SENSITVE PLANT SPECIES AND NOXIOUS WEED ASSESSMENT

Boulder Bay Project

CRYSTAL BAY, NV

Prepared for:

Boulder Bay
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June 30, 2009

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1.0. INTRODUCTION

This report summarizes vegetation survey results for the proposed Boulder Bay Resort in Crystal Bay, Lake Tahoe, Nevada. The proposed project is located on private land, including the existing Tahoe Biltmore and the old Tahoe Mariner site. The survey addressed special interest, proposed, endangered, threatened, and sensitive plant species as well as noxious and invasive species. Special interest species include those identified by the Tahoe Regional Planning Agency (TRPA), and the State of Nevada (Nevada Natural Heritage Program Department of Conservation and Natural Resources) and the United States Forest Service (USFS) - Lake Tahoe Basin Management Unit (LTBMU) that have the potential to be present in the proposed project area. Noxious and invasive weed species are those identified by the Nevada Department of Agriculture and the LTBMU.

Threatened and endangered species are managed under the authority of the Federal Endangered Species Act (PL 93-502, as amended) and the National Forest Management Act (PL 94-588). The Endangered Species Act requires federal agencies to ensure that all actions are not likely to jeopardize the continued existence of any threatened and/or endangered species. It also includes species identified or proposed for listing by the U.S. Department of the Interior, Fish and Wildlife Service (BA) and species designated as sensitive by the Regional Forester (BE) as well as those identified by the TRPA in accordance with the standards established in the TRPA Code of Ordinances (Chapter 78.3C).

The survey included special-status vascular and non-vascular species. All species encountered were identified to the lowest taxonomic level possible.

2.0. ENVIRONMENTAL SETTING

The project occurs just west of Crystal Bay and SR 28. The area is mountainous with a semi-arid climate. Annual precipitation occurs mostly in the form of winter snow and/or spring rain. Summers typically are dry and warm, with average daytime temperatures in the 80-degree (F) range. Elevation of the project area is approximately 6,500 feet. Native vegetation can be described as Sierra Nevada chaparral/Jeffrey pine/mixed conifer.

3.0. CONSULTATION TO DATE

3.1. Potential special interest, proposed, endangered, threatened, and sensitive plant species

The LTBMU web site, updated in January of 2009 was consulted prior to the June survey to obtain a current list of special interest, threatened, endangered, proposed, and candidate species that may be present withihn the proposed project area (Table 1.)

Table 1. Listing of special status plant species in the Lake Tahoe Basin (source: LTBMU January 2009)

LTBMU Sensitive Species								
Scientific Name	**Common Name**	**LTBMU**	**FED List**	**CA/NV State List**	**CNPS**	**TRPA**	**Pottential Habitat**	**Habitat**
Arabis rectissima	Washoe Trail rock cress	LSI					No	Jeffrey pine-fir forest on gentle slopes, in gently disturbed areas, on sandy granitic or andesitic soils; 7,021 – 10,020' elevation. Blooms June-July.
Arabis rigidissima var demote	Galena Creek rock cress	S			1B.2		Yes	Species is found in open, rocky areas along forest edges of conifer and/or aspen stands. Usually found on northerly aspects above 7,500 feet (ft). Blooms August.
Arabis tiehmii	Tiehm's rock cress	S			1B.3		No	Open rocky soils in the Mt. Rose Wilderness.
Botrychium ascendens	Upswept moonwort	S			2.3		No	*Botrychium* species share similar preferences in habitat, *i.e.* wet or moist soils such as marshes, meadows, and along the edges of lakes and streams at elevations between 4,700 and 9,000 ft. They generally occur with mosses, grasses, sedges, rushes, and other riparian vegetation. Fertile July – early September.
Botrychium crenulatum	Scalloped moonwort	S			2.2		No	See above
Botrychium lineare	Slender moonwort	S			1B.3		No	See above
Botrychium lunaria	Common moonwort	S			2.3		No	See above
Botrychium minganense	Mingan moonwort	S			2.2		No	See above
Botrychium montanum	Western goblin	S			2.1		No	See above
Bruchia bolanderi	Bolander's candle moss	S			2.2		No	Montane meadows and stream banks are favored habitat. This moss tends to grow on bare, slightly eroding soil where there is little competition from other vegetation.
Draba asterophora var asterophora	Tahoe draba	S			1B.3	SI	No	Species is found in rock crevices and open granite talus slopes at high elevations between 8,000 to 10,200 ft on north-east facing slopes. Blooms July – September.
Draba asterophora var macrocarpa	Cup Lake draba	S			1B.3	SI	No	This species is found on steep, gravelly or rocky slopes at elevations of 8,400 to 9,235 ft. Blooms July – August.
Epilobium howellii	Subalpine fireweed	S			1B.3		No	Plants found in wet meadows and mossy seeps at 6,500 to 9,000 ft in subalpine coniferous forest. Blooms July –

LTBMU Sensitive Species								
								August.
Erigeron miser	Starved daisy	S			1B.3		No	Plants found at high elevation granitic rock outcrops above 6,000 ft. Blooms June – October.
Eriogonum umbellatum var. torreyanum	Torrey's or Donner Pass buckwheat	S			1B.2		No	This species grows in dry gravelly or stony sites, often on harsh exposures such as ridge tops or steep slopes. Blooms July – September.
Helodium blandowii	Blandow's bog moss	S			2.3		No	Habitat for this moss is in bogs and fens, wet meadows, and along streams under willows.
Hulsea brevifolia	Short-leaved hulsea	S			1B.2		Yes	This species is known primarily from red fir forests, but has also been found in mixed conifer forests. The elevational range of the plant is between 4,920 to 8,860 ft. Blooms May – August.
Lewisia kelloggii ssp.hutchisonii	Kellogg's lewisia	S			3.3		No	Habitat for this plant occurs on ridge tops or flat open spaces with widely spaced trees and sandy granitic to erosive volcanic soil from about 5,000 to 7,000 ft.
Lewisia kelloggii ssp kelloggii	Kellogg's lewisia	S					No	See above
Lewisia longipetala	Long-petaled lewisia	S			1B.3	SI	No	This species occurs on the northerly exposures on slopes and ridge tops at elevations between 8,000 and 12,500 ft where snow banks persist throughout the summer. The plants are often found near the margins of the snow banks in wet soils. Blooms July – August.
Meesia longiseta	Long-stalked hump moss	LSI					No	This speceis is distinguished from *M. triquetra* by the entire leaf margins, synoicus sexual conditions, and leaves generally more slender. It occurs in similar habitats.
Meesia triquetra	Three-ranked hump-moss	S			2.2		No	This moss prefers bogs and fen habitats, but is also found in very wet meadows.
Meesia uliginosa	Broad-nerved hump-moss	S			2.2		No	This moss often prefers dry microclimate near bogs and fen habitats, but is also found in very wet meadows.
Myurella julacea	Myurella moss	LSI					No	This species occurs on shaded, damp cliffs and in crevices and ledges
Orthotrichum praemorsum	Orthotrichum moss	LSI					No	Saxicolous, acrocarpous moss characterized by its hygroscopic leaves and non-arctic habitat; found in the Lake Tahoe areas in 1955
Orthotrichum shevockii	Shevock's moss	LSI					No	Ersect, small dark green tufts on dry granitic boulders. Leaves 5 mm long, Highly papillose leaf cells. Has been found at Lake Tahoe and up Voltaire Canyon near Carson City.
Orthotrichum	Spjut's	LSI					No	Sierra Nevada endemic. Saxicolous, acrocarpous moss

LTBMU Sensitive Species								
spjutii	bristlemoss							occurring on rocks and crevices with indirect light.
Peltigera hydrothyria	Veined water lichen	S					No	This species is found in cold unpolluted streams in mixed conifer forests.
Pohlia tundrae	Tundrae pohlia moss	LSI					No	A mesic alpine tundra moss. Forms dense, compact mats on soil with a distinct gloss when dry.
Rorippa subumbellata	Tahoe yellow cress	S	CE	E / CE	1B.1	SI	No	This species is endemic to the shorezone around Lake Tahoe in California and Nevada. Typically found in back beach areas between elevations of 6,223 and 6,230 ft. Blooms May – September.
Sphagnum spp.	Sphagnum	LSI					No	Usually grows in wet places

S = USFS LTBMU Sensitive Species, Regional Forester's Sensitive Species List, Region 5
LSI = USFS LTBMU Species of Interest
SI = TRPA Special Interest Species, Regional Plan for the LTBMU: Goals and Policies (1986) and Code of Ordinances (1987)

CA State List
R = rare T = threatened E = endangered
NV State List
CE = Nevada Critically Endangered
Fed List:
CE = Candidate for Endangered
SC = Species of concern
CNPS List
1A = presumed extinct in CA, 1B = Rare or Endangered in CA and elsewhere
2 = Rare or Endangered in CA but more common elsewhere
3 = Plants need more information - Review list
4 = Plants of limited distribution - Watch List
CNPS Threat Code extensions
.1 - Seriously endangered in CA (over 80% of occurrences threatened / high degree and immediacy of threat)
.2 - Fairly endangered in CA (20-80% occurrences threatened)
.3 - Not very endangered in CA (<20% of occurrences threatened or no current threats known)

3.2. FSM 2670.31 Threatened and Endangered Species

1. Place top priority on conservation and recovery of endangered, threatened, and proposed species and their habitats through relevant National Forest System, State and Private Forestry, and Research activities and programs.
2. Establish through the Forest planning process objectives for habitat management and/or recovery of populations, in cooperation with States, the Fish and Wildlife Service (FWS), and other Federal agencies.
3. Through the biological evaluation process, review actions and programs authorized, funded, or carried out by the Forest Service to determine their potential for effect on threatened and endangered species and species proposed for listing.
4. Avoid all adverse impacts on threatened and endangered species and their habitat except when it is possible to compensate adverse effect totally through alternatives identified in a biological opinion rendered by the FWS; when an exemption has been granted under the act, or when the FWS biological opinion recognizes an incidental taking. Avoid adverse impacts on species proposed for listing during the conference period and while their Federal status is being determined.
5. Initiate consultation or conference with the FWS when the Forest Service determines that proposed activities may have an adverse effect on threatened, endangered, or proposed species or when Forest Service projects are for the specific benefit of a threatened or endangered species
6. Identify and prescribe measures to prevent adverse modification or destruction of critical habitat and other habitats essential for the conservation of endangered, threatened, and proposed species. Protect individual organisms or populations from harm or harassment as appropriate.

3.3. FSM 2670.32 Sensitive Species

1. Assist States in achieving their goals for conservation of endemic species.
2. As part of the National Environmental Policy Act process, review programs and activities through a biological evaluation to determine their potential effect on sensitive species.
3. Avoid or minimize impacts to species whose viability has been identified as a concern.
4. If impacts cannot be avoided, analyze the significance of potential adverse effects on the population or its habitat within the area of concern and on the species as a whole.
5. Establish management objectives in cooperation with the States when a project on National Forest System lands may have a significant effect on sensitive species population numbers or distribution. Establish objectives for Federal candidate species, in cooperation with the FWS and the States.

4.0. FIELD METHODOLOGY

On June 23 Botanist Julie Etra and a technical assistant performed field surveys within the boundaries of the proposed project area, as shown on maps provided by Boulder Bay, and as delineated in the field by Brian Helm, the Project Manager. This was an optimum time for maximum species identification. The survey was conducted on foot, traversing the proposed project area along transects roughly 10 feet apart except where vegetation was very dense. Much of the site, particularly where the former Tahoe Mariner was located, was highly disturbed. Terrain varied from vertical and steep slopes to flat areas. Ornamental species were not included in the survey.

5.0. RESULTS

'A Manual of California Vegetation' (Sawyer and Keeler-Wolf, 1995) describes one potential community type for this project area, the Jeffrey pine series, where Jeffrey pine is the dominant species in the overstory. The series they describe also includes a number of species not found on the proposed project site, so there is no close match in their text. A species list for the proposed project area is included in Table 2. Ornamental species were not included in the survey.

No special interest, proposed, endangered, threatened, and sensitive plant species were located and only two species, *Hulsea brevifolia* and *Arabis rigidissima var demota* had potential habitat. Neither species was located.

No State-listed noxious weeds were located. *Bromus tectorum*, an LTBMU invasive species, was scattered throughout the project area along right-of-ways and disturbed areas and was particularly dense at the 'restored' Tahoe Mariner site. Scattered mullein plants consisted of approximately 20 ft.². Undisturbed sites of native vegetation were substantially weed free.

Table 2. Species identified in the project area October 2008 and May 2009

FAMILY	SCIENTIFIC NAME	COMMON NAME
Asteraceae	*Achillea millefolium*	Yarrow
	Anaphalis margaritacea	Pearly everlasting
	Artemisia tridentata ssp. vaseyana	Mtn. sage
	Chrysothamnus nauseosus	Rabbitbrush
	Lactuca seriola	Prickly lettuce
	Madia glomerata	Tar weed
	Tragopopon dubius	Oyster plant
Boraginaceae	*Cryptantha affinis*	Cryptantha
Brassicaceae	*Arabis holboellii*	Holboell's rockcress
	Descurainia pinnata	Tansy mustard
	Lepidium densiflorum	Common pepperweed
	Sysimbrium altissimum	Tumble mustard
Caprifolicaceae	*Symphoricarpos mollis*	Creeping snowberry
Cyperaceae	*Carex sp.*	Sedge
Ericaceae	*Arctostaphylos patula*	Green-leaf Manzanita
Fabaceae	*Lathyrus latifolius*	Perennial pea
	Lotus nevadensis	Nevada bird's foot trefoil
	Lupinus sp.	Lupine
	Melilotus sp	Sweet blossom clover
Fagaceae	*Quercus vaccinifolia*	Huckleberry oak
Grossulariaceeae	*Ribes cereum*	Wax currant
Juncaceae	*Juncus balticus*	Baltic rush
Onagraceae	*Gayophytum diffusum*	Ground smoke
Pinaceae	*Abies concolor*	White fir
	Pinus jeffreyi	Jeffrey pine
	Pinus lambertiana	Sugar pine
Poaceae	*Agropyron cristatum*	Crested wheatgrass
	Bromus tectorum	Cheatgrass
	Bromus inermis	Smooth brome
	Dactylis glomerata	Orchardgrass
	Elymus elymoides var. *elymoides*	Squirreltail
	Elytrigia intermedia	Intermediate wheatgrass
	Festuca arundinacea	Tall fescue
	Hordeum jubatum	Foxtail barley
Polygonaceae	*Eriogonum nudum*	Naked buckwheat
	Eriogonum umbellatum .	Sulphur buckwheat
Rhamnaceae	*Ceanothus cordulatus.*	Whitethorn
	Ceanothus prostratus	Squawcarpet
	Ceanothus velutinus	tobaccobrush
Rosaceae	*Potentilla glanduosa*	Sticky ccinquefoil
	Prunus emarginata	Bittercherry

	Purshia tridentata	Bitterbrush
Salicaceae	*Salix lemmoni*	Lemmon's willow
	Salix scouleriana	Scouler's willow
Scrophulareaceae	*Verbascum thapsus*	Mullein

REFERENCES

California Department of Fish and Game Natural Diversity Data Base. California Department of Fish and Game. August 2004.

Cronquist, Arthur., Holmgren, Arthur H., Holmgren, Noel H., Reveal, James L., Holmgren, Patricia K.. 1989. *Intermountain Flora, Vascular Plants of the Intermountain West, U.S.A.* New York Botanical Garden, Bronx, New York.

Hickman, James C., Editor. 1993. *The Jepson Manual of Higher Plants of California.* University of California Press. Berkeley and Los Angeles, CA.

Kartesz, John Thomas. 1987. *A Flora of Nevada.* PhD Dissertation, University of Nevada, Reno.

Mozingo, Hugh N. and Margaret Williams. 1980. *Threatened and Endangered Plants of Nevada*. U.S. Department of the Interior Fish and Wildlife Service and U.S. Department of the Interior Bureau of Land Management.

Munz, Philip A. 1968. *A California Flora*. University of California Press. Berkeley and Los Angeles, California.

Sawyer, J.O. and T. Keeler-Wolf, 1995. *A Manual of California Vegetation*. California Native Plant Society, Sacramento, California.

State of Nevada, Nevada Natural Heritage Program, Department of Conservation and Natural Resources.

Tiehm, A. 1989. *Status report for Arabis rigidissima var. demota*. Reno, NV, December.

Tahoe Regional Planning Agency, 1988. *Water Quality Management Plan for the Lake Tahoe Region, Volume III. SEZ Protection and Restoration Program*.

Weixelman, Dave and Duane Atwood. *Toiyabe National Forest Sensitive Plant Field Guide.* United States Department of Agriculture, Forest Service Intermountain Region.

APPENDIX 1

Noxious Weed Risk Assessment Form

Noxious Weed Risk Assessment
for the Boulder Bay Redevelopment Project
on the Lake Tahoe Basin Management Unit

Prepared by: Julie Etra Date: 6/30/09

Approved by: _____ Date: _____

NOXIOUS WEED RISK ASSESSMENT DIRECTION

The Sierra Nevada Forest Plan Amendment (SNFP) outlines the direction for completing a noxious weed risk assessment (SNFP Appendix L). In addition, the Forest Service Manual (FSM) 2080 Noxious Weed Management (effective 11/29/1995) includes a policy statement calling for a risk assessment for noxious weeds to be completed for every project. Specifically, the manual states:

2081.03 Policy. When any ground disturbing action or activity is proposed, determine the risk of introducing or spreading noxious weeds associated with the proposed action.

1. For projects having moderate to high risk of introducing or spreading noxious weeds, the project decision document must identify noxious weed control measures that must be undertaken during project implementation.

2. Make every effort to ensure that all seed, feed, hay, and straw used on National Forest System lands is free of noxious weed seeds (FSH 6309.12, sec. 42 and 42.1).

3. Where States have enacted legislation and have an active program to make weed-free forage available, Forest Officers shall issue orders restricting the transport of feed, hay, straw, or mulch which is not declared as weed-free, as provided in 36 CFR 261.50(a) and 261.58(t).

4. Use contract and permit clauses to prevent the introduction or spread of noxious weeds by contractors and permittees. For example, where determined to be appropriate, use clauses requiring contractors or permittees to clean their equipment prior to entering National Forest System lands.

2081.2 Prevention and Control Measures. Determine the factors which favor establishment and spread of noxious weeds and design management practices or prescriptions to reduce risk of infestation or spread of these species.

PROJECT DESCRIPTION (brief description or attach)
The Boulder Bay Project consists of eight new structures for residential, gaming and commercial uses, underground parking facilities, a pedestrian village, community park and open space, and an integrated on-site stormwater treatment system. The proposal is a mixed-use development that consists of the following uses:

- 300 tourist accommodation units (hotel);

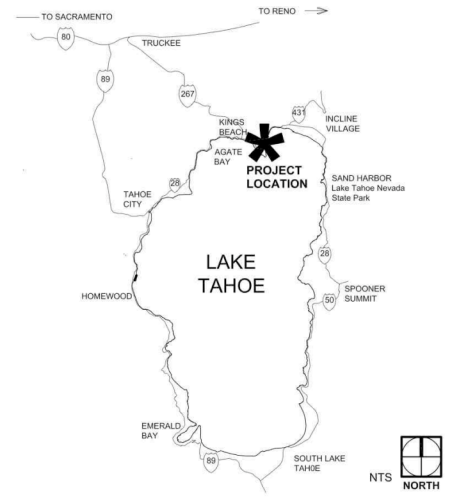
- 59 whole ownership condominiums;
- 14 affordable housing units (up to 38 total bedrooms);
- 20,715 square feet of commercial floor area (includes 12,172 square feet of retail and 8,853 square feet of dining within a two-acre public gathering space and pedestrian village);
- 89,187 square feet of hotel and casino accessory uses (19,089 square foot health and wellness center; 9,860 square foot fitness center; 21,253 square foot convention and meeting space; 1,665 square foot day care center; 1,500 square foot retail/bar; 3,680 square foot restaurant; and approximately 32,158 square feet of lobby area, mechanical, electrical and plumbing space, and administrative services)
- 10,000 square feet of casino (reduced from 29,744 square feet of NTRPA certified gaming area);
- 5.7 acres of open space with 4.31 acres designated for two public parks to be built and maintained by Boulder Bay.

The project also includes the realignment of Wassou and Reservoir Roads, with a new site circulation utilizing two new roads – Wellness Way and Boulder Way. Existing utilities will be improved and realigned and all utilities will be located underground.

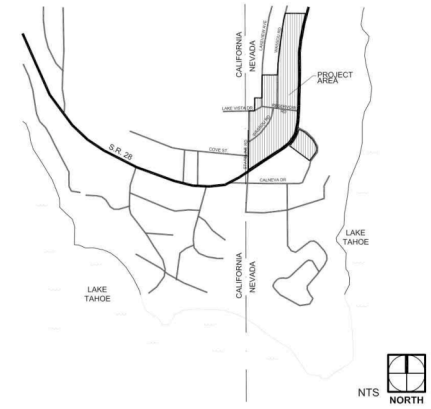
PROJECT LOCATION (legal description; see project map)

The proposed Boulder Project (Boulder Bay Project) is located in Crystal Bay, NV adjacent to the California/Nevada state line (Figure S-1). The project area is bound by State Route 28 to the east, southeast, and south; Stateline Road to the west; and Wassou and Lakeview Road to the northwest. The Crystal Bay Club Casino, Jim Kelley's Nugget Casino, Cal Neva Resort Hotel & Casino, and the Crystal Bay Office Building border the project area to the south, across State Route 28. Commercial Buildings, Residential housing units and open forestlands are located to the west, north and east of the project area.

Project Location Map



Vicinity Map



RISK ASSESSMENT

A. Inventory (describe survey conducted and complete table below):

A survey of the project site was conducted by Western Botanical Services Inc. on June 23, 2009.

Table 1. Potential noxious and invasive weed species in or near the project area

Common Name	Scientific Name	LTBWCG	CDFA	NDA	SNFPA	Species Present ? Y or N	Gross Area of the Infestation (sq. ft.)
Cheatgrass	*Bromus tectorum*				NW	Y	Scattered throughout proposed project area
Hoary cress	*Cardaria draba*	Group 1	B	C	NW	N	
Musk thistle	*Carduus nutans*	Group 1	A	B	NW	N	
Purple starthistle	*Centaurea calcitrapa*	Group 1	B	A	NW	N	
Diffuse knapweed	*Centaurea diffusa*	Group 1	A	B	NW	N	
Spotted knapweed	*Centaurea maculosa*	Group 2	A	A	NW	N	
Russian knapweed	*Centaurea repens*	Group 1		B		N	
Yellow starthistle	*Centaurea solstitialis*	Group 1	C	A	NW	N	
Squarrose knapweed	*Centaurea squarrosa*	Group 1	A	A	NW	N	
Rush skeleton	*Chondrilla juncea*	Group 1	A	A	NW	N	
Canada thistle	*Cirsium arvense*	Group 1	B	C	NW	N	
Bull thistle	*Cirsium vulgare*	Group 2	C		NW	N	
Field Bindweed	*Convolvulus arvensis*		C		NW	N	
Scotchbroom	*Cytisus scoparius*	Group 2	C		NW	N	
Teasel	*Dipsacus fullonum*	Group 1				N	
St. John's wort/ Klamath weed	*Hypericum perforatum*	Group 1	C	A	NW	N	
Tall whitetop/Perennial pepperweed	*Lepidium latifolium*	Group 2	B	C	NW	N	
Ox eye daisy	*Leucanthemum vulgare*	Group 2			NW	N	
Dalmatian toadflax	*Linaria dalmatica*	Group 2	A	A	NW	N	
Yellow toadflax	*Linaria vulgaris*	Group 2		A		N	
Eurasian watermilfoil	*Myriophyllum spicatum*	Group 2	C	A	NW	N	
Scotch thistle	*Onorpordum acanthium*	Group 1	A	B	NW	N	
Curlyleaf pondweed	*Potamogeton crispus*	Group 1				N	
Sulfur cinquefoil	*Potentilla recta*	Group 1	Q	A		N	
Perennial Sowthistle	*Sonchus arvensis 1.*		A	A		N	
Woolly mullein	*Verbascum thapsus*				NW	Y	20

Management Status Explanations
Lake Tahoe Basin Weed Coordination Group (LTBWCG) prioritizes invasive weeds of concern by management group. Group 1: watch for, report, and eradicate immediately. Group 2: manage infestations with the goal of eradication.

The Nevada Department of Agriculture (NDA) noxious weed list divides noxious weeds into categories A, B, and C. For A-listed weeds, control is required by the state in all infestations. B-listed weeds are actively excluded wherever possible, and control required by state in areas where populations are not well established or previously unknown to occur. C-listed weeds will be abated at the discretion of the state quarantine officer.
The Sierra Nevada Forest Plan Amendment (SNFPA) lists noxious weeds as NW.

B. Habitat Vulnerability (vegetative cover types, previous disturbance, soil cover, shade, soil type, aspect/slope): Habitat is Sierra chaparral with Jeffrey pine (*Pinus jeffreyi*) in the overstory. Shrubs include Bitterbrush (*Purshia tridentata*), Greenleaf manzanita (*Arctostaphylos patula*), and species of *Ceanothus.* Any new disturbance and importation of materials and equipment can result in new occurrences and spread of cheatgrass and mullein. The former Tahoe Mariner site has the most dense infestation of cheatgrass and other ruderal species.

C. Non-project Dependent Vectors (existing roads and trails, traffic use, livestock/wildlife migration, wind patterns, drainage flow direction):

Traffic and people are non-project vectors. Wind can also spread weed seed.

D. Habitat Alteration Expected as a Result of the Project:

Some minor habitat alteration will occur as a result of project construction.

E. Increased Vectors as a Result of Project Implementation:

Construction equipment and disturbance can result in increased spread of cheatgrass.

F. Mitigation Measures (prevention and control): All measures listed below will be implemented. Prevention will include tight seeding specifications that will not allow for seed of weed species. Mycorrhiza should be used to enhance native plant establishment and limit weed species. Sue Donaldson at UNR Cooperative Extension will be contacted for guidance regarding the most current techniques for cheatgrass control. Current research is examining the use of plant pathogens (smuts) to control the plant in early stages of growth, but no specific treatments are available to the public. Mullein can be physically removed, especially prior to seed set. Use of herbicides is restricted due to vicinity of the Lake Tahoe.

1 All off-road equipment and vehicles used for project implementation are required to be weed-free. All equipment and vehicles will be cleaned of all attached mud, dirt, and plant parts. This will be done at a vehicle washing station or steam cleaning facility (power or high-pressure cleaning) before the equipment and vehicles enter the project area on National Forest System lands, and before vehicles enter the Basin (if they originate from outside the Basin).

2 All earth-moving equipment, gravel, fill, or other materials are required to be weed-free. Use onsite sand, gravel, rock, or organic matter when possible. Otherwise, obtain weed-free materials from gravel pits and fill sources that have been surveyed and approved by Nevada Department of Agriculture or by a botanist or ecologist at the Lake Tahoe Basin Management Unit.

3 Minimize the amount of ground and vegetation disturbance in the construction areas. Reestablish vegetation on all disturbed bare ground to minimize weed establishment and infestation. Delineate project area with flagging or other approved methods.

4 Use weed-free equipment, mulches, and seed sources. Salvage topsoil from project area for use in onsite revegetation, unless contaminated with noxious weeds. All activities that require seeding or planting must utilize locally collected native seed sources when possible. Plant and seed material should be collected from or near the project area, from within the same watershed, and at a similar elevation when possible. Persistent non-natives such as *Phleum pratense* (cultivated timothy), *Dactylis glomerata* (orchard grass), or *Lolium* spp. (ryegrass) will not be used. This requirement is consistent with the USFS Region 5 policy that directs the use of native plant material for revegetation and restoration for maintaining "the overall national goal of conserving the biodiversity, health, productivity, and sustainable use of forest, rangeland, and aquatic ecosystems". Seed mixes must be approved by a Forest Service botanist.

5 Staging areas for equipment, materials, or crews will not be sited in weed infested areas.

6 Weed infestations identified before project implementation that are within the project area or along travel routes near the project area will be hand treated or "flagged and avoided" according to the species present and project constraints.

7 The project area will be monitored by Boulder Bay for three (3) years subsequent to project implementation to ensure weeds do not become established in the areas affected by the projects. Annual reporting will be submitted to the noxious weed coordinator to ensure compliance. If noxious weeds are found, the noxious weed coordinator on the LTBMU will be notified immediately.

G. Anticipated Weed Response to Proposed Action:

Factors	Current condition	Risk
Weed spread factors not connected to Proposed Action (pre-existing circumstances)		
A. Inventory	NA	High
B. Habitat vulnerability	NA	Moderate
C. Non-project dependent vectors	NA	Moderate
D. Habitat alteration expected as a result of the project	NA	Moderate
E. Increased vectors as a result of project implementation	NA	High
F. Mitigation measures	See above	See above
G. Anticipated weed response to proposed action	NA	High

The overall risk of invasive weed spread is high. In addition:

1 Seed and other revegetation and construction materials forbid noxious weeds
2 Protocol listed above will be followed to prevent the establishment of invasive species.

SUMMARY (include overall risk assessment)

Risk of spread of cheatgrass is high.

Mollie Hurt
1027 Turnback Trail
South Lake Tahoe, CA 96150
530-544-9902
vikingharrier@yahoo.com

Boulder Bay, LLC
PO Box 37
22 Highway 28, Suite 201
Crystal Bay, NV 89402

15 June 2009

Re: Boulder Bay-Wildlife Survey

Dear Brian**,**

The first year of the Boulder Bay wildlife survey was completed on 14 June 2009. No active raptor nests or migratory bird nests were detected. Attached is a list of bird species detected within the project boundary. This survey was conducted to partially accomplish the following item required by the TRPA EIS:

1. Pre-construction survey conducted during nesting season shall be conducted to identify any active raptor nests or migratory bird nests within the construction area.

In 2010, I will conduct a survey during the nesting season immediately prior to initial project construction (e.g., excavation and tree removal), to identify any active raptor or migratory bird nest sites within the project area. If you have any questions regarding this survey, I can be reached at 530-544-9902.

Sincerely,

Mollie Hurt

Boulder Bay Wildlife Survey

14 June 2009

No active raptor or migratory bird nests were detected

Table 1. Bird species detected by sight or sound, Boulder Bay Resort project, Crystal Bay, NV, 2009.

Alpha Code	Common name	Scientific Name
NOFL	Northern Flicker	Colaptes auratus
OSFL	Olive-sided Flycatcher	Contopus cooperi
WEWP	Western Wood-Pewee	Contopus sordidulus
STJA	Steller's Jay	Cyanocitta stelleri
BUSH	Bushtit	Psaltriparus minimus
PYNU	Pygmy Nuthatch	Sitta pygmaea
BRCR	Brown Creeper	Certhia americana
AMRO	American Robin	Turdus migratorius
WETA	Western Tanager	Piranga ludoviciana
DEJU	Dark-eyed Junco	Junco hyemalis
BRBL	Brewer's Blackbird	Euphagus cyanocephalus
BHCO	Brown-headed Cowbird	Molothrus ater