in.)
- Depth to Free Water in Pit: 0 (in.)
- Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators

Primary Indicators
- X Inundated
- ____ Saturated in Upper 12 Inches
- ____ Water Marks
- ____ Drift Lines
- ____ Sediment Deposits
- ____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ____ Oxidized Root Channels in Upper 12 inches
- ____ Water-Stained Leaves
- ____ Local Soil Survey Data
- ____ FAC-Neutral Test
- ____ Other (Explain in Remarks)

Remarks: PRESENCE OF HYDROLOGY AND SECONDARY INDICATORS.

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hilltop Site Plot ID DP11

SOILS

Map Unit Name
(Series and Phase): Chesaw family Drainage Class: somewhat excessively drained

Taxonomy (Subgroup): Field Observations Confirm Mapped Type? Yes [No]

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.

Hydric Soil Indicators:

____ Histosol	____ Concretions
____ Histic Epipedon	____ High Organic Content in Surface Layer in Sandy Soils
____ Sulfidic Odor	____ Organic Streaking in Sandy Soils
X Aquic Moisture Regime	____ Listed on Local Hydric Soils List
____ Reducing Conditions	____ Listed on National Hydric Soils List
____ Gleyed or Low-Chroma Colors	____ Other (Explain in Remarks)

Remarks: PRESENCE OF HYDRIC SOIL INDICATORS.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	[No]	(Circle)
Wetland Hydrology Present?	[Yes]	No	
Hydric Soils Present?	[Yes]	No	

Is this Sampling Point Within a Wetland? Yes [No] (Circle)

Remarks: AREA IDENTIFIED AS A WATER OF THE UNITED STATES AND DELINEATED AT THE ORDINARY HIGH WATER MARK.

The area is an open water pond located adjacent/within Section I.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hilltop Site
Applicant/Owner: Chadmar Group
Investigators: JoAnne Michael, Lynn Zonge

Date: June 13 and July 19, 2005
County: Mono
State: California

Do Normal Circumstances exist on the site?	Yes	No
Is the site significantly disturbed (Atypical Situation)?	Yes	No
Is the area a potential Problem Area?	Yes	No
(If needed, explain on reverse.)		

Community ID: Upland, disturbed area
Former tree nursery
Transect ID:
Plot ID: DP12

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Melilotus officinalis*	herbaceous	UPL	9.		
2. *Achillea millefolium*	herbaceous	UPL	10.		
3. *Medicago lupulina*	herbaceous	UPL	11.		
4.			12.		
5.			13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 0.0%

Remarks: DOMINANCE OF NON-HYDROPHYTIC VEGETATION.
Large areas of bare ground present.

HYDROLOGY

Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
X No Recorded Data Available

Field Observations:
Depth of Surface Water: none (in.)
Depth to Free Water in Pit: ___ (in.)
Depth to Saturated Soil: ___ (in.)

Wetland Hydrology Indicators

Primary Indicators
___ Inundated
___ Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
___ Oxidized Root Channels in Upper 12 inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks:

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hilltop Site Plot ID DP12

SOILS

Map Unit Name
(Series and Phase): Chesaw family Drainage Class: somewhat excessively drained

Taxonomy (Subgroup): _____ Field Observations Confirm Mapped Type? Yes [No]

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.
				fill material

Hydric Soil Indicators:

____ Histosol
____ Histic Epipedon
____ Sulfidic Odor
____ Aquic Moisture Regime
____ Reducing Conditions
____ Gleyed or Low-Chroma Colors
____ Concretions
____ High Organic Content in Surface Layer in Sandy Soils
____ Organic Streaking in Sandy Soils
____ Listed on Local Hydric Soils List
____ Listed on National Hydric Soils List
____ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes [No] (Circle)
Wetland Hydrology Present? Yes No
Hydric Soils Present? Yes No

Is this Sampling Point Within a Wetland? Yes [No] (Circle)

Remarks: NON-WETLAND BASED ON ABSENCE OF HYDROPHYTIC VEGETATION.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hilltop Site
Applicant/Owner: Chadmar Group
Investigators: JoAnne Michael, Lynn Zonge

Date: June 13 and July 19, 2005
County: Mono
State: California

Do Normal Circumstances exist on the site?	Yes	No
Is the site significantly disturbed (Atypical Situation)?	Yes	No
Is the area a potential Problem Area?	Yes	No
(If needed, explain on reverse.)		

Community ID: Upland hillside (typical)
Transect ID:
Plot ID: DP13

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Pinus jeffreyii*	Canopy	UPL	9.		
2. *Artemisis tridentata*	Shrub	UPL	10.		
3. *Arctostaphylos patula*	Shrub	UPL	11.		
4. *Bromus inermis*	herbaceous	UPL	12.		
5. *Lupine sp.*	herbaceous		13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 0.0%

Remarks: DOMINANCE OF NON-HYDROPHYTIC VEGETATION.

HYDROLOGY

____ Recorded Data (Describe in Remarks):
____ Stream, Lake, or Tide Gauge
____ Aerial Photographs
____ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: _____ (in.)
Depth to Saturated Soil: _____ (in.)

Wetland Hydrology Indicators

Primary Indicators
_____ Inundated
_____ Saturated in Upper 12 Inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
_____ Oxidized Root Channels in Upper 12 inches
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (Explain in Remarks)

Remarks:

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hilltop Site Plot ID DP13

SOILS

Map Unit Name
(Series and Phase): Chesaw family Drainage Class: somewhat excessively drained

Taxonomy (Subgroup): _____ Field Observations Confirm Mapped Type? Yes [No]

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.
				fill material

Hydric Soil Indicators:

____ Histosol
____ Histic Epipedon
____ Sulfidic Odor
____ Aquic Moisture Regime
____ Reducing Conditions
____ Gleyed or Low-Chroma Colors
____ Concretions
____ High Organic Content in Surface Layer in Sandy Soils
____ Organic Streaking in Sandy Soils
____ Listed on Local Hydric Soils List
____ Listed on National Hydric Soils List
____ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes [No] (Circle)
Wetland Hydrology Present? Yes No
Hydric Soils Present? Yes No

(Circle)
Is this Sampling Point Within a Wetland? Yes [No]

Remarks: NON-WETLAND BASED ON ABSENCE OF HYDROPHYTIC VEGETATION.

Data point located on steep hillside.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Hilltop Site	Date:	June 13 and July 19, 2005
Applicant/Owner:	Chadmar Group	County:	Mono
Investigators:	JoAnne Michael, Lynn Zonge	State:	California

Do Normal Circumstances exist on the site?	Yes	No	Community ID:	Aspen Grove
Is the site significantly disturbed (Atypical Situation)?	Yes	No		located on hillside adjacent to road
Is the area a potential Problem Area?	Yes	No	Transect ID:	
(If needed, explain on reverse.)			Plot ID:	DP14

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Aspen tremuloides*	canopy	FAC+	9.		
2. *Aspen tremuloides*	sub-canopy	FAC+	10.		
3. *Bromus carinatus*	herbaceous	UPL	11.		
4. *Smilacina racemosa*	herbaceous	FAC	12.		
5. *Thalictrum fendleri*	herbaceous	FACU	13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-) 60.0%

Remarks: DOMINANCE OF HYDROPHYTIC VEGETATION.

HYDROLOGY

Recorded Data (Describe in Remarks):
- ____ Stream, Lake, or Tide Gauge
- ____ Aerial Photographs
- ____ Other

X No Recorded Data Available

Field Observations:

Depth of Surface Water:	none	(in.)
Depth to Free Water in Pit:	> 12	(in.)
Depth to Saturated Soil:	> 12	(in.)

Wetland Hydrology Indicators

Primary Indicators
- ____ Inundated
- ____ Saturated in Upper 12 Inches
- ____ Water Marks
- ____ Drift Lines
- ____ Sediment Deposits
- ____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
- ____ Oxidized Root Channels in Upper 12 inches
- ____ Water-Stained Leaves
- ____ Local Soil Survey Data
- ____ FAC-Neutral Test
- ____ Other (Explain in Remarks)

Remarks: ABSENCE OF HYDOLOGY AND SECONDARY INDICATORS

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hilltop Site Plot ID DP14

SOILS

Map Unit Name (Series and Phase): Chesaw family Drainage Class: somewhat excessively drained

Taxonomy (Subgroup): _____ Field Observations Confirm Mapped Type? Yes [No]

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.
0-12	1	10 YR 2/2	none	

Hydric Soil Indicators:

____ Histosol
____ Histic Epipedon
____ Sulfidic Odor
____ Aquic Moisture Regime
____ Reducing Conditions
____ Gleyed or Low-Chroma Colors
____ Concretions
____ High Organic Content in Surface Layer in Sandy Soils
____ Organic Streaking in Sandy Soils
____ Listed on Local Hydric Soils List
____ Listed on National Hydric Soils List
____ Other (Explain in Remarks)

Remarks: ABSENCE OF HYDRIC SOIL INDICATORS.

WETLAND DETERMINATION

			(Circle)
Hydrophytic Vegetation Present?	[Yes]	No	
Wetland Hydrology Present?	Yes	[No]	
Hydric Soils Present?	Yes	[No]	
Is this Sampling Point Within a Wetland?	Yes	[No]	

Remarks: NON-WETLAND BASED ON ABSENCE OF POSITIVE HYDROLOGY AND SOILS INDICATORS.

Data point located on hillside.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site:	Hilltop Site	Date:	June 13 and July 19, 2005
Applicant/Owner:	Chadmar Group	County:	Mono
Investigators:	JoAnne Michael, Lynn Zonge	State:	California

Do Normal Circumstances exist on the site?	Yes	No
Is the site significantly disturbed (Atypical Situation)?	Yes	No
Is the area a potential Problem Area?	Yes	No
(If needed, explain on reverse.)		

Community ID: Section I: Open Channel Tributary to Mammoth Cr. w/in Mammoth Meadow
Transect ID:
Plot ID: DP15

VEGETATION

	Dominant Plant Species	Stratum	Indicator		Dominant Plant Species	Stratum	Indicator
1.				9.			
2.				10.			
3.				11.			
4.				12.			
5.				13.			
6.				14.			
7.				15.			
8.				16.			

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 0.0%

Remarks: NO DOMINANT VEGETATION BELOW ORDINARY HIGH WATER MARK.

HYDROLOGY

____ Recorded Data (Describe in Remarks):
____ Stream, Lake, or Tide Gauge
____ Aerial Photographs
____ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: 24 (in.)
Depth to Free Water in Pit: 0 (in.)
Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators

Primary Indicators
X Inundated
____ Saturated in Upper 12 Inches
____ Water Marks
____ Drift Lines
____ Sediment Deposits
____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
____ Oxidized Root Channels in Upper 12 inches
____ Water-Stained Leaves
____ Local Soil Survey Data
____ FAC-Neutral Test
____ Other (Explain in Remarks)

Remarks: PRESENCE OF HYDOLOGY
Channel width = 2.5 feet; bank height = 3 feet

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hilltop Site Plot ID DP15

SOILS

Map Unit Name (Series and Phase): Chesaw family Drainage Class: somewhat excessively drained

Taxonomy (Subgroup): _____ Field Observations Confirm Mapped Type? Yes [No]

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.

Hydric Soil Indicators:

___ Histosol	___ Concretions
___ Histic Epipedon	___ High Organic Content in Surface Layer in Sandy Soils
___ Sulfidic Odor	___ Organic Streaking in Sandy Soils
X Aquic Moisture Regime	___ Listed on Local Hydric Soils List
___ Reducing Conditions	___ Listed on National Hydric Soils List
___ Gleyed or Low-Chroma Colors	___ Other (Explain in Remarks)

Remarks: PRESENCE OF HYDRIC SOILS

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	[No]	(Circle)
Wetland Hydrology Present?	[Yes]	No	
Hydric Soils Present?	[Yes]	No	

Is this Sampling Point Within a Wetland? Yes [No] (Circle)

Remarks: AREA IDENTIFIED AS A WATER OF THE UNITED STATES AND DELINEATED AT THE ORDINARY HIGH WATER MARK.

The area is an open channel within Section I and is a tributary to Mammoth Creek.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hilltop Site
Applicant/Owner: Chadmar Group
Investigators: JoAnne Michael, Lynn Zonge

Date: June 13 and July 19, 2005
County: Mono
State: California

Do Normal Circumstances exist on the site?	Yes	No
Is the site significantly disturbed (Atypical Situation)?	Yes	No
Is the area a potential Problem Area?	Yes	No
(If needed, explain on reverse.)		

Community ID: Aspen Grove
located on hillside adjacent to road
Transect ID:
Plot ID: DP16

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. *Aspen tremuloides*	canopy	FAC+	9.		
2. *Aspen tremuloides*	sub-canopy	FAC+	10.		
3. *Smilacina racemosa*	herbaceous	FAC	11.		
4. *Veratrum californicum*	herbaceous	OBL	12.		
5. *Lupinus sp.*	herbaceous		13.		
6.			14.		
7.			15.		
8.			16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100.0%

Remarks: DOMINANCE OF HYDROPHYTIC VEGETATION.

HYDROLOGY

____ Recorded Data (Describe in Remarks):
____ Stream, Lake, or Tide Gauge
____ Aerial Photographs
____ Other
X No Recorded Data Available

Field Observations:

Depth of Surface Water: none (in.)
Depth to Free Water in Pit: > 12 (in.)
Depth to Saturated Soil: > 12 (in.)

Wetland Hydrology Indicators

Primary Indicators
____ Inundated
____ Saturated in Upper 12 Inches
____ Water Marks
____ Drift Lines
____ Sediment Deposits
____ Drainage Patterns in Wetlands

Secondary Indicators (2 or more required)
____ Oxidized Root Channels in Upper 12 inches
____ Water-Stained Leaves
____ Local Soil Survey Data
____ FAC-Neutral Test
____ Other (Explain in Remarks)

Remarks: ABSENCE OF HYDOLOGY AND SECONDARY INDICATORS

DATA FORM - CONTINUED
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Hilltop Site Plot ID DP16

SOILS

Map Unit Name (Series and Phase): Chesaw family Drainage Class: somewhat excessively drained

Taxonomy (Subgroup): _____ Field Observations Confirm Mapped Type? Yes [No]

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Structure, Concretions, etc.
0-12	1	10 YR 2/2	none	

Hydric Soil Indicators:

____ Histosol
____ Histic Epipedon
____ Sulfidic Odor
____ Aquic Moisture Regime
____ Reducing Conditions
____ Gleyed or Low-Chroma Colors
____ Concretions
____ High Organic Content in Surface Layer in Sandy Soils
____ Organic Streaking in Sandy Soils
____ Listed on Local Hydric Soils List
____ Listed on National Hydric Soils List
____ Other (Explain in Remarks)

Remarks: ABSENCE OF HYDRIC SOIL INDICATORS.

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	[Yes]	No	(Circle)
Wetland Hydrology Present?	Yes	[No]	
Hydric Soils Present?	Yes	[No]	

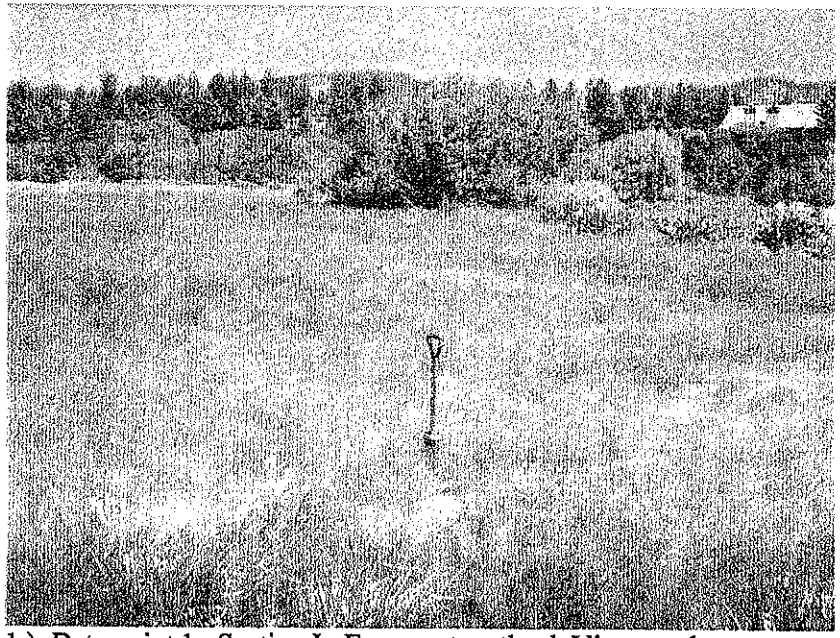
Is this Sampling Point Within a Wetland? Yes [No] (Circle)

Remarks: NON-WETLAND BASED ON ABSENCE OF POSITIVE HYDROLOGY AND SOILS INDICATORS.

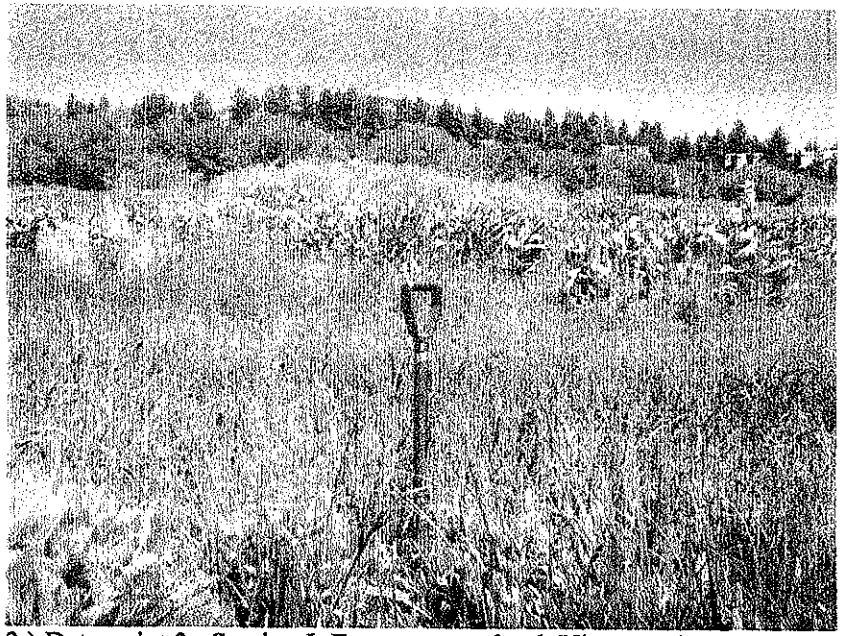
Data point located on hillside.

Appendix B

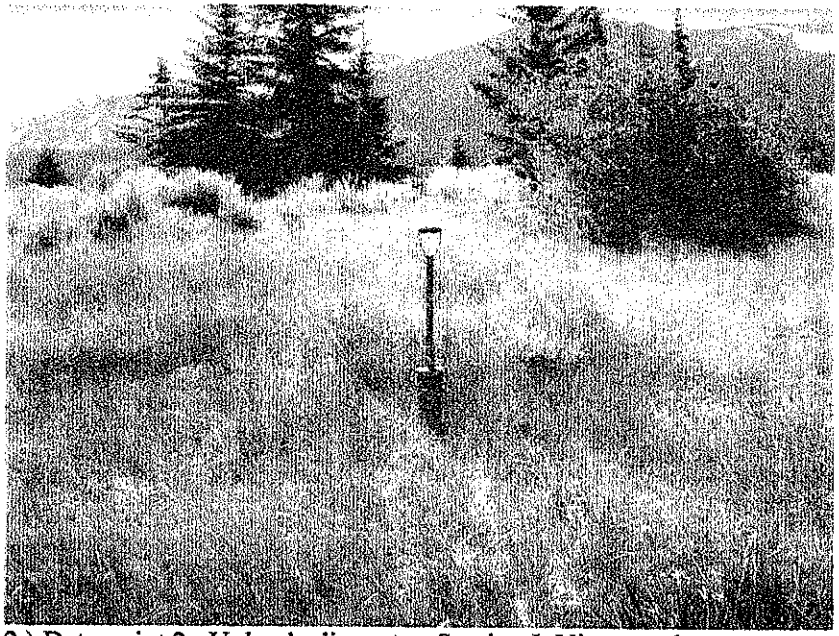
Site Photographs



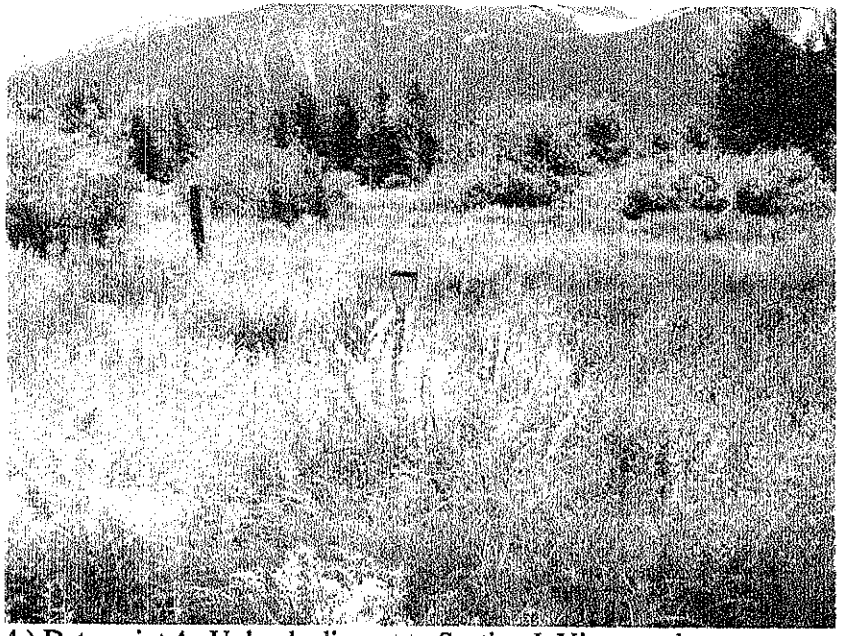
1.) Data point 1. Section I: Emergent wetland. View north.



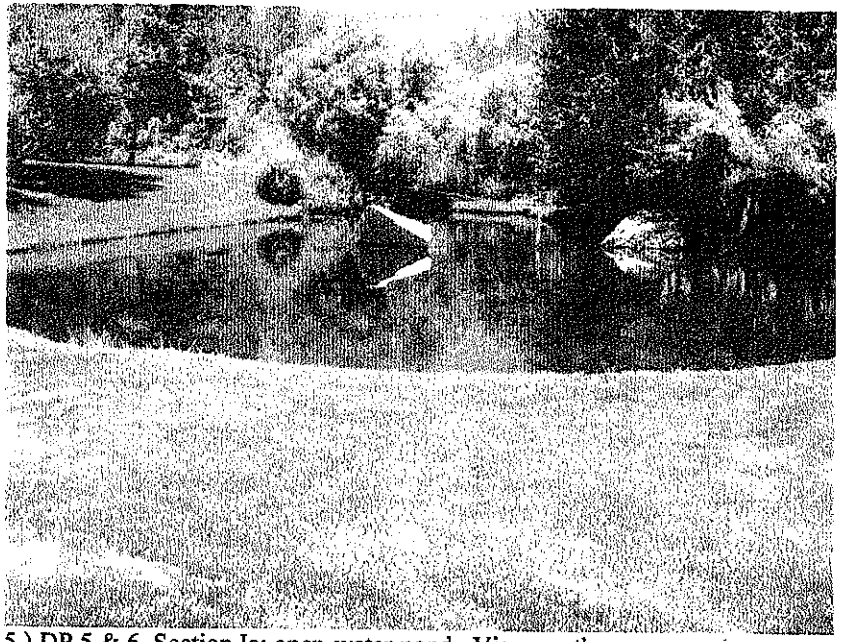
3.) Data point 3. Section I: Emergent wetland. View north.



2.) Data point 2. Upland adjacent to Section I. View south.

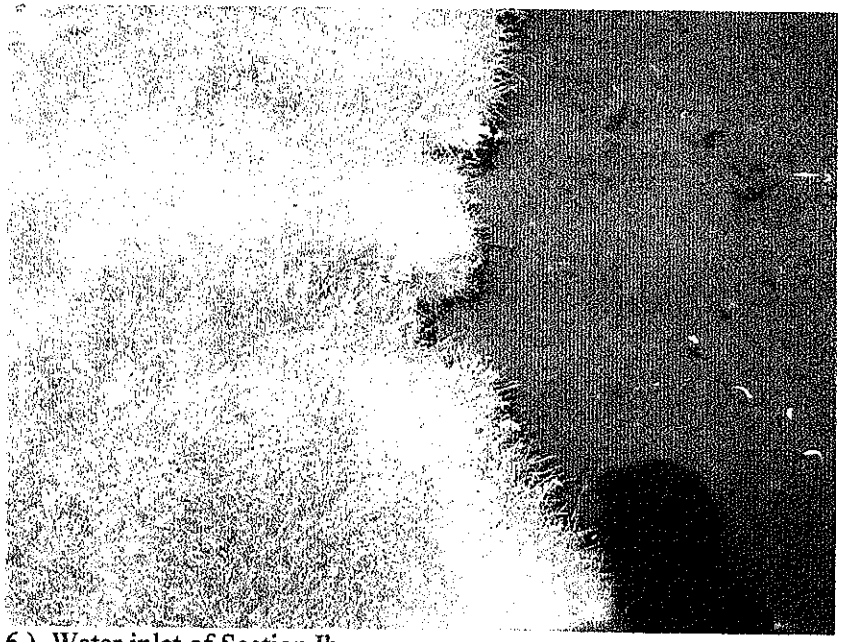


4.) Data point 4. Upland adjacent to Section I. View south.

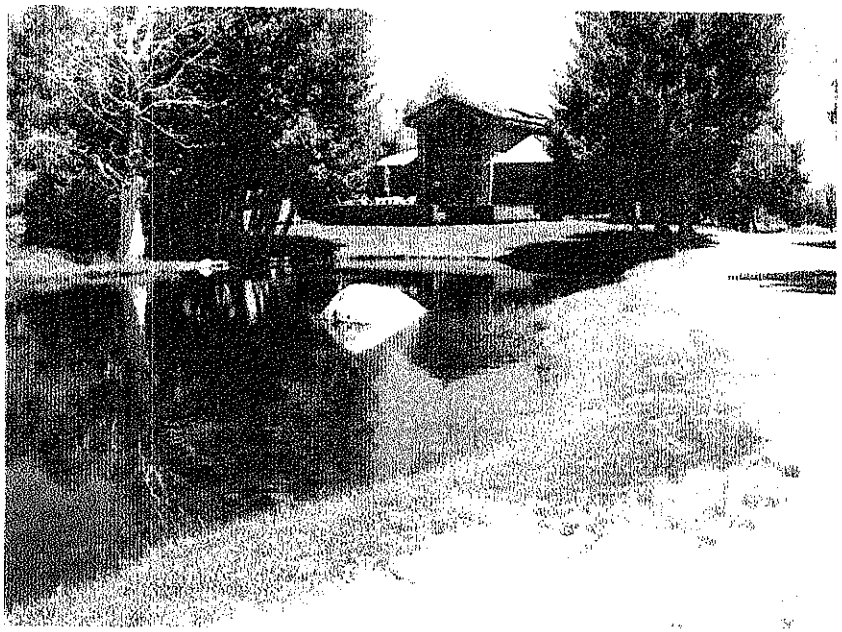


5.) DP 5 & 6. Section Ia: open-water pond. View south.

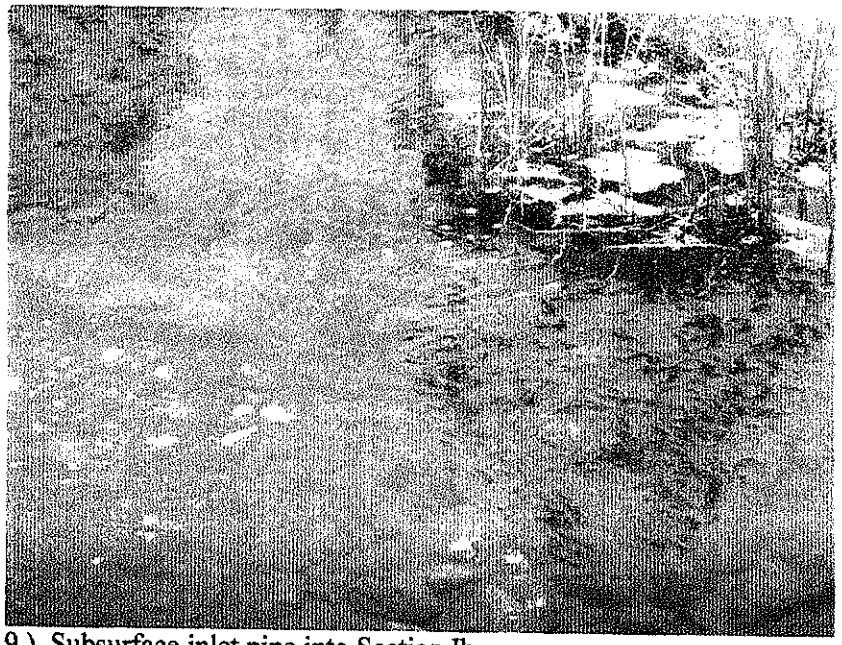
7.) DP 5A. Open channel outlet for Section Ia.



6.) Water inlet of Section Ib.

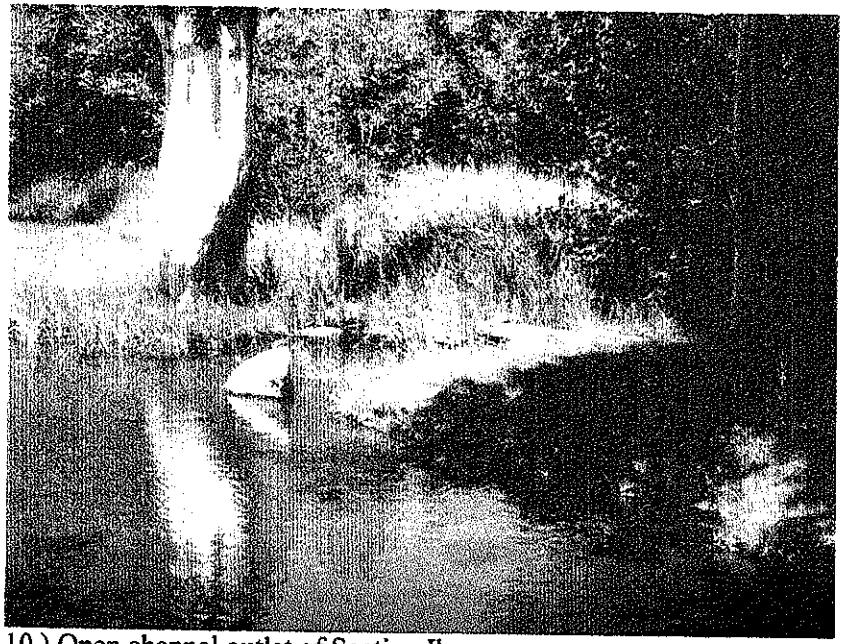


8.) DP 7 & 8.Section Ib. open water pond.

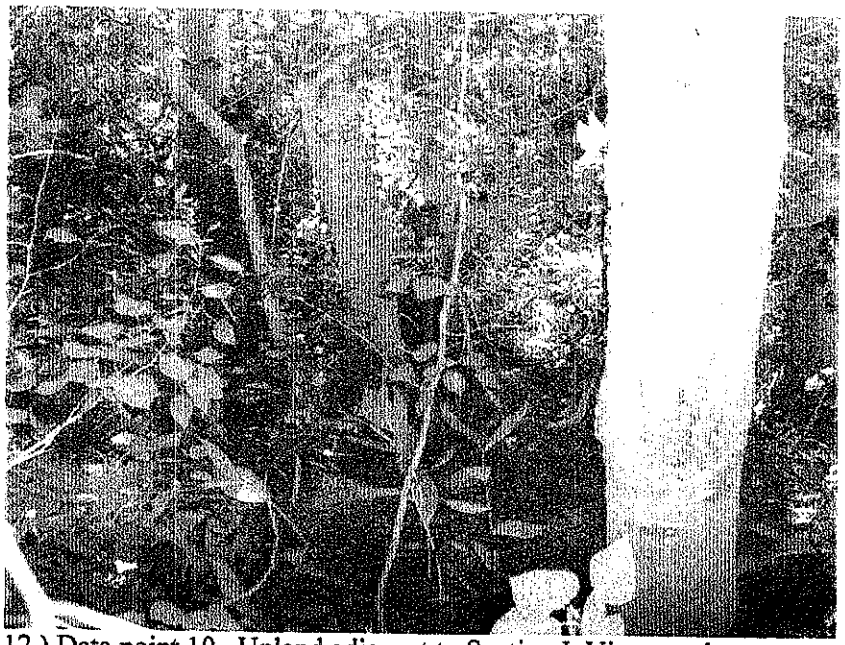


9.) Subsurface inlet pipe into Section Ib.

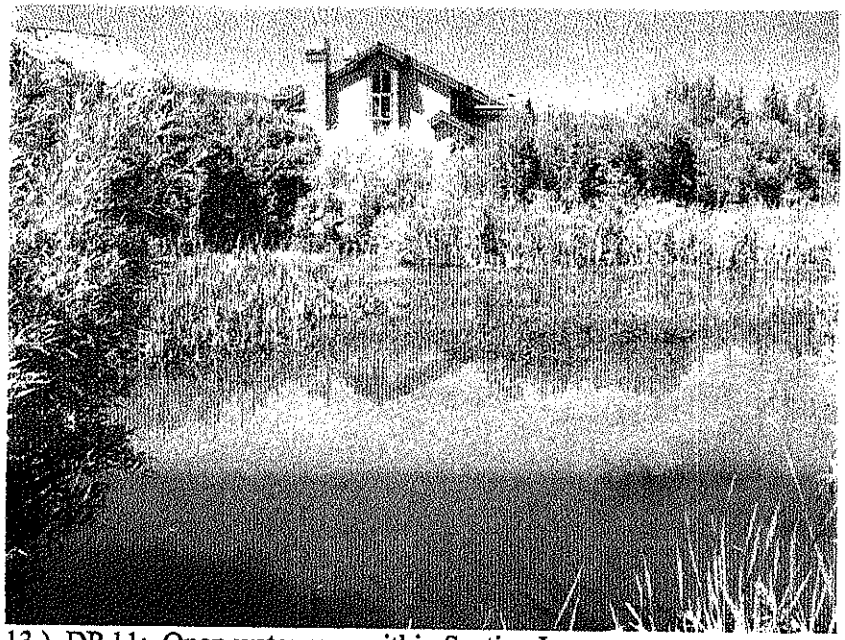
11.) DP9: Open channel within Section I: View north.



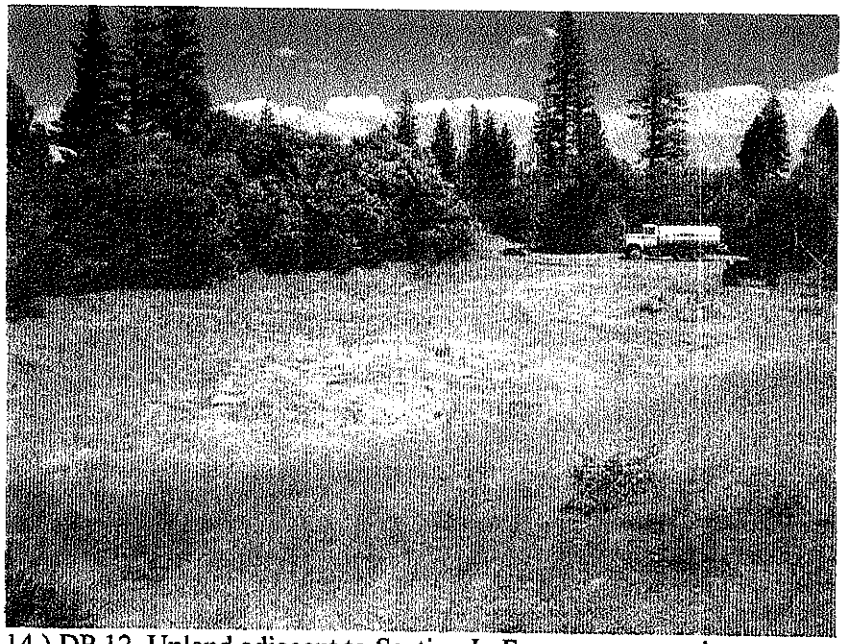
10.) Open channel outlet of Section Ib.



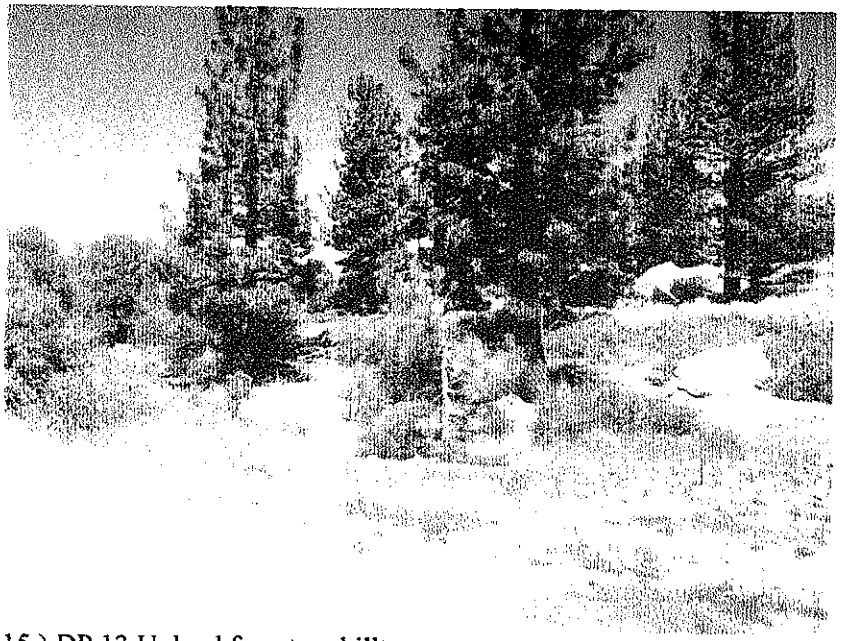
12.) Data point 10. Upland adjacent to Section I. View south.



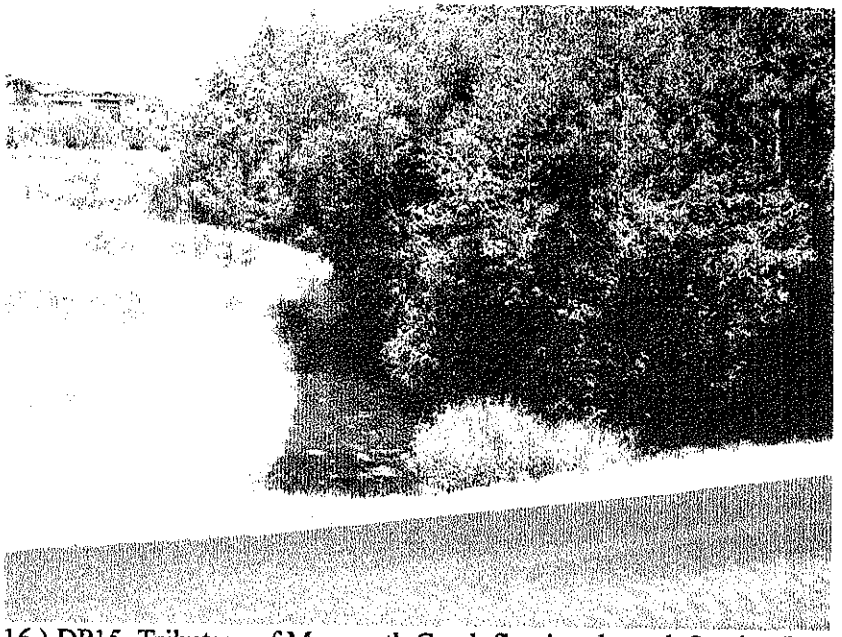
13.) DP 11: Open water area within Section I.



14.) DP 12. Upland adjacent to Section I. Former nursery site.



15.) DP 13 Upland forest on hilltop.



16.) DP15. Tributary of Mammoth Creek flowing through Section I.

DEPARTMENT OF THE ARMY
LOS ANGELES DISTRICT, CORPS OF ENGINEERS
VENTURA FIELD OFFICE
2151 ALESSANDRO DRIVE, SUITE 110
VENTURA, CALIFORNIA 93001

REPLY TO
ATTENTION OF:

July 8, 2003

Office of the Chief
Regulatory Branch

Dempsey Construction Corporation
Attention: Gail Frampton
P.O. Box 657
Mammoth Lakes, California 93546

Dear Mr. Frampton:

Reference is made to your letter report (Corps file no. 200200716-BAH) dated June 27, 2002 for the revised wetlands identification/delineation prepared by Dr. Dana Sanders of D. R. Sanders and Associates, Inc., transmitted on your behalf by Mr. Dave Laverty of Triad/Holmes Associates, the revised version subsequently provided by Dr. Sanders transmitted under cover letter dated August 5, 2002, and the letter of December 2, 2002 from Mr. Laverty requesting further clarification of the Corps' jurisdictional verification of October 17, 2002. The identification/delineation report addresses the Snowcreek Resort in the Town of Mammoth Lakes, Mono County, California. Reference is also made to the *Report on Historical Use of Drainage Ditches at Snowcreek Resort, Mammoth Lakes, California* (Report), dated May 2002, and prepared by Mr. Laverty.

We note that the existing golf course ponds drain to another holding pond east of Fairway Drive and south of Old Mammoth Road, and eventually to an excavated Retention Basin "E" connected to this latter golf course pond by Ditch "F." The retention basin then exits over a constructed concrete spillway into Swale "H" and Ditch "I." However, their eventual connection with Mammoth Creek is very infrequent and there is no substantial evidence of an ordinary high water mark in these drainage courses. Therefore, based on the information furnished in the documents above, and the site visit with you, Dr. Sanders, and Mr. Laverty on May 10, 2002, we have determined that your proposed project does not discharge dredged or fill material into a water of the United States or an adjacent wetland either on Lot 4 as stated in our October 17, 2002 letter, or on the U.S. Forest Service exchange parcel on the eastern and southern boundaries of the Snowcreek parcel. Therefore, the project is not subject to our jurisdiction under Section 404 of the Clean Water Act and a Section 404 permit is not required from our office.

Please be aware that our determination does not preclude the need to comply with Section 13260 of the California Water Code (Porter-Cologne Water Quality Control Act), and we recommend that you contact the California Regional Water Quality Control Board to insure compliance with the above statute. Furthermore, our determination does not obviate the need to obtain other Federal, state, or local authorizations required by law.

If you have any questions, please contact Bruce A. Henderson of my staff at (805) 585-2145.

Sincerely,

David J. Castanon
Acting Chief, Regulatory Branch

DEPARTMENT OF THE ARMY
LOS ANGELES DISTRICT, CORPS OF ENGINEERS
VENTURA FIELD OFFICE
2151 ALESSANDRO DRIVE, SUITE 110
VENTURA, CALIFORNIA 93001

REPLY TO
ATTENTION OF:

February 1, 2006

Office of the Chief
Regulatory Branch

Chadmar Group
c/o Resource Concepts, Inc.
Attention: JoAnne Michael
340 N. Minnesota Street
Carson City, Nevada 89703-4152

File Number: 200600051-BAH

Dear Ms. Michael:

Reference is made to your letter of September 7, 2005 and related documentation dated August 2005 that you provided regarding the Section 404 jurisdictional limits for the Hilltop Site–Snowcreek Area 7 north of Old Mammoth Road and west of Minaret Road in the Town of Mammoth Lakes, Mono County, California. According to the delineation report, you identified areas subject to Corps jurisdiction on the site comprised of approximately 15.89 acres of wetlands and open waters of the United States on Mammoth Meadow, including the main channel of Mammoth Creek, a side branch of Mammoth Creek, and adjacent emergent wetlands. Two excavated ponds of 0.10 and 0.07 acres in the eastern portion of the project area were also determined to be jurisdictional waters of the U.S. because they receive water from the side branch of Mammoth Creek and return water to the side branch. The Corps reviewed the delineation report and conducted a jurisdictional delineation site visit on November 21, 2005 with Ms. Tammy Bennett of the Chadmar Group, Ms. Denise Hutten of Triad/Holmes Associates, Inc., and yourself.

The enclosed map was provided by you in your August 2005 documentation and delineates the waters of the United States, including wetlands, regulated by Section 404 of the Clean Water Act on the subject site. Following our site visit of November 21, 2005, we agree that the methods used adequately describe the prevailing site conditions. This approved jurisdictional determination will remain in effect for five years from the date of this letter unless an unusual flood event occurs. After this five-year period or after an unusual flood event alters stream conditions, the Corps of Engineers reserves the authority to retain the original jurisdictional limits or to establish new jurisdictional limits as conditions warrant.

Each water of the United States herein delineated is an isolated water subject to interstate and/or foreign commerce. The Section 404 jurisdictional limit for a water of the United States is defined at 33 CFR Part 328. The jurisdictional limit for a non-tidal water of the United States is determined by the jurisdictional wetland boundary and/or the ordinary high water mark. The jurisdictional limit of a wetland is determined in accordance with the Corps of Engineers 1987 Wetlands Delineation Manual. Otherwise, presence of the indicators stated in the definition of ordinary high mark (33CFR 328.3(e)) are

used to establish the jurisdictional limit of a water of the United States. The basis of this jurisdictional determination is shown on the enclosed checklist.

Any discharge of dredged or fill material within the designated jurisdictional area requires said permit from the Corps of Engineers. The Corps of Engineers emphasizes avoidance of impacts to the delineated jurisdictional area. It is our understanding the Chadmar Group has no intention to impact areas subject to Corps jurisdiction as depicted on the enclosed map. Please review this delineation and evaluate your proposed activity to ensure that avoidance of the jurisdictional area is given full consideration in your design. If all discharges of dredged or fill material occur outside the designated jurisdictional area, no Section 404 permit is required. If avoidance is not practicable, please reference File Number 200600051-BAH when submitting your Section 404 permit application to the Corps of Engineers. Please be advised that your application needs to substantiate that avoidance of designated jurisdictional areas is not practicable and substantiate that impacts to waters of the United States have been minimized.

This letter contains an approved jurisdictional determination for the subject project site. If the Chadmar Group objects to this determination, they may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form. If the Chadmar Group requests to appeal this determination, you must submit a completed RFA form to the South Pacific Division office at the following address

Doug Pomeroy
415-977-8035 (phone)
415-977-8129
South Pacific Division
CESPD-PDS-O
333 Market Street
San Francisco, CA 94105

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should the Chadmar Group decide to submit an RFA form, it must be received at the above address by April 2, 2006. It is not necessary to submit an RFA form to the Division office if you do not object to the determination in this letter.

The receipt of your inquiry is appreciated. If you have any questions, please contact Bruce A. Henderson at (805) 585-2145.

Sincerely,

Antal Szijj
Acting Chief, North Coast Section

Enclosures

CALIFORNIA REFORESTATION. INC.
22230-A So. Colorado River Drive • Sonora, California 95370
(209) 533-1324 Forestry/Fax: (209) 588-1920

October 3, 2006

The Chadmar Group
PO Box 100, PMB #605
1 Fairway Drive
Mammoth Lakes, CA 93546

Dear Sir or Madam:

On August 3, 2006 I visited the site of the Snowcreek VIII development with your representatives to assess the potential of the area for timber productivity. The site is located south of Old Mammoth Road in the northwest quarter of Section 2 Township 4 South, Range 27 East, Mt Diablo B&M, Mono County APN # 040-140-004. Currently the vegetation on the site consists of grass and sage. The area is used for grazing and has been irrigated in the past with a system of ditches. The site is currently not forested.

Soil information for the site is not available through the Natural Resource Conservation Service (NRCS). The area west of the site is similar and consists of soils belonging to the Chesaw, Hagga, and Wursten families. These soils are not classified for timber production and have a high probably for tree seedling mortality. The soils are shallow, rocky, and not well drained. They are not suitable for commercial timber production. Field inspection verifies that soils of similar characteristics exit on this site.

The Z'Berg-Nejedly Forest Practice Act, Div 4, Ch8, PRC 4526, defines timberland as "land which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees". Considering the soils, water availability, and current vegetation this site does not meet this definition and is not capable of growing a crop of commercial species.

Please contact me if you have any questions.

Sincerely,

Leon J Manich
RPF #1970

MEMORANDUM

To: *Jen Daugherty, Town of Mammoth Lakes*

From: *Shannon Lucas and Aindrea Jensen, CAJA Biologists*

Date: *January 30, 2007*

Subject: *Snowcreek VIII - Biological Resources Peer Review*

This memorandum is intended to replace the memo dated December 1, 2006.

Christopher A. Joseph & Associates (CAJA) has completed a peer review of the biological resources reports prepared by the Applicant's biologists for the proposed Snowcreek VIII Project to determine the adequacy, completeness and accuracy of the reports for use in the preparation of the Environmental Impact Report (EIR) for the Snowcreek Master Plan Project. Specifically, we reviewed the following reports.

- Denise Duffy & Associates, Letter to Sonia Ransom, Allen Matkins LLP. October 20, 2005. Snowcreek 7 – Preliminary Biological Assessment.
- Denise Duffy & Associates, Letter to Sonia Ransom, Allen Matkins LLP. October 11, 2006. Snowcreek 8 – Biological Assessment.
- Denise Duffy & Associates, Letter to Sonia Ransom, Allen Matkins LLP. November 16, 2006. Snowcreek 8 – Addendum to Biological Assessment.
- D.R. Sanders and Associates, Inc., Letter to Gail Frampton, Dempsey Construction. 27 June 2002. Identification/Delineation of Wetlands on a Portion of Snowcreek Resort Property in Mammoth Lakes (Mono County), California.
- Resource Concepts, Inc., 2005. *Hilltop Site – Snowcreek Area 7 Wetland Delineation Report.*

In addition to the documents listed above, we reviewed letters from the U.S. Army Corps of Engineers (USACE) to the Applicant's biologists regarding the extent of its jurisdiction on the project site, pursuant to Section 404 of the Clean Water Act (CWA).

Prior to conducting our peer review, we reviewed available background information pertaining to biological resources in the vicinity of the project, including, but not limited to, the California Natural Diversity Database (CNDDB)[1], the U.S. Fish and Wildlife Service (Service) List of Listed, Proposed, and Candidate Species Which May Occur in Mono County[2], the California Native Plant Society's (CNPS) Electronic Inventory[3], The Town of Mammoth Lakes General Plan[4], and The Town of Mammoth Lakes 2005 General Plan Update DEIR[5]. California

[1] California Department of Fish and Game. 2006 *California Natural Diversity Database* (CNDDB) *Rarefind* [CD-ROM], Wildlife Habitat Data Analysis Branch, California Department of Fish and Game. Sacramento: California

[2] U.S. Fish and Wildlife Service. November 6, 2006. *Listed, Proposed, and Candidate Species which May Occur in Mono County.* Ventura (CA): Ventura Fish and Wildlife Office. Accessed November 6, 2006. Available from http://www.fws.gov/ventura/esprograms/listing%5Fch/

[3] California Native Plant Society. November 6, 2006. *Inventory of rare and endangered plants of California*. California Native Plant Society, Sacramento. Accessed November 6, 2006. Available from http://cnps.web.aplus.net/cgi-bin/inv/inventory.cgi

[4] Town of Mammoth Lakes. 1987. Town of Mammoth Lakes General Plan.

Department of Fish and Game (CDFG) staff were also contacted. We also conducted a one-day field reconnaissance on October 25, 2006 to assess the existing site conditions and evaluate the potential for the site to support special-status species and sensitive habitats. We compared the results of our background review and field reconnaissance to the Applicant's biological reports. This memo summarizes our review of the biological reports prepared by the Applicant's biologists, identifying any concerns with each of the reports relative to their use in the preparation of the EIR.

Snowcreek 7 – Preliminary Biological Assessment

The *Snowcreek 7 – Preliminary Biological Assessment* provides a description of the existing biological conditions and determines whether special-status species and sensitive habitats occur or may potentially occur on the Snowcreek 7 project site. This parcel is the northernmost parcel (APN 40-040-20) included in Snowcreek VIII Project, located on north side of Old Mammoth Road. The project site defined in this assessment generally encompasses only the southwestern 18.3 acres of the 38.4-acre parcel south of Golden Creek Road; proposed development in this area has already been approved. However, none of the vegetation types and wildlife habitats (e.g., Mammoth Creek and associated riparian corridor, seasonal wetlands, meadow) present on the remainder of the parcel north of Golden Creek Road were characterized, mapped, and evaluated for their potential to support special-status species or sensitive habitats. Additional work has been conducted during preparation of the EIR to describe the other vegetation types present, to assess the potential for these habitats to support special-status plants and animals or sensitive habitats, and to evaluate potential project impacts to the biological resources on this parcel. This parcel supports two sensitive plant communities (willow-alder riparian and wet meadow), jurisdictional wetlands and waters, and has the potential to support nine special status plants and four special status animals (all associated with the wet meadow, riparian, and/or open water in Mammoth Creek and the connected ponds). Although a majority of this parcel will remain undeveloped as permanent open space, thereby avoiding most potential adverse impacts to sensitive biological resources, remaining potential project impacts include disturbance from construction activities, increased recreational use, increased lighting and noise.

Snowcreek Area 7 Wetland Delineation Report

The *Snowcreek Area 7 Wetland Delineation Report* identifies potentially jurisdictional waters and wetlands on the 38.4-acre parcel (APN 40-040-20) located on the north side of Old Mammoth Road. The USACE verified this wetland delineation on February 1, 2006[6]. Unless conditions on the parcel substantially change, the delineation is valid for a five-year period. Based on our field reconnaissance, the approved delineation is accurate. Copies of the wetland delineation map stamped by the USACE will be needed in the preparation of the EIR.

Snowcreek 8 – Biological Assessment and Snowcreek 8 – Addendum to Biological Assessment

The *Snowcreek 8 – Biological Assessment* and *Snowcreek 8 – Addendum to Biological Assessment* provide a description of the existing biological conditions on the project site, determine the potential for special-status species and sensitive habitats to occur within the project site, identify potential impacts to biological resources that may occur as a result of the project, and provide avoidance and mitigation measures to reduce these impacts. Even though these reports address all seven parcels (APNs 40-070-23, 40-070-13, 40-070-10, 40-070-11, 40-070-12, 40-140-04, 40-140-05) located on the south side of Old Mammoth Road that are included in the Snowcreek VIII Project, our review indicates that this assessment does not provide: 1) a complete list of special-status plants and animals that have the potential to occur on-site; 2) an adequate identification and evaluation of migratory deer holding area on and adjacent to the site; 3) an accurate identification of the vegetation communities present on-site; or 4) a comprehensive assessment of the potential effects of the proposed project on biological resources and associated recommendations to minimize and mitigate for those effects.

[5] Town of Mammoth Lakes. 2005. Revised Draft Program Environmental Impact Report for the Town of Mammoth Lakes 2005 General Plan Update.

[6] U.S. Army Corps of Engineers, Letter to Chadmar Group, Resource Concepts, Inc.. February 1, 2006. File Number 200600051-BAH.

The project site defined in the *Snowcreek 8 – Biological Assessment* only encompassed five of the seven parcels (APNs 40-070-10, 40-070-11, 40-070-12, 40-140-04, 40-140-05) located on the south side of Old Mammoth Road that are included in Snowcreek VIII Project; this report identified and mapped the vegetation types on these parcels. Although the *Addendum to Biological Assessment* addressed the two remaining parcels (APNs 40-070-23, 40-070-13) containing the existing golf course and associated ponds, this report did not characterize or map the vegetation types or wildlife habitats present on these parcels; additional work has been conducted during preparation of the EIR to describe and map these other vegetation types.

Although we agree with the majority of the special status species potential for occurrence determinations for this area as noted in the *Biological Assessment* and *Addendum*, during the background information search several additional species were identified that have the potential to occur on these parcels. One special status plant species (Masonic rock cress) and two special status animals (western white-tailed jackrabbit and American badger) were determined as potentially occurring within the development area in the basin sagebrush and grassland habitats. The existing golf course ponds also have the potential to support an additional special status animal species, Yosemite toad. Additional work has been conducted during preparation of the EIR to describe the other vegetation types present, to assess the potential for these habitats to support special-status plants and animals or sensitive habitats, and to evaluate potential project impacts to the biological resources on this parcel.

The *Biological Assessment* states that no deer migratory routes are present on the project site, and that the nearest route passes south of the project site. However, previous environmental documents prepared for the site and adjacent areas (Sherwin Ski Area EIS, Snowcreek Land Exchange EA, Snowcreek Golf Course Expansion EIS) indicate that a portion of the proposed golf course contains habitat that is used by the Round Valley herd as a holding area, which is a critical area used during deer migration. Potential project impacts from the removal of habitat within the holding area and potential disturbance to deer using the migratory corridor immediately south of the site were not evaluated in the *Biological Assessment.* Additional work has been conducted during preparation of the EIR to evaluate potential impacts to deer migration by the project.

Several vegetation communities identified in the *Biological Assessment* do not conform to the source cited in the report, the U.S. Forest Service's CALVEG system. For example, the "meadow" vegetation community cited in the *Biological Assessment* is not included in the CALVEG system; this area has been reclassified as "perennial grasses and forbs" based on the plant species composition in order to match the CALVEG system. Also, "developed/disturbed" is not included in CALVEG; although, "developed" is included in CALVEG, it is defined differently than in the *Biological Assessment* to only include areas that are "dominated by urban structures, residential units, or other developed land use elements such as highways, city parks, cemeteries." Therefore, some areas formerly identified as "developed/disturbed" have been reclassified as "annual grasses and forbs" based on the plant species composition in order to match the CALVEG system. The "retention basins" have also been reclassified as "barren" per the CALVEG system definitions.

Lastly, the evaluation of potential project biological impacts was not comprehensive. Although checklist items from Appendix G of the CEQA Guidelines were included as Standards of Significance in the "Impacts and Mitigation" section of the report, only two impacts were identified and no further explanations were provided addressing all of the standards of significance. For example, consistency of the project with local, state, and federal policies and regulations protecting biological resources (such as wildlife foraging habitat, protected trees or "waters of the State") was not addressed. A detailed analysis of all project impacts on biological resources will need to be completed, including quantification of impacts in acres, and appropriate mitigation measures will need to be developed for any additional significant impacts identified during preparation of the EIR. However, the mitigation measures included in the assessment report for the two identified impacts are appropriate and adequate to reduce those impacts to less-than-significant levels.

Identification/Delineation of Wetlands on a Portion of Snowcreek Resort Property in Mammoth Lakes (Mono County), California

The above referenced report identifies potentially jurisdictional waters and wetlands on five of the seven parcels located on the south side of Old Mammoth Road that are included in Snowcreek VIII Project. The delineation did not include the two parcels containing the existing golf course. The USACE confirmed the absence of jurisdictional areas on July 8, 2003[7]; such determinations generally remain valid (at the discretion of the Corps) provided that site conditions do not change substantially. Based on our field reconnaissance, the site conditions have not changed. The existing ponds and connected drainages on the golf course were not part of this delineation; although these areas are currently excluded from the proposed development area, a discussion of their potential jurisdictional status will still need to be addressed in the EIR regarding potential indirect project impacts to these features.

In summary, issues that arose during our peer review that required additional analysis outside of CAJA's scope of work in order to be fully addressed in the EIR include:

1. Identification of vegetation communities, sensitive habitats, and potential occurrence of special status species on the northeastern portion of the parcel north of Old Mammoth Road;
2. Evaluation of the potential for additional special status species to occur on the parcel south of Old Mammoth Road, including the existing golf course (ponds);
3. Assessment of potential impacts to deer migration, including the critical holding area;
4. Assignment of proper CALVEG community type descriptions to several vegetation communities identified on-site, including identification and mapping of vegetation types on the existing golf course parcels; and
5. Comprehensive analysis of project impacts to other biological resources such as protected trees and any associated mitigation measures recommended to reduce significant impacts (other than those identified in the Snowcreek VIII Biological Assessment).

If you have any questions regarding the results of our peer review or require additional information, please do not hesitate to contact either Shannon Lucas at (310) 473-1600 or Aindrea Jensen at (707) 283-4040.

[7] U.S. Army Corps of Engineers, Letter to Dempsy Construction Corporation. July 8, 2006.

Denise Duffy & Associates, Inc.
PLANNING AND ENVIRONMENTAL CONSULTING

July 17, 2007

Bill Taylor
Town of Mammoth Lakes
P.O. Box 1609
Mammoth Lakes, Ca. 93546

Dear Mr. Taylor,

On behalf of our client, Snowcreek Investment Company, we have done the following research in reference to trees and the results are as follows:

We have conducted a survey of trees currently located on the Snowcreek VIII parcels identified in the Draft Environmental Impact Report. We have listed below a summary of all trees of a 6-inch diameter or greater:

Native/Naturally-occurring trees - 22
- 20 located on the 94-acre exchange parcel
- 2 located at the northwest corner of Old Mammoth Road and Minaret

Non-native/Ornamental trees – mostly Blue Spruce planted previously for landscaping purposes
- 84 located near Snowcreek Sales Office, near Chadmar Development office, along Fairway Drive, and at northwest corner of Old Mammoth Road and Minaret

It is the intent of the developer that all Native/Naturally-occurring trees remain onsite in their current location, subsequent to an arborist's review of the health and status of the tree. If an arborist determines that the tree needs to be removed for public safety purposes, then the tree will be so removed.

It is the intent of the developer that to the extent possible, the Non-native/Ornamental trees will be retained on site. This will be done by leaving the trees in place where they do not interfere with the proposed design or transplanting the trees to the extent possible. These trees will also be subject to review by an arborist of their health and current condition as well as likelihood to survive relocation.

Please feel free to contact me if you have any questions or require any additional information.

Sincerely,

Erin Harwayne
Senior Environmental Scientist
DENISE DUFFY & ASSOCIATES, INC.