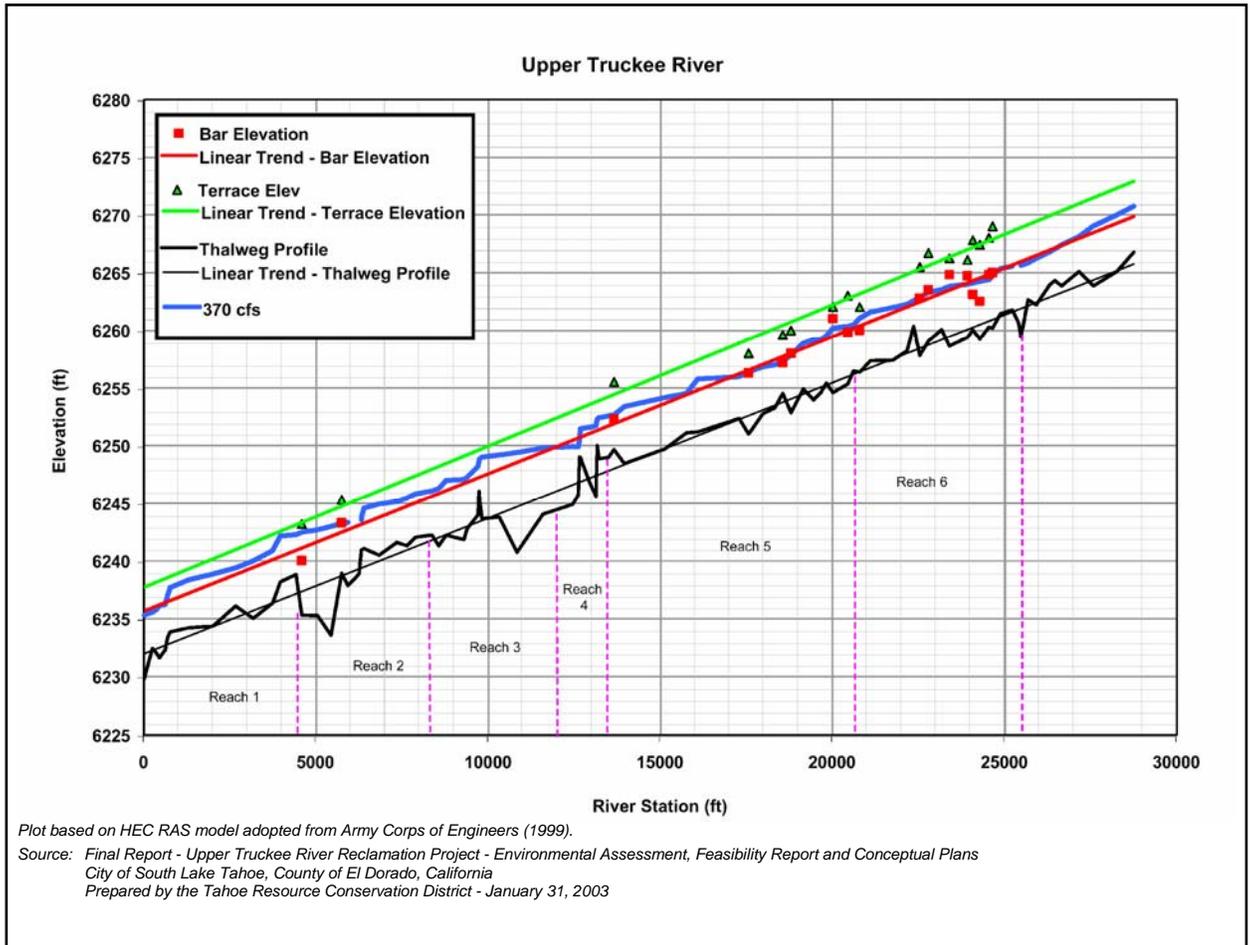


Appendix D
Hydrology and Geomorphology
(taken from Appendix A of ECAM)

Appendix D

Hydrology and Geomorphology

Longitudinal Plot of Valley Flat (Terrace), In-channel Bars, and Thalweg Elevations with 370 cfs Water Surface Profile



Simon and Others (2003) Sediment Sample Results within the CSLT Middle Reach Study Area

ENTRIX River Station (ft)	Bank	Depth (m)	% Particle Size/ % Particle Count	Percent Grain Size				Particle Size (mm)			
				Boulder/Cobble (>64 mm)	Gravel (2-64 mm)	Sand (0.062-2 mm)	Silt/Clay (<0.062)	D ₁₆	D ₅₀	D ₈₄	D ₉₅
Bed Material											
9525	NA	-	100/0	0.0	67.5	32.5	0.0	0.56	10.00	37.00	53.00
6900	NA	-	100/0	0.0	0.0	77.8	22.2	0.04	0.11	0.40	1.00
Bank Toe Material											
9525	-	-	0/100	62.0	28.0	10.0	0.0	7.00	110.00	210.00	250.00
6900	-	-	100/0	0.0	0.0	74.7	25.3	0.02	0.15	0.99	1.70
Bank Face Material											
9525	-	-	0/100	62.0	28.0	10.0	0.0	7.00	110.00	210.00	250.00
6900	-	-	100/0	0.0	1.2	81.6	17.1	0.06	0.21	0.96	1.70
Internal Bank Material											
6900	R	0.9	-	0.0	3.9	83.4	12.8	0.07	0.17	0.40	1.00
6900	R	0.5	-	0.0	0.2	84.7	15.0	0.07	0.13	0.30	0.48

U.S. Army Corps of Engineers (2000) Sediment Sampling within the Airport Reach Study Area

Sample	ENTRIX River Station (ft)	Geomorphic Unit Sampled	D_{50} (mm)	D_{84} (mm)
Wolman Count 4	8200	Mid-channel bar	30.9	47.9
Subsurface 5	13000	Right Bed	2.6	5.9
Subsurface 6	12650	Left Bed	1.6	5.8
Subsurface 7	9870	Left Bed	2	6.5
Subsurface 8	8750	Right Bed	2.7	10.6
Subsurface 9	8200	Subsurface @ WC4	6	38.1
Bank 3	13000	Left Bank	0.21	0.61
Bank 4	8675	Left Bank	-	0.13
Bank 5	7275	Left Bank	0.06	0.22
Berm 1	13000	Right Berm	0.59	1.56

Appendix E
Air Quality Emission Inventory

Schedule

Month
 day/week 5
 hours/day 10
 6 This includes moving the fill the first 26 wk/yr

Approximate Area to be disturbed

Alt-2 1,216,036 acres or sq-ft square feet

Excavation Volume including Cut and Fill

Alt-2 52,000 cu yd cut 35,000

No. of Haul Roundtrip(r Haul Trips Unpaved(ft)
 Year 1 3467
 Year 3 2,334 800

Alternative-2

Note: Unpaved and paved road lengths were provided by Suzanne from email.

EQUIPMENT	Quantity	BHP
Bore/Drill Rigs	1	
Concrete/Industrial Saws	1	
Cranes	1	
Crawler Tractor/Dozers	4	
Dumpers/Tenders	2	
Excavators	2	
Graders	1	
Other Construction Equipment	4	
Paving Equipment	1	
Plate Compactors	3	
Rollers	1	
Rubber Tire Loaders	2	
Skid Steer Loaders	4	
Tampers/Rammers	2	
Tractors/Loaders/Backhoes	2	
Trenchers	2	

Note: Based on ENTRIX engineer's email, no more than 5 equipment will be operating at the same time.

Table Total Daily Emissions (lbs/day)

	ROG	CO	NOx	PM10	PM2.5
Uncontrolled	5.44	15.92	54.57	500.03	51.81
Controlled	5.44	15.92	54.57	251.15	26.93
Threshold	82		82		

Table Total Annual Emissions (t/yr)

	ROG	CO	NOx	PM10	PM2.5
Uncontrolled	0.17	0.52	1.68	17.62	1.82
Controlled	0.17	0.52	1.68	8.84	0.94

Earth Excavation Emissions (tons) = (0.011 x acreage x months + 0.059 x cu-yd/1000 cu-yd + 0.22 x cu-yd/1000) (project duration)
from MRI report

plus 0.011 ton/acre-month
 plus 0.059 ton/1000 cu yd on-site cut/fill
 plus 0.22 ton/1000 cu yd off-site cut/fill

	Uncontrolled PM10 (t/y)	PM10 (lb/day)	Control Efficient	Controlled PM10 (t/y)	PM10 (lb/day)
Yr-1 Earth Cut	14.82	455.85	50%	7.41	227.92
Yr-3 Earth Fill	10.07	309.91	50%	5.04	154.96
Yr-1 Earth Cut	1.482	45.585		0.74	22.79
Yr-3 Earth Fill	1.007	30.991		0.50	15.50

Table Fugive Dust Emissions from Earth Cut/Fill

	lbs/day		t/y
	PM10	PM2.5	
Uncontrolled	455.85	45.58	14.82
Controlled	227.92	22.79	7.41
			PM2.5
			1.48
			0.74

Yr-1 mi
 Total 2364
 Paved 1839
 Unpaved 525

EMFAC2007 Run for Eldorado county diesel truck fleet

vehicle Type Speed (MPH)

	On-site Worker	HHDT	LDT1	CO	NOx	PM10	PM2.5
gram/mile	6.57	14.15	32.19	2.18	2.01	0.07	0.07
On-site Worker	0.08	0.55	1.19	0.07	0.07	0.07	0.07

Efs - Unpaved Road Dusts

lb/mile	PM10	PM2.5
Lowest	0.366	0.037
Worst	10.372	1.037
Mean	4.234	0.423

Efs - Paved Road Dusts

MRI Report on Paved Road PM10m Emission Factors

g/mile	high-ADT	low-ADT	ave-ADT
Average cond	0.37	1.3	0.81
Worst-case cond	0.64	3.9	2.1

PM PROFILE PM_PROF SOURCE_ < PM 10 < PM 2.5

	PM2.5/PM10	high-ADT	low-ADT	ave-ADT
422 PAVED RCOMNI	0.4572	0.06	0.22	0.1368
420 CONSTRU OMNI	0.4893	0.11	0.66	0.35

0.0772 OMNI MAS FINAL SIZI AVERAGE OF 6 OMNI SOIL SAMPLES (SOILS 3,8,12,19,20,27)
 0.1017 OMNI MASS DATA WITH EACH CHEMICAL PROFILE.

Daily Exhaust Emissions (lbs/day)

	ROG	CO	NOx	PM10	PM2.5
On-site	0.26	0.57	1.29	0.09	0.08

Daily Fugitive Dust Emissions (lbs/day)

	PM10	PM2.5
Paved	0.065	0.011
Unpaved-uncontrolled	41.910	4.191
Unpaved-controlled	20.955	2.095

control efficiency
50%

Annual Exhaust Emissions (t/y)

	ROG	CO	NOx	PM10	PM2.5
On-site	0.02	0.04	0.08	0.01	0.01

Annual Exhaust Emissions (t/y)

	PM10	PM2.5
Paved	0.004	0.001
Unpaved-uncontrolled	2.724	0.272
Unpaved-controlled	1.362	0.136

Hauling Activity Daily Emissions (lbs/day)

	ROG	CO	NOx	PM10	PM2.5
Uncontrolled	0.26	0.57	1.29	42.06	4.28
Controlled	0.26	0.57	1.29	21.11	2.19

Note: Assuming 50% control efficiency for unpaved road dust by watering twice a day.

Hauling Activity Annual Emissions (t/y)

	ROG	CO	NOx	PM10	PM2.5
Uncontrolled	0.02	0.04	0.08	2.73	0.28
Controlled	0.02	0.04	0.08	1.37	0.14

8 hr/day

lb/day/equipment

EQUIPMENT		Quantity	BHP	ROG	CO	NOx	PM10	PM2.5
Emission Factors (lbs/day) @ 8-hr/day From ARB Offroad Model								
Bore/Drill Rigs	2	250	0.301	0.941	4.357	0.114	0.105	
Concrete/Industrial Saws	1	250	0.426	1.630	3.590	0.180	0.166	
Cranes	1	250	0.594	1.654	5.906	0.229	0.211	
Crawler Tractors	4	250	0.794	2.228	7.611	0.310	0.285	
Other Material Handling Equipment	2	250	0.682	1.855	7.384	0.258	0.237	
Excavators	2	250	0.772	2.074	8.317	0.287	0.264	
Graders	1	250	0.630	1.749	6.491	0.242	0.222	
Other Material Handling Equipment	4	250	0.682	1.855	7.384	0.258	0.237	
Paving Equipment	1	250	0.467	1.348	4.468	0.185	0.170	
Other Material Handling Equipment	3	250	0.682	1.855	7.384	0.258	0.237	
Rollers	1	250	0.411	1.187	4.238	0.161	0.148	
Rubber Tired Loaders	2	250	0.548	1.523	5.684	0.210	0.193	
Tractors/Loaders/Balkhoes	4	250	0.521	1.430	5.875	0.195	0.180	
Other Material Handling Equipment	2	250	0.682	1.855	7.384	0.258	0.237	
Tractors/Loaders/Balkhoes	2	250	0.521	1.430	5.875	0.195	0.180	
Trenchers	2	250	0.647	1.887	6.185	0.258	0.237	

Operation schedule	Quantity	BHP	ROG	CO	NOx	PM10	PM2.5
Offroad (hr/day)	8	lb/day @ 8-hr	3.9	10.8	39.5	1.5	1.4
UTR (hr/day)	10	lb/day @ 10-hr	4.9	13.5	49.3	1.9	1.7
UTR (day/wk)	5	ty @10-hr	0.13	0.37	1.34	0.05	0.05
UTR (month)	2.5	EI/Dorado APCD Threshold (lb/day)	82		82		

Note: Based on ENTRIX engineer's email, no more than 5 equipment will be operating at the same time. 5 equipment with the 1st and 2nd high emission factors were selected in the emission inventory, including 2 excavators, and 3 tractors.

Yr-1
 Roundtrip 50 mi
 Workers 30 peak daily peak 20 daily
EMFAC2007 Run for Eldorado county diesel truck fleet
 vehicle Tyf Speed (MPH)
 On-site HHDT 10
 Worker LDT1 30

gram/mile	ROG	CO	NOx	PM10	PM2.5
On-site	6.57	14.15	32.19	2.18	2.01
Worker	0.08	0.55	1.19	0.07	0.07

PM PROF1 PM_PROF_SOURCE_ < PM 10 < PM 2.5 PM_SIZE_ PM_SIZE_ PM_CHEM_CMMT1

Daily Worker Trip Emissions (lbs/day)

	ROG	CO	NOx	PM10	PM2.5
Worker	0.26	1.81	3.94	0.24	0.22

Assumptions: 50 mile average roundtrip, 10 workers per day
 vehicle type - light duty truck (pickup)

Annual Worker Trip Emissions (t/yr)

	ROG	CO	NOx	PM10	PM2.5
Worker	0.0172	0.1179	0.2564	0.0155	0.0142

Appendix F
Fugitive Dust Control Measures

RULE 223-1 TABLE 1
BEST MANAGEMENT PRACTICE
(Construction and Other Earthmoving Activities)

Source Category	Control Measure	Guidance
Backfilling	A1 Stabilize backfill material when not actively handling; <u>and</u> A2 Stabilize backfill material during handling; <u>and</u> A3 Stabilize soil at completion of activity. .	Mix backfill soil with water prior to moving Dedicate water truck or high capacity hose to backfilling equipment. Empty loader bucket slowly so that no dust plumes are generated. Minimize drop height from loader bucket.
Clearing and grubbing	B1 Maintain stability of soil through pre-watering of site prior to clearing and grubbing; <u>and</u> B2 Stabilize soil during clearing and grubbing activities; <u>and</u> B3 Stabilize soil immediately after clearing and grubbing activities.	Maintain live perennial vegetation where possible. Apply water in sufficient quantity to prevent generation of dust plumes.
Clearing forms	C1 Use water spray to clear forms; or C2 Use sweeping and water spray to clear forms; <u>or</u> C3 Use vacuum system to clear forms.	Use of high pressure air to clear forms may cause exceedance of Rule requirements.
Crushing	D1 Stabilize surface soils prior to operation of support equipment; <u>and</u> D2 Stabilize material after crushing.	Follow permit conditions for crushing equipment. Pre-water material prior to loading into crusher. Monitor crusher emissions opacity. Apply water to crushed material to prevent dust plumes.
Cut and fill	E1 Pre-water soils prior to cut and fill activities; <u>and</u> E2 Stabilize soil during and after cut and fill activities	For large sites, pre-water with sprinklers or water trucks and allow time for penetration. Use water as necessary to keep dust down.
Demolition – mechanical/manual	F1 Stabilize wind erodible surfaces to reduce dust; <u>and</u> F2 Stabilize surface soil where support equipment and vehicles will operate; <u>and</u> F3 Stabilize loose soil and demolition debris.	Apply water in sufficient quantities to prevent the generation of visible dust plumes.

**RULE 223-1 TABLE 1
 BEST MANAGEMENT PRACTICE
 (Construction and Other Earthmoving Activities)**

Source Category	Control Measure	Guidance
Disturbed soil	G1 Stabilize disturbed soil throughout the construction site; <u>and</u> G2 Stabilize disturbed soil between structures	Limit vehicular traffic and disturbances on soils where possible. If interior block walls are planned, install as early as possible. Apply water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes.
Earth-moving activities	H1 Pre-apply water; <u>and</u> H2 Re-apply water as necessary to maintain soils in a damp condition and to ensure that visible emissions do not exceed 50 feet or beyond property line in any direction; <u>and</u> H3 Stabilize soils once earth-moving activities are complete.	Grade each project phase separately, timed to coincide with construction phase. Upwind fencing can prevent material movement on site. Apply water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes.
Importing/exporting of bulk materials	I1 Stabilize or adequately wet material while loading to reduce fugitive dust emissions; <u>and</u> I2 Maintain at least six inches of freeboard on haul vehicles traveling offsite; <u>and</u> I3 Stabilize or adequately wet material while transporting to reduce fugitive dust emissions; <u>and</u> I4 Stabilize material while unloading to reduce fugitive dust emissions.	Use tarps or other suitable enclosures on haul trucks. Comply with track-out prevention/mitigation requirements. Provide water while loading and unloading to reduce visible dust plumes.
Landscaping	J1 Stabilize soils, materials and slopes.	Apply water to materials to stabilize. Maintain materials in a crusted condition. Maintain effective cover over materials Stabilize sloping surfaces using soil binders until vegetation or ground cover can effectively stabilize the slopes Hydroseed prior to rainy season.
Road shoulder maintenance	K1 Apply water to unpaved shoulders prior to clearing; <u>and</u> K2 Apply chemical dust suppressants and/or other appropriate material in accordance with DOT specifications to maintain a stabilized surface after completing road shoulder maintenance.	Installation of curbing and/or paving of road shoulders can reduce recurring maintenance costs. Use of chemical dust suppressants can inhibit vegetation growth and reduce future road shoulder maintenance costs.

**RULE 223-1 TABLE 1
 BEST MANAGEMENT PRACTICE
 (Construction and Other Earthmoving Activities)**

Source Category	Control Measure	Guidance
Screening	L1 Pre-water material prior to screening; <u>and</u> L2 Limit fugitive dust emissions to opacity and plume length standards; <u>and</u> L3 Stabilize material immediately after screening.	Dedicate water truck or high capacity hose to screening operation. Drop material through the screen slowly and minimize drop height. Install wind barrier with a porosity of no more than 50% upwind of screen to the height of the drop point.
Staging areas	M1 Stabilize staging areas during use; <u>and</u> M2 Stabilize staging area soils at project completion.	Limit size of staging area. Limit vehicle speeds to prevent visible dust in excess of standards per 223-1.4.A. Limit number and size of staging area entrances/exits.
Stockpiles/Bulk Material Handling	N1 Stabilize stockpiled materials. N2 Stockpiles within 100 yards of off-site occupied buildings must not be greater than eight feet in height; or must have a road bladed to the top to allow water truck access or must have an operational water irrigation system that is capable of complete stockpile coverage.	Add or remove material from the downwind portion of the storage pile. Maintain storage piles to avoid slides.
Traffic areas for construction activities	O1 Stabilize or maintain adequate moisture on all off-road traffic and parking areas; <u>and</u> O2 Stabilize or maintain adequate moisture on all haul routes; and O3 Direct construction traffic over established haul routes.	Apply gravel/paving to all haul routes as soon as possible to all future roadway areas. Barriers can be used to ensure vehicles are only used on established parking areas/haul routes.
Trenching	P1 Stabilize surface soils where trencher or excavator and support equipment will operate; <u>and</u> P2 Stabilize soils at the completion of trenching activities.	Pre-watering of soils prior to trenching is an effective preventive measure. Washing mud and soils from equipment at the conclusion of trenching activities can prevent crusting and drying of soil on equipment.
Truck loading	Q1 Pre-water material prior to loading; <u>or</u> Q2 Apply water as loader bucket is being emptied; <u>and</u> Q2 Freeboard must be 6 inches or greater (VCS 23114)	Empty loader bucket such that no visible dust plumes are created. Ensure that the loader bucket is close to the truck to minimize drop height while loading.

**RULE 223-1 TABLE 1
 BEST MANAGEMENT PRACTICE
 (Construction and Other Earthmoving Activities)**

Source Category	Control Measure	Guidance
Turf Overseeding	R1 Apply sufficient water immediately prior to conducting turf vacuuming activities to meet opacity and plume length standards; <u>and</u> R2 Cover haul vehicles prior to exiting the site.	Haul waste material immediately off-site.
Unpaved roads/parking lots	S1 Stabilize soils to meet the applicable performance standards(Surface crusting); <u>and</u> S2 Limit vehicular travel to established unpaved roads (haul routes) and unpaved parking lots.	Restricting vehicular access to established unpaved travel paths and parking lots can reduce stabilization requirements.
Vacant land	T1 In instances where vacant lots are 0.10 acre or larger and have a cumulative area of 500 square feet or more that are driven over and/or used by motor vehicles and/or off-road vehicles, prevent motor vehicle and/or off-road vehicle trespassing, parking and/or access.	Installing barriers, curbs, fences, gates, posts, signs, shrubs, trees or other effective control measures to prevent access to motor or off-road vehicles.

**RULE 223-1 TABLE 2
 BEST MANAGEMENT PRACTICE
 (Bulk Material Handling)**

Source Category	Control Actions
Handling Of Bulk Materials	A1 When handling bulk materials, apply water or chemical/organic stabilizers/suppressants;
Storage of Bulk Materials	B1 When storing bulk materials, comply with the conditions for a stabilized surface; <u>or</u> B2 Cover bulk materials stored outdoors with tarps, plastic or other suitable material and anchor in such a manner that prevents the cover from being removed by wind action; <u>or</u> B3 Construct and maintain wind barriers with less than 50% porosity. If utilizing fences or wind barriers, apply water or chemical/organic stabilizers/suppressants; <u>or</u> B4 Utilize a 3-sided structure with a height at least equal to the height of the storage pile and with less than 50% porosity.
On-Site Transporting of Bulk Materials	C1 Limit vehicular speed while traveling on the work site; <u>or</u> C2 Load all haul trucks such that the freeboard is not less than six (6) inches when material is transported across any paved public access road; <u>or</u> C3 Apply water to the top of the load; <u>or</u> C4 Cover haul trucks with a tarp or other suitable cover.
Off-Site Transporting of Bulk Materials	D1 Clean the interior of the cargo compartment or cover the cargo compartment before the empty truck leaves the site; <u>and</u> D2 Prevent spillage or loss of bulk material from holes or other openings in the cargo compartment's floor, sides and/or tailgate; <u>and</u> D3 Load all haul trucks such that the freeboard is not less than six (6) inches when material is transported on any paved road, and apply water to the top of the load; or cover haul trucks with a tarp or other suitable cover.
Outdoor Transport Of Bulk Materials With A Chute Or Conveyor:	E1 Fully enclose the chute or conveyor; <u>or</u> E2 Operate water spray equipment; <u>or</u> E3 Wash separated or screened materials to remove conveyed materials having an aerodynamic diameter of 10 microns or less.

**RULE 223-1 TABLE 3
 BEST MANAGEMENT PRACTICE
 (Removal and Prevention of Trackout)**

Source Category	Control Actions
Removal of Trackout Material	A1 Manually sweeping and picking-up; <u>or</u> A2 Operating a rotary brush or broom accompanied or preceded by sufficient wetting; <u>or</u> A3 Operating a PM10-efficient street sweeper; <u>or</u> A4 Flushing with water, where the use of water will not result in adverse impacts on storm water drainage systems or violate any National Pollutant Discharge Elimination System permit program; <u>and</u> A5 <u>The use of blower devices, or dry rotary brushes or dry brooms is expressly prohibited.</u>
Frequency of Trackout Material Removal	B1 At the minimum trackout must be removed at the end of the day; <u>and</u> B2 Trackout must be immediately removed when it extends 50 feet or more from the nearest unpaved surface exit point of a site; <u>and</u> B3 On interior paved roads trackout must be removed at least once per workday.
Trackout Prevention for Large Operations or Sites with more than 150 vehicle trips/day.	C1 Installation of grizzlies, or similar devices designed to remove dirt/mud from tires; <u>or</u> C2 Installation of gravel pads; <u>or</u> C3 Paving of interior roads.

**RULE 223-1 TABLE 4
 BEST MANAGEMENT PRACTICE
 (Blasting Activities)**

Source Category	Control Measure	Guidance
Site Preparation (drilling, setting charges, burial of charges)	A1 Reduce dust from drilling operation A2 Pre-wet blast area A3 Cover charges to minimize dust	Control rate of drilling Apply water fog Place blast mats over charges Place soil mounds over charges Wet entire area prior to blasting
Blasting activities	B1 Dust cannot exceed 50 ft or cross the project property line	Conduct blasting on calm days Consider wind direction with respect to your property line, nearby residences and other receptors.
Post-Blasting Activities	C1 Follow Best Management Practice for all construction activities (Rule 223-1, Table 1)	

**RULE 223-1 TABLE 5
 DUST CONTROL MEASURES FOR LARGE OPERATIONS**

Source Category	Control Actions
Earth-moving (except construction cutting and filling areas, and mining operations)	<p>A1 Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Air Pollution Control Officer. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations each subsequent four-hour period of active operations; <u>or</u></p> <p>A2 For any earth-moving which is more than 50 feet from all property lines, conduct watering as necessary to prevent visible dust emissions from exceeding 50 feet in length in any direction. Visible emissions must not extend beyond property boundary.</p>
Earth-moving: Construction fill areas:	<p>B1 Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Air Pollution Control Officer. For areas which have an optimum moisture content for compaction of less than 12 percent, as determined by ASTM Method 1557 or other equivalent method approved by the Air Pollution Control Officer complete the compaction process as expeditiously as possible after achieving at least 70 percent of the optimum soil moisture content. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations during each subsequent four hour period of active operations; <u>or</u></p> <p>B2 For any earth-moving which is more than 50 feet from all property lines, conduct watering as necessary to prevent visible dust emissions from exceeding 50 feet in length in any direction. Visible emissions must not extend beyond property boundary.</p>
Earth-moving: Construction cut areas	<p>C1 Conduct watering as necessary to prevent any visible emissions from extending beyond property boundary.</p>
Disturbed surface areas: (except completed grading areas)	<p>D1 Apply dust suppression in sufficient quantity and frequency to maintain a stabilized surface. Any areas which cannot be stabilized, as evidenced by wind driven fugitive dust must have an application of water at least twice per day to at least 80 percent of the unstabilized area.</p>
Disturbed surface areas: Completed grading areas	<p>E1 Apply chemical stabilizers within five working days of grading completion; <u>or</u></p> <p>E2 Take actions F1 or F3 specified for inactive disturbed surface areas.</p>

**RULE 223-1 TABLE 5
 DUST CONTROL MEASURES FOR LARGE OPERATIONS**

Source Category	Control Actions
Inactive disturbed surface areas	<p>F1 Apply water to at least 80 percent of all inactive disturbed surface areas on a daily basis when there is evidence of wind driven fugitive dust, excluding any areas which are inaccessible to watering vehicles due to excessive slope or other safety conditions; <u>or</u></p> <p>F2 Apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface; <u>or</u></p> <p>F3 Establish a vegetative ground cover within 21 days after active operations have ceased. Ground cover must be of sufficient density to expose less than 30 percent of unstabilized ground within 90 days of planting, and at all times thereafter; <u>or</u></p> <p>F4 Utilize any combination of control actions F1, F2 and F3 such that, in total, these actions apply to all inactive disturbed surface areas.</p> <p>F5 Establishment and maintenance of surface crusting sufficient to satisfy the test in Section 223-1.10</p> <p>F6 Approved mixture of tackifier and fiber mulch, applied per manufacturer’s recommendation.</p>
Unpaved Roads	<p>G1 Water all roads used for any vehicular traffic at least once per every two hours of active operations or as often as necessary; <u>or</u></p> <p>G2 Apply a chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface; <u>and</u></p> <p>G3 Restrict vehicle speeds where necessary ;</p>
Open storage piles	<p>H1 Apply chemical stabilizers; <u>or</u></p> <p>H2 Apply water to at least 80 percent of the surface area of all open storage piles on a daily basis when there is evidence of wind driven fugitive dust; <u>or</u></p> <p>H3 Install temporary coverings; <u>or</u></p> <p>H4 Install a three-sided enclosure with walls with no more than 50 percent porosity which extend, at a minimum, to the top of the pile. This option may only be used at aggregate-related plants or at cement manufacturing facilities.</p>
All Categories	<p>I1 Any other control measures approved by the Air Pollution Control Officer as equivalent to the methods specified in Table 5 may be used.</p>

RULE 223-1 TABLE 6
CONTINGENCY DUST CONTROL MEASURES FOR LARGE OPERATIONS

Source Category	Control Actions
Earth-moving	A1 Cease all active operations except for dust mitigation activities; <u>or</u> A2 Apply water to soil not more than 15 minutes prior to moving such soil; <u>and</u> A3 Apply water during soil moving or disturbance operations.
Disturbed surface areas	B1 On the last day of active operations prior to a weekend, holiday or any other period when active operations will not occur for not more than four consecutive days: apply water with a mixture of chemical stabilizer diluted to not less than 1/20 of the concentration required to maintain a stabilized surface for a period of six months; <u>or</u> B2 Apply chemical stabilizers prior to wind event; <u>or</u> B3 Apply water to all unstabilized disturbed areas 3 times per day. If there is any evidence of wind driven fugitive dust, watering frequency is increased to a minimum of four times per day; <u>or</u> B4 Take the actions specified in Table 5, control action F3; <u>or</u> B5 Utilize any combination of control actions B1, B2 and B3B such that, in total, these actions apply to all disturbed surface areas.
Unpaved roads	C1 Apply chemical stabilizers prior to wind event; <u>or</u> C2 Apply water twice per hour during active operation; <u>or</u> C3 Stop all vehicular traffic, except for dust mitigation equipment.
Open storage piles	D1 Apply water twice per hour; <u>or</u> D2 Install temporary coverings.
Bulk Material Transport	E1 Cover all haul vehicles; <u>or</u> E2 Freeboard must be 6 inches or greater (VCS 23114)
All Categories	F1 Any other control measures approved by the Air Pollution Control Officer as equivalent to the methods specified in Table 6 may be used.

Appendix G
*Upper Truckee River Middle Reach Preliminary
Restoration Alternative South Lake
Tahoe, El Dorado County, California*
Report of Historical Significance of
Cultural Resources, Judith Marvin and
Linda Thorpe, Foothill Associates,
October, 2007

**UPPER TRUCKEE RIVER MIDDLE REACH
PRELIMINARY RESTORATION ALTERNATIVE
SOUTH LAKE TAHOE, EL DORADO COUNTY,
CALIFORNIA**

Prepared for:
Suzanne Wilkins, Planner
CDM
P.O. Box 229
Tahoe City, California 96145

Prepared by:
Judith Marvin and Linda Thorpe
Foothill Resources, Ltd.
P.O. Box 2040
Murphys, California 95247

October 2007

PROJECT LOCATION AND DESCRIPTION

The Upper Truckee River Middle Reach Project is located in Lake Valley, South Lake Tahoe, El Dorado County, California, between State Route 50 and Pioneer Trail, about one mile south and east of the Tahoe Y (Figure 1). The project is located predominantly in Section 9, as well as in the SE ¼ of Section 4, and the north portion of Section 16, T12N, R18E, MDBM, as depicted on the South Lake Tahoe Quadrangle, at about 6240 foot elevation (Figure 2; USGS 1992). The Upper Truckee River Middle Reach consists of the area east of the Lake Tahoe Airport and meanders northerly to near State Route 50 on the lake shore (Figure 3).

Archaeologist Susan Lindström and ethnographer Penny Rucks conducted an archaeological field survey of the project area in August of 2005, resulting in the identification of Native American resources, water management resources, transportation resources, habitation resources, fence line resources, miscellaneous isolated historic features, and miscellaneous isolated historic artifacts (Lindström 2005).

In August of 2006, historian Judith Marvin was contracted by Susan Lindström, Consulting Archaeologist, to conduct one or more of the following tasks to evaluate the historic resources: formal field recordation, archival and oral history research, complete an architectural evaluation, photo documentation and measured drawings, and prepare a final report of findings on two historic-period dams, two 19th and 20th century refuse deposits, as well as stream fords and fence posts that were later determined to be less than 50 years of age (Lindström 2005). The sites were visited by Judith Marvin and archaeologist Linda Thorpe on 3 September 2006, and the historic-period sites were recorded in the field. The formal recordation was not completed, however, as the project was halted on 27 September 2006. The project was reactivated in August of 2007 and this final report and State Record Forms (Department of Parks and Recreation 523) completed.

RESEARCH METHODS

Archival and oral-history research for the project overview and specific site history was conducted by Judith Marvin. Ms. Marvin is a historian and architectural historian who has been actively involved in historic research since 1977. Obtaining a degree in history from the University of California, Berkeley, she served for 11 years as curator and director of the Calaveras County Museum and Archives, since 1983 as a cultural resources manager with Foothill Resources, Ltd., Murphys, and, since 2000, as a project manager for LSA Associates, Inc., Rocklin, California. She has served as historian/architectural historian for a wide range of cultural resource projects, including historical reports and evaluations for the Tahoe Regional Planning Agency, Stanislaus National Forest, Eldorado National Forest, Toiyabe National Forest, California Department of Parks and Recreation, California Department of Transportation, U.S. Army Corps of Engineers, and numerous cities, counties, and private parties.

She was a consultant and contributor to the Report of the Placer County Cultural Resources Inventory's *Historical, Architectural, and Archaeological Resources of Placer County, California*, in December 1992; co-author of the *Harrison Avenue Heritage Resource Study* for the City of South Lake Tahoe in 2001; and author of the *Round Hill Resort Intensive Survey Report* for the USDA Forest Service, IBET Province-Eldorado National Forest in 2002, as well as a report and evaluation of Camp Richardson Resort and several other historic resources in the Lake Tahoe basin for the LTBMU.

Research for this evaluation was conducted in the files of Susan Lindström, in previously published materials relating to the area, and with informants with information about the project area. Please see the References Cited or Consulted section for a complete listing.

HISTORICAL BACKGROUND

Lake Tahoe Ranching

Following its sighting by Frémont in 1844, the Tahoe Basin was essentially uninhabited until the late 1850s, aside from a few trappers and miners moving east from the foothills. It is doubtful if there was any permanent settlement of any significance up to the time of the Comstock, other than a few trading posts and inns in Lake Valley that catered to early emigrants (Koval 1990:25-26). The commencement of the Comstock mining boom in Nevada, beginning in mid-1859, prompted a sudden surge of heavy wagon and freight traffic through the Tahoe Basin, as quicker routes were sought across the Tahoe Sierra. Koval (1990:27-28, 31-33) and Scott (1957; 1973) have described these various routes of ingress and egress over Carson Pass, Luther Pass, Daggett Pass, and Spooner Pass, and they will not be discussed further here.

The need for foodstuffs, dairy products, and meat for the hordes of Comstock miners prompted many farmers and ranchers from the lower elevations to establish high country summer ranches where they operated dairies, grazed livestock, and raised hay, grain, and seasonal vegetables to feed Virginia City and the Carson Valley. Numerous ranches were established in Lake Valley and on the shores of Lake Tahoe in the 1860s and 1870s, often in conjunction with inns and way stations. In addition, many ranchers practiced transhumance, the practice of taking their livestock to the high country pastures to feed during the summer months, returning to their lower elevation ranches in the fall.

Project Area

The lands in the project area have been associated with two early-day Lake Valley families: the Lyons and the Bartons. The lands southwest of the project area, located in the first meadow north of Meyers, was settled by Hiram Barton, who arrived in California in the 1850s and established his Lake Valley summer "home ranch" in the 1860s. There he supplied feed for the freighting teams and dairy products for the traveler, as well as serving as a lodging house when other waystations along the Lakeshore leg of the Johnson Cut-off were full to capacity.

During the winter season members of the Barton family resided in White Oak Township, near Rescue and north of Clarksville, in western El Dorado County. Hiram and his wife Margaret had two girls and seven sons, with one of them, William Delos Barton, still active in the cattle business in 1955, with headquarters at the Tahoe Y. One of Hiram's brothers, Timothy and his wife Jane, settled their summer range on meadowland to the northeast of Hiram's Lake Valley Ranch, where he raised cattle. The ranch was later acquired by Samuel Kyburz, apparently the ranch in the project area (Scott:1957:379).

Another ranch in the area, located near the airport, was that of William and Mary Lyons, who settled there in the 1860s. In 1870, the Lyons family consisted of William and Mary, son Charles, and daughter Philena, by 1880 daughter Minnie and nephew Charles, as well as five hired men, were residing in the household. By 1900, the widowed Mary and daughter Minnie were residing in the Placerville Township (U.S. Federal Census).

The concrete dams on the Upper Truckee River within the project area appear to have been constructed by the Barton family, who ran cattle on the land. The dams were used for irrigating the meadowlands on either side of the river for livestock grazing.

Fallen Leaf Lake Lodge

The refuse deposits identified in the project area appear to be secondary deposits from Fallen Leaf Lake Lodge, located to the west. In 1899, William Whitman Price, a professor at Stanford University and naturalist, opened a boys' summer camp below Glen Alpine. By 1905 Price had moved his operation to the shores at the southwest end of Fallen Leaf Lake and opened a resort campground, operated separately from his boys' camp.

Price's retreat expanded in 1913, and now boasted a two-story lodge, dining hall, and a boathouse with additional cabins and tents. Three years later, due to the onset of World War I, the boys' camp was discontinued and in 1918 Price purchased additional land from the Lucky Baldwin estate and added housekeeping cabins. In the early 1920s, after her husband's death, Mrs. Price took over the management of the property (Scott 1957:144-146).

When described by James Wharton James in 1915, the distinguishing characteristic of the Fallen Leaf Lodge Resort were its "simplicity, home-likeness, unostentation." It was described as situated on the southwestern edge of Fallen Leaf Lake, five miles from Tallac, and reached by a road that wound through the trees of the Baldwin estate, and then skirted the eastern and southern shores of the lake (James 1915:156). The lodge is no longer extant.

Lake Tahoe Airport.

The airport, a full-service general aviation facility, was constructed in 1958, with an expansion in 1962. The water crossings and dirt roads identified in the initial field survey appear to date to this period.

FINDINGS AND CONCLUSIONS

Judith Marvin and Linda Thorpe visited the project area on 3 September 2006. Two concrete dams (Resource Nos. 32 and 33) on the Upper Truckee River and two refuse deposits were recorded (Resource Nos. 24 and 24a, recorded as one site).

Other identified resources were determined either to be too recent in age (Resource Nos. 26 and 30, stream fords; Resource Nos. 27 and 28, water crossing and road), or to be insignificant elements of undetermined age (Resources 44 and 44a, fencing segments), and were therefore not recorded.

None of the three recorded resources appear eligible for listing on the NRHP under any of the applicable criteria, nor to be historical resources for the purposes of CEQA or TRPA. The resources were recorded on State Record Forms (Department of Parks and Recreation 523). All forms are appended to this report (Appendix A), and have been filed at the North California Information Center at California State University, Sacramento.

Resource Descriptions

Concrete Dams, Resource Numbers 32 and 33, Reach 4.

Resource No. 32, Dam

This is the collapsed remains of a board-formed concrete irrigation dam in the Upper Truckee River. The only standing section is along the west bank of the river, while the remainder of the sections have collapsed into the river. The 20-foot long standing wall, paralleling the riverbank, measures seven feet high and eight inches thick, with a four-foot long wing on the upstream side. The corresponding wall on the east bank has fallen sideways into the river, with the wing wall partially erect. An eroded but intact poured concrete ridged slab (ca. 20 feet wide) covers the river bed between the dam walls. Rubble from the collapsed dam sections lies downstream of the dam site. This dam appears on modern maps.

Resource No. 33, Dam

This is the collapsed remains of a board-formed concrete irrigation dam in the Upper Truckee River. An L-shaped section on the east bank of the river is the only standing section of this dam. This section is freestanding, as it has been breached between the bank and the section. The remainder of the sections have collapsed into the river, with the water coursing over them. The standing section measures seven feet tall. Large timbers run under it (ca. 35-45 feet) from bank to bank. The timbers are still largely intact.

Conclusions

Integrity. Significance assessments involve establishing the integrity of the historic resources. This is determined by seven criteria: location, design, setting, workmanship, materials, feeling, and association.

Location: The dams are in their original location.

Design: The dams were originally designed as irrigation dams on the Upper Truckee River, but have collapsed into the river and are no longer in use.

Setting: The dams are located in their original setting, but have collapsed.

Workmanship and Materials: The dams are board-formed concrete structures, and retain their size and form, but are no longer standing.

Feeling and Association: The dams were originally built to irrigate the meadowlands of the Upper Truckee River for livestock grazing, but have collapsed and no longer serve that purpose.

Evaluation. The dams do not appear to be eligible for listing on the National Register, nor to be historical resources for the purposes of CEQA or TRPA. Under Criterion A/1, although they are associated with livestock grazing in Lake Valley, they are not significant contributors to that important event, nor are they associated with any persons important in history (Criterion B/2). Under Criterion C/3, they are typical examples of common resource types, not the work of a master, nor do they possess high artistic values. They are also lacking in integrity, having collapsed into the river. Their information potential (Criterion D/4) has been exhausted through their recordation in this report.

Refuse Deposits. Resource Numbers 24 and 24a, Reach 3.

This site is a widespread refuse scatter, ca. 600 feet by 350 feet in size, with occasional shallow deposits, consisting of “hotel china” and early 1900s and some 1920s ceramics and cans. It is located on the east bank of the Upper Truckee River extending from the edge of the river-bank to a paved bike path to the east. Initially identified as two separate deposits, they were found to be connected during field recordation. Site 24a extends southward from Site 24 into the sage flat. The densest concentration of artifacts, where the refuse was originally dumped; covers an area approximately 200 feet by 150 feet. Here there are a few small concentrations of artifacts, though no intact deposits were found. A sparse scatter of shards and can fragments extends an additional 50 to 100 feet to the north and west, and 200 feet to the south, the result of heavy equipment disturbance.

Items included: WIE (double parallel green line design near rim (“Fallen Leaf-Lake Tahoe”), several fragments of plates, cups, saucers, butter pats, soup bowls, etc.; plain WIE; blue and white ceramic sherd (Japanese rice bowl?); amber, amethyst, clear (tumbler), brown, green, and olive glass; Prince Albert tobacco can; sanitary milk cans; and pieces of unidentified metal.

Evaluation. The deposits appear to have been dumped from the Fallen Leaf Lodge, and to date from the 1910s to the 1920s. The deposits are secondary, lacking in integrity, and

were scattered across the embankment above the river bed, with no notable concentrations or deep deposits. The deposits appear to have been scattered by heavy equipment when the river was channelized. As the tobacco tin was not invented until ca. 1910, it is consistent with the time frame of the glass and ceramic deposits. Lake Tahoe Basin Management Unit Archaeologist Dr. Michael Weichman reported finding a like dump on the west side of the airport, suggesting that Fallen Leaf Lake Lodge simply dumped their garbage in many locations away from the lake and lodge prior to the construction of the Lake Tahoe Airport (Weichman 2007) While probably from Fallen Leaf Lake Lodge, the deposits are lacking in any temporal or important associations and do not appear to be able to answer questions important in history (Criterion D/4) beyond their recordation for this report (Appendix A).

Other resources:

The previously identified water crossings and possible fords (Resources Nos. 26, 27, 28, 30) were determined to be too recent in age to require recordation. Various fence segments (Resource Nos. 44 and 44a), though of indeterminate age, were also not recorded. This type of resource has been addressed in the recent Programmatic Agreement developed between Caltrans and the Office of Historic Preservation, and are commonly accepted by other agencies (the issues addressed here are also applicable to CEQA and TRPA evaluation) (Caltrans 2004). In Attachment 4, properties “exempt from evaluation” are identified; these are properties which do not have the potential for historic significance. Among these are:

- Fences, walls, gates, and gateposts

The fences are therefore not significant under NEPA, CEQA or TRPA, and were not formally recorded.

No further archaeological survey work should be necessary.

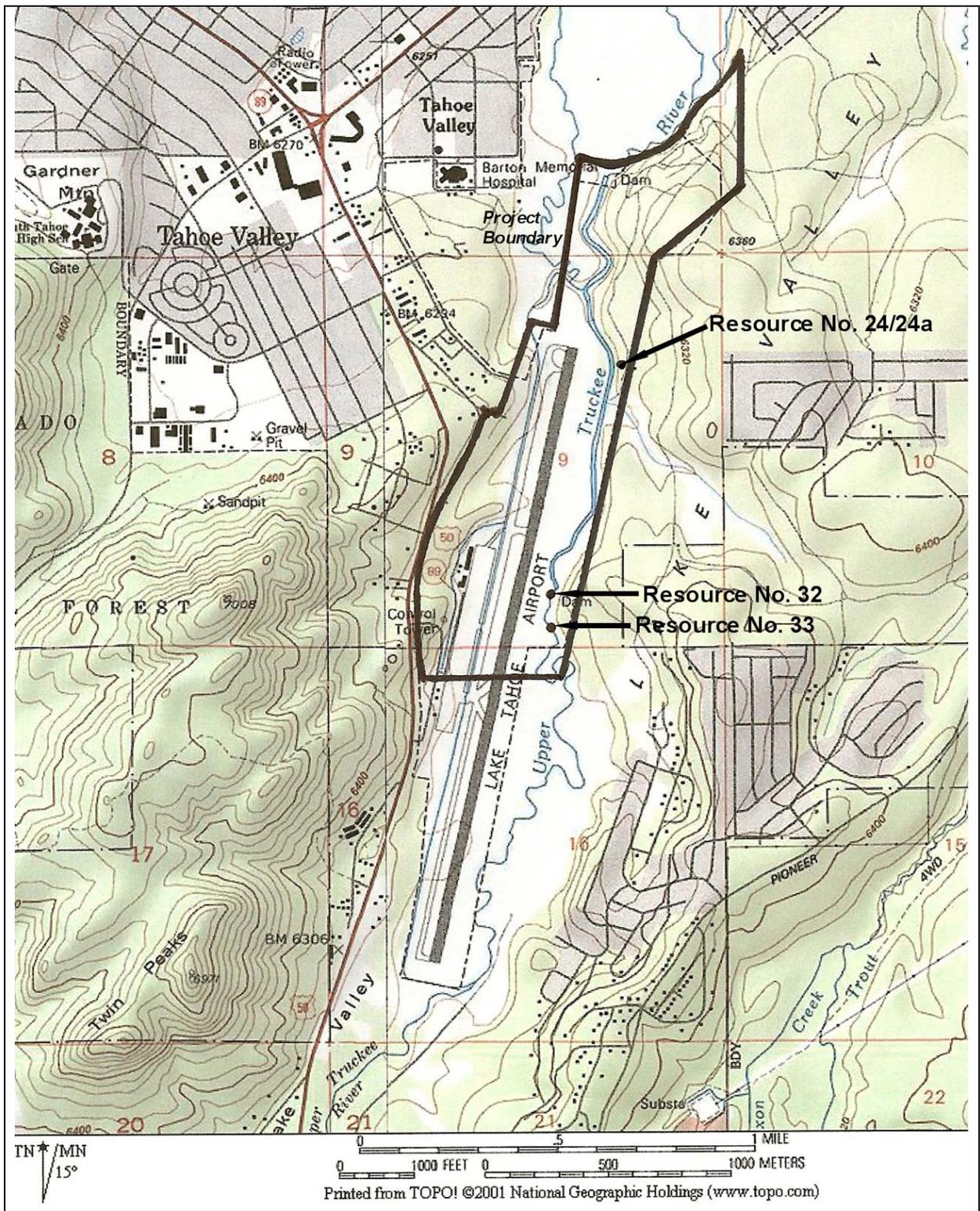


Figure 2. Project location on USGS South Lake Tahoe 7.5-minute quadrangle, 1992.

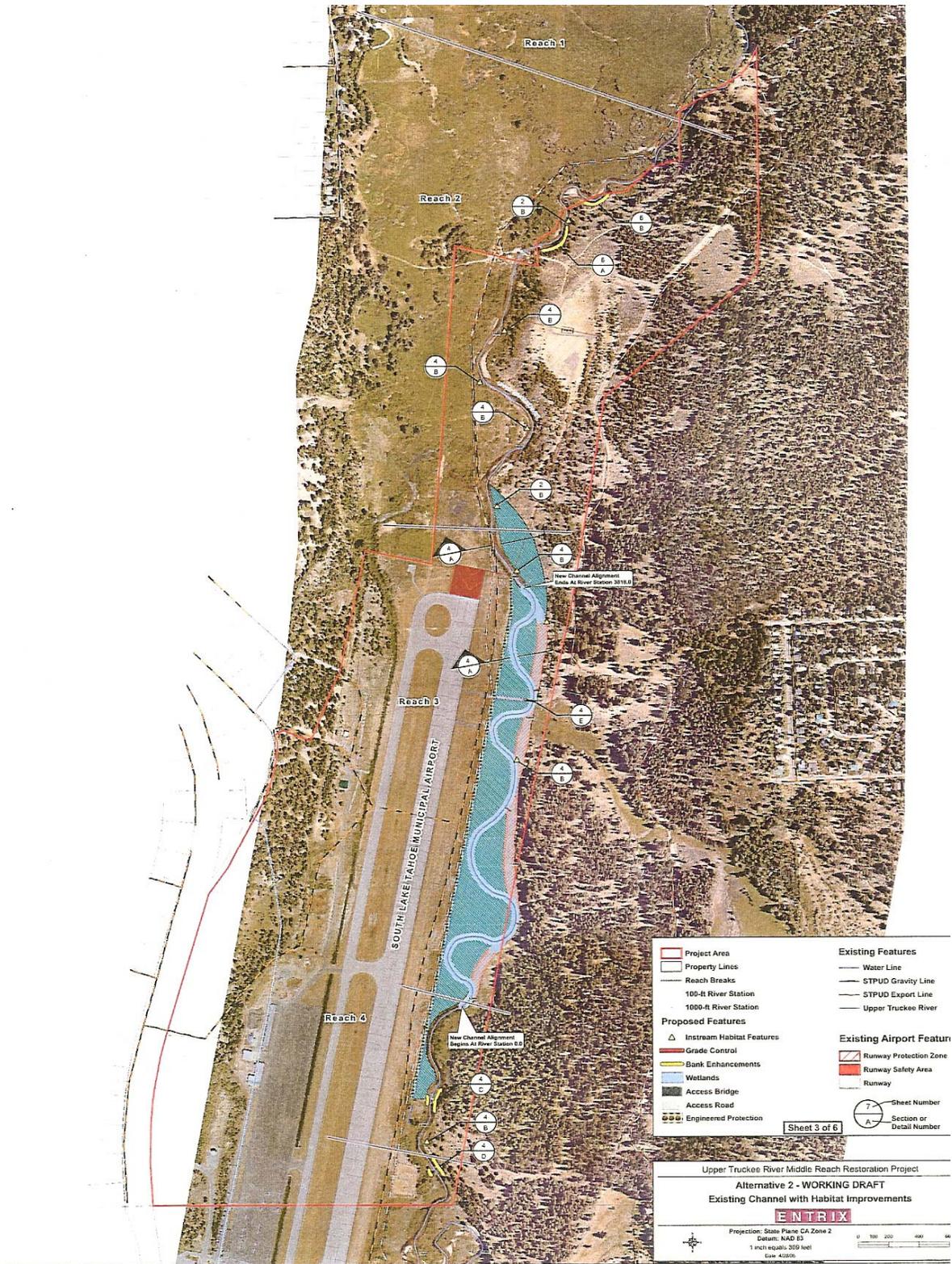


Figure 3. Map of Upper Truckee River Middle Reach Stream Restoration Project

REFERENCES CITED OR CONSULTED

El Dorado, County of
var. Official Maps

Farquhar, Francis P.

1966 *History of the Sierra Nevada*. University of California Press, Berkeley and Los Angeles, in collaboration with The Sierra Club.

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Koval, Ana B.

1990 *Historic Resources of the Nevada Side of the Tahoe Basin*. Prepared for the Tahoe Regional Planning Agency by Alpengroup and Rainshadow Associates, Reno, Nevada.

Lindström, Susan G.

2005 Upper Truckee River Middle Reach Preliminary Restoration Alternative Strategies: Heritage Resource Component, Report of Findings. Letter Report prepared for CDM, Tahoe City.

Scott, Edward B.

1957 *The Saga of Lake Tahoe, Vol. I: A Complete Documentation of Lake Tahoe's Development Over the Last One Hundred Years*. Sierra-Tahoe Publishing Company, Crystal Bay, Lake Tahoe, Nevada. Reprinted 2000.

1973 *The Saga of Lake Tahoe, Vol. II: A Definitive Pictorial Documentation of Lake Tahoe's Development Over the Last One Hundred and Twenty-five Years*. Sierra-Tahoe Publishing Company, Crystal Bay, Lake Tahoe, Nevada. Reprinted 1993.

United States Federal Census (Ancestry.com)

1860

1870

1880

1900

1910

1920

1930

United States Geological Survey
1998 South Lake Tahoe, Calif. Quadrangle.

Weichman, Michael, PhD, LTBMU
2007 Personal communication to Judith Marvin of 29 June 2007.

Wheeler, 1st Lt. Geo. M.
1876-77 *Map of Lake Tahoe, Including Truckee, Virginia City, Reno & Carson City.*
Expeditions Under the Command of 1st Lt. Geo. M. Wheeler. U.S. Geographic
Surveys West of the 100th Meridian. Reprinted 1990 by Historic California
Collection Lake Tahoe.

APPENDIX A
SITE RECORD FORMS

P1. Other Identifier: _____

*P2. Location: Not for Publication Unrestricted *a. County El Dorado

and (P2b and P2c or P2d. Attach a Location Map as necessary.)
*b. USGS 7.5' Quad South Lake Tahoe, CA-NV Date 1992 T 12N R 18E, SE ¼ of NE ¼ of Sec. 9; MDBM
c. Address _____ City _____ Zip _____
d. UTM: (Give more than one for large and/or linear resources) Zone 11 242838 mE/ 4210252 mN (NAD 27)
e. Other Locational Data: e.g., parcel #, directions to resource, elevation, etc., as appropriate).

*P3a. Description: Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries. The site consists of a widespread refuse scatter consisting of "hotel china" and early 1900s and some 1920s ceramics and cans. It seems to consist of a few shallow refuse dumps dispersed and spread across the adjoining flat, resulting in a consistent but low-density scatter over a large area. The refuse appears to be dumped from the Fallen Leaf Lake Lodge, located to the west, on the shore of Fallen Leaf Lake, dating to the 1910s to the 1920s.

Located on a large flat along the east bank of the Upper Truckee River, the site was initially identified as two separate scatter. Field survey determined them to be the same refuse, spread and disturbed by heavy equipment, probably during channalization of the river. The site covers an area ca. 600 feet N/S by 350 feet E/W, extending from the edge of the river-bank to a paved bike path to the east. The densest concentration of artifacts, averaging 5-40 artifacts per square yard, is located in the northeast portion of the site. The remaining site area averages 0-5 artifacts (mostly small glass and ceramic shards) per square yard. Occasional concentrations and shallow deposits of artifacts were noted, but none of any depth.

*P3b. Resource Attributes: (List attributes and codes) AH4. Refuse deposit, scatter

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #)

Overview of south end of scatter (view S, 3 September 2006).

*P6. Date Constructed/Age and Sources:
 Historic ca. 1910s-1920s
 Prehistoric Both

*P7. Owner and Address:

*P8. Recorded by: (Name, affiliation, address)
Judith Marvin and Linda Thorpe
Foothill Resources, Ltd.
P.O. Box 2040
Murphys, CA 95247

*P9. Date Recorded:
3 September 2006

*P10. Survey Type (Describe):
Intensive

*P11. Report Citation: (Cite survey report and other sources, or enter "none.") *Upper Truckee River Middle Reach Preliminary Restoration Alternative, South Lake Tahoe,*

El Dorado County, California. Foothill Resources, Ltd., Murphys, California October 2007.

*Attachments: NONE Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
 Artifact Record Photograph Record Other (List) _____

Page 2 of 4 *Resource Name or # (Assigned by recorder) Resource No. 24/24a Refuse deposit/scatter

*A1. Dimensions: a. Length ca 250 feet N/S. b. Width ca. 100 feet E/W

Method of Measurement: Paced Taped Visual estimate Other: _____

Method of Determination (Check any that apply.): Artifacts Features Soil Vegetation Topography
 Cut bank Animal burrow Excavation Property boundary Other (Explain)

Reliability of Determination: High Medium Low Explain: Site disturbed

Limitations (Check any that apply): Restricted access Paved/built over Site limits incompletely defined
 Disturbances Vegetation Other (Explain): _____

A2. Depth: _____ None Unknown Method of Determination: _____

*A3. Human Remains: Present Absent Possible Unknown (Explain):

*A4. Features (Number, briefly describe, indicate size, list associated cultural constituents, and show location of each feature on sketch map):

The site consists of a widespread refuse scatter consisting mainly of ceramic and glass shards. This appears to be refuse dumped from a nearby recreational lodge in the 1910s and 1920s. It seems to consist of a few shallow refuse dumps dispersed and spread across the adjoining flat, resulting in a consistent but low-density scatter over a large area.

*A5. Cultural Constituents (Describe and quantify artifacts, ecofacts, cultural residues, etc., not associated with features)

Items included: WIE (double parallel green line design near rim ("Fallen Leaf-Lake Tahoe"), several fragments of plates, cups, saucers, butter pats, soup bowls, etc.; plain WIE; blue and white ceramic sherd (Japanese rice bowl?); amber, amethyst, clear (tumbler), brown, green, and olive glass; Prince Albert tobacco can; sanitary milk cans; and pieces of unidentified metal.

*A6. Were Specimens Collected? No Yes (If yes, attach Artifact Record or catalog and identify where specimens are curated.)

*A7. Site Condition: Good Fair Poor (Describe disturbances.): Flat has been disturbed by heavy equipment, probably during the channelization of the river.

*A8. Nearest Water (Type, distance, and direction) The site is located on the east bank of the Upper Truckee River.

*A9. Elevation: Ca. 6240 feet AMSL.

A10. Environmental Setting (Describe culturally relevant variables such as vegetation, fauna, soils, geology, landform, slope, aspect, exposure, etc.):

The area is characterized by open grass and sage covered flats, interspersed with stands of Jeffrey Pine.

A11. Historical Information: *A12. Age: Prehistoric Protohistoric 1542-1769 1769-1848 1848-1880 1880-1914
 1914-1945 1910s-1920s
 Post 1945 Undetermined (Describe position in regional prehistoric chronology or factual historic dates if known):

A13. Interpretations (Discuss data potential, function[s], ethnic affiliation, and other interpretations) A14. Remarks:

The deposits appear to have been dumped from the Fallen Leaf Lake Lodge, and to date from the 1910s to the 1920s. The deposits are secondary, lacking in integrity, and were scattered across the embankment above the river bed, with no concentrations or deep deposits. The deposits appear to have been scattered by heavy equipment when the river was channelized. As the tobacco tin was not invented until ca. 1910, it is consistent with the time frame of the glass and ceramic deposits. Lake Tahoe Basin Management Unit Archaeologist Dr. Michael Weichman reported finding a like dump on the west side of the airport, suggesting that Fallen Leaf Lake Lodge simply dumped their garbage in many locations away from the lake and lodge prior to the construction of the Lake Tahoe Airport (Weichman 2007)

A15. References (Documents, informants, maps, and other references):

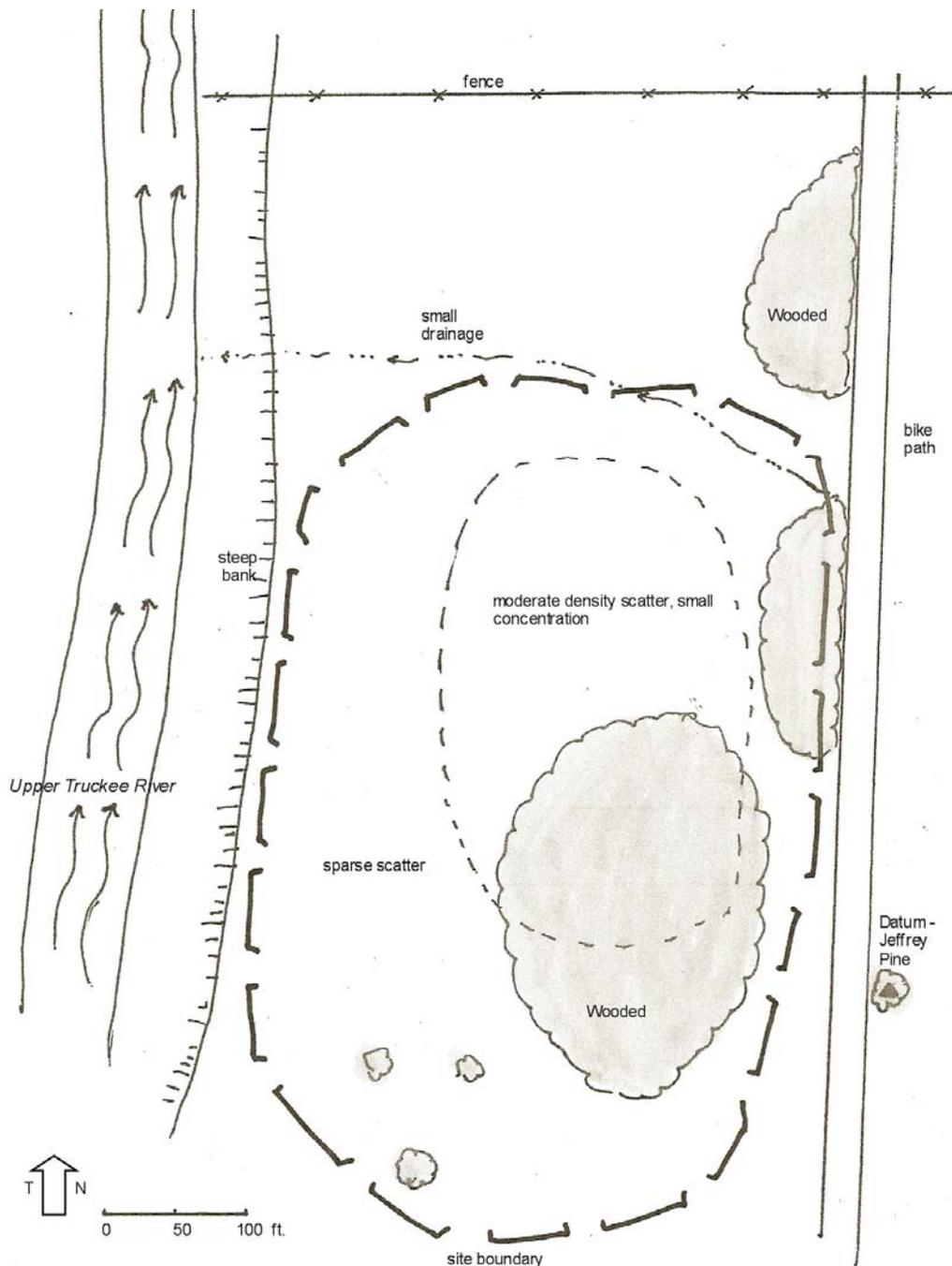
A16. Photographs (List subjects, direction of view, and accession numbers or attach a Photograph Record):

Original Media/Negatives Kept at: Foothill Resources, Ltd., P.O. Box 2040, Murphys, CA 95247

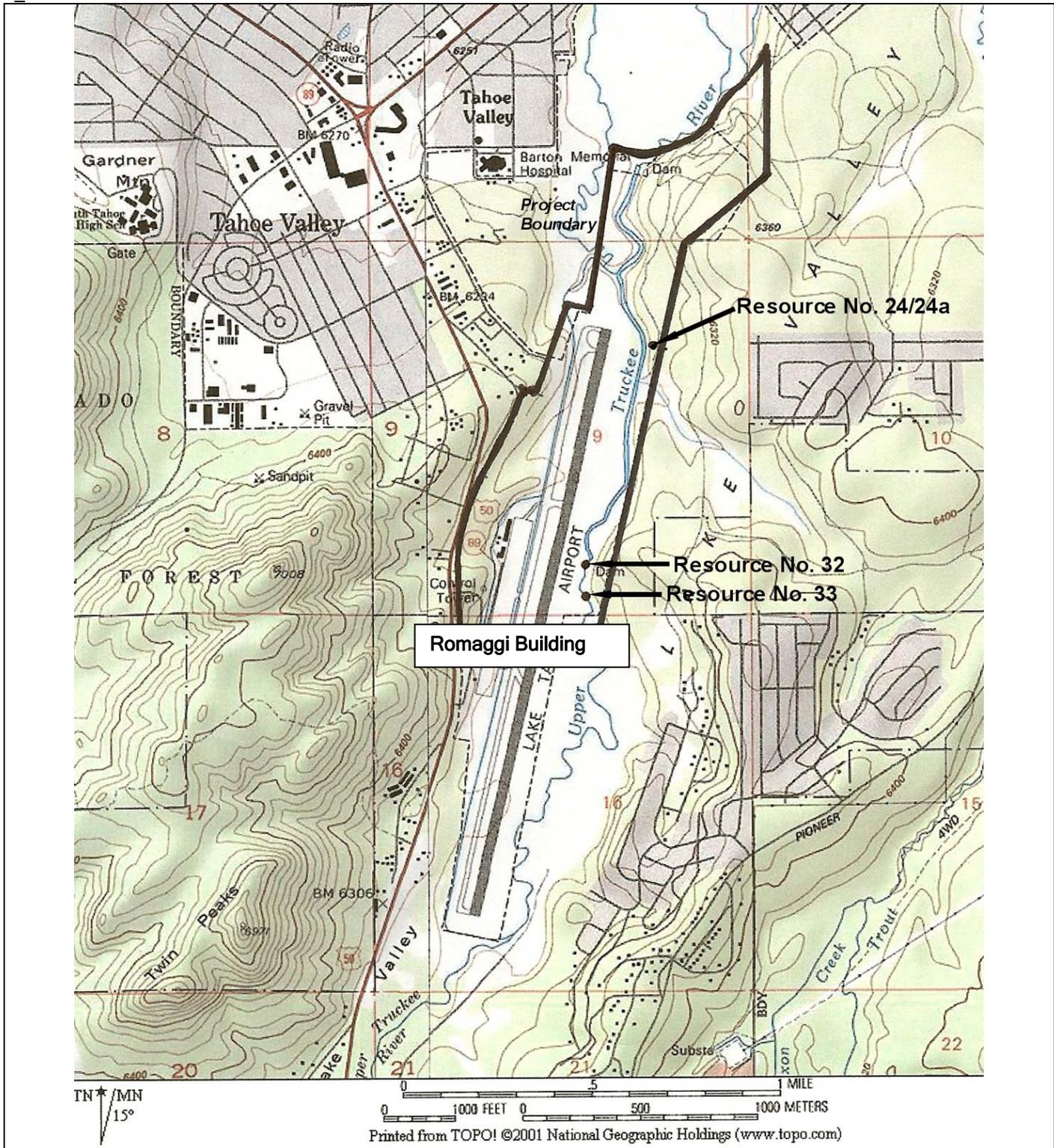
*A17. Form Prepared by: Linda Thorpe and Judith Marvin

Date: 3 September 2007

Affiliation and Address: Foothill Resources, Ltd., P.O. Box 2040, Murphys, CA 95247



Page 4 of 4 *Resource Name or # (Assigned by recorder) Resource No. 24/24a Refuse Scatter
*Map Name: South Lake Tahoe CA/NV USGS 7.5' Quad Scale: 1:24000 Date of Map: 1992



State of California—The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code _____

Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 4 *Resource Name or #: (Assigned by recorder) Resource No. 32 Dam

P1. Other Identifier: _____

*P2. Location: Not for Publication Unrestricted *a. County El Dorado

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad South Lake Tahoe, CA-NV Date 1992 T 12N R 18E, SW ¼ of SE ¼ of Sec. 9; MDBM

c. Address _____ City _____ Zip _____

d. UTM: (Give more than one for large and/or linear resources) Zone 11 240491 mE/ 4309312 mN (NAD 27)

e. Other Locational Data: e.g., parcel #, directions to resource, elevation, etc., as appropriate).

*P3a. Description: Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries. This is the collapsed remains of a board-formed concrete irrigation dam in the Upper Truckee River. The only standing section is along the west bank of the river, while the remainder of the sections have collapsed into the river. The 20-foot long standing wall, paralleling the riverbank, measures seven feet high and eight inches thick, with a four-foot long wing on the upstream side. The corresponding wall on the east bank has fallen sideways into the river, with the wing wall partially erect. An eroded but intact poured concrete ridged slab (ca. 20 feet wide) covers the river bed between the dam walls. Rubble from the collapsed dam sections lies downstream of the dam site.

*P3b. Resource Attributes: (List attributes and codes) HP21 Dam

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #) Overview Resource No. 32 Dam (view SW, 3 September 2006).

*P6. Date Constructed/Age and Sources:

Historic
 Prehistoric Both

*P7. Owner and Address:

*P8. Recorded by: (Name, affiliation, address)

Judith Marvin and Linda Thorpe
Foothill Resources, Ltd.
P.O. Box 2040
Murphys, CA 95247

*P9. Date Recorded:

3 September 2006

*P10. Survey Type (Describe):

Intensive

*P11. Report Citation: (Cite survey report and other sources, or enter "none.") *Upper Truckee River Middle Reach Preliminary*

Restoration Alternative, South Lake Tahoe, El Dorado County, California. Foothill Resources, Ltd., Murphys, California October 2007.

*Attachments: NONE Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
 Artifact Record Photograph Record Other (List) _____

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 of 4

*NRHP Status Code 6Z

*Resource Name or # (Assigned by recorder) Resource No. 32

B1. Historic Name:

B2. Common Name:

B3. Original Use: Dam B4. Present Use: Collapsed

*B5. Architectural Style:

*B6. Construction History: (Construction date, alterations, and date of alterations)

*B7. Moved? No Yes Unknown Date: Original Location:

*B8. Related Features:

B9a. Architect: Unknown b. Builder: Unknown

*B10. Significance: Theme Area

Period of Significance Property Type Applicable Criteria

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The lands in the project area have been associated with two early-day Lake Valley families: the Lyons and the Bartons. The lands southwest of the project area, located in the first meadow north of Meyers, was settled by Hiram Barton, who arrived in California in the 1850s and established his Lake Valley summer "home ranch" in the 1860s. There he supplied feed for the freighting teams and dairy products for the traveler, as well as serving as a lodging house when other waystations along the Lakeshore leg of the Johnson Cut-off were full to capacity.

During the winter season members of the Barton family resided in White Oak Township, near Rescue and north of Clarksville, in western El Dorado County. Hiram and his wife Margaret had two girls and seven sons, with one of them, William Delos Barton, still active in the cattle business in 1955, with headquarters at the Tahoe Y. One of Hiram's brothers, Timothy and his wife Jane, settled their summer range on meadowland to the northeast of Hiram's Lake Valley Ranch, where he raised cattle. The ranch was later acquired by Samuel Kyburz, apparently the ranch in the project area (Scott:1957:379).

The concrete dams on the Upper Truckee River within the project area appear to have been constructed by the Barton family, who ran cattle on the land. The dams were used for irrigating the meadowlands on either side of the river for livestock grazing.

Evaluation. The dam does not appear to be eligible for listing on the National Register, nor to be a historical resource for the purposes of CEQA or TRPA. Under Criterion A/1, although it is associated with livestock grazing in Lake Valley, it is not a significant contributor to that important event, nor is it associated with any persons important in history (Criterion B/2). Under Criterion C/3, it is a typical example of a common resource types, not the work of a master, nor does it possess high artistic values. It is also lacking in integrity, having collapsed into the river. Its information potential (Criterion D/4) has been exhausted through this recordation

B11. Additional Resource Attributes: (List attributes and codes) N/A

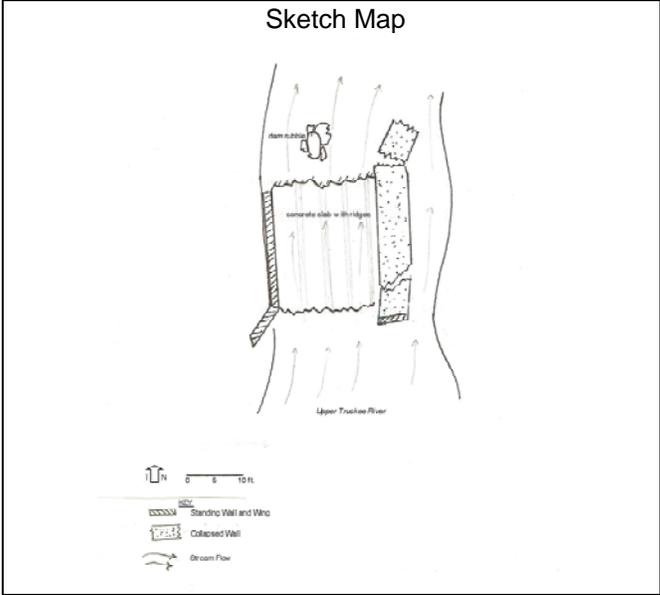
*B12. References

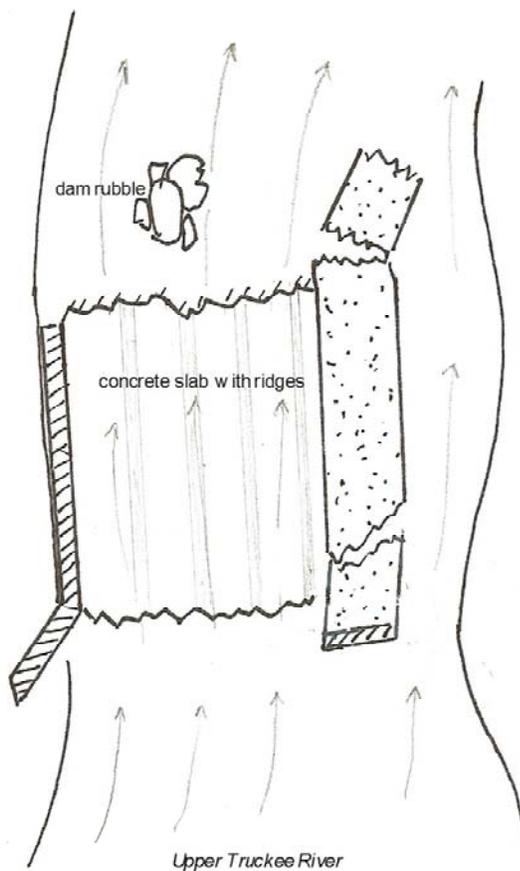
B13. Remarks:

*B14. Evaluator: Judith Marvin, Foothill Resources, Ltd.

*Date of Evaluation: 5 October 2007

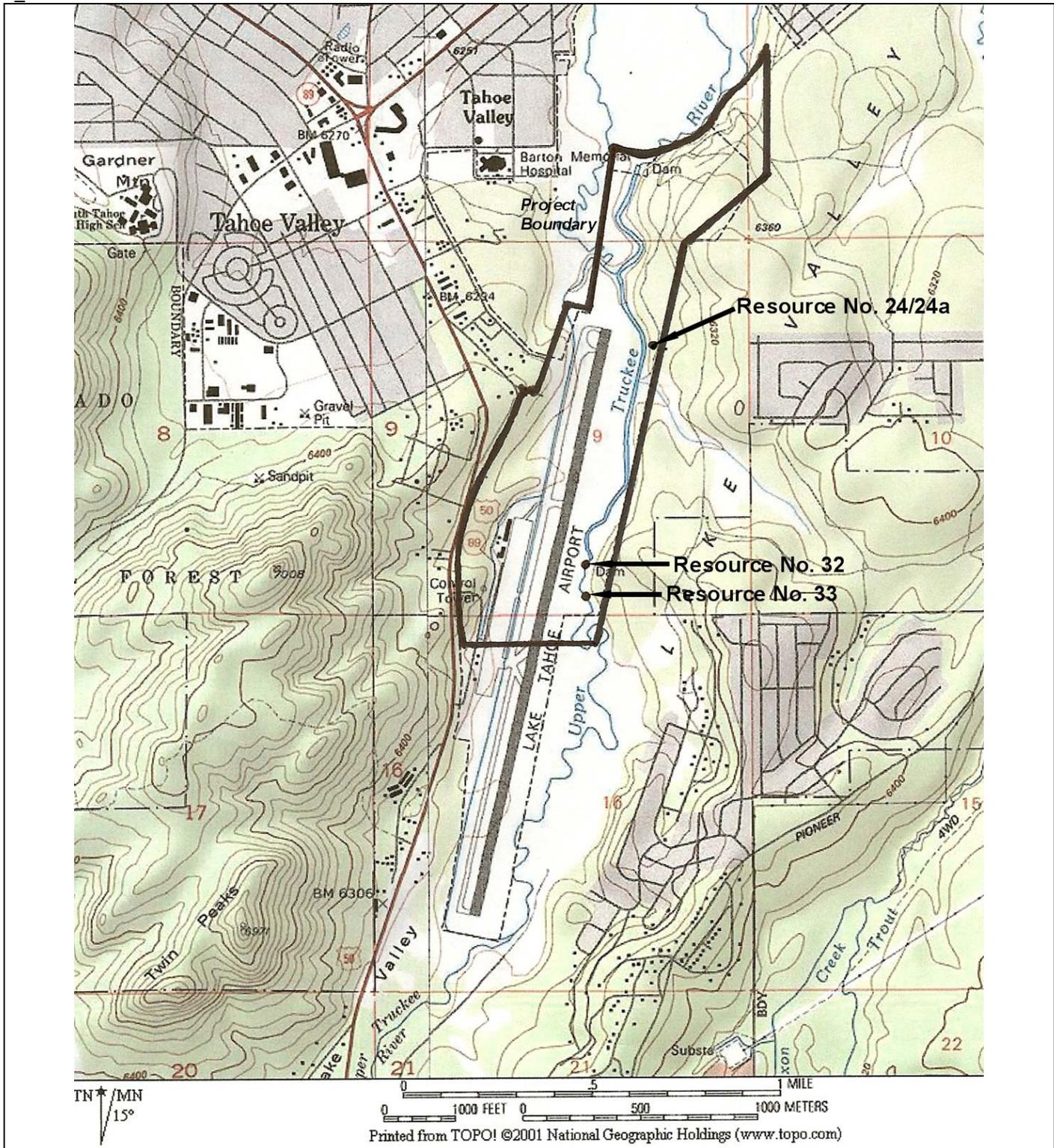
(This space reserved for official comments)





- KEY**
- Standing Wall and Wing
 - Collapsed Wall
 - Stream Flow

Page 4 of 4 *Resource Name or # (Assigned by recorder) Resource No. 32 Dam
*Map Name: South Lake Tahoe CA/NV USGS 7.5' Quad Scale: 1:24000 Date of Map: 1992



P1. Other Identifier: _____

*P2. Location: Not for Publication Unrestricted *a. County El Dorado

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad South Lake Tahoe, CA-NV Date 1992 T 12N R 18E, SW ¼ of SE ¼ of Sec. 9; MDBM

c. Address _____ City _____ Zip _____

d. UTM: (Give more than one for large and/or linear resources) Zone 11 240497 mE/ 4309169 mN (NAD 27)

e. Other Locational Data: e.g., parcel #, directions to resource, elevation, etc., as appropriate).

*P3a. Description: Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries). This is the collapsed remains of a board-formed concrete irrigation dam in the Upper Truckee River. An L-shaped section on the east bank of the river is the only standing section of this dam. This section is freestanding, as it has been breached between the bank and the section. The remainder of the sections have collapsed into the river, with the water coursing over them. The standing section measures seven feet tall. Large timbers run under it (ca. 35-45 feet) from bank to bank. The timbers are displaced and askew, but still intact.

*P3b. Resource Attributes: (List attributes and codes) HP21 Dam

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #)

Overview Resource No. 33 Dam (view SW, 3 September 2006).

*P6. Date Constructed/Age and Sources:

- Historic
- Prehistoric Both

*P7. Owner and Address:

*P8. Recorded by: (Name, affiliation, address)
Judith Marvin and Linda Thorpe
Foothill Resources, Ltd.
P.O. Box 2040
Murphys, CA 95247

*P9. Date Recorded:
3 September 2006

*P10. Survey Type (Describe):
Intensive

*P11. Report Citation: (Cite survey report and other sources, or enter "none.") *Upper Truckee River Middle Reach Preliminary*

Restoration Alternative, South Lake Tahoe, El Dorado County, California. Foothill Resources, Ltd., Murphys, California October 2007.

*Attachments: NONE Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
 Artifact Record Photograph Record Other (List) _____

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 of 4

*NRHP Status Code 6Z

*Resource Name or # (Assigned by recorder) Resource No. 33 Dam

- B1. Historic Name:
- B2. Common Name:
- B3. Original Use: Dam B4. Present Use: Collapsed
- *B5. **Architectural Style:**
- *B6. **Construction History:** (Construction date, alterations, and date of alterations)
- *B7. **Moved?** No Yes Unknown **Date:** **Original Location:**
- *B8. **Related Features:**
- B9a. Architect: Unknown b. Builder: Unknown
- *B10. **Significance:** **Theme** **Area**

Period of Significance **Property Type** **Applicable Criteria**
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The lands in the project area have been associated with two early-day Lake Valley families: the Lyons and the Bartons. The lands southwest of the project area, located in the first meadow north of Meyers, was settled by Hiram Barton, who arrived in California in the 1850s and established his Lake Valley summer "home ranch" in the 1860s. There he supplied feed for the freighting teams and dairy products for the traveler, as well as serving as a lodging house when other waystations along the Lakeshore leg of the Johnson Cut-off were full to capacity.

During the winter season members of the Barton family resided in White Oak Township, near Rescue and north of Clarksville, in western El Dorado County. Hiram and his wife Margaret had two girls and seven sons, with one of them, William Delos Barton, still active in the cattle business in 1955, with headquarters at the Tahoe Y. One of Hiram's brothers, Timothy and his wife Jane, settled their summer range on meadowland to the northeast of Hiram's Lake Valley Ranch, where he raised cattle. The ranch was later acquired by Samuel Kyburz, apparently the ranch in the project area (Scott:1957:379).

The concrete dams on the Upper Truckee River within the project area appear to have been constructed by the Barton family, who ran cattle on the land. The dams were used for irrigating the meadowlands on either side of the river for livestock grazing.

Evaluation. The dam does not appear to be eligible for listing on the National Register, nor to be a historical resource for the purposes of CEQA or TRPA. Under Criterion A/1, although it is associated with livestock grazing in Lake Valley, it is not a significant contributor to that important event, nor is it associated with any persons important in history (Criterion B/2). Under Criterion C/3, it is a typical example of a common resource types, not the work of a master, nor does it possess high artistic values. It is also lacking in integrity, having collapsed into the river. Its information potential (Criterion D/4) has been exhausted through this recordation

B11. Additional Resource Attributes: (List attributes and codes) N/A

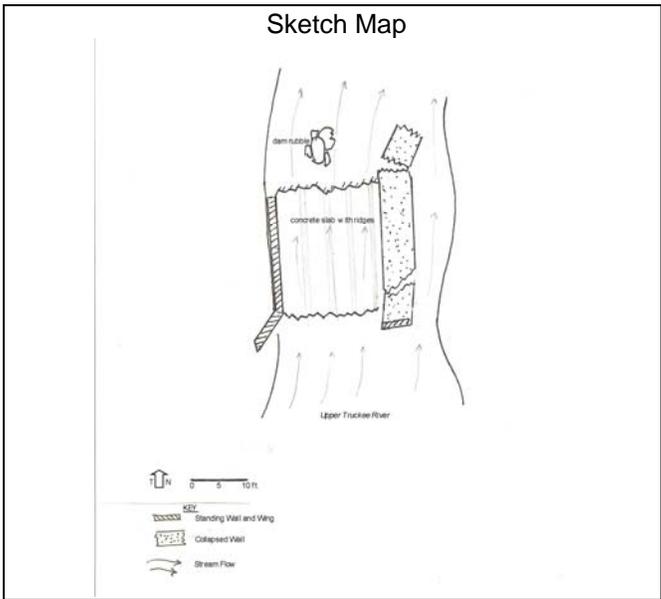
*B12. **References**

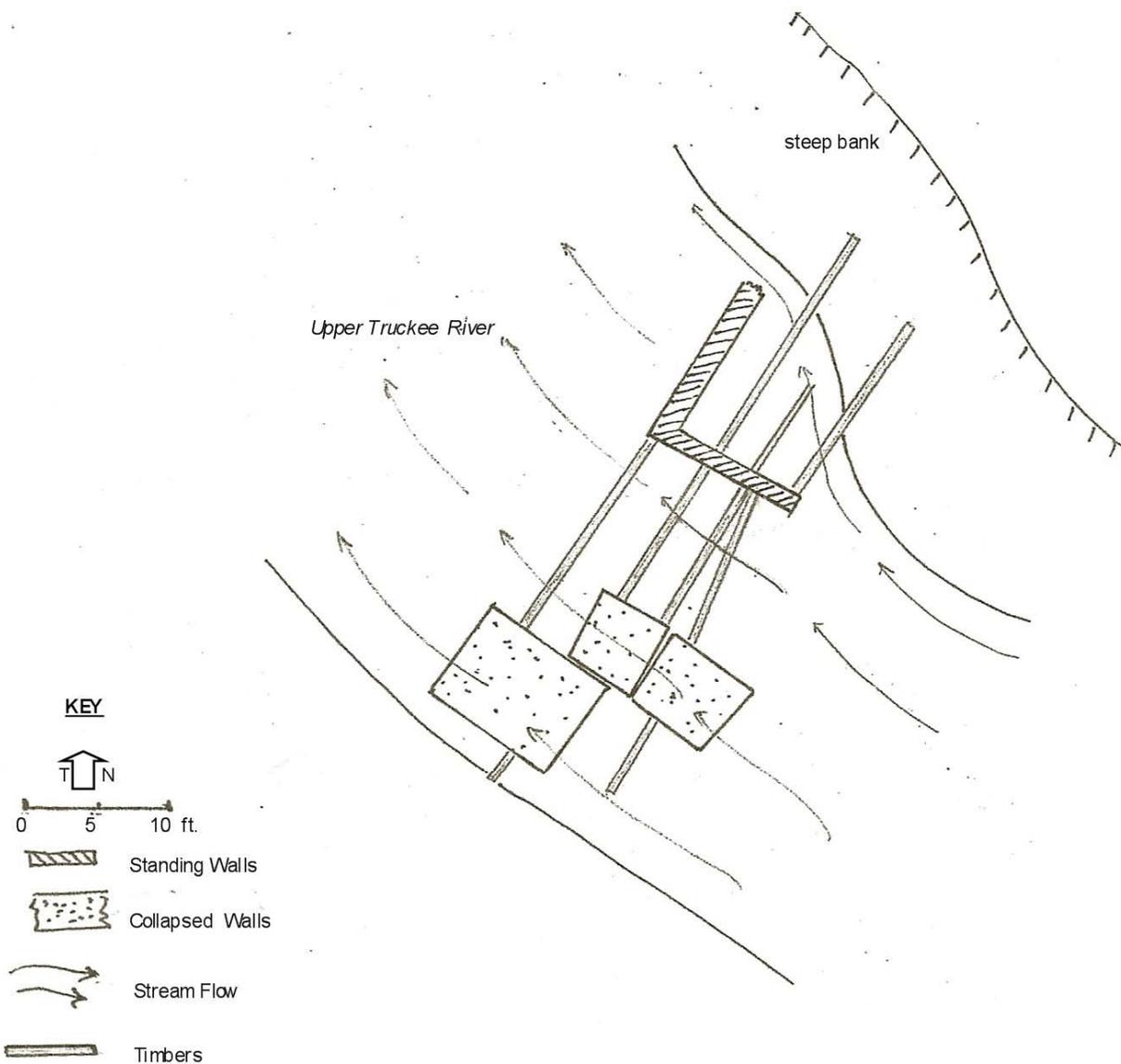
B13. Remarks:

*B14. **Evaluator:** Judith Marvin, Foothill Resources, Ltd.

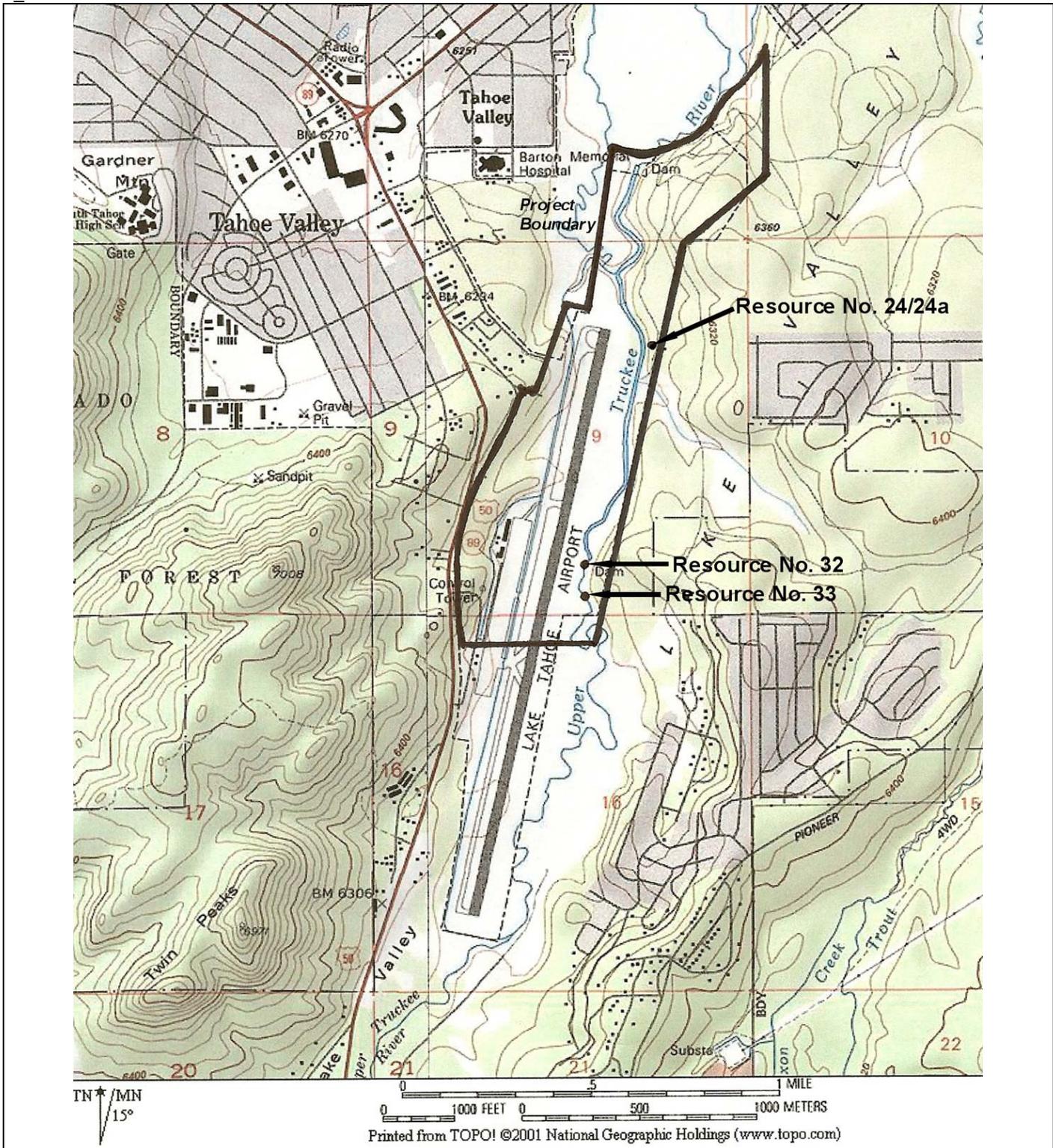
*Date of Evaluation: 5 October 2007

(This space reserved for official comments)





Page 4 of 4 *Resource Name or # (Assigned by recorder) Resource No. 33 Dam
*Map Name: South Lake Tahoe CA/NV USGS 7.5' Quad Scale: 1:24000 Date of Map: 1992



Appendix H
TRPA Plan Area Statements

095

TROUT/COLD CREEK

PLAN DESIGNATION:

Land Use Classification	CONSERVATION
Management Strategy	MITIGATION
Special Designation	NONE

DESCRIPTION:

Location: This is a large undeveloped area south of the City of South Lake Tahoe. The area is depicted on TRPA maps G-20, G-21, H-18, H-19, and the South Lake Tahoe and Freel Peak Quadrangles.

Existing Uses: Most of this area is in public ownership and is managed by the USFS for low to moderate resource use. Forest practices include range allotment, timber harvest, wildlife habitat improvements, and dispersed recreation management. Recreational activities include hiking, fishing, cross country skiing, and off-road vehicle use

Existing Environment: The land capability of this area is a mixture of low, moderate, and high hazard. Creeks passing through this area include Heavenly Valley, Cold, Trout, and Saxon. Dominant plant species include red and white fir, lodgepole pine, willow, greenleaf manzanita, and Basin sagebrush.

PLANNING STATEMENT: This area should continue to be managed for low to moderate resource use to include timber, grazing, recreation, and wildlife habitat management.

PLANNING CONSIDERATIONS:

1. Off-road vehicle use is creating localized erosion problems and nuisances.
2. Access to Star Lake and Freel Peak is through private land with no public right-of-way.
3. Proximity to urban areas provides potential for developed recreation sites.
4. The future status of a Caltrans right-of-way through this area is uncertain.
5. The Agency Wildlife Map identifies peregrine falcon habitat and major deer migration corridors through this Plan Area, and the USFS has identified active goshawk habitat here.

SPECIAL POLICIES: No special policies.

1. Reduce conflicts between residents and off-road vehicle users.
2. Improve the instream habitats for fishes in the various creeks that pass through this area.
3. Low hazard lands adjacent to the Sierra Tract should be considered for development of urban recreation uses.

PERMISSIBLE USES: Pursuant to Chapter 18 PERMISSIBLE USES and if applicable, Chapter 51 PERMISSIBLE USES AND ACCESSORY STRUCTURES IN THE SHOREZONE AND LAKEZONE, the following primary uses may be permitted within all or a portion of the Plan Area. The list indicates if the use is allowed (A) or must be considered under the provisions for a special use (S). Existing uses not listed shall be considered nonconforming uses within this Plan Area. The establishment of new uses not listed shall be prohibited within this Plan Area.

General List: The following list of permissible uses is applicable throughout the Plan Area.

Residential	Domestic animal raising (S), employee housing (S), and single family dwelling (S).
Commercial	Nursery (S).
Public Service	Cemeteries (S), pipelines and power transmission lines (S), local public health and safety facilities (S), public utility centers (S), transit stations and terminals (S), transmission and receiving facilities (S), and transportation routes (S).
Recreation	Cross country skiing courses (S), day use areas (S), developed campgrounds (S), outdoor recreation concessions (S), off-road vehicle courses (S), participant sports facilities (S), riding and hiking trails (A), rural sports (S), group facilities (S), snowmobile courses (S), and undeveloped campgrounds (S).
Resource Management	Reforestation (A), regeneration harvest (A), sanitation salvage cut (A), selection cut (A), special cut (A), thinning (A), timber stand improvement (A), tree farms (S), early successional stage vegetation management (A), nonstructural fish habitat management (A), nonstructural wildlife habitat management (A), structural fish habitat management (A), structural wildlife habitat management (A), farm/ranch accessory structures (S), grazing (S), range pasture management (A), range improvement (A), fire detection and suppression (A), fuels treatment (A), insect and disease suppression (A), prescribed fire management (A), sensitive plant management (A), uncommon plant community management (A), erosion control (A), runoff control (A), and SEZ restoration (A).

MAXIMUM DENSITIES: Pursuant to Chapter 21 DENSITY, the following list establishes the maximum allowable densities that may be permitted for any parcel located within the Plan Area. The actual development permitted may be further limited by transfer of development rights limitations, residential density incentive program, special use determinations, allocation limitations and general site development standards.

USE	MAXIMUM DENSITY
Residential	
Employee Housing	15 units per acre
Single Family Dwelling	1 unit per parcel
Recreation	
Developed Campgrounds	8 sites per acre
Group Facilities	25 persons per acre

MAXIMUM COMMUNITY NOISE EQUIVALENT LEVEL: The maximum community noise equivalent level for this Plan Area is 50 CNEL.

ADDITIONAL DEVELOPED OUTDOOR RECREATION: The following are the targets and limits for additional developed outdoor recreation facilities specified in Chapter 13 to be located within this Plan Area. Specific projects and their timing are addressed in the TRPA Five-Year Recreation Program pursuant to Chapter 33 Allocation of Development. The following additional capacities allowed are measured in persons at one time.

SUMMER DAY USES **0 PAOT** WINTER DAY USES **0 PAOT** OVERNIGHT USES **0 PAOT**

OTHER: Trailhead and ten miles of trail.

ENVIRONMENTAL IMPROVEMENT PROGRAMS: The capital improvement and other improvement programs required by the Regional Goals and Policies Plan and Environmental Improvement Plan (EIP) for this area shall be implemented. [§]

[§] Amended 5/22/02

TRUCKEE MARSH

PLAN DESIGNATION:

Land Use Classification	CONSERVATION
Management Strategy	MAXIMUM REGULATION
Special Designation	NONE

DESCRIPTION:

Location: This is the stream environment zone adjoining the Upper Truckee River from Lake Tahoe to a point just below the airport and along Trout Creek north of Pioneer Trail. The boundaries of this area are depicted on Agency maps G-17, G-18 and G-19.

Existing Uses: This area has limited use due to poor drainage. Recreational uses include rafting, bird watching, cross country skiing, hiking, fishing, and some sunbathing along the shoreline of Lake Tahoe. Grazing of livestock occurs in the meadow areas. The Tahoe Keys Property Owners' Association holds a long term lease/purchase option on 2.206 acres of land, used as a maintenance and storage facility, south of Venice Drive East.

Existing Environment: This area is classified as SEZ. Marsh and deciduous riparian vegetation dominate the vegetative composition. Excellent habitat exists for a wide variety of different wildlife species. Bald eagles use the area in the fall and winter months. Habitats for *Rorippa subumbellata* are found on the beach. The shorezone tolerance district is 1.

PLANNING STATEMENT: This area should be managed primarily for its natural values including those management practices which contribute to the quality of fish and wildlife habitats, support dispersed recreation, and maintain the nutrient catchment capacity of the stream environment zone.

PLANNING CONSIDERATIONS:

1. Commercial and residential uses infringe upon the stream environment zone.
2. Highway crossings over the Upper Truckee River and Trout Creek restrict the natural functioning capacity of the SEZ.
3. Important wildlife habitat adjoins the airport.
4. Parking problems are created by people wishing to raft on the Upper Truckee River.
5. Dogs from nearby residential areas harass wildlife.
6. Fish habitat in the Upper Truckee River and Trout Creek has been degraded by sediment deposition.
7. Many fishes from the lake migrate up the streams to spawn.

8. There are localized problems of bank slumping and erosion.
9. Access to Barton Beach is extremely limited.
10. Cold Creek is diverted to create Lake Christopher.
11. This area is impacted by the airport transportation corridor.
12. Cattle are occasionally released into the meadow areas when the meadows are saturated with water.
13. Approximately 150 acres adjacent to the Tahoe Keys may be transferred to public ownership pursuant to a litigation settlement.
14. The future status of a Caltrans right-of-way through this area is uncertain.
15. The Agency Wildlife Map identifies waterfowl habitat in the area, and the USFS has identified this area as bald eagle habitat.

SPECIAL POLICIES:

1. Stream zones should be restored where Highway 50 crosses the Upper Truckee River and Trout Creek.
2. Stream environment zones should be restored in the vicinity of the crossings of Trout Creek at Highway 50 and at Black Bart Road.
3. Banks along both creeks should be stabilized.
4. Instream habitat should be improved through artificial creation of deep pools and removal of obstructions.
5. The Upper Truckee Marsh should be buffered from other, more intensive land use areas.
6. Final determination by the city on the long term use and maintenance of Lake Christopher should include consideration of SEZ restoration and relocation of Cold Creek to its original channel.
7. Grazing of livestock should be conditional upon the use of acceptable management practices.
8. The diversion structure used to irrigate the Upper Truckee Meadow south of Highway 50 should be eliminated.
9. Wildlife habitat improvement projects, to include waterfowl nesting platforms, should be undertaken for the Upper Truckee Marsh.
10. New roadway alignments through stream environment zones are to be discouraged.
11. No new uses should be approved that would degrade the high scenic quality of Shoreline Unit No. 33 or contribute to the further degradation of Roadway Unit No. 35.
12. Developed facilities adjacent to the view corridors along Highway 50 at the Upper Truckee River and Trout Creek shall be addressed in the South Y Community Plan to improve the scenic quality rating of these areas.

- 13. The Upper Truckee River should be designated as a catch and release fishery.
- 14. This is a high priority area for land coverage removal.

PERMISSIBLE USES: Pursuant to Chapter 18 PERMISSIBLE USES and if applicable, Chapter 51 PERMISSIBLE USES AND ACCESSORY STRUCTURES IN THE SHOREZONE AND LAKEZONE, the following primary uses may be permitted within all or a portion of the Plan Area. The list indicates if the use is allowed (A) or must be considered under the provisions for a special use (S). Existing uses not listed shall be considered nonconforming uses within this Plan Area. The establishment of new uses not listed shall be prohibited within this Plan Area.

General List: The following list of permissible uses is applicable throughout the Plan Area.

Public Service	Transportation routes (S), pipeline and power transmission (S), and public utility centers (S).
Recreation	Riding and hiking trails (S) and cross country skiing courses (S).
Resource Management	Sanitation salvage cut (S), early successional stage vegetation management (S), nonstructural fish habitat management (S), nonstructural wildlife habitat management (A), structural fish habitat management (S), structural wildlife habitat management (S), farm/ranch accessory structure (S), grazing (S), range pasture management (S), range improvement (S), fire detection and suppression (A), fuels treatment (S), insect and disease suppression (A), sensitive plant management (S), uncommon plant community management (S), erosion control (S), runoff control (S), special cuts (S), and SEZ restoration (S).

Shorezone: Within the specified shorezone tolerance district, the following primary uses may be permitted in the backshore, nearshore, and foreshore. Accessory structures shall be regulated pursuant to the regulations applicable to the primary use upon which they are dependent in accordance with Chapter 18. The following structures may be permitted in the shorezone as an allowed (A) or special (S) use only if they are accessory to an existing, allowed use located on the same or adjoining littoral parcel.

Tolerance District 1

Primary Uses	Safety and navigation facilities (A).
Accessory Structures	Fences (S) and shoreline protective structures (S).

MAXIMUM DENSITIES: Pursuant to Chapter 21 DENSITY, the following list establishes the maximum allowable densities that may be permitted for any parcel located within the Plan Area. The actual development permitted may be further limited by transfer of development rights limitations, residential density incentive program, special use determinations, allocation limitations and general site development standards.

USE	MAXIMUM DENSITY
There are no Plan Area maximum allowable densities	

MAXIMUM COMMUNITY NOISE EQUIVALENT LEVEL: The maximum community noise equivalent level for this Plan Area is 50 CNEL, except a noise standard of 60 CNEL shall apply to areas within approved flight paths. The maximum community noise equivalent level for the Highway 50 corridor is 65 CNEL.

ADDITIONAL DEVELOPED OUTDOOR RECREATION: The following are the targets and limits for additional developed outdoor recreation facilities specified in Chapter 13 to be located within this Plan Area. Specific projects and their timing are addressed in the TRPA Five-Year Recreation Program pursuant to Chapter 33 Allocation of Development. The following additional capacities allowed are measured in persons at one time.

SUMMER DAY USES **0 PAOT** WINTER DAY USES **0 PAOT** OVERNIGHT USES **0 PAOT**

ENVIRONMENTAL IMPROVEMENT PROGRAMS: The capital improvement and other improvement programs required by the Regional Goals and Policies Plan and Environmental Improvement Plan (EIP) for this area shall be implemented.[§]

[§] Amended 5/22/02

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AIRPORT

PLAN DESIGNATION:

Land Use Classification	COMMERCIAL/PUBLIC SERVICE
Management Strategy	REDIRECTION
Special Designation	TDR RECEIVING AREA FOR: 1. Existing Development SCENIC RESTORATION AREA

DESCRIPTION:

Location: This area includes the airport and surrounding area along Highway 50 and is located on TRPA maps G-19 and G-20.

Existing Uses: This area includes the airport, a concrete batch plant, old borrow areas, and miscellaneous commercial uses. The area is approximately 40 percent built out if the airport runways are excluded.

Existing Environment: The lands are classified 70 percent SEZ, 20 percent low hazard and ten percent high hazard. The area is 20 percent covered with an additional 60 percent disturbed.

PLANNING STATEMENT: This area should be rehabilitated to provide appropriate commercial service. The airport should continue to provide commercial and general aviation service in accordance with the adopted Goals and Policies and environmental constraints.

PLANNING CONSIDERATIONS:

1. There are extensive disturbed areas (Px) which are currently misclassified as high hazard and should be considered for man-modified designations.
2. There are scenic problems associated with the existing commercial area.
3. There are a number of unresolved airport issues, including land capability, general aviation and commercial service levels, and establishment of a noise corridor.

SPECIAL POLICIES:

1. The area west of Highway 50 should be evaluated for a man-modified determination. Areas so designated should be subject to a rehabilitation plan, and mitigation measures should emphasize scenic and disturbed land restoration as a condition of new development.
2. Redirection, including relocation of development or change in use of development on areas which do not meet scenic threshold criteria, should be encouraged.

3. The airport and its surrounding land uses shall be the subject of a cooperative planning effort between the City of South Lake Tahoe, the County of El Dorado, an Airport Land Use Commission (if formed), and TRPA, to the extent authorized by applicable state and federal law. Such joint planning efforts shall be incremental, dealing first with the airport proper and then the allowable surrounding land uses. Such joint planning shall be conducted, where practicable, under memorandums of understanding between the various governmental entities to avoid or minimize any jurisdictional questions.
4. This area should be considered as a multi-modal transportation node.

PERMISSIBLE USES: Pursuant to Chapter 18 PERMISSIBLE USES and if applicable, Chapter 51 PERMISSIBLE USES AND ACCESSORY STRUCTURES IN THE SHOREZONE AND LAKEZONE, the following primary uses may be permitted within all or a portion of the Plan Area. The list indicates if the use is allowed (A) or must be considered under the provisions for a special use (S). Existing uses not listed shall be considered nonconforming uses within this Plan Area. The establishment of new uses not listed shall be prohibited within this Plan Area.

General List: The following list of permissible uses is applicable throughout the Plan Area.

Residential	Employee housing (S) and multiple family dwelling (S).
Tourist Accommodation	Hotels, motels, and other transient dwelling units Accommodation(S).
Commercial	Auto, mobile home and vehicle dealers (S), building materials and hardware (S), eating and drinking places (A), food and beverage retail sales (A), furniture, home furnishings and equipment (S), general merchandise stores (A), mail order and vending (A), nursery (A), outdoor retail sales (S), service stations (S), animal husbandry services (S), auto repair and service (S), broadcasting studios (A), personal services (A), professional offices (A), schools - business and vocational (S), secondary storage (S), batch plants (S), food and kindred products (S), fuel and ice dealers (S), industrial services (S), recycling and scrap (S), small scale manufacturing (S), storage yards (S), vehicle and freight terminals (S), vehicle storage and parking (S), warehousing (A), and wholesale and distribution (S).
Public Service	Airfields, landing strips and heliports (new non-emergency sites prohibited) (A), cemeteries (S), churches (S), cultural facilities (S), day care centers/pre-schools (A), government offices (S), local assembly and entertainment (S), local post office (A), local public health and safety facilities (A), membership organizations (S), public utility centers (S), regional public health and safety facilities (S), social service organizations (S), pipelines and power transmission (S), transit stations and terminals (S), transportation routes (S), and transmission and receiving facilities (S).

Recreation

Day use areas (A), participant sports facilities (S), cross country skiing courses (S), outdoor recreation concessions (S), riding and hiking trails (S), rural sports (S), snowmobile courses (S), and visitor information center (S).

Resource Management

Reforestation (A), sanitation salvage cut (A), thinning (A), timber stand improvement (A), tree farms (A), early successional stage vegetation management (A), nonstructural fish habitat management (A), nonstructural wildlife habitat management (A), structural fish habitat management (A), structural wildlife habitat management (A), fire detection and suppression (A), fuels treatment (A), insect and disease suppression (A), sensitive plant management (A), uncommon plant community management (A), erosion control (A), runoff control (A) and SEZ restoration (A).

MAXIMUM DENSITIES: Pursuant to Chapter 21 DENSITY, the following list establishes the maximum allowable densities that may be permitted for any parcel located within the Plan Area. The actual development permitted may be further limited by transfer of development rights limitations, residential density incentive program, special use determinations, allocation limitations and general site development standards.

USE	MAXIMUM DENSITY
Residential	
Employee Housing	15 units per acre
Tourist Accommodation	
Hotel, Motel and other Transient Units	
• with less than 10% of units with kitchens	40 units per acre
• with 10% or more units with kitchens	15 units per acre

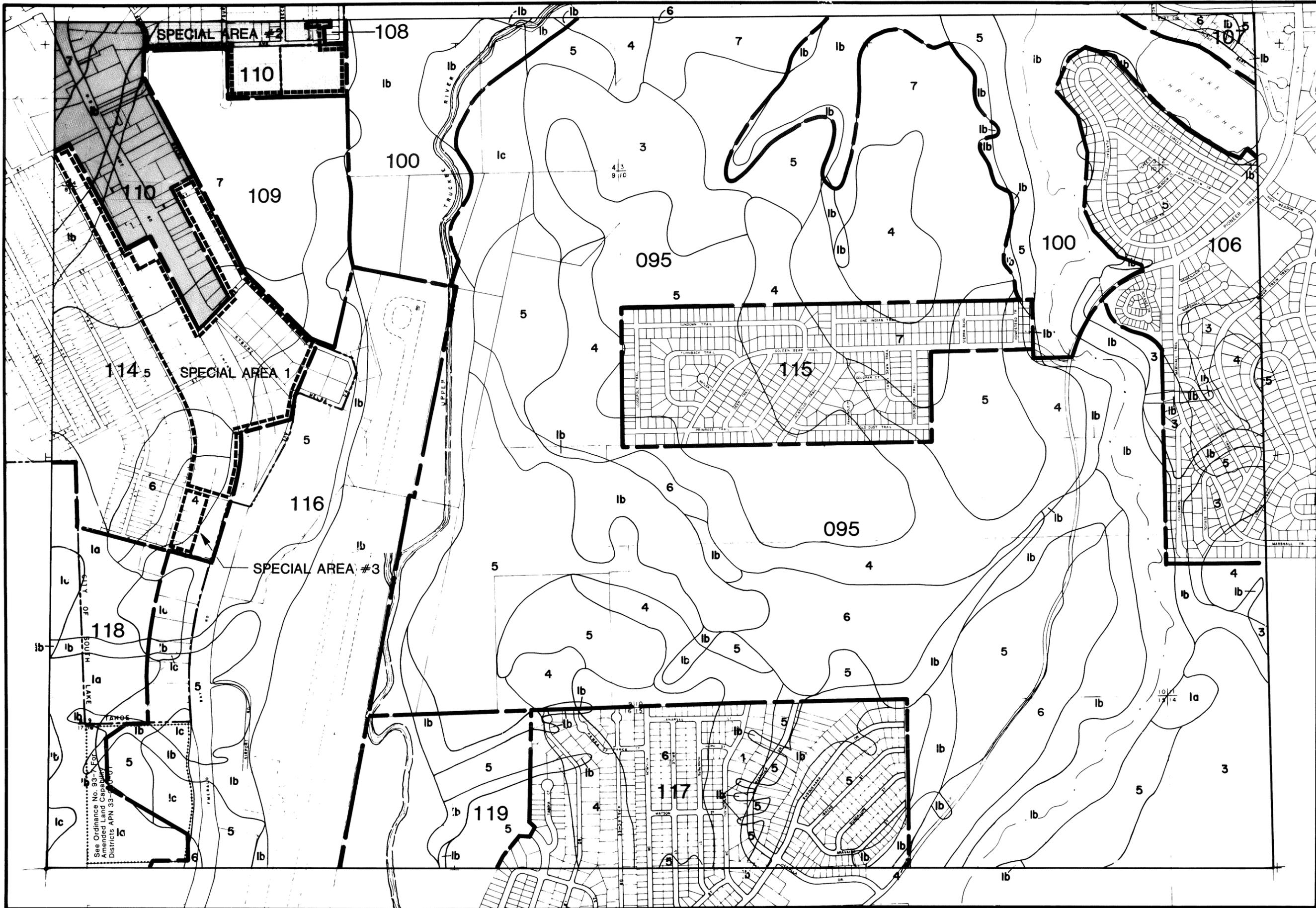
MAXIMUM COMMUNITY NOISE EQUIVALENT LEVEL: The maximum community noise equivalent level for this Plan Area is 65 CNEL. The maximum community noise equivalent level for the Highway 50 corridor is 65 CNEL.

ADDITIONAL DEVELOPED OUTDOOR RECREATION: The following are the targets and limits for additional developed outdoor recreation facilities specified in Chapter 13 to be located within this Plan Area. Specific projects and their timing are addressed in the TRPA Five-Year Recreation Program pursuant to Chapter 33 Allocation of Development. The following additional capacities allowed are measured in persons at one time.

SUMMER DAY USES **0 PAOT** WINTER DAY USES **0 PAOT** OVERNIGHT USES **0 PAOT**

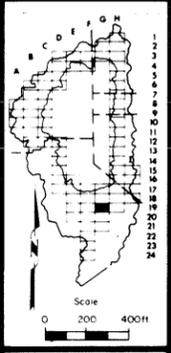
ENVIRONMENTAL IMPROVEMENT PROGRAMS: The capital improvement and other improvement programs required by the Regional Goals and Policies Plan and Environmental Improvement Plan (EIP) for this area shall be implemented.[§]

[§] Amended 5/22/02



See Ordinance No. 93-3
 Amended Land Capacity
 Districts APN 33-00001

PLAN AREAS	LAND CAPABILITY
Ordinance 93-3	Ordinance 93-7
Revised 4-28-93	Revised 6/23/93
93-22	
Revised 12-15-93	
97-10	
Revised 5-25-97	



G-19
 LAKE TAHOE REGION

Shirley G. Sibley
 Governing Board Chairman

Shirley G. Sibley
 Governing Board Chairman

7-1-87 Date

7-1-87 Date