CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LAHONTAN REGION

MEETING OF APRIL 9 AND 10, 2014 SOUTH LAKE TAHOE

ITEM: 9

SUBJECT: UNITED STATES FOREST SERVICE-LAKE TAHOE BASIN

MANAGEMENT UNIT (LTBMU), WILLIAM KENT CAMPGROUND REDEVELOPMENT PROJECT – ADOPTION OF A MITIGATED NEGATIVE DECLARATION AND EXEMPTION TO WASTE DISCHARGE PROHIBITIONS CONTAINED IN THE WATER QUALITY CONTROL PLAN FOR THE LAHONTAN REGION

(BASIN PLAN)

CHRONOLOGY: This is a new item.

ISSUES: Should the Water Board adopt a Mitigated Negative Declaration

(MND) for the William Kent Campground Redevelopment Project

(Project)?

Does the LTBMU Project meet the criteria for Basin Plan prohibition exemptions to allow the discharge of waste below the high water rim of Lake Tahoe and within a Stream Environment Zone (SEZ)?

DISCUSSION: The LTBMU project is designed to change and improve existing

facilities and improve water quality at the William Kent Campground near Tahoe City. In 2012 the LTBMU prepared an Environmental Assessment (William Kent EA), and in 2013 signed a Decision Notice and Finding of No Significant Impact (DN/FONSI) for the William Kent BMP Retrofit and Administrative Site Redevelopment Project. The William Kent Campground Redevelopment Project (Project) is a subset of the larger LTBMU project analyzed in the William Kent EA. The Project as analyzed in the MND includes redesign and upgrade of some campground facilities, day-use beach area storm water conveyance improvements, and

campground SEZ restoration. The Project does not include

construction of an administrative facility and relocation of the Meeks

Bay fire station as discussed in the William Kent EA.

Staff has provided information in the proposed resolution to meet the required criteria to grant exemptions to Basin Plan prohibitions.

The Water Board considered the William Kent EA and determined that additional information was needed to satisfy the requirements of the California Environmental Quality Act (CEQA). The Water Board prepared a draft MND for the Project to inform the public and interested agencies of the Project and describe additional mitigation measures identified as necessary.

The draft MND was circulated for a 30-day public comment period from January 9, 2014 to February 10, 2014. The Water Board received seven letters commenting on the project, included as Enclosure 2. Of the seven comment letters, the California Department of Transportation and the California State Lands Commission submitted comments which necessitated Staff to gather additional information to respond to those specific comments. Staff responses to comments are included as Enclosure 3.

Prior to construction, the LTBMU must obtain a 401 Water Quality Certification and coverage under the Order R6T-2001-0019, General Waste Discharge Requirements and NPDES General Permit No. CAG616002 for Storm Water Discharges Associated with Construction Activity in the Lake Tahoe Hydrologic Unit.

RECOMMEN-DATION:

Adoption of the Resolution as proposed.

ENCLOSURE	ITEM	Bates Number
1	Proposed Resolution R6T-2014-(Proposed)	9-5
2	Public comment letters	9-15
3	Water Board staff response to comments	9-31
4	Mitigated Negative Declaration for the William Kent Campground Redevelopment Project	9-43

ENCLOSURE 1

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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LAHONTAN REGION

RESOLUTION R6T-2014-(PROPOSED)

UNITED STATES FOREST SERVICE-LAKE TAHOE BASIN MANAGEMENT UNIT,
WILLIAM KENT CAMPGROUND REDEVELOPMENT PROJECT - ADOPTION OF A
MITIGATED NEGATIVE DECLARATION AND EXEMPTIONS TO WASTE
DISCHARGE PROHIBITIONS CONTAINED IN THE WATER QUALITY CONTROL
PLAN FOR THE LAHONTAN REGION

EI Dorado County_		
		

WHEREAS, the California Water Quality Control Board, Lahontan Region (Water Board) finds:

- In December 2013, the United States Forest Service-Lake Tahoe Basin Management Unit (LTBMU) submitted the following information to the Water Board to obtain permits to implement facility upgrades and water quality improvements at the William Kent Campground facility:
 - a. The Final Environmental Assessment for the William Kent BMP Retrofit and Administrative Site Redevelopment Project (William Kent EA) dated February 2013, prepared by the LTBMU
 - b. The National Environmental Protection Act (NEPA) Decision Notice and Finding of No Significant Impact for the William Kent BMP Retrofit and Administrative Site Redevelopment Project (DN/FONSI) signed by the LTBMU Forest Supervisor on February 4, 2014
 - c. A draft Storm Water Pollution Prevention Plan (SWPPP) for William Kent BMP Retrofit Project to comply with Board Order No. R6T-2011-0019, General Waste Discharge Requirements and National Pollutant Discharge Elimination System Permit No. CAG616002 for Storm Water Discharges Associated with Construction Activity in the Lake Tahoe Hydrologic Unit (Construction Storm Water Permit).
 - d. A request for exemptions to prohibitions contained in the Water Quality Control Plan for the Lahontan Basin (Basin Plan).
- The William Kent Campground is located on National Forest lands in Placer County approximately two miles south of Tahoe City, CA. The project area includes approximately 25 acres including a campground facility, administrative site and dayuse beach area.
- 3. The William Kent Campground was first developed in 1924 and the current infrastructure dates to 1963. The campground has 95 campsite spurs, a paved road system, six flush toilet restroom facilities, a sewer dump station, and small check-in kiosk near the facility entrance. A Stream Environment Zone begins near the north-west corner of the property and stretches toward the southern boundary before

terminating near the north-east corner of the property. Storm water from the surrounding neighborhood flows into the campground and is carried through the SEZ in a shallow man-made channel. A portion of the southern-most campground road and campsites are located within the SEZ.

- 4. The LTBMU released the William Kent EA on April 25, 2012, for a 30-day public comment period, and issued the final document in February 2013. The project analyzed in the William Kent EA includes: redevelopment of campground roads and facilities, beach area water quality improvements, SEZ restoration, construction of an administrative facility and wild-land firefighting station, and removal of the existing Meeks Bay fire station. The project for which the LTBMU is seeking permitting and prohibition exemptions does not include redevelopment of the campground bathrooms, removal of the Meeks Bay fire station, or development of an administrative facility and new fire station.
- 5. Implementation of the proposed work requires discretionary approvals from the Water Board. The William Kent Redevelopment Project (hereafter referred to as the "Project"), a subset of the larger federal project, includes:
 - a. Redesign and upgrade of campground facilities:
 - Construct new and redesigned camping spurs to relocate campsites out of the SEZ
 - ii. Upgrade the waste dump station facility
 - iii. Upgrade potable water dispensers
 - iv. Relocate camp host sites
 - v. Redevelop the entrance road and information kiosk area
 - vi. Construct a new road and culvert across the SEZ
 - Day-use beach site water quality improvements to improve approximately 80-feet of storm water conveyance at the Lake Tahoe shorezone by excavating existing buried pipes and creating an open channel
 - c. Campground SEZ restoration and water quality improvements:
 - i. Construct micro-basins and swales for storm water retention and infiltration
 - ii. Remove approximately 1060 linear feet of paved road, multiple small culverts, and 12 campsites from the SEZ
 - iii. Reshape the storm water channel within the SEZ
- 6. The Project is subject to the requirements of both NEPA and the California Environmental Quality Act (CEQA). The LTBMU is the NEPA Lead Agency and the Water Board is the CEQA Lead Agency.
- 7. The Water Board considered the William Kent EA and determined that additional information was needed to satisfy the requirements of CEQA. The Water Board prepared a Mitigated Negative Declaration, including a CEQA Environmental Checklist, to inform the public and interested agencies of the Project and describe

- additional mitigation measures identified as necessary to reduce impacts to less than significant.
- 8. On January 9, 2014 the Water Board provided notice of intent to adopt a Mitigated Negative Declaration for the Project (State Clearing House number 2014012017). The Mitigated Negative Declaration was circulated for a public comment period from January 9, 2014 to February 10, 2014.
- 9. Seven comment letters were received on the Mitigated Negative Declaration.
- 10. The Mitigated Negative Declaration reflects the Water Board's independent judgment and analysis. After considering the document and comments received during the public review process, the Water Board hereby determines that the Project with mitigation measures will not have a significant effect on the environment. The Mitigated Negative Declaration is hereby adopted. Mitigation monitoring is described in the SWPPP and will be enforced through the Construction Storm Water Permit. The documents and other material, which constitute the record, are located at the Water Board office at 2501 Lake Tahoe Boulevard, South Lake Tahoe, CA. The Water Board will file a Notice of Determination.
- 11. The LTBMU requested an exemption to waste discharge prohibitions contained in the Basin Plan for the following Project activities that will be occurring within SEZs and below the high water rim of Lake Tahoe.
 - a. Campground storm water channel reshaping, requiring approximately 9,100square feet of temporary SEZ disturbance and excavation of approximately 220cubic yards
 - b. Paved roadway, culverts and campsite removal and restoration, requiring approximately 15,800-square feet of temporary SEZ disturbance and excavation of approximately 250-cubic yards
 - c. New road segment and culvert installation, requiring approximately 1,400-square feet of new permanent SEZ disturbance and placement of approximately 160-cubic yards of fill
 - d. Beach site storm water culvert removal, requiring approximately 800-square feet of temporary disturbance and placement of approximately 30-cubic yards of fill below the high water rim of Lake Tahoe
 - e. Beach site storm water open channel construction, requiring approximately 1,600-square feet of new permanent disturbance, excavation of approximately 202-cubic yards, and placement of approximately 50-cubic yards of fill below the high water rim of Lake Tahoe
- 12. The Basin Plan specifies the following discharge prohibitions:
 - a. The discharge or threatened discharge, attributable to new development or permanent disturbance in Stream Environment Zones, of solid or liquid waste, including soil, silt, clay, rock, metal, plastic, or other organic mineral or earthen

materials, to Stream Environment Zones in the Lake Tahoe Basin is prohibited. (Chapter 5, Waste Discharge Prohibitions, page 5.2-4)

- b. The discharge, attributable to human activities, of solid or liquid waste materials, including soil, silt, clay, sand, and other organic and earthen materials to lands below the highwater rim of Lake Tahoe or within the 100-year floodplain of any tributary to Lake Tahoe is prohibited. (Chapter 5, Waste Discharge Prohibitions, page 5.2-3)
- 13. The activities listed in Findings 11.a.-11.c. will result in the temporary and permanent discharges to SEZs and activities in Findings 11.d. and 11.e. will result in discharges to lands below the high water rim of Lake Tahoe; therefore, these activities require an exemption to the prohibitions stated in Finding 12 above.
- 14. The Project activities within the campground SEZ require an exemption to the prohibition in Finding 12.a. above. The Basin Plan contains a provision that the Water Board may grant exemptions to the prohibition stated in Finding 12.a. for outdoor recreation projects if all of the following findings can be made:

a. The project by its nature must be sited in an SEZ

The Project by its very nature must be located in the SEZ as the purpose is to restore SEZ within the William Kent campground while maintaining a connected road system within the facility. The William Kent Campground is located within a confined site, surrounded by non-Forest Service property on all sides. The SEZ boundary within the campground primarily follows the storm water channel that collects runoff from the surrounding neighborhood. During development of the campground in the 1960s a paved road was constructed through the SEZ within the campground. Because this Project will move a significant portion of the campground away from this SEZ, a minimized portion must remain to connect the road system. The Project will remove the road and campsites within the SEZ in south-eastern portion of the property. A storm water channel is adjacent to the paved road through much of this area. The channel will be reshaped from a V-shaped ditch to a broader swale to improve function, capacity, and more closely mimic natural conditions. To maintain access to the road and campsites in the south-western portion of the campground the LTBMU will construct a new segment of paved road and culvert to cross the SEZ and storm water channel.

b. There is no feasible alternative, which would reduce the extent of SEZ encroachment

There is no feasible alternative that would completely avoid encroachment in the SEZ and still maintain a functional and viable campground. The Project will reduce the number of campsites in the campground. The extent of SEZ encroachment is minimized by limiting the area of disturbance to a maximum of 10-feet on both sides of the road to be removed and along the storm water channel. One of the main goals of this project is to locate infrastructure away from SEZ. The portions of the

Project within the SEZ boundary were minimized. The Project will reduce roadway crossings over the storm water channel from nine to four. The new SEZ crossing was located to minimize impacts to the SEZ. This crossing allows for access to the campsites in the south-west portion of the campground and maintains a one-way loop for vehicle access through the campground. Maintenance of the one-way loop was critical to avoid significant impacts to traffic circulation within the facility.

The Project will reduce the amount of campground SEZ coverage from 23,028 square feet to 7,212 square feet.

c. Impacts are fully mitigated

Impacts in the SEZ will be mitigated through temporary Best Management Practices (BMPs) during construction and permanent BMPs post-construction. The LTBMU will implement design features and BMPs, as described within the SWPPP and Mitigated Negative Declaration. These BMPs will prevent construction activities from discharging sediment and other pollutants into the SEZ and limiting disturbance to within the Project footprint.

Specific BMPs include, but are not limited to: scheduling Project implementation when surface flows have ceased and the SEZ is dry; preservation of existing vegetation; waste management; sediment tracking prevention; and implementing stockpile and site management practices. Additionally, permanent BMP microbasins will be constructed within the campground to capture and infiltrate storm water from impervious surfaces. These micro-basins will be one of the first features built to capture storm water runoff from construction activities. Permanent BMPs for disturbed SEZ areas will include uniform decompaction, recontouring the existing channel to mimic a natural swale condition, and application of wood mulch or hydromulch with native seed.

The LTBMU will monitor the temporary and permanent BMPs as described in the SWPPP. The LTBMU will monitor SEZ restoration areas the year following Project completion to assess stability and revegetation success.

d. SEZs are restored in an amount 1.5 times the area of SEZ disturbed or developed for the Project

The new permanent SEZ disturbance from the Project activities totals approximately 1,400-square feet. Approximately 15,800-square feet of existing SEZ impervious cover will be removed and restored through removal of the paved road and spurs. Recontouring the existing storm water channel to mimic a natural drainage swale will result in temporary SEZ disturbance of approximately 9100-square feet. The LTBMU will decompact and revegetate all areas of temporary SEZ disturbance. The Project is expected to result in expansion of the SEZ and improved water retention.

15. Removal of the existing storm water culverts and construction of the new open channel requires an exemption to the prohibition in Finding 12.b. above. The Basin Plan contains a provision that the Water Board shall grant exemptions to the prohibition in Finding 12.b. for restoration projects if all of the following findings can be made:

a. The project is necessary for environmental protection.

The restoration project will enable non-peak storm water flows to reduce velocity and infiltrate before reaching waters of Lake Tahoe. This provides an environmental protection benefit within the constraint of established adjacent land uses which generate the storm water runoff conveyed in the channel restoration project area. Approximately 80 feet of subsurface pipe will be replaced by a 110-foot long open channel.

b. There is no reasonable alternative which avoids or reduces the extent of encroachment.

The storm drain pipes at the beach site collect runoff from a portion of Highway 89, the William Kent Campground, and portions of the neighborhood above the campground. There are currently several infiltration basins that capture most surface water before entering the storm drain pipes, but a drainage location must remain to accommodate large storms in which surface water overtops the basins and flows into the lake.

To remove a portion of storm drain pipe and concrete headwall from the shoreline of Lake Tahoe at the day-use site there is no reasonable alternative which avoids or reduces encroachment below the high water of Lake Tahoe. The current pipe outfall and concrete headwall are located at 6227-feet elevation, approximately two feet below the high water elevation. The constructed channel maintains the slope and elevation of the pipe which will be removed. During periods of lake high water (elevation 6,229.1-feet), water will back into the channel as currently occurs within the pipe.

Project design includes stabilization of exposed slopes with boulders ranging in size from approximately three feet to one foot diameter, and grade control structures at the channel bottom and outfall. Fill from the channel excavation area will be placed in the void left by the pipes and the shorezone stabilized with boulders and gravels. There will also be willow stakes planted below this high water mark.

- 16. The Water Board has notified the Project proponent and interested agencies and persons of interest of its intent to adopt this Resolution. The draft Resolution was circulated for public comment from March 10-31, 2014.
- 17. The Water Board, in a public meeting, heard and considered all relevant comments pertaining to the proposed activities and the proposed Basin Plan prohibition exemptions.

THEREFORE, BE IT RESOLVED THAT:

- 1. The Project is necessary for SEZ restoration and for the LTBMU's long range plans for public outdoor recreation, and meets the eligibility criteria for exemptions to the Basin Plan waste discharge prohibitions as outlined in Findings 14 and 15 above.
- 2. The Water Board hereby grants exemptions to the Basin Plan prohibitions stated in Finding 12 above for the activities described in Finding 11 above.
- 3. The LTBMU shall conduct BMP implementation and monitoring as described in the Mitigated Negative Declaration and SWPPP.
- 4. Prior to construction commencing, the LTBMU must obtain 401 Water Quality Certification and coverage under the Construction Storm Water Permit.

I, Patty Z. Kouyoumdjian, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, Lahontan Region, on April 9 and 10, 2014.

PATTY Z. KOUYOUMDJIAN EXECUTIVE OFFICER

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ENCLOSURE 2

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TAHOE-TRUCKEE SANITATION AGENCY



A Public Agency
13720 Butterfield Drive
TRUCKEE, CALIFORNIA 96161
(530) 587-2525 • FAX (530) 587-5840

O.R. Butterfield
Dale Cox
Erik Henrikson
S. Lane Lewis
Jon Northrop
General Manager
Marcia A. Beals

VIA U.S. MAIL AND E-MAIL

22 January 2014

Ms. Laurie Scribe
Lahontan Regional Water Quality Control Board
2501 Lake Tahoe Boulevard
South Lake Tahoe, CA 96150
LScribe@waterboards.ca.gov

RE: Mitigated Negative Declaration for William Kent Campground Redevelopment Project

Dear Ms. Scribe:

We recently received the Notice of Intent to Certify a Mitigated Negative Declaration (MND) for the William Kent Campground Redevelopment Project (Project). The proposed improvements to the campground that are described in the MND will change some of the T-TSA billing factors on the property. Once the Project has been completed, T-TSA will need to reevaluate the site to ensure that the proper billing factors are assigned to the property and that the appropriate T-TSA charges have been paid.

With respect to dewatering plans for the Project, careful consideration should be given to the best methods for treating and disposing of construction water.

Please be advised that T-TSA does not allow discharge of construction dewatering water to the sanitary sewer system or the water reclamation plant.

Please separately coordinate with the Tahoe City Public Utility District (TDPUD) as they will also be providing sewer service to the campground.

If you have any questions, please do not hesitate to call me at (530) 587-2525.

Sincerely,

Jason A. Parker

Engineering Department Manager

cc: Marcia Beals, General Manager

Coral Taylor, TCPUD



CINDY GUSTAFSON GENERAL MANAGER

Tahoe City Public Utility District

January 15, 2014

Laurie Scribe
Lahontan Regional Water Quality Control Board
2501 Lake Tahoe Blvd.
South Lake Tahoe, CA 96150



RE: Mitigated Negative Declaration - William Kent Campground Redevelopment Project - 1995 W. Lake Blvd. - APN 084-010-006

Dear Ms. Scribe,

Thank you for the opportunity to review the Mitigated Negative Declaration for the above-referenced project. The District has the following comments related to this document:

- CEQA Environmental Checklist, Section XVII. Utilities and Service Systems, p. 32
 - State that the Tahoe City Public Utility District provides wastewater collection.
 You may also wish to state that the Tahoe-Truckee Sanitation Agency provides wastewater treatment.
- USDA Environmental Assessment, Section 1.11.11 Local Agency Permitting Requirements and Coordination, p. 24
 - Note that a Tahoe City Public Utility District "Commercial Permit" will be required, as the proposed project will affect the provision of sewer service as well as the billing for this property. (The proposed camp host site relocation, upgrade of waste dump station facility, and addition of utilities at some campsites all have some impact to the District's wastewater collection system.)
- Appendix B, CASQA BMP Standard Specifications, NS-2 Dewatering Operations, p.2
 - O Please note that both a Tahoe City Public Utility District and a Tahoe-Truckee Sanitation Agency "Temporary Discharge Permit" will be required, should water from dewatering operations be discharged to the sanitary sewer system.

Enclosed is a Commercial Permit Application. Before beginning construction, please submit the enclosed application, along with site plans showing sewer service locations, and floor plans (for the proposed restrooms and administrative building). The District will perform a review, collect a permit fee, and issue a permit. As part of the project, the District will perform inspections, may revise billing at the completion of the project, and may collect additional sewer connection fees. You may also want to contact Tahoe-Truckee Sanitation Agency, (530) 587-2525, for any conditions of service or sewer connection fees related to the proposed project.

Should you have any questions, please feel free to contact me at (530) 580-6328.

Sincerely,

Coral R. Taylor, P.E.

Technical Services Supervisor

Attachments (1) - TCPUD Commercial Permit Application

C: Cindy Gustafson, General Manager

Matt Homolka, P.E., Assistant General Manager, District Engineer

Tony Laliotis, Director of Utilities

Terri Viehmann, District Clerk/ Executive Assistant to General Manager

Linda Coberly, Tahoe-Truckee Sanitation Agency



TAHOE CITY PUBLIC UTILITY DISTRICT

Commercial Permit Application Note: Complete one application per structure

☐ New Construction	☐ Remodel ☐ Tear down/Rebuild ☐ Other
Business Name	
Owner Name	
Street Address	
Mailing Address	Subdivision Unit / Lot
	Owner Phone
	Building Permit #
General Contractor:	Contractor Phone
 ☐ Food Service Establishment (Complete F Existing Square Footage 	ucture No. of Units This App is for Unit # FOG application, also)
(Entire structure)	(As a part of this project)
WATER SERVICE DETAILS	
Water Service Agency: ☐ TCPUD ☐ O	
Water Contractor Name	
Plumbing Contractor As a part of this project, will you: 1. Install a water service line?	☐ Yes ☐ No Size Mat'l
2. Relocate, remove, replace or build over any existing water service lines?3. Install a fire sprinkler line?	☐ Yes ☐ No ☐ Yes ☐ No Size Mat'l
Will any of the following be located at the p	property? (whether part of this project or existing)
□ Sewage pump □ Auxiliary water □ Hydronic heat □ Livestock □ Boiler □ Fire sprinkler □ Heated driveway / □ Fire Pumper Connection and / or walkways □ Stop & drain valve	☐ Irrigation line ☐ Swimming pool ☐ Booster Pump ☐ Lawn sprinklers ☐ Hot tub ☐ 2 nd Floor ☐ Drip irrigation ☐ Sauna ☐ Dishwasher
A cross-connection inspection will	nere hazardous substances may be connected to the water system. be performed of the entire project at the time of final. artment at (530) 583-3796, ext 6, if you have questions.
SEWER SERVICE DETAILS	
Sewer Contractor Name	Phone
As a part of this project, will you: 1. Install a sewer line? 2. Relocate, remove, replace or build over any existing sewer lines?	☐ Yes ☐ No Size Mat'I
	terials for sewer service lines and must be removed if encountered in



TAHOE CITY PUBLIC UTILITY DISTRICT

Attachment to Commercial Application for Service

Business Owner's Name Property Owner's Name Physical Address			APN:			
		TCPUD Acct #				
						_
Type of Co	nnection	Description of	Plumbing F	ixtures (c	onnected to s	sewer system)
Please place check in space below if you	have this service:		Current Billing	Quantity Added	Quantity Removed	For District Use
Residential units	# of units:	Bathtub		7,000	italiierea	
Motel w/ kitchen	# of units:	Shower			3.0	
Motel w/o kitchen	# of units:	Drinking Ftn, ea head	T	-	1,1	
Campsite w/ sewer	# of sites	Floor Drain, 2"				
Campsite w/o sewer	# of sites	Washing Machine	74.			
Restaurant & Bar	# of inside seats:	Large Washing Machine			15	· · · · · · · · · · · · · · · · · · ·
Restaurant & Bar						
Snack Bar		Mop Basin, 2" or 3"	†		1 1 11 11 11 11	
Carbonated beverage svc		Dental Unit / Cuspidor	+		E 95 X	
Coffee direct connect		Dental Lab Sink, 1.5"			CHAT	
Backwash filter		Sink, clinic/flushing rim, 3"	 		Vid. emission	
Washer - under 10#		Sink, washup	1		Decided seal	
Washer - 10# and greater		Sink, kitchen			1 1 1 1 1 1 1	
Landscape Irrigation		Sink, kit w/ dishwasher	 		1 (2) (2) (3) (4) 1 (2) (4) (3) (3) (4)	
Hydronic Heat		GARBAGE DISPOSALS ARE	NOT ALLO	WED		
Boiler		Dishwasher w/ indep drain	T		1002	
Sewage Pump		Sink, comm 1.5" w/ disp	 			
Auxiliary Water		Comm garbage disposal (2")			at themby	
Air Conditioner / Cooler		Sink, bar			L. Thomas	
Booster Pump		Lavatory / Faucet (single)	-		S THE	
Vacuum / Pump connection		Toilet (flush-type, 1.6 gpf)			J CT	
2nd Floor		Toilet (flushometer, 1.6 gpf)	 -		2 2 - 19	
Fire Sprinkler Connection		Toilet (>1.6gpf, any type)			EL PCT	· · · · · · · · · · · · · · · · · · ·
Fire Pumper Connection		Urinal (1 gpf)	-		-	
	_	Other			2 10.00	
# of Employees		Other			10 10	
# of Employees	_	Other				
			<u></u>			
Signature of Owner or Agent:	Datas	Other				
signature of Owner or Agent:	Date:				II a	
	· · · · · · · · · · · · · · · · · · ·					
COMMENTS:						
Completed by:			Т	itle:	-,	
Phone Number:	····			_		
			е	mail:		

Public Comment - William Kent

Jan Brisco, 530-583-6882

janbrisco@ltol.com

taken via phone on 1/16/14 by Laurie Scribe

- 1. Terminate split rail fence above Lake Tahoe High Water. Fences cannot be constructed below high water mark (per TRPA).
- 2. Terminate the Project at the high water mark, no construction below high water mark. Concerns regarding channel shaping and bank work proposed below high water line. Dynamic lake shore process along shorezone.
- 3. In the past there has been flooding of the Sunnyside boat house on west side of highway, concerns that project should not increase or exacerbate any flooding risk to the property.

DEPARTMENT OF TRANSPORTATION

DISTRICT 3—SACRAMENTO AREA OFFICE 2379 GATEWAY OAKS DRIVE, SUITE 150 SACRAMENTO, CA 95833 PHONE (916) 274-0638 FAX (916) 274-0602 TTY 711 www.dot.ca.gov



Be energy efficient!

February 6, 2014

032014-PLA-0003 03-PLA-89, PM 6.35 SCH#2014012017

Ms. Laurie Scribe
California Regional Water Quality Control Board,
Lahontan Region
2501 Lake Tahoe Blvd.
South Lake Tahoe, CA 96150

U.S. Forest Service - Lake Tahoe Basin Management Unit, "William Kent Campground Redevelopment Project" - Mitigated Negative Declaration

Dear Ms. Scribe:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the project referenced above. The project consists of the William Kent Campground, an administrative site, and the William Kent day-use beach area; and proposes to 1) redesign and upgrade campground facilities, 2) provide water quality improvements to the day-use beach area, and 3) provide campground stream environment zone restoration and water quality improvements. This project is located adjacent to State Route (SR) 89, approximately two miles south of Tahoe City. Access to the campground is directly from SR 89, with campground property on both sides of the Highway.

The following comments are based upon the Mitigated Negative Declaration package.

Encroachment Permit

Please be advised that any work or traffic control that would encroach onto the State Highway right of way (ROW) requires an encroachment permit that is issued by Caltrans. To apply, a completed encroachment permit application, environmental documentation, and five sets of plans clearly indicating 'State ROW', must be submitted to Bruce Capaul, District Office Chief, Office of Encroachment Permits, California Department of Transportation, District 3, 703 'B' Street, Marysville, CA 95901.

Hydraulics - Runoff and Water Volumes

The development of this project will increase impervious surface area through the construction of new roads, driveways, and buildings, with a corresponding increase in surface water runoff. No net increase to 100-year storm event peak discharge may be made to occur within the State

Ms. Laurie Scribe California Regional Water Quality Control Board, Lahontan Region February 6, 2014 Page 2

in peak runoff discharge for the 100-year storm event to the State highway ROW and to Caltrans' drainage facilities must be reduced to at or below the pre-construction levels through project drainage mitigation measures. Also, cumulative effects on drainage due to development within the region should be considered in the overall development plan of this area. Any cumulative impacts to Caltrans' drainage facilities arising from effects of development on surface water runoff discharge from the 100-year storm event should likewise be minimized through project drainage mitigation measures.

A Drainage Report with all back-up calculations should be prepared to address retention/detention of excessive runoff generated as a result of the project; this Report should be submitted to Caltrans District 3 Hydraulics Branch for review.

Hydraulics - Runoff and Water Quality

Runoff from the proposed project that will enter the State's highway ROW and/or Caltrans' drainage facilities must meet all Regional Water Quality Control Board water quality standards prior to entering the State's highway right-of-way or Caltrans' drainage facilities. Appropriate storm water quality Best Management Practices may be applied to ensure that runoff from the site meets these standards (i.e., is free of oil, grease, sand, sediment and metals). Once the drainage facilities are installed, the property owner must properly maintain these systems.

Please provide our office with copies of any further actions regarding this project. We would appreciate the opportunity to review and comment on any changes related to this project.

If you have any questions regarding these comments or require additional information, please contact Susan Wilson, Intergovernmental Review Coordinator, at (916) 274-0639 or by email at: susan.wilson@dot.ca.gov.

Sincerely,

MARLO TINNEY, Chief

Office of Transportation Planning – East

c: Scott Morgan, State Clearinghouse

CALIFORNIA STATE LANDS COMMISSION 100 Howe Avenue, Suite 100-South Sacramento, CA 95825-8202



February 7, 2014

JENNIFER LUCCHESI, Executive Officer
(916) 574-1800 FAX (916) 574-1810
California Relay Service From TDD Phone 1-800-735-2929
from Voice Phone 1-800-735-2922

Contact Phone: (916) 574-1900 Contact FAX: (916) 574-1885

File Ref: SCH# 2014012017

Lahontan Regional Water Quality Control Board Attn.: Laurie Scribe, (530) 542-5465 2501 Lake Tahoe Blvd. South Lake Tahoe, CA 96150

Subject:

Draft Mitigated Negative Declaration (MND) for the William Kent

Campground Redevelopment Project, Placer County

Dear Ms. Scribe:

The California State Lands Commission (CSLC) staff has reviewed the subject MND for the William Kent Campground Redevelopment Project (Project), which is being prepared by the Lahontan Regional Water Quality Control Board (LRWQCB). LRWQCB, as a public agency proposing to carry out a project, is the lead agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.). The CSLC is a trustee agency because of its trust responsibility for projects that could directly or indirectly affect sovereign lands, their accompanying Public Trust resources or uses, and the public easement in navigable waters. Additionally, because the Project potentially involves work on sovereign lands and could affect Public Trust resources, the CSLC may act as a responsible agency if necessary.

CSLC Jurisdiction and Public Trust Lands

The CSLC has jurisdiction and management authority over all ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways. The CSLC also has certain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions (Pub. Resources Code, §§ 6301, 6306). All tidelands and submerged lands, granted or ungranted, as well as navigable lakes and waterways, are subject to the protections of the Common Law Public Trust.

As general background, the State of California acquired sovereign ownership of all tidelands and submerged lands and beds of navigable lakes and waterways upon its admission to the United States in 1850. The State holds these lands for the benefit of all people of the State for statewide Public Trust purposes, which include but are not limited to waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation, and open space. On navigable non-tidal, waterways, including Lake

Tahoe, the State holds fee ownership of the bed of the waterway landward to the ordinary low water mark and a Public Trust easement landward to the ordinary high water mark, except where the, boundary has been fixed by agreement or court decision such boundaries may not be readily apparent from present day site inspections.

A portion of the project involving the water culvert and access path may extend into the Public Trust easement. This easement provides that members of the public have the right to navigate and exercise the incidences of navigation in a lawful manner on State waters that are capable of being physically navigated by oar or motor-propelled small craft. Such uses may include, but not be limited to, boating, rafting, sailing, rowing, fishing, fowling, bathing, skiing, and other water-related public uses. The proposed project must not restrict or impede the easement right of the public.

This conclusion is without prejudice to any future assertion of State ownership or public rights, should, circumstances change, or should additional information become available. This letter is not intended, nor should it be construed as, a waiver or limitation of any right, title, or interest of the State of California in any lands under its jurisdiction.

Project Description

The U.S. Forest Service — Lake Tahoe Basin Management Unit (LTBMU) is planning to redevelop facilities and conduct water quality improvement activities at the William Kent Campground property. The property covers approximately 25 acres on the west shore of Lake Tahoe and consists of the William Kent Campground, an administrative site, and the William Kent day-use beach area. In 2012, the LTBMU prepared an Environmental Assessment for the William Kent Campground Best Management Practices (BMP's) Retrofit and Administrative Site Redevelopment Project (William Kent EA) and in 2013 signed a Decision Notice/Finding of No Significant Impact (FONSI) in compliance with the National Environmental Policy Act (NEPA). The Project includes: redesigning and upgrading the campground facilities, Stream Environment Zone (SEZ) restoration in the campground and beach site, redevelopment of an administrative facility, relocation of the Meeks Bay Fire Station to the administrative facility, and decommissioning and removal of the current Meeks Bay Fire Station.

CSLC Staff Comments

Thank you for the opportunity to comment on the MND for the Project. The CSLC staff has no comments on environmental issues addressed in the MND at this time. As a trustee and potentially responsible agency, the CSLC will need to rely on the Final MND for the issuance of any new or amended lease as specified above; the information above provides additional description of the CSLC's jurisdiction with respect to the proposed Project.

Please send copies of future Project-related documents, including electronic copies of the Final MND, Mitigation Monitoring and Reporting Program (MMRP), and Notice of Determination (NOD) when they become available, and refer questions concerning environmental review to Christopher Huitt, Senior Environmental Scientist, at (916) 574-

2080 or via e-mail at christopher.huitt@slc.ca.gov. For questions concerning CSLC leasing jurisdiction, please contact Beverly Terry, Public Land Manager, at (916) 574-0343, or via email at beverly.terry@slc.ca.gov.

Sincerely,

Cy R. Oggins, Chief Division of Environmental Planning and Management

Office of Planning and Research Beverly Terry, LMD, CSLC Christopher Huitt, DEPM, CSLC



COUNTY OF PLACER

Community Development Resource Agency

ENGINEERING & SURVEYING

MEMORANDUM

DATE: FEBRUARY 7, 2014

TO: MAYWAN KRACH, ECS

FROM: REBECCA TABER

SUBJECT: WILLIAM KENT CAMPGROUND REDEVELOPMENT PROJECT: MITIGATED

NEGATIVE DECLARATION; 1995 WEST LAKE BLVD, TAHOE CITY

The Lahontan Regional Water Quality Control Board is the lead agency for the William Kent Campground Redevelopment project. The Engineering and Surveying Division would like to provide the following comments on the MND:

- 1. An Encroachment Permit is required for any work within the Placer County right-of-way of Sequoia Avenue. Improvement plans and a drainage report along with payment of plan check and inspection fees will be required for review and approval by the Placer County Engineering and Surveying Division and the Department of Public Works for the proposed road encroachment and rerouting of the stream under the roadway prior to Encroachment Permit issuance.
- 2. The conceptual site plan shows a day use parking area that appears to partially be within the County maintained roadway, Sequoia Avenue. Vehicles are not allowed to back out into the County roadway. Can the parking area be redesigned so that vehicles exit into the County roadway in a forward facing direction? Placer County Zoning Ordinance 17.54.070 A.4.B. Controlled Access Required, states that, "All parking spaces (including garage spaces) required for any land use other than a single-family dwelling shall be designed and located to enable the maneuvering of vehicles on the site so that they may leave the building site to enter any public or private road in a forward direction."
- 3. Snow removal and snow storage should be addressed in the MND. Placer County uses its right-of-way in Tahoe for snow storage. Is the proposed redevelopment project conflicting with the County's existing use?

cc: Amber Conboy, DPW Transportation



COUNTY OF PLACER

Community Development Resource Agency

PLANNING

MEMORANDUM

DATE: February 7, 2014

TO: MAYWAN KRACH, ECS

FROM: PLANNING SERVICES DIVISION – TAHOE, STACY WYDRA

SUBJECT: WILLIAM KENT CAMPGROUND REDEVELOPMENT PROJECT: MITIGATED

NEGATIVE DECLARATION; 1995 WEST LAKE BLVD., TAHOE CITY

The Lahontan Regional Water Quality Control Board is the lead agency for the William Kent Campground Redevelopment project. The Planning Service Division – Tahoe would like to provide the following comments on the Mitigation Negative Declaration:

- To ensure there are no impacts to adjacent residential parcels from vehicle headlights parking in the parking lot or driving along the access road(s), please ensure that the existing fence remains and/or landscaping or fencing or a combination thereof is installed and maintained.
- 2. To ensure there are no visual impacts, the colors of the yurts should be of earthtone colors.

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ENCLOSURE 3

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Comment Response TAHOE-TRUCKEE SANITATION AGENCY A Public Agency Directors 13720 Butterfield Drive O.R. Butterfield TRUCKEE, CALIFORNIA 96161 Dale Cox Erik Henrikson (530) 587-2525 • FAX (530) 587-5840 S. Lane Lewis Ion Northrop General Manager Marcia A. Beals VIA U.S. MAIL AND E-MAIL 22 January 2014 Ms. Laurie Scribe Lahontan Regional Water Quality Control Board 2501 Lake Tahoe Boulevard South Lake Tahoe, CA 96150 LScribe@waterboards.ca.gov TTSA-1: Water Board staff has forwarded your comment Mitigated Negative Declaration for William Kent Campground Redevelopment Project letter to the U.S Forest Service, Lake Tahoe Basin Management Unit (LTBMU) to inform the LTBMU about the Dear Ms. Scribe: T-TSA need to reevaluate the site to assess billing factors We recently received the Notice of Intent to Certify a Mitigated Negative Declaration (MND) for and charges for the campground. the William Kent Campground Redevelopment Project (Project). The proposed improvements to the campground that are described in the MND will change some of the T-TSA billing factors on the property. Once the Project has been completed, T-TSA will need to reevaluate the site to ensure that the proper billing factors are assigned to the property and that the appropriate T-TSA TTSA-2: The Water Board permit for this project will prohibit charges have been paid. the LTBMU from discharging construction water to the With respect to dewatering plans for the Project, careful consideration should be given to the best sanitary sewer during project implementation. The LTBMU methods for treating and disposing of construction water. proposes to pump construction dewatering liquids to a Please be advised that T-TSA does not allow discharge of construction dewatering water to the collection vessel and discharge to upland forest or microsanitary sewer system or the water reclamation plant. basins within the campground property. The LTBMU does Please separately coordinate with the Tahoe City Public Utility District (TDPUD) as they will not expect to have any dewatering needs to implement the also be providing sewer service to the campground. campground renovations. Beach site storm water If you have any questions, please do not hesitate to call me at (530) 587-2525. improvements will only occur if the Lake Tahoe water level is at or below 6226-feet elevation, which will help to limit Sincerely, dewatering needs.

Jason A. Parker

Engineering Department Manager

Comment

Tahoe City Public Utility District

January 15, 2014

Laurie Scribe
Lahontan Regional Water Quality Control Board
2501 Lake Tahoe Blvd.
South Lake Tahoe, CA 96150



RE: Mitigated Negative Declaration - William Kent Campground Redevelopment Project - 1995 W. Lake Blvd. - APN 084-010-006

Dear Ms. Scribe,

Thank you for the opportunity to review the Mitigated Negative Declaration for the abovereferenced project. The District has the following comments related to this document:

- CEQA Environmental Checklist, Section XVII. Utilities and Service Systems, p. 32
 - State that the Tahoe City Public Utility District provides wastewater collection.
 You may also wish to state that the Tahoe-Truckee Sanitation Agency provides wastewater treatment.
- USDA Environmental Assessment, Section 1.11.11 Local Agency Permitting Requirements and Coordination, p. 24
 - Note that a Tahoe City Fublic Utility District 'Commercial Permit" will be required, as the proposed project will affect the provision of sewer service as well as the billing for this property. (The proposed camp host site relocation, upgrade of waste dump station facility, and addition of utilities at some campsites all have some impact to the District's wastewater collection system.)
- Appendix B, CASQA BMP Standard Specifications, NS-2 Dewatering Operations, p.2
 - Please note that both a Tahoe City Public Utility District and a Tahoe-Truckee Sanitation Agency "Temporary Discharge Permit" will be required, should water from dewatering operations be discharged to the sanitary sewer system.

Enclosed is a Commercial Permit Application. Before beginning construction, please submit the enclosed application, along with site plans showing sewer service locations, and floor plans (for the proposed restrooms and administrative building). The District will perform a review, collect a permit fee, and issue a permit. As part of the project, the District will perform inspections, may revise billing at the completion of the project, and may collect additional sewer connection fees. You may also want to contact Tahoe-Truckee Sanitation Agency, (530) 587-2525, for any conditions of service or sewer connection fees related to the proposed project.

Should you have any questions, please feel free to contact me at (530) 580-6328.

Response

TCPUD-1: Text has been added to the CEQA document, page XX, to state that TCPUD provides wastewater collection and TTSA provides wastewater treatment.

TCPUD-2: Water Board staff has forwarded your comment letter to the LTBMU to inform the LTBMU that a commercial permit is required prior to project implementation.

TCPUD-3: The Water Board permit for this project will prohibit the LTBMU from discharging construction water to the sanitary sewer during project implementation. The LTBMU proposes to pump construction dewatering liquids to a collection vessel and discharge to upland forest or micro-basins within the campground property. The LTBMU does not expect to have any dewatering needs to implement the campground renovations. Beach site storm water improvements will only occur if the Lake Tahoe water level is at or below 6226-feet elevation, which will help to limit dewatering needs.

TCPUD-4: Water Board staff has forwarded your comment letter to the LTBMU to inform the LTBMU of your requirements.

Comment	Response
Public Comment – William Kent	•
Jan Brisco, 530-583-6882	
janbrisco@ltol.com	
 taken via phone on 1/16/14 by Laurie Scribe Terminate split rail fence above Lake Tahoe High Water. Fences cannot be constructed below high water mark (per TRPA). Terminate the Project at the high water mark, no construction below high water mark. Concerns regarding channel shaping and bank work proposed below high water line. Dynamic lake shore process along shorezone. In the past there has been flooding of the Sunnyside boat house on west side of highway, concerns that project should not increase or exacerbate any flooding risk to the property. 	JB-1: The LTBMU has modified its proposal and the split rail fence will now terminate at elevation 6233, approximately 4 feet above the lake high water. JB-2: The bottom elevation of the culverts where they discharge to the beach is at 6,227-feet, so the project cannot be implemented without conducting some work below the high water line of Lake Tahoe (elevation 6229-feet). The LTBMU modified its plans for the beach area so that the constructed channel and rock slope protection terminate at the break in grade where the site transitions from upland soils to beach gravel. The revised design
	plans for the beach site are included in the revised SWPPP circulated with the proposed Water Board Resolution.

Comment	Response
Public Comment – William Kent	
Jan Brisco, 530-583-6882	
janbrisco@ltol.com	ID 2) It is antisinated that the prepared compareupd
taken via phone on 1/16/14 by Laurie Scribe	JB-3: It is anticipated that the proposed campground retrofit project will reduce storm water flows that exit the campground. This will occur through construction of a
 Terminate split rail fence above Lake Tahoe High Water. Fences cannot be constructed below high water mark (per TRPA). 	slightly larger-capacity swale in place of the current man- made ditch, the reduction of impervious area within the campground, and construction of multiple micro-basins
 Terminate the Project at the high water mark, no construction below high water mark. Concerns regarding channel shaping and bank work proposed below high water line. Dynamic lake shore process along shorezone. 	that will infiltrate water originating from impervious surfaces within the campground. The LTBMU also conducted a topographic survey of the area bordering
 In the past there has been flooding of the Sunnyside boat house on west side of highway, concerns that project should not increase or exacerbate any flooding risk to the property. 	Sunnyside's property to ensure water flowing within the campground follows the existing drainage pathway, and doesn't exit the campground in that area. The project is not expected to increase or exacerbate any flooding risk.

Comment Response DEPARTMENT OF TRANSPORTATION DISTRICT 3-SACRAMENTO AREA OFFICE 2379 GATEWAY OAKS DRIVE, SUITE 150 SACRAMENTO, CA 95833 PHONE (916) 274-0638 FAX (916) 274-0602 TTY 711 www.dot.ca.gov February 6, 2014 032014-PLA-0003 03-PLA-89, PM 6.35 SCH#2014012017 Ms. Laurie Scribe California Regional Water Quality Control Board, Lahontan Region 2501 Lake Tahoe Blvd. South Lake Tahoe, CA 96150 U.S. Forest Service - Lake Tahoe Basin Management Unit, "William Kent Campground Redevelopment Project" - Mitigated Negative Declaration Dear Ms. Scribe: Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the project referenced above. The project consists of the William Kent Campground, an administrative site, and the William Kent day-use beach area; and proposes to 1) redesign and upgrade campground facilities, 2) provide water quality improvements to the day-use beach area, and 3) provide campground stream environment zone restoration and water quality improvements. This project is located adjacent to State Route (SR) 89, approximately two miles south of Tahoc City. Access to the campground is directly from SR Caltrans-1: Water Board staff has forwarded your 89, with campground property on both sides of the Highway. comment letter to the LTBMU to inform the LTBMU The following comments are based upon the Mitigated Negative Declaration package. about Caltrans requirements. **Encroachment Permit** Please be advised that any work or traffic control that would encroach onto the State Highway right of way (ROW) requires an encroachment permit that is issued by Caltrans. To apply, a completed encroachment permit application, environmental documentation, and five sets of plans clearly indicating 'State ROW', must be submitted to Bruce Capaul, District Office Chief, Office of Encroachment Permits, California Department of Transportation, District 3, 703 'B' Street, Marysville, CA 95901. Hydraulics - Runoff and Water Volumes The development of this project will increase impervious surface area through the construction of new roads, driveways, and buildings, with a corresponding increase in surface water runoff. No net increase to 100-year storm event peak discharge may be made to occur within the State

Comment

Ms. Laurie Scribe California Regional Water Quality Control Board, Lahontan Region February 6, 2014 Page 2

in peak runoff discharge for the 100-year storm event to the State highway ROW and to Caltrans' drainage facilities must be reduced to at or below the pre-construction levels through project drainage mitigation measures. Also, cumulative effects on drainage due to development within the region should be considered in the overall development plan of this area. Any cumulative impacts to Caltrans' drainage facilities arising from effects of development on surface water runoff discharge from the 100-year storm event should likewise be minimized through project drainage mitigation measures.

A Drainage Report with all back-up calculations should be prepared to address retention/ detention of excessive runoff generated as a result of the project; this Report should be submitted to Caltrans District 3 Hydraulics Branch for review.

Hydraulics - Runoff and Water Quality

Runoff from the proposed project that will enter the State's highway ROW and/or Caltrans' drainage facilities must meet all Regional Water Quality Control Board water quality standards prior to entering the State's highway right-of-way or Caltrans' drainage facilities. Appropriate storm water quality Best Management Practices may be applied to ensure that runoff from the site meets these standards (i.e., is free of oil, grease, sand, sediment and metals). Once the drainage facilities are installed, the property owner must properly maintain these systems.

Please provide our office with copies of any further actions regarding this project. We would appreciate the opportunity to review and comment on any changes related to this project.

If you have any questions regarding these comments or require additional information, please contact Susan Wilson, Intergovernmental Review Coordinator, at (916) 274-0639 or by email at: susan.wilson@dot.ca.gov.

Sincerely,

MARLO TINNEY, Chief

Office of Transportation Planning - East

Response

Caltrans-2: Although new impervious coverage will be built, the net impervious area will be decreased and micro-basins will be installed to capture storm water from impervious surfaces. Therefore, it is anticipated that storm water flows exiting the campground will decrease from pre-project conditions. The intent of the channel work within the campground is to mimic more of a natural swale condition, instead of the present man-made ditch. Additionally, the removal of impervious cover surrounding the channel will improve on-site infiltration of storm water.

Caltrans-3: New paved areas will be constructed to direct storm water runoff to infiltration micro-basins designed to accommodate volumes associated with storm intensities of 2-inches of rain within 24-hours. The LTBMU will also construct micro-basins in areas of the campground unaffected by the project to capture and slow surface water runoff where it currently concentrates.

Response

Comment

CALIFORNIA STATE LANDS COMMISSION 100 Howe Avenue, Suite 100-South Sacramento, CA 95825-8202



February 7, 2014

JENNIFER LUCCHESI, Executive Officer (916) 574-1800 FAX (916) 574-1810 Celifornia Relay Service From TDD Phone 1-800-735-2929 from Voice Phone 1-800-735-2922

> Contact Phone: (916) 574-1900 Contact FAX: (916) 574-1885

File Ref: SCH# 2014012017

Lahontan Regional Water Quality Control Board Attn.: Laurie Scribe, (530) 542-5465

2501 Lake Tahoe Blvd. South Lake Tahoe, CA 96150

Subject:

Draft Mitigated Negative Declaration (MND) for the William Kent

Campground Redevelopment Project, Placer County

Dear Ms. Scribe:

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	Comment			Response
Laurie Scribe	Page 2	February 7, 2014		•
ordinary low water mark an water mark, except where the such boundaries may not be a portion of the project involved public Trust easement. This right to navigate and exercitive waters that are capable of craft. Such uses may include fishing, fowling, bathing, sk	ownership of the bed of the waterward a Public Trust easement landward the, boundary has been fixed by agrie readily apparent from present day olving the water culvert and access is easement provides that members se the incidences of navigation in a being physically navigated by oar or de, but not be limited to, boating, rafing, and other water-related public	d to the ordinary high reement or court decision as ite inspections. path may extend into the of the public have the lawful manner on State motog-propelled small ting, sailing, rowing, uses. The proposed		CSLC-1: A portion of the swale occurs between the low water and high water marks. The swale design is not expected to restrict access or impede access to the public trust easement.
This conclusion is without prights, should, circumstance available. This letter is not	impede the easement right of the pu prejudice to any future assertion of S es change, or should additional info intended, nor should it be construed to of the State of California in any lan	State ownership or public rmation become	\rightarrow	CSLC-2: As a clarification, the LTBMU's proposed project to be implemented, and analyzed in the Water Board's Mitigated Negative Declaration, does not include development of the administrative facility or relocation of
Project Description				the Meeks Bay fire station.
redevelop facilities and con Campground property. The of Lake Tahoe and consists and the William Kent day-u Environmental Assessment Practices (BMP's) Retrofit a EA) and in 2013 signed a E compliance with the Nation redesigning and upgrading restoration in the campgroufacility, relocation of the Me	Lake Tahoe Basin Management Ur iduct water quality improvement acti property covers approximately 25 a s of the William Kent Campground, a se beach area. In 2012, the LTBMU thory the William Kent Campground E and Administrative Site Redevelopm Decision Notice/Finding of No Signifial Environmental Policy Act (NEPA) the campground facilities, Stream E and and beach site, redevelopment of the sample of the current Meeks Bay Fire Storal	ivities at the William Kent acres on the west shore an administrative site, I prepared an Best Management heet Project (William Kent cant Impact (FONSI) in The Project includes: Environment Zone (SEZ) of an administrative trative facility, and	>	CSLC-3: On February 12, 2014, Water Board staff spoke with Beverly Terry of CSLC regarding the need for a lease for this project. According to Ms. Terry, since the project does not extend below the low water mark (elevation 6223-feet) and does not restrict access to the public trust easement, the CSLC is not requiring a lease.
CSLC Staff Comments				
has no comments on environments and potentially resp for the issuance of any new	ity to comment on the MND for the I onmental issues addressed in the M onsible agency, the CSLC will need or amended lease as specified abo description of the CSLC's jurisdiction	ND at this time. As a to rely on the Final MND_ove; the information] [CSLC-4: Copies of project-related documents will be sent to the CSLC.
the Final MND, Mitigation N Determination (NOD) when	e Project-related documents, includ Monitoring and Reporting Program (Northey become available, and refer quaristopher Huitt, Senior Environment	MMRP), and Notice of uestions concerning		

Comment



COUNTY OF PLACER

Community Development Resource Agency

ENGINEERING & SURVEYING

MEMORANDUM

FEBRUARY 7, 2014

TO: MAYWAN KRACH, ECS

FROM: REBECCA TABER

WILLIAM KENT CAMPGROUND REDEVELOPMENT PROJECT: MITIGATED SUBJECT:

NEGATIVE DECLARATION; 1995 WEST LAKE BLVD, TAHOE CITY

The Lahontan Regional Water Quality Control Board is the lead agency for the William Kent Campground Redevelopment project. The Engineering and Surveying Division would like to provide the following comments on the MND:

- 1. An Encroachment Permit is required for any work within the Placer County right-of-way of Seguoia Avenue. Improvement plans and a drainage report along with payment of plan check and inspection fees will be required for review and approval by the Placer County Engineering and Surveying Division and the Department of Public Works for the proposed road encroachment and rerouting of the stream under the roadway prior to Encroachment Permit issuance.
- 2. The conceptual site plan shows a day use parking area that appears to partially be within the County maintained roadway, Seguoia Avenue. Vehicles are not allowed to back out into the County roadway. Can the parking area be redesigned so that vehicles exit into the County roadway in a forward facing direction? Placer County Zoning Ordinance 17.54.070 A.4.B. Controlled Access Required, states that, "All parking spaces (including garage spaces) required for any land use other than a single-family dwelling shall be designed and located to enable the maneuvering of vehicles on the site so that they may leave the building site to enter any public or private road in a forward direction."
- 3. Snow removal and snow storage should be addressed in the MND. Placer County uses its rightof-way in Tahoe for snow storage. Is the proposed redevelopment project conflicting with the County's existing use?

Amber Conboy, DPW Transportation

Placer-1: Water Board staff has forwarded your comment letter to the LTBMU to inform the LTBMU of your requirements. As clarification, the active work area will occur to the east side of the existing bike path, and does not include any changes to existing culverts under Placer County's right-of-way. All modifications to the culverts will occur to the east of the bike trail.

Response

Placer-2: The proposed project will not change the existing parking area along Sequoia Avenue. The existing baseline condition will be maintained in this area. As noted above, the active work area will occur to the east side of the existing bike path.

Placer-3: The proposed project will not alter existing winter operations at this site. The LTBMU does not plan to conduct snow removal activities at the beach site. There are no changes proposed to the parking area or Placer County's right of way.

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APRY OF PRO	Comment	Response
	COUNTY OF PLACER	
	Community Development Resource Agency	
	PLANNING	
OF CALLED		Placer-4: The LTBMU did not propose any changes to
	MEMORANDUM	the existing fence.
DATE:	February 7, 2014	
TO:	MAYWAN KRACH, ECS	Discour Et The LTDMII did not propose worth of
FROM:	PLANNING SERVICES DIVISION - TAHOE, STACY WYDRA	Placer-5: The LTBMU did not propose yurts as part of its current construction plans.
SUBJECT:	WILLIAM KENT CAMPGROUND REDEVELOPMENT PROJECT: MITIGATED NEGATIVE DECLARATION; 1995 WEST LAKE BLVD., TAHOE CITY	·
Campground	in Regional Water Quality Control Board is the lead agency for the William Kent Redevelopment project. The Planning Service Division – Tahoe would like to ollowing comments on the Mitigation Negative Declaration:	
parkir existir	nsure there are no impacts to adjacent residential parcels from vehicle headlights ng in the parking lot or driving along the access road(s), please ensure that the ng fence remains and/or landscaping or fencing or a combination thereof is installed naintained.	
To er colors	nsure there are no visual impacts, the colors of the yurts should be of earthtone s.	

ENCLOSURE 4

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Mitigated Negative Declaration

This statement and attachments constitute the Mitigated Negative Declaration as proposed for adoption by the California Regional Water Quality Control Board, Lahontan Region (Water Board) for the project described below.

Posting Date: January 10, 2014

To State

<u>Clearinghouse:</u> January 8, 2014

Comment Period: January 10, 2014-February 10, 2014

Proposed Adoption

<u>Date:</u> April 9, 2014

Project Name: William Kent Campground Redevelopment Project

Staff Contact: Laurie Scribe (530) 542-5465

Lscribe@waterboards.ca.gov

Project Description: The U.S. Forest Service – Lake Tahoe Basin Management

Unit (LTBMU) is planning to redevelop facilities and conduct water quality improvement activities at the 25-acre William Kent Campground property on the west shore of Lake Tahoe. The Project includes facility upgrades, SEZ

restoration, and improvements to storm water conveyances

at the beach site.

The Water Board will regulate discharges from the Project by: (1) granting coverage under the Water Board's General Waste Discharge Requirements and National Pollutant Discharge Elimination System Permit for Storm Water Discharges Associated with Construction Activity in the Lake

Tahoe Basin; (2) granting an exemption to a discharge prohibition in the Lahontan Regional Board Water Quality Control Plan; and (3) issuing Clean Water Act 401 Water

Quality Certification (if required).

Project Location: 1995 West Lake Blvd, Tahoe City, CA 96145; Placer County

Environmental Finding: The project, as described in the attached CEQA

Environmental Checklist, the LTBMU Environmental Assessment, and the LTBMU Draft Storm Water Pollution Prevention Plan (SWPPP), incorporates design features and best management practices to reduce potentially significant impacts to the environment to less than significant levels.

Lead Agency: Lahontan Regional Water Quality Control Board

2501 Lake Tahoe Boulevard

South Lake Tahoe, California 96150

phone: (530) 542-5400 fax: (530) 544-2271

Other Agencies Whose Approval May be

Required: The Tahoe Regional Planning Agency, United States Army

Corps of Engineers

Attachments: 1) CEQA Environmental Checklist

2) LTBMU Environmental Assessment for the William Kent

Campground BMP Retrofit and Administrative Site

Redevelopment Project

3) LTBMU Draft Storm Water Pollution Prevention Plan

How to Submit Comments:

The Lead Agency invites comments on the proposal from all interested persons and parties. Written comments must be received by 5:00 p.m. on February 10, 2014. Written comments should be addressed to the Lahontan Regional Water Quality Control Board at the address/fax provided above. For more information contact: Laurie Scribe, (530)

542-5465, LScribe@waterboards.ca.gov

California Regional Water Quality Control Board Lahontan Region

CEQA Environmental Checklist

PROJECT DESCRIPTION AND BACKGROUND

Project Title:	William Kent Campground Redevelopment Project
Lead agency name and address:	Lahontan Regional Water Quality Control Board 2501 Lake Tahoe Blvd. South Lake Tahoe, CA 96150
Contact person and phone number:	Laurie Scribe, (530) 542-5465 LScribe@waterboards.ca.gov
Project Location:	William Kent Campground, West shore of Lake Tahoe, 1995 West Lake Blvd, Tahoe City, CA 96145; Placer County
Project sponsor's name and address:	U.S. Forest Service Lake Tahoe Basin Management Unit 35 College Drive South Lake Tahoe, CA 96150
Description of project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation.)	The U.S. Forest Service – Lake Tahoe Basin Management Unit (LTBMU) is planning to redevelop facilities and conduct water quality improvement activities at the William Kent Campground property. The property covers approximately 25-acres on the west shore of Lake Tahoe and consists of the William Kent Campground, an administrative site, and the William Kent day-use beach area.
	In 2012, the LTBMU prepared an Environmental Assessment for the William Kent Campground BMP Retrofit and Administrative Site Redevelopment Project (William Kent EA) and in 2013 signed a Decision Notice/Finding of No Significant Impact (FONSI) in compliance with the National Environmental Policy Act (NEPA). The William Kent Campground BMP Retrofit and Administrative Site Redevelopment Project includes: redesigning and upgrading the campground facilities, Stream Environment Zone (SEZ) restoration in the campground and beach site,

redevelopment of an administrative facility, relocation of the Meeks Bay Fire Station to the administrative facility, and decommissioning and removal of the current Meeks Bay Fire Station.

The LTBMU applied to the Water Board for permits to implement part of the federal project analyzed under NEPA. Some components of the federal project require discretionary approvals from the Water Board. The William Kent Campground Redevelopment Project (Project) analyzed in this Environmental Checklist, a subset of the larger project analyzed under NEPA, includes the following elements:

- Redesign and upgrade of campground facilities: construction of new and redesigned camping spurs and roadway to relocate campsites out of SEZ, upgrading the dump station facility, upgrading potable water dispensers, relocating camp host sites, redesign of the entrance road and information kiosk.
- 2) Day-use beach area water quality improvements: daylighting of 75-feet of a storm water culvert at the shorezone of Lake Tahoe, construction of an access path to the lake.
- 3) Campground SEZ restoration and water quality improvements: installation of micro basins and swales for storm water retention; removal of approximately 1060 linear feet of road, 5 culverts and 12 campsites from the SEZ, totaling approximately 15,816 square feet of impervious cover removed from the SEZ; contouring, decompacting and seeding to restore the SEZ.

Other elements of the federal project that are not planned to be implemented at this phase, such as redevelopment of an administrative facility, relocation of the Meeks Bay Fire Station to the administrative facility, and decommissioning and removal of the current Meeks Bay Fire Station, are not addressed in this document. These elements have independent utility and are not a necessary element of the Project, as described above. If the LTBMU decides to move forward on those other elements of the federal project described in the EA, and the Water Board must take a discretionary action related to those elements, the Water Board will take additional action to comply with CEQA at that time.

The LTBMU has prepared a draft Storm Water Pollution Prevention Plan (SWPPP), describing Best Management Practices (BMPs) that it will implement to control discharges of sediment and protect water quality. The SWPPP also

contains: **Detailed Project description** Facility location maps Campground site design plans Beach site culvert design plans Erosion and sediment control BMP descriptions BMP inspection, maintenance, and monitoring plans Construction schedule and phasing The LTBMU's William Kent EA and SWPPP together describe measures the LTBMU will use to avoid or substantially lessen and mitigate potential adverse environmental impacts associated with the Project. The Water Board will regulate discharges from the Project by: (1) granting coverage under the Water Board's General Waste Discharge Requirements and National Pollutant Discharge Elimination System Permit for Storm Water Discharges Associated with Construction Activity in the Lake Tahoe Basin; (2) granting Basin Plan Prohibition Exemptions, and by (3) granting Clean Water Act 401 Water Quality Certification if the Army Corps of Engineers determines that a Clean Water Act section 404 permit is required for the Project. The Water Board is the Lead Agency under the California Environmental Quality Act (CEQA). Surrounding land uses and The William Kent property is bounded by private residences setting; briefly describe the to the North, South, and West. There are commercial project's surroundings: properties to the East. Highway 89 separates the campground from the beach facility. Other public agencies whose Tahoe Regional Planning Agency, United States Army Corps approval is required (e.g. of Engineers permits, financial approval, or participation agreements):

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, as indicated by the checklist on the following pages.

	Aesthetics		Agriculture and Forestry		Air Quality		
\boxtimes	Biological Resources		Cultural Resources	\boxtimes	Geology/Soils		
	Greenhouse Gas	\boxtimes	Hazards and Hazardous		Hydrology/Water Quality		
	Emissions		Materials				
Щ	Land Use/Planning	Щ	Mineral Resources	<u>Ц</u>	Noise		
	Population/Ho using	Ш	Public Services	\boxtimes	Recreation		
	Transportation/Traffic		Utilities/Service Systems		Mandatory Findings of Significance		
	there will not be a significant effect in this case because revisions in the project have been						
	made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared. I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.						
I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.							
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required						
Signature: Date:					Date:		
Prir	nted Name: PATTY Z. k EXECUTIVE						

CEQA Environmental Checklist

This checklist identifies potential impacts to the environment from the Project. In some cases, background studies performed in connection with the project indicate no impacts, and in other circumstances, the nature and location of the project make it obvious that there would be certain types of impacts. A NO IMPACT answer in the last column reflects these determinations. Where there is a need for clarifying discussion, the discussion is included either following the applicable section of the checklist or referenced to the appropriate section of the William Kent EA or the draft Storm Water Pollution Prevention Plan (SWPPP), which are attached. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

The Project is subject to the requirements of both the federal National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). The LTBMU is the NEPA Lead Agency. In 2012 the LTBMU developed the William Kent EA and in February 2013 signed a FONSI for the William Kent EA, pursuant to NEPA.

Section 15221 of the CEQA Guidelines directs that when a project requires compliance with both NEPA and CEQA, state Lead Agencies should use the EA and FONSI rather than preparing a separate Negative Declaration, as long as the EA and FONSI comply with the requirements of CEQA. This Mitigated Negative Declaration and CEQA Environmental Checklist incorporate by reference the William Kent EA pursuant to CEQA Guidelines section 15150, and rely on that analysis. However, the Water Board staff has also determined that additional mitigation measures, which are described in the LTBMU's SWPPP and set forth here, are needed to comply with CEQA requirements.

Therefore, the Water Board is circulating a CEQA checklist, along with the William Kent EA and SWPPP to support a Mitigated Negative Declaration in compliance with CEQA guidelines. This CEQA checklist was developed by Water Board staff to inform the public and interested agencies of the potential environmental impacts of the Project and describe the additional mitigation measures, which are contained in the SWPPP and identified as necessary by the Water Board to avoid or mitigate those impacts to less than significant levels. A discussion of growth inducing impacts and mandatory findings of significance, as required by CEQA, is also included in the CEQA checklist.

The federal William Kent Campground BMP Retrofit and Administrative Site Redevelopment Project was designed to prevent negative environmental impacts by incorporating "Design Features" (DFs) into the project design to mitigate or avoid significant environmental effects. For each resource category, the CEQA Environmental Checklist identifies the DFs that have been incorporated into the federal project design to reduce impacts. The DFs are further described in the

William Kent EA, Section 2.5. In addition, water quality BMPs that are part of the federal project are included in the William Kent EA, Appendix A. Project maps and design plans are located in the SWPPP.

I. AESTHETICS: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?				
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				
c) Substantially degrade the existing visual character or quality of the site and its surroundings?				
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				

Existing conditions and potential impacts to scenic resources are analyzed in the William Kent EA Section 3.4 (Scenic Resources). Section 3.4 describes the effects of the Project as generally improving scenic quality and scenic stability. Some trees will be removed for the Project but the overall scenic attribute of a forested campground will be retained and the remaining trees will have greater vigor and health. The SEZ restoration work will improve the scenic quality of the campground.

The Water Board concurs with that analysis and considers it to sufficiently describe how the Project, including its Design Features (DFs), will have a less than significant impact to scenic resources. The following Project DFs described in the William Kent EA will reduce impacts to aesthetic values of the area:

- DF Scenic Resources 1 (consistency with USFS Built Environment Image Guide)
- DF Scenic Resources 2 (retention of large mature trees)
- DF Engineering 4 (lighting that limits light pollution)
- DF Engineering 6 (construction hours from 7:00 AM to 7:00 PM)
- DF Tree Removal 1 (emphasis on retaining large trees)
- DF Tree Removal 2 (tree thinning will consider screening objectives)

a-b) The beach day use area, adjacent to Highway 89, has view of Lake Tahoe which may be considered a scenic vista. The Project will result in a change to topography in this area and an elimination of the pipe outfall at the lakeshore. Some vegetation, including approximately five trees, will be removed to create the open channel. The vegetation removal will slightly increase the view of the lake from the picnic area. Although the Project will remove some vegetation from the beach area, it will not have a substantial adverse effect on the vista; therefore the appropriate finding is a less than significant impact.

c) The Project will alter some of the facilities within the campground property; however the overall character of the property will remain as forested land. Project implementation will result in improved scenic quality through restoration of the SEZ and by upgrading campground restrooms and entrance kiosk to be in compliance with the USFS Built Environment Image Guide, which provides direction to ensure that constructed facilities reflect the visual character and cultural identity of the landscape within which they are built.

Scenic impacts to adjacent property from camp sites and traffic circulation within the campground will be improved along the southern property boundary due to removal of the road and camp sites from the SEZ. The number of camp sites and road alignments along the western and northern property boundary will remain unchanged from existing conditions. The addition of a new road segment through the interior of the site may result in a slight decrease in traffic along the northern property boundary, which would improve aesthetics for the properties adjacent on that side.

The appearance of the beach site will change by excavating 75-ft of the existing culvert and creating an open channel. This will reduce the size of the picnic area but will not restrict access to the lake.

Construction activities will cause short-term impacts to aesthetics, especially to the adjacent property owners. These impacts will occur for approximately 6 months, but will allow for overall improvement of scenic quality to the property. Due to the short duration of the construction and the implementation of DFs, the appropriate finding is less than significant.

d) Facility will not change significantly from the existing conditions and DFs will assure that any new lighting is designed to reduce light pollution; therefore the appropriate finding is less than significant.

II. AGRICULTURE AND FOREST RESOURCES:

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				
d) Result in the loss of forest land or conversion of forest land to non-forest use?				
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to nonagricultural use or conversion of forest land to nonforest use?				

- a) There is no farmland or agricultural resources in or adjacent to the Project area, therefore the appropriate finding is no impact.
- b-c) The Project does not conflict with zoning nor cause rezoning; therefore the appropriate finding is no impact.
- d-e) The Project does not involve the conversion of forest land, therefore the appropriate finding is no impact.

III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?				
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?				
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?				
d) Expose sensitive receptors to substantial pollutant concentrations?				
e) Create objectionable odors affecting a substantial number of people?				

Potential impacts to air quality are analyzed in the William Kent EA Section 3.7 (Air Quality). Section 3.7 states that most of the Lake Tahoe Basin air quality thresholds developed by the TRPA show a positive trend toward attainment. The most detrimental air pollutants in the area are greenhouse gases (GHGs), with the most common source being from vehicle emissions. Potential impacts on air quality are associated primarily with construction activities such as temporary dust from equipment, grading activities and road decommissioning. Dust abatement measures will reduce negative effects on air quality. The Project will not exceed state and local air quality standards. The Water Board concurs with that analysis and considers it to sufficiently describe how the Project, including its DFs, will have a less than significant impact to air quality. Project DFs to reduce air quality impacts are described in the William Kent EA Section 2.5, including:

- DF Air Quality 1 (stabilization of unpaved vehicle traffic areas)
- DF Air Quality 2 (speed limits on unpaved roads)
- DF Air Quality 3 (stockpile management)
- DF Air Quality 4 (watering an area prior to ground disturbance)
- DF Air Quality 5 (cleaning of vehicles leaving the Project area)

- DF Air Quality 6 (suspension of activities if prevention measures are inadequate)
- DF Air Quality 7 (stabilization of transported materials)
- DF Air Quality 8 (prevention of wind-driven dust from disturbed areas)

a-e) Construction activities, as described for the Project in the attached documents, are most likely to affect air quality by generating short-term and minor amounts of vehicle exhaust and fugitive dust. Project DFs minimize the production and transport of fugitive dust from the Project by providing dust abatement through such measures such as regular watering, stabilization of the disturbed surfaces, and stockpile management.

IV. BIOLOGICAL RESOURCES: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?				
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				

The William Kent EA discusses potential biological impacts in Section 3.2 (Wildlife Resources) and Section 3.3 (Botanical Resources). The William Kent EA discloses potential effects on species (and/or their habitats) listed as endangered, threatened, candidate or proposed under the federal Endangered Species Act of 1973 as amended (ESA); species designated as sensitive by the Regional Forester in Region 5; species designated as special-interest by the Tahoe Regional Planning Agency; habitats designated for management indicator species (MIS) for the Lake Tahoe Basin Management Unit; and wildlife and fisheries threshold standards as designated by the TRPA report.

Information found in Sections 3.2 and 3.3 is based upon the Biological Assessment/Biological Evaluation Aquatic and Terrestrial Species Report, the MIS Report, and the TRPA Project Impact Analysis. There are no known special status botanical or wildlife species currently present in the Project area; however, suitable habitat for multiple species does exist. In general the campground is considered low quality habitat for wildlife because it is an urban campground that is surrounded by residential housing and commercial property, and it has frequent disturbance by intense recreational use.

There are potential minor direct and indirect impacts to individuals of a species related to project construction; however the Project is designed to improve habitat conditions in the long-term. The Project will remove an existing road in an SEZ and restore the area to natural conditions. No noxious weed infestations occur in the Project area; however, there are noxious bull thistle and St. John's Wort infestations adjacent to the Project area that could be spread unless DFs are utilized. Construction related impacts are minimized through implementation of the DFs listed below. The Water Board concurs with that analysis; however, it requires that additional mitigation be added to reduce Project impacts to less than significant.

DFs listed in the William Kent EA to protect biological resources include:

- DF Wildlife 1 (implementing Limited Operating Periods)
- DF Wildlife 2 (procedures if species found during construction)
- DF Wildlife 3 (retention of large diameter downed logs)
- DF Wildlife 4 (trash management during construction)
- DF Botany 1 (flagging and avoidance of sensitive plant species)
- DF Botany 2 (invasive species prevention)
- DF Botany 3 (equipment inspection for invasive species prevention)
- DF Botany 4 (equipment cleaning)
- DF Botany 5 (use of certified weed-free materials)
- DF Botany 6 (seed mix approved by LTBMU Forest Botanist
- DF Botany 7 (avoidance of areas infested with invasive species for staging)
- DF Botany 8 (cheatgrass infestation protocols)
- DF Botany 9 (post-project monitoring for invasive species)
- a) There are no known special status wildlife species currently present in the Project area; therefore the appropriate finding is no impact.
- b-c) Construction activities may cause short term direct and indirect impacts to biological resources due to SEZ disturbance and tree removal. Overall, the Project will enhance biological resources within the Project area by removing a road and camping spurs located in an SEZ and improving and expanding riparian habitat. The lower portion of the culverts to be removed at the beach area are located below the high water rim of Lake Tahoe, and may be considered by the

Army Corps of Engineers to be Waters of the United States pursuant to Section 404 of the Clean Water Act.

The SWPPP provides additional measures necessary to mitigate potential impacts to biological resources. BMPs in the SWPPP (Section III) which mitigate impacts to riparian habitat and wetlands include:

- EC-1 (Scheduling to Avoid Wet Season Construction)
- EC-2 (Preservation of existing vegetation)
- NS-1 (Water Control and Conservation)
- NS-2 (Dewatering Operations)
- NS-5 (Clean Water Diversion Around Work Site)
- NS-6 (Illicit Connection and Illegal Discharge)

These additional measures are adequate to mitigate impacts to biological resources in the Project area to less than significant.

In addition, all work would comply with requirements of permits issued by the Water Board, including NPDES construction stormwater permit requirements and requirements set forth in a Clean Water Act section 401 State Water Quality Certification, if certification is required. The mitigation identified herein and in the attached Project documents will be incorporated into the terms of the permits.

- d) As described in the William Kent EA, bears frequently travel through certain portions of the campground and tear down perimeter fencing. The Project will improve wildlife movement through the campground by creating breaks in fencing that will provide easy access across the property; therefore the appropriate finding is less than significant.
- e-f) The Project does not conflict with any local or regional plans protecting biological resources and habitat, therefore the appropriate finding is no impact.

V. CULTURAL RESOURCES: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?				
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?				
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				
d) Disturb any human remains, including those interred outside of formal cemeteries?			\boxtimes	

Forest Service policy requires that projects with the potential to affect cultural resources be surveyed for such resources in order to comply with applicable federal laws and regulations. The LTBMU and the Forest Service currently operate under two major Programmatic Agreements with the California State Historic Preservation Officer (CA-SHPO). In 1996 the LTBMU evaluated the Project area for heritage and archeological resources. No cultural resources were recorded within the Project area. Documentation of this survey is retained in the Project record at the Water Board office.

- a-b) The Project area has been evaluated for the presence of historic and archeological resources, and does not have any catalogued sites. Because there are no historical or archeological resources in the Project area, the appropriate finding is no impact.
- c-d) It is possible that buried or concealed cultural resources, including human remains, could be present and detected during project ground disturbance activities. In the event of discoveries of heritage resources, the LTBMU will implement DF Heritage Resources 1, William Kent EA Section 2.5. This DF directs that project activities would cease in the area of the find, and the project operator would notify the LTBMU archaeologist to begin consultation process pursuant to the Code of Federal Regulations 36 CFR Part 800, Section 800.13. In the event that human remains are discovered during project activity, law requires that project managers contact the county coroner. If the remains are determined to be of Native American origin, both the Native American Heritage Commission and any identified descendants should be notified.

Water Board staff have reviewed DF Heritage Resources 1 and find that it is sufficient to protect cultural resources in the Project area. Therefore, the appropriate finding is less than significant.

VI. GEOLOGY AND SOILS: Would the project:

	Significant Impact	Significant with Mitigation	Significant Impact	Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?				
ii) Strong seismic ground shaking?				
iii) Seismic-related ground failure, including liquefaction?				
iv) Landslides?				
b) Result in substantial soil erosion or the loss of topsoil?				
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				

Impacts to soil resources are discussed in the William Kent EA Section 3.6 (Hydrology/Soils). Section 3.6 describes the soil types, soil conditions and erosion potential within the Project area. The soil in the Project area is a Kneeridge gravelly sandy loam, moderately well drained to well-drained. Current recreational use by vehicles, foot traffic, and campers has caused compaction of the soils and decreased vegetative cover in the Project area. The elimination of existing campsites, roads, and impervious surfaces in the SEZ and creation of new, updated, and BMP-improved campsites, roads, and trails will have a net benefit to soil and water resources over the long term. The Water Board concurs with that analysis, however requires that additional mitigation be added to reduce short term Project impacts to less than significant.

Project-wide, significant erosion will be reduced through implementation of the prescribed DFs, including:

- DF Soil and Ground Disturbance 1(Grading season restrictions)
- DF Soil and Ground Disturbance 2 (USFS Water Quality BMPs)
- DF Soil and Ground Disturbance 4 (Staging area management)
- DF Soil and Ground Disturbance 5 (Stockpile management)
- DF Soil and Ground Disturbance 7 (Stormwater basins)
- DF Soil and Ground Disturbance 10 (SEZ flagging)
- DF Soil and Ground Disturbance 14 (Paving)

a i-iv) The proposed project is not located in an Earthquake Fault Zone, therefore the appropriate finding is no impact.

b) The Project is intended to restore the ecosystem function of the area by improving riparian and wetland habitat. However, Project implementation could result in short-term increases in erosion potential from the use of mechanical equipment for SEZ and wetland restoration and road decommissioning and building.

The SWPPP provides additional mitigation measures necessary to mitigate potential soils impacts. BMPs in the SWPPP (Section III), which mitigate potential soil erosion include:

- EC-1 (Scheduling to Avoid Wet Season Construction)
- EC-2 (Preservation of Existing Vegetation)
- EC-3 (Hydraulic Mulch)
- EC-4 (Hydroseed)
- EC-8 (Wood Mulch)
- EC-12 (Stream Bank Stabilization)
- SE-2 (Sediment Basins)

These measures are adequate to mitigate impacts to soils resources in the Project area to less than significant.

c-e) The Project is not located on an unstable geologic unit or expansive soil, and does not involve any wastewater disposal, therefore the appropriate finding is no impact.

VII. GREENHOUSE GAS EMISSIONS: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?				
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				

Greenhouse gas (GHG) emissions are discussed in the William Kent EA Sections 3.7 (Air Quality) and Section 3.5 (Transportation/Traffic). As described in the William Kent EA, GHG impacts from the Project are primarily related to vehicle emissions. Implementation of the campground improvements will result in fewer daily vehicle trips than the existing condition and improve circulation within the campground facility. The reduction in vehicle trips will result in less GHG production. GHG emissions due to construction of the Project will be offset by the long-term reduction in vehicle trips.

The Water Board concurs with that analysis and considers it to sufficiently describe how the Project will have no impact to greenhouse gas emissions.

VIII. HAZARDS AND HAZARDOUS MATERIALS:

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				

a-b) The Project will not routinely transport, use, or dispose of hazardous materials. The LTBMU will use excavators and other heavy equipment within the Project area during construction. There is the potential for small gasoline, diesel fuel, oil, and hydraulic fluid spills and leaks that could create a hazard to the environment.

BMPs in the SWPPP (Section III) that mitigate potential impacts from hazardous materials include:

• WM-4 (Spill Prevention and Control)

- WM-5 (Solid Waste Management)
- WM-6 (Hazardous Waste Management)
- NS-8 (Vehicle and Equipment Cleaning)
- NS-9 (Vehicle and Equipment Fueling)
- NS-10 (Vehicle and Equipment Maintenance)

These measures will mitigate impacts from the minimal use of hazardous materials in the Project area to less than significant levels.

- c) The Project is not located within one-quarter mile of any school; therefore, the appropriate finding is no impact.
- d) The Project does not alter or weaken any requirements to identify risks due to hazardous materials sites pursuant to Government Code Section 65962.5; therefore, the appropriate finding is no impact.
- e-f) The Project does not involve activities near an airport or airstrip that would result in a safety hazard; therefore, the appropriate finding is no impact.
- g) The Project will not alter paved traffic routes, nor impede traffic flow and thus will not interfere with an emergency evacuation or response plan; therefore, the appropriate finding is no impact.
- h) The Project involves the removal of trees to relocate campground roads, and these activities should result in slight decreased risk of exposure to wildland fires; therefore, the appropriate finding is no impact.

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IX. HYDROLOGY AND WATER QUALITY: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impad
a) Violate any water quality standards or waste discharge requirements?				
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?				
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?				
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				
f) Otherwise substantially degrade water quality?		\boxtimes		
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				
j) Inundation by seiche, tsunami, or mudflow				\boxtimes

Impacts to hydrology and water quality are discussed in the William Kent EA Section 3.6 (Hydrology/Soils). Section 3.6 describes that the Project will have direct and indirect impacts on these resources. The Water Board concurs that the Project goals of increasing SEZ acreage and improving riparian habitat will result in overall improvements in riparian resource conditions. However, the Water Board finds that additional best management practices in the SWPPP

must be implemented to reduce potential short-term Project impacts to water quality from construction activities to less than significant. Those additional mitigation measures, described below, will be made requirements of the permits for the Project.

The LTBMU has incorporated DFs to reduce potential impacts, including:

- DF 1 (review BMPs prior to rain events)
- DF 2 (limit grading and soil disturbance to dry season)
- DF 58 (groundwater levels in construction area)
- DFs 59-60 (temporary roads)
- DF 61 (seasoning of new channel)
- DF 62 (soil erosion control)
- DF 64-65 (revegetation)

a), c), d), f) Project components involving SEZ restoration have the potential to cause short-term violations of water quality standards primarily related to increases in turbidity both during construction and immediately following Project completion.

The SWPPP provides additional measures necessary to mitigate potential impacts to hydrology and water quality. BMPs in the SWPPP (Section III) that mitigate impacts to hydrology and water quality include:

- WM-3 (Stockpile Management)
- EC-2 (Preservation of Existing Vegetation)
- EC-9 (Drainage Swales)
- EC-12 (Stream Bank Stabilization)
- SE-2 (Sediment Basins)
- NS-1 (Water Control and Conservation)
- NS-2 (Dewatering Operations)
- NS-5 (Clear Water Diversion)
- NS-6 (Illicit Connection and Illegal Discharge)
- NS-15 (Demolition Adjacent to Water)

Water Board staff have reviewed these measures, and find that they are adequate to mitigate water quality impacts from the Project to less than significant levels.

In addition, all restoration work would comply with requirements of permits issued by the Water Board, including NPDES construction stormwater permit requirements and requirements set forth in a Clean Water Act section 401 State Water Quality Certification, if certification is required. The mitigation identified herein and in the attached EA and SWPPP will be incorporated into the terms of the permits.

- b) The Project does not propose any use of groundwater supplies and will not interfere substantially with groundwater recharge; therefore, the appropriate finding is no impact.
- e) The Project will not increase storm water drainage therefore the appropriate finding is no impact.
- g) There is no housing developed for this Project, therefore the appropriate finding is no impact.
- h) The Project will not place structures within a 100-year flood zone that would impede flows, nor would it cause flooding beyond the SEZ boundary, therefore the appropriate finding is no impact.
- i) The Project will not subject people or non-natural structures to flooding; therefore the appropriate finding is no impact.
- j) The Project does not create a risk of inundation by seiche, tsunami, or mudflow therefore the appropriate finding is no impact.

X. LAND USE AND PLANNING: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Physically divide an established community?				\boxtimes
b)Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				\boxtimes

Consistency with local plans and policies is discussed in William Kent EA Section 1.11.11. The Tahoe Regional Planning Agency (TRPA) Regional Plan contains environmental thresholds for both habitats and species of interest. No TRPA Special Interest Species, fish, or wildlife habitats of significance would be adversely affected by the Project. The Water Board concurs with that analysis and considers it to sufficiently describe how the Project, including its DFs, will have a less than significant impact to land use and planning.

- a) The Project is within the existing campground property and does not include any development or construction that will physically divide the community, therefore the appropriate finding is no impact.
- b-c) The proposed project does not conflict with any applicable land use plans, habitat conservation plan or natural community conservation plan. Because the project does not involve these elements, the appropriate finding is no impact.

XI. MINERAL RESOURCES: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				
b) Result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				

a-b) There are no known mineral resources or locally-important mineral resource recovery sites within the Project area; therefore the appropriate finding is no impact.

XII. NOISE: Would the project result in:

	Significant Impact	Significant with Mitigation	Significant Impact	Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?				
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?				
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				

- a,b,d) The Project is located in National Forest but access to some work areas is through residential communities. The Project may cause minor, short-term noise impacts from equipment usage. To ensure that noise impacts are reduced to less than significant levels, the LTBMU will generally restrict significant noisegenerating activities to the hours between 7:00 AM and 7:00 PM, as described in DF Engineering 6.
- c) The Project will not result in any permanent increases in ambient noise; therefore the appropriate finding is no impact.
- e-f) The Project is not located within the vicinity of any public or private airports; therefore the appropriate finding is no impact.

XIII. POPULATION AND HOUSING: Would the project:

Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
	Significant	Significant Significant Impact with	Significant Significant Significant Impact with Impact

a-c) The Project does not include plans that would influence population growth, housing, businesses, or infrastructure; therefore the appropriate finding is no impact.

XIV. PUBLIC SERVICES:

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a)Fire protection?				\boxtimes
b)Police protection?				\boxtimes
c)Schools?				\boxtimes
d)Parks?				
e)Other public facilities?				\boxtimes

a-e) The Project will make water quality improvements to the William Kent facility. The Project does not include provisions for new or physically altered governmental facilities that would affect public services; therefore the appropriate finding is no impact.

XV. RECREATION:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impac
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				

Recreation resources are analyzed in the William Kent EA Section 3.1 (Recreation). Section 3.1 describes the Project's impact to facility operations, to the recreation experience, and to the adjacent neighbors. The Project will reduce the number of campsites from 95 to 81, which represents a net capacity reduction from 475 persons-at-one-time (PAOTs) to 405 PAOTs. Over the long-term, the Project will enhance the recreational experience by upgrading campground facilities and improving the entranceway and kiosk.

The Water Board concurs with that analysis; however, it requires that additional mitigation be added to reduce Project impacts to less than significant.

- a) The temporary closure of the William Kent facility during summer 2014 for Project construction may increase usage at other nearby campground facilities. This impact would be temporary, limited to one summer and would not be expected to cause substantial deterioration to other campgrounds. This Project will reduce the number of campsites by 14 units and 70 POATs, representing a 6% reduction in the area, which is considered to be the geographical area within a 30-minute drive in each direction from the campground. Over the long-term, this will not cause substantial deterioration to other campgrounds, which generally only reach capacity on a few busy weekends every summer. The impacts to other facilities are limited in duration and magnitude, therefore the appropriate finding is a less than significant impact.
- b) The Project involves water quality improvements to an existing campground, which includes new road construction, decommissioning of existing roads in sensitive areas, heavy equipment usage within and adjacent to SEZ, and construction adjacent to the shore zone of Lake Tahoe. These activities have potential adverse effects on the environment related to SEZ disturbance, earth moving, and removal of existing vegetation. The LTBMU will construct the Project in accordance with the DFs described in the William Kent EA, and engineering plans and BMPs in the SWPPP. BMPs to mitigate Project impacts are described in this Initial Study in Sections: IV Biological Resources, VI

Geology and Soils, VIII Hazards and Hazardous Materials, and IX Hydrology and Water Quality.

Implementation of these BMPs, in addition to the DFs in the EA, and adherence to the engineering plans and specification will mitigate potential impacts from the recreation facilities to less than significant levels.

XVI. TRANSPORTATION/TRAFFIC: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impac
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?				
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?				
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				
e) Result in inadequate emergency access?				\boxtimes
f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				

Transportation impacts are analyzed in the William Kent EA Section 3.5 (Transportation/Traffic). The existing campground entry area becomes congested during busy times and results in traffic being backed up onto the Highway 89 shoulder, contributing to congestion in the area. Within the campground, the paved footprint of most camping spurs is too small to accommodate modern recreational vehicles, leading to people parking off of paved areas and intruding into the main roads, causing compaction and congestion within the property. The Project will improve circulation within the facility and at the entrance area; and it will result in 14 fewer campsites which will decrease the usage of the facility and the number of daily vehicle trips. The Water Board concurs with that analysis and considers it to sufficiently describe how the Project will have no impact to transportation resources.

XVII. UTILITIES AND SERVICE SYSTEMS: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impac
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				
g) Comply with federal, state, and local statutes and regulations related to solid waste?				\boxtimes

The Tahoe City Public Utility District provides wastewater collection and the Tahoe Truckee Sanitation Agency provides wastewater treatment for the campground. Prior to project implementation the LTBMU will obtain a commercial permit from the Tahoe City Public Utility District.

a-g) The Project will not have any effect on utilities or service systems, including storm water or wastewater treatment facilities, nor will it produce much, if any, solid waste; therefore the appropriate finding is no impact.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				

- a) Without adequate mitigation, the Project has the potential to cause short-term environmental degradation. Specifically, Project construction may cause short term impacts to biological resources, soils, sensitive riparian lands, and the Lake Tahoe shore zone. However, due to the short duration of construction and the implementation of design features described in the William Kent EA and BMPs described in the SWPPP, identified potential impacts will be reduced to less than significant levels.
- b) Although the Project will have temporary, short-term environmental impacts associated with construction, the cumulative effect will be environmental enhancement. This Project, when viewed in conjunction with other LTBMU campground upgrade projects, will result in a reduction of the number of campsites currently available in the Tahoe Basin. However, the campgrounds only reach capacity a few weekends per year and it is not anticipated that the loss of PAOTs will result in a loss of the ability to camp in the Tahoe Basin or negatively affect the range of available camping experiences. The appropriate finding is less than significant.
- c) The Project is intended to improve human's experience in this National Forest campground by providing an updated campground facility and improved riparian ecosystem. The Project does not have any environmental effects that will cause substantial adverse effects on humans; therefore the appropriate finding is no impact.



United States Department of Agriculture

Forest Service

February 2013



Environmental Assessment

William Kent Campground BMP Retrofit and Administrative Site Redevelopment

Region 5, Lake Tahoe Basin Management Unit Placer County, CA



The William Kent Campground in 1922.

For More Information Contact:

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Acronyms

Adidilyilid	
Acronym/ Abbreviation	Definition
ABA	Architectural Barriers Act
BA/BE	Biological Assessment/Biological Evaluation
BEIG	Built Environment Image Guide
BMPs	Best Management Rractices
BMPEP	Best Management Practice Evaluation Program
Caltrans	California Department of Transportation
CAR	Critical Aquatic Refuge
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CLM	California Land Management
CO	Carbon Monoxide
CWA	Clean Water Act
CWHR	California Wildlife Habitat Relationship System
DBH	Diameter at Breast Height
DOE	Determination of Eligibility
DVT	Daily Vehicle Trips
EA	Environmental Assessment
EIP	Environmental Improvement Program
EIS	Environmental Impact Statement
ERA	Equivalent Roaded Acres
ESA	Endangered Species Act of 1973 as amended
FONSI	Finding of No Significant Impact
Forest Plan	Lake Tahoe Basin Management Unit Land and Resource Management Plan
Forest Service	USDA Forest Service
FSORAG	Forest Service Outdoor Recreation Accessibility Guideline
GFA	Gross Floor Area
GHGs	Greenhouse Gasses
GIS	Geographic Information System
HUC	Hydrologic Unit Code
LEED	Leadership in Energy and Environmental Design
LOP	Limited Operating Period
LRMP	Land and Resource Management Plan

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Acronym/ Abbreviation	Definition
LTBMU	Lake Tahoe Basin Management Unit
MIS	Management Indicator Species
MIS Report	Management Indicator Species for the Lake Tahoe Basin Management Unit
ND	Neighborhood Development
NEPA	National Environmental Policy Act
NFMA	National Forest Management Act
NFS	National Forest System
NHPA	National Historic Preservation Act
NO_x	Nitrous Oxides
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
OHV	Off-Highway Vehicle
PAC	Protected Activity Center
PAOT	Persons At One Time
PM10	Particulate Matter less than 10 microns in diameter
RCA	Riparian Conservation Area
RCOs	Riparian Conservation Objectives
ROS	Recreation Opportunity Spectrum
SEZ	Stream Environment Zone
SHPO	State Historic Preservation Officer
SNF MIS	2007 Sierra Nevada Forests Management Indicator Species
SNFPA	Sierra Nevada Forest Plan Amendment
SO_2	Sulfur Dioxide
South Shore Project	South Shore Fuel Reduction and Healthy Forest Restoration Project
TEPS	Threatened, Endangered, Proposed, or Sensitive
TES	Threatened and Endangered Species
TMPO	Tahoe Metropolitan Planning Agency
TRPA	Tahoe Regional Planning Agency
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
VMT	Vehicle Miles Traveled
VQO	Visual Quality Objective

1.0 Introduction

The US Forest Service has prepared this environmental assessment in compliance with the National Environmental Policy Act (NEPA) and other relevant Federal and State laws and regulations. This environmental assessment discloses the direct, indirect, and cumulative environmental impacts that would result from the proposed action and alternatives.

1.1 Document Organization

The document is organized as follows:

Chapter 1, "Introduction," includes information on the structure of the Environmental Assessment (EA), background of the project, overview of the existing condition, the desired conditions, the purpose of and need for action, summary of the proposed action, applicable management direction, and the decision framework. This chapter also details how the Forest Service informed the public of the proposal through public involvement, describes the issues identified by the public, and summarizes laws, regulations, and policies that are applicable to the proposed project.

Chapter 2, "Alternatives, Including the Proposed Action," provides descriptions of alternatives considered but dismissed from detailed analysis, the no-action alternative, the Forest Service's proposed action, and the alternative action. It also summarizes the direct, indirect, and cumulative effects of the no-action alternative, the proposed action, and the alternative action.

Chapter 3, "Affected Environment and Environmental Consequences," presents an overview of the analysis, the indicators used to document the effects, the existing conditions, and the environmental effects of implementing the proposed action, alternative action, and no-action alternative. The effects of the no-action alternative are described first to provide a baseline for evaluation and comparison of the action alternatives.

Chapter 4, "Consultation and Coordination," provides a list of preparers, as well as individuals and agencies consulted during the development of this document.

Additional documentation may be found in the project record located at the Lake Tahoe Basin Management Unit (LTBMU) Forest Supervisor's Office in South Lake Tahoe, CA.

1.2 Background

The US Forest Service facilities at the William Kent site are located approximately two miles south of Sunnyside-Tahoe City on Hwy 89 West Lake Blvd, Section 24, Township 15N, Range 16E. The property covers 22 acres and consists of the William Kent campground, the William Kent administrative site, and the William Kent day use beach area.

The administrative site is just west of the campground visitor check-in kiosk on the north side of the campground road. The previous buildings on the administrative site

were decommissioned and removed. Previous uses of the site included a small fire station, maintenance area, and residential home that was used as a barracks.

The day use beach area is located directly east of the campground on the east side of Hwy 89.

All facilities within the project area are federally owned and managed by the US Forest Service.

Refer to Figure 1-1 for the project area location and Figure 1-2 for an area context map.

The William Kent Campground is a US Forest Service recreation facility, managed by the LTBMU, and operated under special use permit. The campground originally dates back to 1924, but the current infrastructure dates to the 1960's. The campground is bounded by private residences to the North, South, and West. Hwy 89 splits the campground and the beach facility.

Wildland fire protection on the west shore is currently serviced by the Meeks Bay Fire Station. This facility is a converted gas station, constructed circa 1940's and does not meet current building or accessibility standards. In 2003 a decision was made to replace the Meeks Bay Fire Station building in its current location at the entrance to the Meeks Bay Resort on Highway 89 (Meeks Bay Resort Fire Station Reconstruction Decision Memo, 2003 – Project Record H).



Figure 1-1. Site vicinity map.

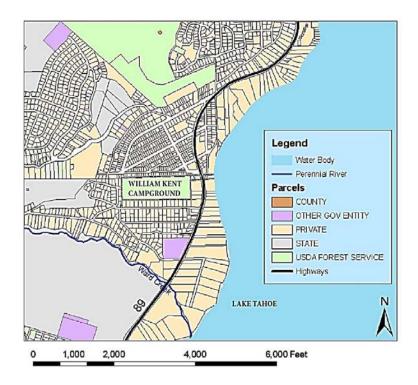
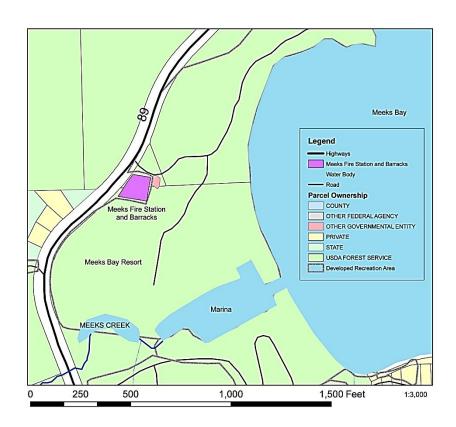


Figure 1-2. William Kent Area context map.





1.3 Overview of Existing Condition

The William Kent campground was originally constructed in 1924. The current road and camping spur design was implemented in 1963 with 95 spurs (see Figure 1-3). Six flush toilet restroom facilities were constructed in 1969. No major upgrades to the facilities have occurred since that time.

The restroom facilities do not meet current building codes or universal accessibility standards for guidelines such as threshold height, door clearance, surface type, etc (Figure 1-6). The camping spurs do not meet Forest Service accessibility guidelines for standards such as surface type, maximum slope, and spur width (Figure 1-8). The small paved footprint of the camping spurs has led to off-pavement vehicular traffic and parking in areas where physical barriers are not present, resulting in destruction of vegetation, soil compaction and erosion. Visitor use patterns at campgrounds have changed over the last 50 years and now include the use of larger vehicles and camping trailers, which contribute to site impacts. The small turning radii and confusing circulation patterns on the site sometimes results in vehicles driving the wrong way on the one way roads, traffic congestion, and damage to trees along the roads. See Figure 1-4 for a map of site challenges.

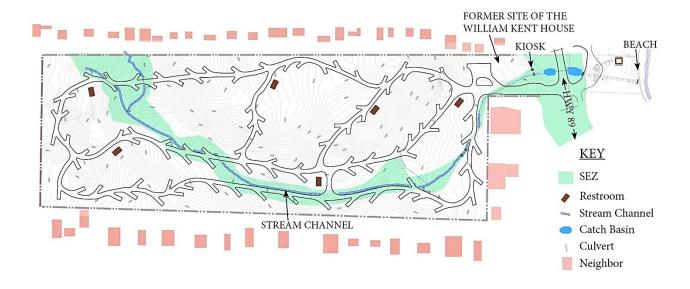


Figure 1-3. Existing condition of William Kent campground, administrative site, and beach day use site.

A small visitor information/campground check-in kiosk sits at the entrance to the campground. The only parking for the structure is a pull-off for short term parking on the main campground access road. Once the pull-off becomes full, parking along the road edges occurs on occasion, which causes erosion, vegetation destruction, and sometimes results in vehicles stacking up onto the highway. The pedestrian path to

the kiosk does not meet Forest Service Outdoor Recreation Accessibility Guidelines (FSORAG) for slope, surface type, and width.

The administrative site currently contains only a parking area that serves as overflow for the campground and parking for the campground host vehicles. The William Kent house and garage that previously existed on the administrative site were decommissioned and removed in 2011. The administrative site has been previously used as a small fire station and maintenance area, administrative offices, and as an employee barracks.

William Kent beach day use area has approximately 150 linear feet of pebble shoreline. It is one of the few public beaches on the western shore of Lake Tahoe. The parking lot has 9 parking spaces that are almost always full during the summer and fall months. The elevation change from the picnic area to the beach occurs rapidly, resulting in a steep slope that is not accessible and readily erodes directly into the lake.

A stormwater pipe discharges onto the steep beach slope and the water then flows into Lake Tahoe. The outflow path below the pipes and the wall supporting the pipes has been almost completely undermined by erosion (Figure 1-9 and 1-10). The stormwater pipe collects the water from an ephemeral stream channel that runs through the campground and from the roadways. The stream is fed from a stormwater channel that serves the residential area to the north and west, as well as by sheet-flow (water running in a thin sheet evenly over a surface) from the residences to the west of the campground (Figure 1-5.) The area surrounding the channel is classified as a stream environment zone (SEZ). The resulting stream is highly disturbed and channelized (Figure 1-7).

The fire station at Meeks Bay, as described in the 2003 *Meeks Bay Resort Campground Rehabilitation Project* Decision Memo, is planned for replacement to alleviate health, safety, and accessibility problems. The Decision Memo describes replacing the fire station on the same site. The site is small, which does not allow enough space for a building that meets current standards, as well as adequate parking for station employees (see Figure 1-11). Furthermore, the site does not have a year-round water source, which limits the use of the facility during winter months. For these reasons, this document analyzes relocating the Meeks Fire Station to the William Kent site in Alternative 2 and 3.

DAY USE AREA
LACK ACCOUNTER
AVE. DUMPS STORM WATER HERE
FENCE & PROPERTY LINE (2002)

ADMINI
ACQUALIFING
ON-SITE EROSON
& CQULLYING
ON-SITE EROSON
& CQULLYING

ACQUALIFING

A

Figure 1-4. Existing site challenges.

Map Designation	Existing Site Challenges Legend
A	Stormwater from the subdivision drains via a ditch onto USFS property.
В	Sheet flow from the subdivision drains onto USFS property.
С	Non-universally accessible restrooms (typical throughout).
D	The stream has been diverted under camping spurs and the road numerous times via culverts (indicated as stars on the map above).
E	Small turning radii and small campground spurs have resulted in off-pavement resource damage.
F	The fence along the property border is damaged seasonally by bears.
G	The stormwater pipe outlet drains directly into Lake Tahoe.

Figure 1-5. Evidence of sheet flow (water flowing evenly over a surface) from the subdivision onto the William Kent campground site (point B on the map in Figure 4).



Figure 1-6. Non-universally accessible restroom facility with extensive deferred maintenance.



Figure 1-7. Camping spurs and the roadway were constructed over the top of the ephemeral stream using culverts in 8 locations on the site (indicated as stars on Figure 4).



Figure 1-8. The camping spurs are very small and of variable sizes. The constrained size results in off-pavement parking and subsequent soil compaction and resource damage.



Figure 1-9. The stormwater pipe on the beach day use site flows directly into Lake Tahoe. This photo was taken during the spring snow melt. The depth of the scour area below the outfall is approximately 3 feet deep (point G on figure 4).



Figure 1-10. The stormwater pipe at the beach day use site, as viewed when standing on the outfall wall and looking towards the lake during spring snowmelt (point G on the map in Figure 4).

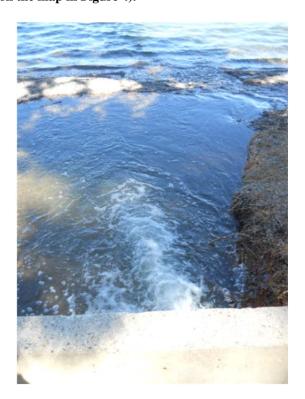




Figure 1-11. Meeks Bay Fire Station when viewed from across Hwy 89. The structure is extremely small and does not meet the needs of the fire crew stationed there.

1.4 Management Direction

The project specifically meets the following goals and objectives at the national, regional, and forest levels:

National Strategic Plan Goals and Objectives:

Goal 1. *Restore*, *Sustain*, *and Enhance the Nation's Forests and Grasslands*Objective 1.5 Restore and maintain healthy watersheds and diverse habitats.

Goal 4. Sustain and Enhance Outdoor Recreation Opportunities (USDA Objective 6.3)

Objective 4.1 Improve the quality and availability of outdoor recreation experiences.

The LRMP, as amended (USDA FS 1988) guides overall LTBMU land management and resource protection through practices, standard and guidelines. Practices, Standards and Guidelines (S&G) that apply to this project:

S&G 30: Water Quality Maintenance and Improvement (pages IV-33-34).

Activities designed to prevent water quality degradation and the installation and maintenance of structures and vegetation to remedy impaired water quality. The primary purpose is to assure that activities on national forest land do not exceed

environmental standards and to restore damaged sites. Activities include installation of check dams, settling basins, infiltration devices, water spreading devices, water canalization conduits, riprap, retaining walls, straw and jute mat spreading and the planting of grass, shrubs, or trees.

Ward Management Area: Resource Management Emphasis:

"The major resource emphasis in this management area is to maintain opportunities for expansion of outdoor recreation. This includes ... developed recreation facilities, and both motorized and nonmotorized dispersed recreation. There are also opportunities for vegetation management and improvement for wildlife and fisheries enhancement."

Forest-wide standards and guidelines apply. The following direction in the LRMP for the Ward Management Area supplements them:

Practice	Standard and Guideline
Recreation Construction	Development of new recreation facilities is projected at 280 PAOT* over present level.

^{*}PAOT: Persons-at-one-time

1.5 Desired Condition

The desired condition at William Kent Campground, beach, and administrative site is to provide a high quality recreation setting and comply with established water quality protection Best Management Practices (BMPs). All developed amenities should meet current construction standards and provide universal access for persons with disabilities, consistent with FSORAG and the Architectural Barriers Act (ABA).

Improvements to the stream channel are desired to reduce erosion and improve water quality. A new fire station and administrative space are desired to improve the wildland fire response on the north shore, increase the efficiency of fire services, and increase the administrative presence on the west shore of Lake Tahoe and to provide appropriate facilities for these functions.

The following is the desired condition for all FSORAG-compliant facilities:

All new or altered camping facilities, picnic areas, beach access routes, outdoor recreation access routes (ORARs), and other constructed features associated with outdoor recreation areas in the National Forest System (including benches; trash, recycling, and other essential containers; viewing areas at overlooks; telescopes and periscopes; mobility device storage; pit toilets; warming huts; and outdoor rinsing showers) shall comply with the FSORAG.

Construction or alteration of all other outdoor recreation areas such as toilet buildings and information centers in the National Forest System shall comply with the applicable requirements of the Architectural Barriers Act Accessibility Standards (ABAAS).

The following is the desired condition for all ABA-compliant facilities:

All areas of newly designed and newly constructed buildings and facilities and altered or leased portions of existing buildings and facilities shall comply with these requirements.

Application Based on Building or Facility Use: Where a site, building, facility, room, or space contains more than one use, each portion shall comply with the applicable requirements for that use.

Temporary and Permanent Structures: These requirements shall apply to temporary and permanent buildings and facilities.

1.6 Purpose and Need for Action

The purpose of this project is to improve water quality and stream environment zone function, enhance the recreational experience, improve wildland fire response on the West and North shores, and address health and safety issues at the William Kent campground, administrative facility, and beach. This action is needed because of the deficiencies in stormwater treatment onsite, the lack of universal accessibility, and impacts to the recreation experience.

There is a need to increase stormwater infiltration and improve water quality due to conditions such as:

- Impervious coverage and compaction within the SEZ and low capability soils
- Absence of BMPs to capture and infiltrate stormwater.
- Direct storm water outflow to Lake Tahoe at the William Kent Beach.

There is a need to improve the recreation experience and accessibility of the site due to:

- Absence of efficiently designed FSORAG compliant campsites and amenities.
- Six restroom facilities in the campground do not meet current building standards, including universal accessibility.
- Campground check-in kiosk is not universally accessible and is located where vehicles affect the traffic on Highway 89.
- Poorly located entrance signage and wayfinding mechanisms.
- Need for better privacy and screening between the campground facility and neighboring residences.
- Public demand for a greater range of camping opportunities.
- Inadequate pedestrian circulation and connection to the beach site.
- Inefficient and counter-intuitive vehicular circulation within the campground.

There is a need to improve the condition of Forest Service facilities relating to health and safety codes due to:

- The Meeks Bay Fire Station is no longer adequate for the size and mission of the fire engine module.
- Wildland fire response to the north and west shores of Lake Tahoe is not optimized due to current location of facility at Meeks Bay.
- There is no universally accessible administrative building and fire station that meets the function and needs of the LTBMU on the North and/or West shores.

1.7 Summary of Initial Proposed Action

Improvements in BMPs are proposed to bring the William Kent Campground, William Kent administrative site, and William Kent beach day use area into compliance with water quality protection and accessibility requirements. This includes implementation of water quality protection BMPs where appropriate to reduce stormwater runoff volume, reduce peak flow levels, reduce the amount of sediment and pollutants reaching Lake Tahoe, as well as to provide for universal accessibility consistent with the FSORAG and ABA requirements.

The proposal includes reconfiguration of the campground circulation pattern, with the primary access route created along the northern boundary of the campground. The initial proposed action also includes relocation of the kiosk area, relocation of the RV waste dump station, construction of new accessible restroom facilities, addition of utilities at some campsites, and an increase in the diversity of camping opportunities through the incorporation of yurt camping sites.

A new administrative building would be constructed on the William Kent administrative site. The building would serve as a replacement for the Meeks Bay Fire Station. The existing Meeks Bay Fire Station would be removed and the area rehabilitated.

The beach day use site would be re-contoured and excavated to shorten the stormwater pipe on the beach to expose the flow ("daylight" the stream), as well as to stabilize the resulting slope. This will increase the area for infiltration and reduce the pollutant/sediment loads of the stormwater before it enters Lake Tahoe. Stabilization of the slope may include riprap, boulder placement, retaining walls, structural walls, and vegetation. Bridges, footpaths, and safety rails would be installed where needed to ensure navigability, safety, and efficient use of the site by visitors. An accessible path would be constructed to access the beach from the picnic area.

A detailed description of the proposed action can be found in Chapter 2.

1.8 Decision Framework

This EA is prepared in accordance with NEPA and Council on Environmental Quality (CEQ) Regulations 40 CFR § 1500. The Responsible Official under NEPA is the

USDA Forest Service Chapter 1 Issues

LTBMU Forest Supervisor who expects to issue a Decision Notice / Finding of No Significant Impact (DN/FONSI).

Based on the analysis provided in this EA, the Forest Supervisor will decide whether or not to implement the no-action alternative, the proposed action, or an alternative to the proposed action as described in this EA. It should be noted that the final decision may entail some combination of components of the proposed action and alternatives, as deemed most appropriate in consideration of the analyses described in this document.

1.9 Public Involvement

The proposal was listed in the Schedule of Proposed Actions on January 1, 2011. The proposal was mailed to adjacent property owners and interested agencies for comment during scoping from November 26 to December 30, 2010. In addition, the proposed action and scoping letter were posted on the LTBMU public website.

A total of 12 written, oral, or electronic comment letters were submitted (Project Record Documents Section C) and a total of 83 comments were identified and evaluated for relevance. These comments and their disposition are summarized in Project Record Document D-1. Using these comments (see *Issues* section), the interdisciplinary team developed a list of issues to consider in developing an action alternative (Alternative 3).

The analysis of the existing condition (Alternative 1), the initial proposed action (Alternative 2), and the new Alternative 3 were released for public comment on April 25, 2012. In response to the legal notice for the 30 day comment period for the Environmental Assessment (EA), ten comment letters were received. Three additional letters were dated after the comment period ended. The comments and the Forest Service (FS) responses are listed in Appendix C of the *Decision Notice and Finding of No Significant Impact* document for the William Kent BMP Retrofit and Administrative Site Redevelopment Project. No comments resulted in the need for an additional action alternative. Some of the comments, however, did result in the addition of a design feature or a slight modification of Alternative 3. This document (the EA) was then edited to reflect these changes. A summary of the changes that resulted from the public comment period can be found in Section 2.4, Table 2-2.

1.10 Issues

The Forest Service separated the issues into three groups: relevant issues, non-issues, and issues considered but eliminated from detailed study. A list of issues and the Forest Service response may be found in Project Record Document D-1. If an issue was listed as Category 1 (see below), the rationale for not being included in the analysis is incorporated in that document, as well.

Non- issues (Category 1) do not meet the purpose and need for the project; are outside the scope of the proposed action; are already decided by law, regulation, or LRMP; are not supported by scientific evidence; are addressed by project design

features; or are addressed by additional information or clarification of the proposed action. Non-issues also represent opinions and statements that do not present problems or alternatives. Numerous comments were received. Most of these were requests to the Forest Service to discuss and disclose specific items in the environmental document. None of these comments necessitated development of an alternative to the proposed action.

Issues considered but eliminated from detailed study (Category 2) meet the purpose and need for the project but were considered in alternatives already studied and eliminated, or additional project design features were developed which reduced or eliminated the effects. See Section 2.1 for a summary of these issues.

Relevant issues (Category 3) were used to develop alternatives to the proposed action. Relevant issues meet the purpose and need for the project and are important in the extent of the geographic distribution, the duration of effects, or the intensity of interest or resource conflict and therefore merit consideration for the development of an alternative to the proposed action. Comments relating to the location of the proposed administrative building, the location of new roads and restrooms within the campground, and the effect of noise and disturbance of increased activity near residential lots were considered relevant issues and initiated the development of the alternative proposed action. See section 2-4 for a description of these issues and how they were addressed by an alternative action.

1.11 Applicable Laws, Regulations, and Policies

All resource management activities described and proposed in this document would be consistent with applicable federal law, USDA regulations, Forest Service policies, and applicable provisions of state law. The major applicable laws are as follows:

1.11.1 National Forest Management Act

The National Forest Management Act (NFMA) requires the development of long-range land and resource management plans. The LRMP was approved in 1988 as required by this act. It has been amended several times, including in the Sierra Nevada Forest Plan Amendment (SNFPA). The LRMP provides guidance for all natural resource management activities on National Forest System lands. The NFMA requires that all projects and activities be consistent with the Forest Plan. The Forest Plan has been reviewed in consideration of this project, and the design of the William Kent Campground BMP Retrofit and Administrative Site Redevelopment Project is consistent with the Forest Plan. A Forest Plan consistency matrix and review for this project was completed (Project Record Document B-1).

1.11.2 Endangered Species Act

In accordance with Section 7(c) of the Endangered Species Act, the U.S. Fish and Wildlife Service (USFWS) list of "endangered and threatened species that may be affected by Projects in the Lake Tahoe Basin Management Area" (December 14, 2010) was reviewed. It was determined that the proposed action and alternative action of the William Kent Project may affect individuals, but is not likely to result in

a trend toward Federal listing or loss of viability for any endangered and threatened species (Project Record Document G-1).

1.11.3 National Historic Preservation Act

Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to take into account the effect of a project on any district, site, building, structure, or object that is included in, or eligible for inclusion in, the National Register of Historic Places. Surveys were conducted for Native American religious or cultural sites, archaeological sites, and historic properties or areas that may be affected by this project (Project Record Document G-3). Compliance with the NHPA was achieved through the use of the USDA Forest Service Region 5 and California State Historic Preservation Officer (SHPO) Programmatic Agreement (2001) regarding compliance with Section 106 of the NHPA. There was a no effect determination made with the use of standard resource protection measures, so consultation with SHPO was not required as described in the Programmatic Agreement.

1.11.4 Clean Water Act (Public Law 92-500)

All federal agencies must comply with the provisions of the Clean Water Act (CWA), which regulates forest management activities near federal waters and riparian areas. The design features associated with the proposed action ensure that the terms of the CWA are met, primarily prevention of pollution caused by erosion and sedimentation.

1.11.5 Clean Air Act (Public Law 84-159)

The project area lies within the Lake Tahoe Air Basin and the Placer County Air Quality Management District. The Traffic Study (Project Record Document G-9) identifies an insignificant increase in vehicle trips. Chapter 93.3.B of the TRPA Code of Ordinances (TRPA 1987) requires that a project provide an air quality impact analysis only if the project is expected to significantly increase vehicle trips.

PLACER COUNTY AIR POLLUTION CONTROL DISTRICT: Construction and Grading Dust Control Requirements. Rule 228, Fugitive Dust, is applicable to the entire County of Placer and addresses fugitive dust generated by construction and grading activities, and by other land use practices including recreational activities. The proposed action and alternative action incorporate design features to comply with these requirements.

1.11.6 Environmental Justice (Executive Order 12898)

Executive Order 12898 requires that all federal actions consider potentially disproportionate effects on minority and low-income communities, especially if adverse effects to environmental or human health conditions are identified. Adverse environmental or human health conditions created by any of the alternatives considered would not affect any minority or low-income neighborhood disproportionately.

The activities proposed in alternatives 2 and 3 were based solely on the existing and desired condition of the campground facilities and surrounding vegetation, sensitivity of the natural environment adjacent to Lake Tahoe, the recreational needs of Forest users, and access in response to the purpose and need. In no case were the

campground and infrastructure/access designs based on the demographic makeup, occupancy, property value, income level, or any other criteria reflecting the status of adjacent non-federal land. Reviewing the location, scope, and nature of the proposed alternatives in relationship to non-federal land, there is no evidence to suggest that any minority or low-income neighborhood would be affected disproportionately. Conversely, there is no evidence that any individual, group, or portion of the community would benefit unequally from any of the actions in the proposed alternatives.

1.11.7 Migratory Bird Treaty Act of 1918 as amended (16 USC 703-712)

The original 1918 statute implemented the 1916 Convention between the United States and Great Britain (for Canada) for the protection of migratory birds. Later amendments implemented treaties between the United States and Mexico, Japan, and the Soviet Union (now Russia). Specific provisions in the statute include the establishment of a federal prohibition, unless permitted by regulations, to "pursue, hunt, take, capture, kill, attempt to take, capture or kill, possess, offer for sale, sell, offer to purchase, purchase, deliver for shipment, ship, cause to be shipped, deliver for transportation, transport, cause to be transported, carry, or cause to be carried by any means whatever, receive for shipment, transportation or carriage, or export, at any time, or in any manner, any migratory bird, included in the terms of this Convention...for the protection of migratory birds...or any part, nest, or egg of any such bird." Because forestlands provide a substantial portion of breeding habitat, land management activities within the LTBMU can have an impact on local populations. The William Kent Campground BMP Retrofit and Administrative Site Redevelopment Project would not adversely impact any populations or habitat of migratory birds (Project Record Document G-1).

1.11.8 Invasive Species, Executive Order 13112 of February 3, 1999

This EA covers botanical resources and noxious weeds. The project's design features are designed to minimize risk of new weed introductions. 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 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 (Project Record Document G-1).

1.11.9 Floodplain Management, Executive Order 11988 of May 24, 1977, and Protection of Wetlands, Executive Order 11990 of May 24, 1977

These executive orders provide for protection and management of floodplains and wetlands. Compliance with these orders will be ensured by adhering to the project design features.

1.11.10 Special Area Designations

There are no special designated areas that would be affected by the William Kent Campground BMP Retrofit and Administrative Site Redevelopment Project (e.g., Research Natural Areas, Inventoried Roadless Areas, Wilderness Areas, and Wild and Scenic Rivers).

1.11.11 Local Agency Permitting Requirements and Coordination

Lahontan Regional Water Quality Control Board

The LRWQCB has determined that the proposed action will require a (NPDES) General Permit for Discharges of Storm Water Runoff Associated with Construction Activity Involving Land Disturbance in the Lake Tahoe Hydrolic Unit, Board Order No. R6T-2005-0007. In addition, a Project-Specific Storm Water Pollution Prevention Plan (SWPPP) and a Storm Water General Permit (a new permit adopted in April 2011) will be required.

Permits will be obtained to comply with Sections 401 and 404 of the CWA through the Lahontan Regional Water Quality Control Board and the U.S. Army Corps of Engineers for stream and wetland restoration and road and trail activities that are not associated with vegetation and fuel reduction activities (as described above). The degree of permitting would be known by the time of the decision by the Forest Supervisor.

TRPA

It is anticipated that a TRPA project permit will be required because the proposed action falls outside of the terms outlined for exempt activities in the Memorandum of Understanding between the TRPA and the US Department of Agriculture, Forest Service (2009) due to the change in land coverage of the administrative structure and management activities proposed within the SEZ and the shore zone.

Placer County Air Pollution Control District

Placer County Air Pollution Control District Rule 228, Fugitive Dust, establishes standards to be met by activities generating fugitive dust. Rule 228 applies to the entire County of Placer and addresses fugitive dust generated by construction and grading activities, and by other land use practices including recreational uses. Fugitive dust is particulate matter discharged into the atmosphere due to a man-made activity or condition. Examples of dust sources that are subject to the rule are excavating and trenching, drilling, boring, earthmoving and grading operations, pavement or masonry cutting operations, brush clearing, travel on unpaved roads within construction sites, and wind-blown dust from uncovered graded areas and storage piles. Rule 228 establishes standards to be met by activities generating fugitive dust. Among these standards to be met is a prohibition on visible dust crossing the property boundary, generation of high levels of visible dust (dust sufficient to obscure vision by 40%), and controls on the track-out of dirt and mud on to public roads. The regulation also establishes minimum dust mitigation and control requirements. These requirements are incorporated in the design features for the project.

2.0 Alternatives, Including the Proposed Action

This chapter describes the alternatives considered for the William Kent Campground BMP Retrofit and Administrative Site Redevelopment Project, including alternatives considered but dismissed from detailed analysis, the no-action alternative, the proposed action, and an alternative action.

2.1 Alternatives Considered but Dismissed from Detailed Analysis

An alternative considered but dismissed from detailed analysis was to implement the campground and beach proposed actions and keep the fire station at Meeks or another site. This alternative was dismissed based on fact that the Meeks site did not meet the needs of a new fire station and after a review of alternate locations on the West Shore, no other viable sites were found. Alternate sites were evaluated for wildland fire response effectiveness, access to utilities, impact to sensitive sites, and for regulations prohibiting construction (ex: Santini-Burton lots). This alternative was not analyzed further as the effects were analyzed in either Alternative 1 (leaving fire station at Meeks), or Alternatives 2 and 3 (different locations of the fire station/administration building within the William Kent site). See Project Record Documents B-2.

2.2 Alternative 1 – No Action

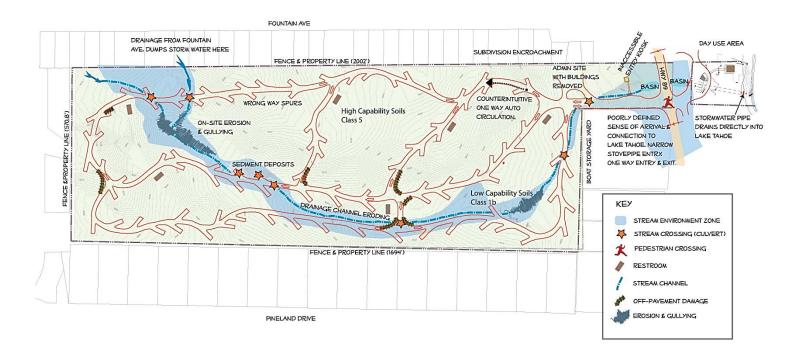
The No Action Alternative provides a baseline for comparing the effects of the action alternatives. The No Action Alternative reflects a continuation of existing recreational, administrative and traffic activities. No improvements to recreational, administration or traffic facilities would be made beyond those considered to be routine maintenance. No campground reconfiguration, BMP retrofit, administrative site construction, or accessibility upgrades would be implemented. A new fire station would not be built on the William Kent site and fire operations would remain at the Meeks fire station (Figure 2-1).

The campground would remain open and continue to be operated by the campground concessionaire. The restroom facilities would continue to degrade, resulting in more frequent repair and maintenance effort and costs. The road system within the campground will continue to be maintained at the present level. Parking and access to the beach area will continue at its present location and condition.

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Figure 2-1. No Action Illustration.

ALTERNATIVE 1 - NO ACTION ALTERNATIVE



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2.3 Alternative 2 - Proposed Action

The William Kent site is planned for rehabilitation, which would include installation of water quality BMPs, control of vehicle circulation by redefining and paving travel routes and camping spurs, relocation of the kiosk, and removal of inadequate restroom buildings. New construction would include four new toilet/shower buildings in the campground and a new fire station/administrative building on the administrative site (Figure 2-2). The Meeks Bay Fire Station would then be decommissioned and the area rehabilitated.

Areas of existing soil compaction that are not planned for campground, administrative building, or other use would be decompacted and mulched where appropriate. The areas may also be planted with native/adapted vegetation such as grasses and shrubs.

Overall project area impervious coverage would decrease from 207,000 to 200,300 square feet. SEZ coverage from current recreation use is proposed to be reduced from 34,600 to 12,800 square feet. BMP measures would be designed to meet the demands of a 1 inch / 1-hour storm, as well as a 2 inches / 24-hours storm event.

This project includes the removal of some existing trees in order to meet the requirements of the Proposed Action. Cut trees may be removed from the site or used as fuel wood. Any slash material generated from tree removal (e.g., smaller trees and limbs and tops) would be removed in whole, chipped and removed, or chipped for use on site. Tree removal may require the use of ground-based mechanical equipment, chainsaws, or chippers, and a staging area(s) in order to process materials. The stumps of cut trees would also be removed as part of this action.

Proposed improvements to the beach include improved stormwater management and accessibility to the beach from the parking lot.

Campground Facilities:

Camping capacity and the overall number of campsites are proposed for reduction. The Proposed Action includes a reduction of campsites from 95 to 81. Traffic routes and direction of travel would be changed to improve traffic flow and access to campsites. The size and configuration of the individual campsites will also be changed.

- 1. Remove approximately 21,714 square feet (83%) of asphalt from within the SEZ in the campground (Table 2-3).
- 2. Reduce the stream crossings from 8 to 2.
- 3. Remove and reconfigure all paved surfaces into four one-way loops connected to a two-way road that runs along the northern border of the campground.
- 4. Remove a net of 14 campsites for a total remaining of 81 campsites (Table 2-4).
- 5. Construct all new spurs to meet FSORAG accessibility requirements; 16' wide by 40' long (33 non-utility sites), 20' wide by 60' long (5 utility sites), 16' wide by 60' long (43 utility sites) (Table 2-4).

- 6. Up to 11 campsites (of the 81 total sites) may include yurts or tent cabins.
- 7. Relocate the RV dump site to an area of high capability soils near the exit that allows for easier vehicular circulation.
- 8. Relocate the entry kiosk further into the campground on the two-way road to allow for drive-up traffic on both sides.
- 9. Construct small infiltration basins and vegetated swales along the roadways and in areas where water flows from paved surfaces into the SEZ to prevent any campground pavement runoff from contributing to the water volume of the stream.
- 10. Remove impervious surfaces from within the SEZ and re-contour the stream channel in areas where the paved surfaces are removed to permit the water to spread out over the SEZ and allow for infiltration and to reduce the flow volume and velocity.
- 11. Plant native vegetation in eroded and disturbed areas.
- 12. Stabilize slopes in the campground with boulder placement and revegetate where needed.
- 13. Replace the signage along Hwy 89 and in the campground to improve navigation for vehicles and pedestrians.
- 14. Install electrical hookups in two campground loops closest to the entrance.
- 15. Install utilities at two host sites; to include water, electric, and sewer.
- 16. Repair fencing along the property line. "Gates" or gaps in the fence will be included to ensure that wildlife does not encounter a solid barrier when crossing the campground.
- 17. Remove the six existing restrooms and replace with four accessible shower/bathroom facilities, one serving each loop.
- 18. Plant vegetation for screening in any areas where vegetation was disturbed or removed along the campground perimeter and intensively plant for screening around the administrative site.
- 19. Approximately 400-800 trees would be removed to facilitate construction of BMPs and associated infrastructure. In addition, thinning of ladder fuels (smaller trees) will take place throughout the project area in order to provide defensible space for facilities.
- 20. Construct a ten-space overflow parking lot south of the campground entrance road.

Administrative Site:

A new combined fire station/administrative building would be built on the location of the existing administrative site. All new facilities will meet FSORAG and ABA accessibility guidelines.

- 1. Construct a new fire station/administrative building and associated parking on the site of the former house and garage.
- 2. The fire station/administrative building will contain two bays for a Type III fire engine, offices for the fire personnel (no overnight accommodations), a kitchen and meeting area, bathrooms and showers, office space for other Forest Service employees, and a public entrance. Approximate building size is 3,500 square feet. Design of the building is to be similar to the USFS Spooner Fire Station on Hwy 50 on the east side of Lake Tahoe.
- 3. Administrative facility parking lot would have room for twelve spaces dedicated for the fire crew and other forest service personnel, and ten spaces for public visitors, including two universally accessible spaces (approximately 10,000 square feet).
- 4. Redesign of the campground entry road will include widening of the road to allow for a dedicated striped emergency vehicle lane.
 - 5. Privacy fencing will be installed along the property line between the administrative site and neighboring residences (minimum height to be six feet).

Beach:

Proposed activities at the beach site include improvements to stormwater management and accessibility to the beach from the parking lot.

- 1. Excavate and shorten the stormwater pipe on the beach to expose the flow ("daylight" the stream) and stabilize the resulting slope. Stabilization may include riprap, boulder placement, retaining walls, structural walls, and vegetation. Bridges, footpaths, and safety rails will be installed where needed to ensure navigability, safety, and efficient use of the site by visitors.
- 2. Create an accessible pathway from the beach parking to the waterfront.

Meeks:

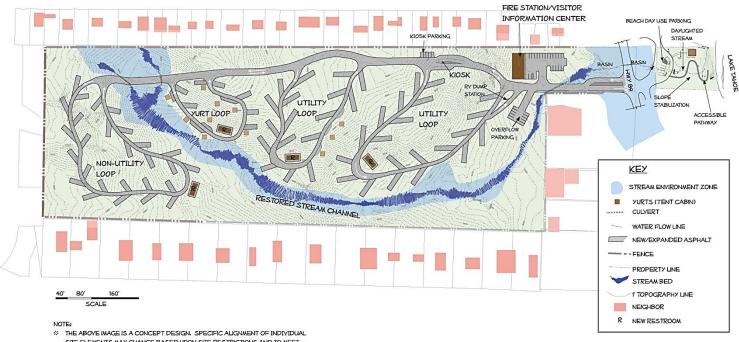
Proposed activities at the Meeks fire station include removing the fire station building and rehabilitate the site.

- 1. Decommission the building and remove excess asphalt.
- 2. Decompact the site and cover exposed soil (wood chips, pine needles, etc) to allow for natural revegetation.

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Figure 2-2. Alternative 2 Concept Design.

ALTERNATIVE 2 - PROPOSED ACTION CONCEPT DESIGN



^{*} THE ABOVE WAGE IS A CONCEPT DESIGN. SPECIFIC ALIGNMENT OF INDIVIDUAL SITE ELEMENTS MAY CHANGE BASED UPON SITE RESTRICTIONS AND TO MEET DESIRED GRADING REQUIREMENTS FOR ACCESSIBILITY.

* INDIVIDUAL BMP'S SUCH AS INFILITRATION BASINS AND SLOPE STABILIZATION

INDIVIDUAL BMP'S SUCH AS INFILTRATION BASINS AND SLOPE STABILIZATION ARE NOT SHOWN IN THIS ILLUSTRATION.

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2.4 Alternative 3 – Alternative Action

This alternative was developed in response to public comments received during the scoping period and EA comment period, as well as internal discussion relating to the use of the administrative site that resulted in the identification of issues (see Chapter 1.10) that merited the development and analysis of an alternative to the proposed action. Since the release of the EA to the public for comment, the need for visitor information services at this site was re-evaluated. It was determined that visitor information services are adequately provided at other facilities in the area and are therefore not considered further in this alternative. Table 2-1 discusses the major issues raised during public scoping and how such issues are addressed in Alternative 3.

After the action alternative was developed, the EA was released to the public for the legal 30 day comment period. Table 2-2 discusses issues raised during the comment period and how such issues were addressed in Alternative 3. No comments resulted in the need for an additional action alternative. Some of the comments, however, did result in the addition of a design feature or a slight modification of Alternative 3. A summary of the changes that resulted from the public comment period can be found in Table 2-2. See Appendix C of the *Decision Notice and Finding of No Significant Impact* document for the William Kent BMP Retrofit and Administrative Site Redevelopment Project for the full Forest Service response.

<u>Table 2-1. Issues with Alternative 2 that were raised during public scoping, which resulted in the creation of an alternative action (Alt 3).</u>

Issue with Alt 2	Forest Service Response
The location of the main campground two-way road will increase noise and activity levels along the northern boundary.	The two-way road was relocated into the interior of the campground in Alternative 3. The configurations of the one-way loops were changed to accommodate this new circulation pattern.
The location of the kiosk will increase noise and activity levels along the northern boundary.	The kiosk was relocated to the administrative site in Alternative 3.
The location of the fire station will increase noise and activity levels along the northern boundary.	The administrative building was relocated to the south of the campground entrance road and a greater distance from residential lots in Alternative 3.
The proposed action increases paved surfaces, even though it decreases the overall coverage in the SEZ and compacted areas.	The size of the overflow parking lots was reduced and the number of yurt parking spaces was decreased in Alt 3. The number of 60' camping spurs were reduced from 48 to 18 and only provides 7 overflow parking spaces. The actual total impervious surfaces amount is significantly decreased.

<u>Table 2-2. Issues with Alternative 3 that were raised during the legal 30 day public comment period and the Forest Service response.</u>

Issue with Alt 3	Forest Service Response
There is concern about the activity associated with the RV dump station in the location proposed in Alt 3 (too close to residential lots).	The RV waste dump station was moved slightly to be further from the residential lots in response to this concern. It is now located off of the proposed traffic circle.
The kiosk and RV dump station increase the general disturbance on the site of the former William Kent house and garage from the past uses.	A design feature was added to install a 6 foot (minimum) privacy fence along this portion of the campground. The RV dump station was moved (see above).
The proposed traffic circulation pattern results in an increase in vehicular movement in proximity to 480 Pineland Drive.	The roadway was moved slightly and the configuration of the campsites changed so that the road intersection is further from the property line. Additional vegetation screening or solid fencing may be added in this area, as well.
There is a general concern about screening of the campground from the residential lots.	The project description relating to vegetated screening was changed slightly to allow for screening in areas other than just where vegetation was disturbed (see #19 under Campground Facilities, Section 2.4).

Campground Facilities:

In Alternative 3 there are changes in the configuration of the roads within the campground and the addition of a two-way road traveling through the center of the site and reconfiguring the entrance road. The number of campsites proposed are the same as Alternative 2 but will be configured differently with the yurts located throughout the site rather than located in one loop as proposed in Alternative 2. General SEZ reconstruction is similar to Alternative 2 (Figure 2-3).

- 1. Remove approximately 23,500 square feet (90%) of asphalt from within the SEZ in the campground (Table 2-3).
- 2. Reduce the stream crossings from 8 to 1.
- 3. Remove and reconfigure all paved surfaces into three one-way loops connected to a two-way road that runs down the middle of the campground.
- 4. Remove a net total of 14 campsites for a total remaining of 81 campsites (Table 2-4).
- 5. Construct all new spurs to meet FSORAG accessibility requirements; 16' wide by 40' long (31 non-utility sites, 32 utility sites), 20' wide by 60' long (5 utility sites), and 16' wide by 60' long (13 utility sites) (Table 2-4).

- 6. Ten yurt or tent cabin sites will be mixed in with the other campground sites. Sites may function as a regular campsite until a yurt is constructed.
- 7. Reconfigure the entrance road to include a one-way traffic circle.
- 8. Relocate the kiosk and dump station to the site of the former William Kent house and garage. Reconfigure the circulation patterns to allow for drive-up kiosk and pedestrian access via a sidewalk. A total of five parking spaces will also be provided for overflow parking and walk-up access.
- 9. Construct small infiltration basins and vegetated swales along the roadways and in areas where water flows from paved surfaces into the SEZ to prevent any campground pavement runoff from contributing to the water volume of the stream.
- 10. Remove impervious surfaces from within the SEZ and re-contour the stream channel in areas where the paved surfaces are removed to permit the water to spread out over the SEZ and allow for infiltration and to reduce the flow volume and velocity.
- 11. Plant native vegetation in eroded and disturbed areas.
- 12. Stabilize slopes in the campground with boulder placement and revegetate where needed.
- 13. Replace the signage along Hwy 89 and in the campground to improve navigation for vehicles and pedestrians.
- 14. Install electrical hookups in two campground loops closest to the campground entrance.
- 15. Install utilities at two host sites; to include water, electric, and sewer.
- 16. Repair fencing along the property line. "Gates" or gaps in the fence will be included to ensure that wildlife does not encounter a solid barrier when crossing the campground. Fencing may be replaced with any type of fencing materials that fits the BEIG guidelines (ex: solid wood, split rail, poly-coated chain link, etc).
- 17. Remove the six existing restrooms and replace with five accessible shower/bathroom facilities.
- 18. Create seven overflow parking sites on high capability lands outside the SEZ.
- 19. Plant vegetation for screening in suitable areas where vegetation was disturbed or removed along the campground perimeter. Vegetation may also be planted for screening of facilities. Screening vegetation must follow defensible space guidelines for facilities.
- 20. Approximately 400-800 trees would be removed to facilitate construction of BMPs and associated infrastructure. In addition, thinning of ladder fuels (smaller trees) will take place throughout the project area in order to provide defensible space for facilities.

21. Privacy fencing will be installed along the property line between the check-in kiosk area and neighboring residences (minimum height to be six feet).

Administrative Site:

In Alternative 3, the administrative facility would be moved to the south side of the campground entrance road. The design for the building would be the same as Alternative 2.

- 1. Construct a new fire station/administrative building and associated parking south of the campground road to the west of the boat storage facility to serve the north and west shores of Lake Tahoe.
- 2. The fire station/administrative building will contain one or two bays for a Type III fire engine, offices for the fire personnel (no overnight accommodations), a kitchen and meeting area, bathrooms and showers, and office space for other forest service employees. Approximate building size is less than 3,500 square feet. Design of the building is to be similar to the USFS Spooner Fire Station on Hwy 50 on the east side of Lake Tahoe.
- 3. Administrative facility parking lot would have 23 parking spaces, including two universally accessible spaces (approximately 14,000 square feet).
- 4. Redesign of the campground entry road will include widening of the road to allow for a dedicated striped emergency vehicle lane.
- 5. Privacy fencing will be installed along the property line between the administrative site and neighboring residences (minimum height to be six feet).

Beach:

In Alternative 3 changes to the beach facility are similar to Alternative 2.

- 1. Excavate and shorten the stormwater pipe on the beach to expose the flow ("daylight" the stream) and stabilize the resulting slope. Stabilization may include riprap, boulder placement, retaining walls, structural walls, and vegetation. Bridges, footpaths, and safety rails will be installed where needed to ensure navigability, safety, and efficient use of the site by visitors.
- 2. Create an accessible pathway from the beach parking to the waterfront.

Meeks:

Proposed activities at the Meeks fire station are the same as those identified in Alternative 2.

Figure 2-3. Alternative 3 Concept Design.

FIGURE 2-3 ALTERNATIVE 3 - CONCEPT DESIGN



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2.5 Design Features Common to All Alternatives

Activities associated with implementation of this project could have localized, short-term effects. The following design features have been incorporated into both Action Alternatives and are intended to minimize or avoid effects on soils, water, vegetation, wildlife, fisheries, heritage resources, recreational resources, and air quality. Some of the design features were developed in response to comments received during scoping. Table 2-3 summarizes these comments. In addition to the following design features, applicable BMPs are identified in *Water Quality Management for Forest System Lands in California* (USDA Forest Service 2011). Adherence to these BMPs ensures compliance with the Clean Water Act. These specific BMPs are listed in Appendix A.

Table 2-3. Issues received during scoping and response.

Issue	Response
The fence along the northern edge of the site is constantly knocked down by bears traversing the site from south to north.	A design feature was added to accommodate bear movement along this north-south line and to ensure the fence does not create an impenetrable barrier along the entire length of the property line, therefore preventing the bears from needing to knock down the fence.
The campground design should follow the "dark-skies" initiative.	A design feature was added to include lighting guidelines that meet current code while minimizing light pollution for the campground and administrative facility.
Privacy screening needed between the administrative site and the neighbors.	A design feature was added to include native vegetative screening and fencing where needed between the administrative site and the neighboring residential lots.
The addition of an administrative building will add to congestion on Hwy 89.	A traffic analysis was conducted in response to this issue. It was determined that the addition of the administrative building is offset by the reduction in Daily Vehicle Trips (DVT) due to the reduction of campsites by 14 spaces. Increase in DVT is considered insignificant under Alternative 2 and 3.

Recreation and Access

- 1. Maintain recreational facilities in a usable condition to the extent possible as long as human health and safety is not compromised and project implementation is unimpeded. The existing kiosk would not be removed until the new kiosk is installed and vehicular access is available. Existing bathrooms would remain in operation until the new bathroom facilities are opened and accessible.
- 2. Prepare a traffic control plan prior to commencing project operations. A temporary forest closure may be implemented for project activities. Closure should be as limited as possible to reduce restrictions to public access. Closure would be only for areas of active construction activity.

- 3. Prohibit vegetative slash and construction burning. Construction wastes will be hauled offsite to an approved waste facility. Slash will be either chipped and used onsite or hauled offsite to an approved waste facility.
- 4. Provide advanced notice to the public to ensure that the public is aware of proposed project activity. Post signs in project areas near public access points to highlight the proposed action and impacts to public access.
- 5. Signing and temporary fencing would be provided around the construction site.

Scenic Resources

- 1. New building facilities would be designed to blend with and enhance the existing landscape through the use of native materials and neutral colors. The design will be consistent with the USFS Built Environment Image Guide.
- 2. Emphasis will be placed on retaining large mature trees to ensure the natural forested appearance of the campground remains.

Heritage Resources

1. If any previously unrecorded cultural resources are discovered during project monitoring or project construction, all project-related activities would cease immediately in the vicinity of such discoveries, the Forest Service would begin the consultation process, as outlined in Section 800.13 of the Advisory Council on Historic Preservation regulations "Protection of Historic Properties" (36 CFR Part 800).

Soil and Ground Disturbance

- 1. Project activities would occur within the TRPA grading ordinance season (May 01 to October 15) and in accordance with the LRWQCB permit. If grading or movement of soil outside of this window becomes necessary (i.e. to finish BMP's, etc.) a standard grading exemption permit request would be submitted to TRPA and LRWQCB for approval. During periods of inclement weather, operations would be shut down at the discretion of the Contracting Officer until conditions are sufficiently dry and stable to allow construction to continue without the threat of substantial erosion, sedimentation, or offsite sediment transport.
- 2. Erosion control and prevention of sediment transport for this project (EA Appendix A) would be implemented in accordance with; *USDA*, *Water Quality Management for Forest System Lands in California -Best Management Practices* (USDA 2011).
- 3. Provision for hazardous materials spill kits would be included in the contract specifications.
- 4. Staging of materials and equipment would be limited to existing disturbed areas outside the SEZ (where soil is already compacted and vegetation has been cleared). Following project completion, any areas used for staging and not intended for continued vehicular use would be tilled, seeded, and mulched.

- 5. Rock, soil and other earthen material removed during grading operations may be stockpiled and used for construction activities. Consistent with BMP requirements, measures would be employed that prevent stockpiled material from entering the stream channel or otherwise adversely affecting ground water, such as with the use of fiber logs, covering with tarps, etc.
- 6. Riparian/stream/SEZ and soil restoration activities would be developed where appropriate. Appropriate restoration actions, methods, locations, and amount would be developed based on the types and magnitude of disturbance within the SEZ, as well as site-specific and watershed-level opportunities and constraints for SEZ enhancement.
- 7. Infiltration basins and vegetated swales would be installed to intercept stormwater flowing from the campground into the SEZ. BMPs would be designed for the 1 inch 1 hour event, and the 2 inch 24 hour rainfall event.
- 8. Disposal areas for sidecast material will be displayed on engineering plans. Compliance with contract specifications during implementation will be handled by the project contracting officer representative (COR).
- 9. To prevent pollutants such as fuels, lubricants, and other harmful materials from being discharged into watercourses or other natural channels, unless otherwise agreed upon by the COR, service and re-fueling areas shall be located outside of SEZs. If fuel storage capacities meet or exceed those stated in contract provisions, project Spill Prevention, Containment, and Counter Measures (SPCC) plans are required. Operators are required to remove service residues, waste oil, and other materials from National Forest land and be prepared to take responsive actions in case of a hazardous substance spill, according to the SPCC plan.
- 10. Construction and maintenance activities adjacent to SEZs will be done in accordance with construction designs. SEZ boundaries will be flagged prior to starting work adjacent near the SEZ. Compliance with contract specifications during implementation will be handled by the project COR.
- 11. The following will be required in contracts: Coordination with the LRWQCB for permits will be required when diverting any flow. Specifications for such activities will be included in the engineering plans. Compliance with contract specifications during implementation will be handled by the project COR.
- 12. Culvert specifications will be included in the engineering plans. Temporary BMPs such as silt fence will be used to ensure water quality is protected during installation. Compliance with contract specifications during implementation will be handled by the project COR.
- 13. Riprap (rock stabilization) use will be included in the engineering plans. Plans will specify what type and size to be used. Compliance with contract specifications during implementation will be handled by the project COR.
- 14. The road surface within the campground will be paved. Compliance with contract specifications during implementation will be handled by the project COR.

15. Erosion control will be accomplished through applying seed to disturbed areas, paving road surfaces, installing drainage features and basins, and retaining walls.

Botany/Non-Native Invasive Plant Species

- 1. If any sensitive plants or special interest plants are found they would be flagged by an LTBMU Forest Botanist and avoided.
- Include non-native invasive species prevention measures in project contract. In the event that noxious weeds are found on the site, the LTBMU noxious weed coordinator would be consulted.
- 3. All construction and earth-moving equipment would be free of non-native invasive plant species before moving into the project area. Equipment would be considered free of non-native invasive plant species when visual inspection by the COR does not reveal soil, seeds, plant material, or other such debris.
- 4. Equipment would be cleaned prior to moving to other National Forest System lands.
- 5. All gravel, fill, or other materials would be required to be weed-free. Obtain certified weed-free materials from gravel pits and fill sources that have been certified weed free or have been surveyed and approved by the LTBMU Forest Botanist.
- 6. All mulches and seed mixes would be weed free. Seed mixes must be approved by the LTBMU Forest Botanist.
- 7. Staging areas for equipment, materials, or crews would not be situated in areas infested by non-native invasive species. Areas containing non-native invasive species would be "flagged and avoided" before implementation.
- 8. Cheatgrass infestations found during project activities would be treated and covered with weed matting prior to and during project implementation. Treatment may include chemical or hand methods, depending on the size of the infestation (see 2010 TIPS EA).
 - a. Staging areas for equipment, materials, or crews will be designated in paved areas away from cheatgrass and noxious weed infestations.
- 9. After the project is completed, all disturbed project areas will be monitored for 3 years to ensure non-native invasive species do not spread and additional non-native invasive species do not become established in areas affected by the project. Monitoring will occur through the LTBMU invasive weeds monitoring program.

Wildlife

1. If special status wildlife species are detected in the project vicinity, Limiting Operating Procedures (LOPs) would be implemented as determined by the project biologist. The project biologist would determine if LOPs are necessary based on habitat suitability or the most current wildlife data from pre-project field surveys.

- 2. Any sightings of threatened, endangered, candidate, sensitive, management indicator, or special interest species would be reported to the project biologist. Nests and dens would be protected with flagging, fencing, or limited operating periods in accordance with management direction. Species identification, known locations, and protection procedures for both plants and animals would be addressed with implementation crews during a pre-construction meeting.
- 3. Existing down logs greater than 20 inches dbh may be retained. Logs that are moved during construction could be repositioned.
- 4. Bear-proof garbage dumpsters would be temporarily installed during implementation or food-related trash associated with project activity would be removed daily to prevent wildlife attraction to the project area.

Engineering

- 1. Building construction would incorporate "green" sustainable construction features where appropriate (i.e. sourcing sustainably produced or local materials, utilizing passive solar, integrating energy-saving technologies, etc).
- 2. Paved surfaces around structures that do not require vehicular circulation would be designed with porous paving systems or other semi-pervious surface (i.e. gravel) where appropriate to enhance infiltration of stormwater.
- 3. Building structures would have roofline drip trenches or other BMPs to catch and slow stormwater flowing from the roof.
- 4. Select light features for the campground and administrative site that limit light pollution while following building code and Forest Service lighting design guidelines.
- 5. Fence repairs and new fence construction will allow places for through-travel of large wildlife (i.e. bears) in at least one location along each property line in a manner that does not necessitate the animal to go over the fence or push it down.
- 6. Specific allowable construction hours would be set from 7:00 am to 7:00 pm, Monday through Friday. Construction outside of these allowable hours must be coordinated and approved by the COR and the permittee.

Air Quality

- 1. Unpaved areas during construction subject to vehicle traffic must be stabilized by being kept wet, treated with chemical dust suppressants or covered. Cover materials must contain less than 0.25 percent naturally-occurring asbestos.
- 2. The speed limit on unpaved areas must be 15 mph or less unless the road surface and surrounding area is sufficiently stabilized to prevent vehicles and equipment traveling more than 15 mph from emitting dust exceeding Ringelmann 2 (dust sufficient to obscure vision by 40%), or visible emissions from crossing the project boundary line.

- 3. Storage piles and disturbed areas not subject to traffic must be stabilized by being kept wet, treated with a chemical dust suppressant, or covered when material is not being added to or removed from the pile.
- 4. Prior to any ground disturbance, including grading, excavating, and land clearing, sufficient water must be applied to the area to be disturbed to prevent emitting dust exceeding Ringelmann 2 and to minimize visible emissions crossing the boundary line.
- 5. Construction vehicles leaving the site must be cleaned to prevent dust, silt, mud, and dirt from being released or tracked off site.
- 6. When wind speeds are high enough to result in dust emissions crossing the boundary line, despite the application of dust mitigation measures, grading and earthmoving operations are suspended.
- 7. No trucks are allowed to transport excavated material off site unless no spillage can occur from holes or openings, and loads are either covered with tarps, or wetted and loaded such that the material does not touch the front, back, or sides of the cargo compartment at any point less than six inches from the top and that no point of the load extends above the top of the cargo compartment.
- 8. Actions must be taken such as surface stabilization, establishment of a vegetative cover, or paving to minimize wind-driven dust from inactive disturbed surface areas.
- 9. Track-out of dirt or mud onto public paved roadways must be minimized and cleaned up.
- 10. A Dust Control Plan (DCP) will be submitted to the Dust Control District for approval prior to the start of earth-disturbing activities if this requirement has been established as a Condition of Approval of a discretionary permit.

Tree Removal

- 1. Emphasis will be placed on retaining structurally complex large trees. Where feasible based on project activities, Jeffrey pine, sugar pine, and incense cedar would be retained and lodgepole pine and white fir would be removed. Trees showing signs of stress, or insect and disease infection would be removed, consistent with project activities.
- 2. Thinning of ladder fuels for defensible space standards around structures will take into consideration recreation and screening objectives. Identification of ladder fuels will occur in coordination with recreation program managers.
- 3. Cut trees may be removed, or utilized as fuelwood. Any slash material generated from tree removal (i.e. smaller trees, limbs, and tops) would be removed in whole, chipped, and removed or chipped for use on the site. Tree removal may require the use of ground-based mechanical equipment, chainsaws, or chippers, and a staging area(s) in order to process material.

Monitoring

- The William Kent Campground BMP Retrofit and Administrative Site Renovation project would be included in the pool of projects for random BMP evaluations under the Best Management Practices Evaluation Program (BMPEP) program. Each year the LTBMU completes evaluations for the BMPEP as part of the Pacific Southwest Region's effort to evaluate the implementation and effectiveness of BMPs created for protecting soil and water resources associated with Forest Service management activities.
- 2. Monitoring to ensure that all contract items including temporary BMPs, design features, and permit requirements are being followed, will be provided by the Forest Service Contracting Officer's Representative following protocols established for public works contract administration.

2.6 Comparison of Alternatives

This section provides a summary of the effects of implementing each alternative. Information in the tables focuses on activities and effects where different levels of effects or outputs can be distinguished quantitatively or qualitatively among alternatives. Chapter 3 provides the scientific and analytical basis for the comparison of effects found in Table 2-6.

Table 2-4. Comparison of total impervious surface coverage for each alternative.

	Alternative 1 (No Action)	Alternative 2 (Proposed Action)	Alternative 3 (Alternative Action)	
Total impervious surfaces (campground and admin site)	207,000 ft ^{2*}	200,300 ft ²	190,500 ft ²	
Reduction in impervious coverage (campground and admin site)	0	3%	8%	
Total impervious coverage in SEZ (campground and admin site)	34,600 ft ² 12,800 ft ²		12,000 ft ²	
Total impervious coverage in SEZ (campground only)	26,200 ft ²	4,500 ft ²	2,700 ft ²	
Impervious coverage removed from SEZ (campground only)	0 ft ²	21,700 ft²	23,500 ft ²	
% impervious coverage removed from SEZ (campground only)	0%	83%	90%	

*Calculation of total impervious surface for Alternative 1 is based on existing paved surface footprint plus a 2 foot buffer of compacted native surface surrounding the asphalt. The 2 foot buffer is an average estimate of the amount of disturbed soils as observed on the site.

Table 2-5. Comparison of Campsite type and number for each alternative.

	Alternative 1 (No Action)	Alternative 2 (Proposed Action)	Alternative 3 (Alternative Action)
12' wide by 25' long spurs	95*	0	0
16' wide by 40' long spurs	0	33	63
20' wide by 60' long spurs	0	5	5
16' wide by 60' long spurs	0	43	13
Total	95	81	81

^{*}Existing average spur size is 12' x 25', but is highly variable.

Table 2-6. Summary of Effects of Alternatives.

Area of Effect	Alternative 1	Alternative 2	Alternative 3
Recreation	(No Action) Existing recreation and	(Proposed Action) Loss of 14 campsites.	(Alternative Action) Loss of 14 campsites.
recreation	management continues.	Facilities meet the BEIG ¹	Facilities meet BEIG and
	Facilities do not meet	and accessibility	accessibility; deferred
	accessibility standards,	standards; deferred	maintenance lowered.
	deferred maintenance	maintenance lowered.	Increased amenities
	remains. Undersized	Increased amenities (showers, utilities).	(showers, utilities). Increased noise and
	camp spurs remain, confusing circulation;	Increased noise and	disturbance to residential
	traffic stacks up on Hwy	disturbance to neighbors	properties near admin site,
	89. Noise levels remain	along northern boundary.	but less so than Alt 2.
	consistent. Beach day	Campsites near admin site	Campsites near admin site
	use site remains the	less rustic. Reduced	less rustic. Reduced
	same.	amount of level ground on	amount of level ground on
		beach site, increased	beach site, increased
XX/:1.11 1.T2:	T:	accessibility to beach.	accessibility to beach.
Wildland Fire Response	Fire station remains at Meeks Bay. The	Wildland fire response on north shore greatly	Wildland fire response on north shore greatly
Response	majority of wildland fire	improved. Improved	improved. Improved
	response calls are located	facility that is universally	facility that is universally
	significantly north of	accessible and able to be	accessible and able to be
	Meeks Bay and require	occupied year-round.	occupied year-round.
	longer response times.	Facility meets the needs of	Facility meets the needs of
	Facility does not meet	the fire crews.	the fire crews.
	accessibility needs, only usable in summer		
	months, does not meet		
	the space or facility		
	needs of the fire crew.		
Wildlife	Bears continue to knock	Bears can travel through	Bears can travel through
	down the fence. No	gaps in the fence without	gaps in the fence without
	effect on special status	property destruction. May	property destruction. May
	species.	affect individuals, but is	affect individuals, but is
		not likely to result in a trend toward Federal	not likely to result in a trend toward Federal
		listing of special status	listing of special status
		species.	species.
<u> </u>		1	1 1

Area of Effect	Alternative 1	Alternative 2	Alternative 3
D. t 1	(No Action)	(Proposed Action)	(Alternative Action)
Botanical Resources	No known special status species or noxious weed species on the site.	Potential for introduction of noxious weed species during construction is moderate. Design features implemented to mitigate this. Likely no impact to botanical resources. Restoration of riparian vegetation.	Potential for introduction of noxious weed species during construction is moderate. Design features implemented to mitigate this. Likely no impact to botanical resources. Greater restoration of riparian vegetation than Alt 2.
Heritage Resources	No effect on heritage resources	No effect on heritage resources.	No effect on heritage resources.
Scenic Resources	Restrooms do not meet BEIG¹ guidelines. Partial retention VQO² for the middle ground; modification or better for foreground. Scenic stability moderate.	All facilities meet the BEIG. VQO is maintained. Beach visual appearance altered, but remains consistent with VQO. Scenic stability increases. Aesthetic appearance of campground improved. Aesthetic appearance of the Meeks Bay Resort entrance is improved.	All facilities meet the BEIG. VQO is maintained. Increased spacing between admin center and neighborhood residences compared to Alt 2. Beach visual appearance altered, but remains consistent with VQO. Scenic stability increases. Aesthetic appearance of campground improved. Aesthetic appearance of the Meeks Bay Resort entrance is improved.
Transportation and Traffic	Traffic stacks up onto Hwy 89 during periods of heavy use. DVT ³ is 481. Confusion and congestion within campground remains. Traffic patterns at Meeks Bay Fire Station remain.	Traffic does not stack onto Hwy 89. Insignificant increase in DVT (1 DVT). Reconfiguration of roadways increases efficiency and decreases confusion and congestion in campground. Traffic congestion and conflict at the Meeks Bay Resort entrance is reduced.	Traffic does not stack onto Hwy 89. Insignificant increase in DVT (2 DVT). Reconfiguration of roadways increases efficiency and decreases confusion and congestion in campground. Traffic congestion and conflict at the Meeks Bay Resort entrance is reduced.
Hydrology and Soils	Erosion and sedimentation of stream channel and impacts to water quality. 8 stream crossings remain in the campground.	Improved soil retention and infiltration, reduced erosion. 83% of impervious surfaces removed from SEZ ⁴ in campground. Two stream crossings remain.	Increased infiltration and soil retention, reduced erosion. 90 % of impervious surfaces removed from SEZ in campground. One stream crossing remains.
Air Quality/Greenhouse Gas Emissions	No change from existing condition.	Increase in DVT, but not significant. Not considered a significant increase in greenhouse gas emissions or decrease in air quality.	Increase in DVT, but not significant. Not considered a significant increase in greenhouse gas emissions or decrease in air quality.

Area of Effect	Alternative 1 Alternative 2		Alternative 3
	(No Action)	(Proposed Action)	(Alternative Action)
Visitor Information	Limited visitor information disbursed from kiosk.	Visitor services for North and West Shores of Lake Tahoe offered in the administrative building.	Limited visitor information disbursed from kiosk.

¹BEIG: Built Environment Image Guide ²VQO: Visual Quality Objectives ³DVT: Daily Vehicle Trips ⁴SEZ: Stream Environment Zone

3.0 Environmental Consequences

The Council on Environmental Quality (CEQ) regulations direct that agencies succinctly describe the environment that may be affected by the alternatives under consideration (40 CFR 1502.15). This chapter describes the existing physical, biological, social, and economic aspects of the project area that have the potential to be affected by implementing any of the alternatives (i.e., the existing conditions). Each description of the existing conditions is followed by a description of the environmental effects (direct, indirect, and cumulative) that would be expected to result from undertaking the proposed action or other alternatives. Together, these descriptions form the scientific and analytical basis for the comparison of effects table found at the end of Chapter 2, "Summary of Effects of Alternatives."

3.0.1 Organization of Chapter 3

Chapter 3 combines information on the existing conditions and environmental effects of the alternatives for the various resources. The information is separated into these resource areas for ease in reading. The discussion of alternatives is organized by resource area, and each resource area is presented as follows:

- Introduction. The scope of the analysis briefly describes the geographic area(s) for the individual resource and its indicators potentially affected by implementation of the proposed action or alternative. The scope of the analysis varies according to individual resource area and may also vary for direct, indirect, and cumulative effects.
- Existing Conditions. The existing conditions section provides a description of the resource environment that is potentially affected based on current resource conditions, uses, and management decisions.
- *Direct, Indirect, and Cumulative Effects*. This section provides an analysis of direct, indirect, and cumulative environmental effects on the resource area by implementing each of the alternatives, according to the indicators and issues identified for that resource.
- *Analytical Conclusions*. This section provides a synthesis of the effects analysis for that resource.

Direct effects are caused by the actions to implement an alternative, and occur at the same time and place. Indirect effects are caused by the implementation action and are later in time or removed in distance, but are still reasonably foreseeable (i.e., likely to occur within the duration of the project).

Cumulative effects are the result of the incremental direct and indirect effects of any action when added to other past, present, and reasonably foreseeable future actions. Cumulative effects can result from individually minor, but collectively significant actions, taking place over a period of time.

3.0.2 Projects Considered for Cumulative Effects

In order to understand the contribution of past actions to the cumulative effects of the proposed action and alternatives, this analysis relies on current environmental conditions as a proxy for the impacts of past actions. This is because existing

conditions reflect the aggregate impact of all prior human actions and natural events that have affected the environment and might contribute to cumulative effects.

This cumulative effects analysis does not attempt to quantify the effects of past human actions by adding up all prior actions on an action-by-action basis. There are several reasons for not taking this approach. First, a catalog and analysis of all past actions would be impractical to compile and unduly costly to obtain. Current conditions have been impacted by innumerable actions over the last century (and beyond), and trying to isolate the individual actions that continue to have residual impacts would be nearly impossible. Second, providing the details of past actions on an individual basis would not be useful to predict the cumulative effects of the proposed action or alternatives. In fact, focusing on individual actions would be less accurate than looking at existing conditions, because there is limited information on the environmental impacts of individual past actions, and one cannot reasonably identify each and every action over the last century that has contributed to current conditions. Additionally, focusing on the impacts of past human actions, risks ignoring the important residual effects of past natural events, which may contribute to cumulative effects just as much as human actions. By looking at current conditions, we are sure to capture all the residual effects of past human actions and natural events, regardless of which particular action or event contributed those effects. Third, public scoping for this project did not identify any public interest or need for detailed information on individual past actions. Finally, the Council on Environmental Quality issued an interpretive memorandum on June 24, 2005 regarding analysis of past actions, which states, "agencies can conduct an adequate cumulative effects analysis by focusing on the current aggregate effects of past actions without delving into the historical details of individual past actions."

The cumulative effects analysis in this EA is also consistent with Forest Service National Environmental Policy Act (NEPA) Regulations (36 CFR 220.4(f)) (July 24, 2008), which state, in part:

"CEQ regulations do not require the consideration of the individual effects of all past actions to determine the present effects of past actions. Once the agency has identified those present effects of past actions that warrant consideration, the agency assesses the extent that the effects of the proposal for agency action or its alternatives would add to, modify, or mitigate those effects. The final analysis documents an agency assessment of the cumulative effects of the actions considered (including past, present, and reasonable foreseeable future actions) on the affected environment. With respect to past actions, during the scoping process and subsequent preparation of the analysis, the agency must determine what information regarding past actions is useful and relevant to the required analysis of cumulative effects. Cataloging past actions and specific information about the direct and indirect effects of their design and implementation could in some contexts be useful to predict the cumulative effects of the proposal. The CEQ regulations, however, do not require agencies to catalogue or exhaustively list and analyze all individual past actions. Simply because information about past actions may be available or obtained with reasonable effort does not mean that it is relevant and necessary to inform decision-making. (40 CFR 1508.7)"

For these reasons, the analysis of past actions in this section is based on current environmental conditions.

Appendix B discloses the present and foreseeable future actions that have affected or may affect resources in the William Kent Campground area that were considered for the analysis of cumulative effects.

3.1 Recreation

3.1.1 Introduction

There are more than 5 million visits to the LTBMU every year (USDA 2010). A large portion of these visits are to developed recreation sites, such as William Kent. The infrastructure and development in these areas allows for concentrated public use, while managing impacts to the natural setting.

This section evaluates the effects to the human environment and recreation use of the no-action, the proposed action, and the alternative actions. In evaluating the three alternatives, the following three categories of effects were analyzed:

- 1. Effects of the project on facility operations to the permittee
- 2. Effects to the recreation experience
- 3. Effects to the adjacent neighbors

3.1.2 Existing Condition

The William Kent campground and day use beach site offers forest setting recreation experiences and is popular with visitors due to its close proximity to Tahoe City and nearby amenities such as the swimming beach, restaurants, stores, a marina, and access to the rest of Lake Tahoe. Contributing to its popularity is that there are only three campgrounds situated in this area of Lake Tahoe and very few public access points to the lake along the west shore of Lake Tahoe.

The campground and administrative site have coexisted since 1924. The campground was operated by the Forest Service from its construction until 1990. Since 1990, the campground has been operated under special use permit. The administrative site currently contains only a parking area that serves as overflow for the campground and parking for the campground host vehicles. The William Kent house and garage that previously existed on the administrative site were decommissioned and removed in 2011.

The campground is well forested with tall Jeffery pine, white fir, and incense cedar; and campsites are spread among low ridges and shallow ravines. Urbanization over the years has surrounded this campground. The campground is surrounded by neighbors on three sides and a boat yard to the east. Some campsites are small and not level and others back up to perimeter fences. Highway noise can be heard from some campsites near the entrance. In spite of these site challenges, visitors report high satisfaction levels with their camping experience (as determined from comment cards returned to the permittee) and many campers return year-after-year.

The campground and day use beach area are open from mid-May to mid-October. The campsites are often full on busy weekends during the peak season from the Fourth of July through the end of the Labor Day. Campsites near the entrance currently experience high levels of vehicle and pedestrian activity during peak occupancy periods because all campground traffic flows by those campsites due to the one-way configuration of the roads. Currently, the campsites that are located

within the SEZ provide early season camping opportunities because the snow melts away from these sites first and little snow removal is needed in order to accommodate early season camping. The permittee uses the kiosk as their office, campground check-in, and visitor information center (the permittee offers general interpretive information to the public in addition to issuing Desolation Wilderness permits).

The day use beach area is directly across Highway 89 from the campground and is adjacent to the Sunnyside Resort. The permittee manages the day use area, parking lot, and restroom facility. It has an approximately ½-acre picnic area and a small rocky beach with lake access. It is a popular beach and is often visited by upwards of 100 people per day during the peak summer period by both visitors and neighbors alike for picnicking, swimming and beach activities.

3.1.3 Direct and Indirect Effects

Alternative 1 - No Action

The No Action Alternative would allow existing recreational activities at the campground and day use beach area to continue without interruption or substantial changes. The permit holder would continue to operate the campground and day use beach area as described in their special use permit and operation plan. There would be no addition of utilities to the campsites and no addition of yurt camping opportunities or reduction in deferred maintenance on the site. The restroom facilities would continue to not meet Forest Service accessibility standards. Camp spurs would continue to be undersized. The campground capacity would remain at 95 campsites accommodating 475 persons-at-one-time (PAOTs). The two host camping sites would continue to be located together near the campground entrance. There would be no change to the problems associated with the existing traffic patterns and the permittee would continue to operate the campground and manage their operations out of the existing kiosk. Little snow removal would continue to occur. Traffic would continue stacking up past the campground kiosk parking area onto Hwy 89 during periods of heavy use. There would be no change to the existing experience neighbors have while living in close proximity to a campground. Noise levels in and around the campground would remain the same. Some campsites would continue to be situated close to neighbors' backyards. There would be no change to the William Kent day use beach area. Demand for the campground and day use beach area is expected to increase with population growth. There would be no change to the administrative site and overflow parking would continue to occur there. There would be no change to the existing traffic patterns or administrative use at the Meeks Bay Fire Station. This alternative does not preclude future upgrades on the site.

Alternative 2 - Proposed Action

Alternative 2 provides improved campsite navigability by reconfiguring the campground, as well as the addition of shower facilities, yurt campsites, and electric hook-ups in two of the campground loops. All campsites would be upgraded to meet FSORAG and ABA accessibility guidelines, as well as to meet the Forest Service sizing guidelines. Increasing the size of the camp spurs will result in less vehicles driving on unpaved areas and less subsequent resource damage, as well as to decrease the incidence of vehicles blocking the roadway and parking on the roadside. Providing electric hookups in two of the campground loops would help update the

campground to meet public expectations. This alternative provides a total of 81campsites, 14 less than is currently provided, which represents a net loss of 70 PAOTs available to the public.

The campground roads and camping spurs are reconfigured to improve circulation and to remove impervious coverage within the SEZ. With the loss of the campground sites in the SEZ that melt off first during the spring months, the campground permittee would incur more costs for snow removal to accommodate mid-May camping opportunities.

The new campsites which are designed with approximately 60 feet between the living areas of adjacent campsites would result in a sense of distance from neighboring campsites for a quality camping experience. See Table 3-1 for a summary of campground types and sizes. Upgrades to campsites would decrease the overall deferred maintenance costs that the permittee addresses on an annual basis.

The eleven new yurt sites or tent cabin sites would result in enhanced alternative camping opportunities offered to the public. The changeover of some sites to yurts would have some impact on the permittee's current operation of the facility. The permittee would be required to purchase and maintain the actual yurt structures, including the daily care and maintenance. The campsites may be used as regular campsites until the yurt structures are installed.

Host campsites 94 and 95 would be relocated within the campground. Host sites would have electric, water, and sewer hookups. Currently the hosts are located adjacent to one another. The planned separation of the host sites would provide campers with better access to hosts and improve customer service. This separation may result in a change in host operations. Relocation of the on-site RV dump station would result in better support for campground operations, as well. Providing these amenities that reflect changing public use patterns would increase the overall desirability of the campground and the financial viability of the campground is expected to improve.

The new kiosk would be positioned further into the campground and would be located in the middle of the entrance roadway. Its location further into the campground in the middle of the road would reduce the impacts from check-in traffic stacking up onto Hwy 89 and would allow both incoming and outgoing traffic the opportunity to conveniently stop by the kiosk for information without visitors getting out of their vehicle. Pedestrians can access the kiosk under Alternative 2 via the road with an 8% slope and then must cross traffic to approach the kiosk.

The kiosk is located on a road that parallels the northern boundary of the campground and subsequently parallels the private homes on Fountain Avenue that lie along its length. An overflow parking lot would also be situated on this road. As a result, those neighbors along this boundary would experience more vehicle movement, noise and headlights than they currently experience.

In Alternative 2 the new administrative building is planned on the existing administrative site location, north of the campground entrance road. Constructing the administrative center along the northern site boundary would only modestly impact the permittee's operation of the campground. Traffic controls would be implemented

to ensure that guests do not hinder emergency traffic leaving the administrative center. Some campsites situated closest to the administrative center and over flow parking lot may become less desirable due to their proximity to the increased activities of the administrative site. The overall camping experience in the campsites near the Administrative Center and overflow parking lot may become less rustic than in the past. It is anticipated that the campground would still fill up during the peak season and the overall impact on the viability of the campground would not be largely affected by the presence of the new administrative center.

Neighbors situated close to the entrance area along the northern boundary currently experience impacts from general campground operations (traffic and activities), and the noise generated by traffic on Highway 89. Activity and noise levels introduced by the proposed action would increase from the existing levels. Siren noise is not expected to have a significant impact on campground activities and neighboring residences because sirens would not be activated under normal emergency operations until reaching the highway/campground intersection.

The changes to the day use beach area may concentrate the current use of the picnic area into a smaller footprint. Less level open space would be available for recreation activities and picnic tables may be positioned closer together due to the grading required to re-create the stream channel. Creating a stream channel through the middle of the day use beach area may increase the permittee's on-site management obligations due to the increased site infrastructure. Easy access to the restrooms from all points within the day use site would be maintained.

Alternative 3 - Alternative Action

Alternative 3 provides improved campsite navigability by reconfiguring the campground, as well as the addition of shower facilities, yurt campsites, and electric hook-ups in two of the campground loops. All campsites would be upgraded to meet FSORAG and ABA accessibility guidelines. Increasing the size of the camp spurs will result in less vehicles driving on unpaved areas and less subsequent resource damage, as well as to decrease the incidence of vehicles blocking the roadway and parking on the roadside. Providing electric hookups in two of the campground loops would update the campground to meet public expectations of utility services in campgrounds.

The primary difference between Alternative 2 and Alternative 3 is that the 2-way road would be located in the center of the campground instead of the northern boundary. This design provides three one-way campground loops (instead of four loops in Alternative 2) and five restroom/shower facilities (instead of four in Alternative 2). The new Administrative Center would be situated to the south of the campground entrance road (adjacent to private property currently used as a boat storage yard).

The relocation of the kiosk onto the existing administrative site in Alternative 3 would improve and speed-up the permittee's check-in process. Campers would be able to check-in without leaving their vehicle via the drive-up window. This would result in faster check-ins and minimize waiting times, reducing the number of vehicles waiting for check-in. The kiosk would have a walk-up window accessible via a pedestrian sidewalk where interpretive information and wilderness permits can be dispensed to pedestrian traffic, as well. Relocating the existing entry kiosk to this

location would reduce potential impacts from check-in traffic stacking up onto Hwy 89. The additional parking would also serve as overflow parking during busy periods. The neighbors adjacent to the kiosk site would experience an increase in activity from current levels, but it is anticipated that it would be less activity than an administrative site in this location (as is proposed in Alternative 2).

It is anticipated that the proposed improvements to the campground would increase the overall quality of the campground and impacts to the permittee's operation would be minimal. The addition of ten yurts would not adversely affect the permittee's operation. Host sites would be separated (similar to Alternative 2) and would have electric, water, and sewer hookups.

The RV dump station was originally located near the kiosk in Alternative 3. In response to comments received during the 30 day legal comment period, the RV dump station was moved further from the residential lots. The RV dump station is now proposed under Alternative 3 to be located off the traffic circle. Moving the RV waste dump station closer to the staffed kiosk will result in an improved ability of the permittee to keep it well maintained. The effects from general disturbance to the residential lots near the kiosk are reduced from the original Alternative 3 concept plan.

This alternative provides a total of 81campsites, 14 less than is currently provided, which represents a net loss of 70 PAOTs available to the public. See Table 3-1 for a summary of campground types and sizes. Some campsites situated along the two-way road would experience more traffic compared to existing conditions. Most of the campsites within the campground will experience less traffic than they currently experience. It is anticipated that these campsites would still provide an acceptable camping experience. As in Alternative 2, the overall quality of the campsite experience in the campground would be improved. The campsites nearest to the administrative center would become less rustic and more modified than in the past and may be considered less desirable, as well. It is anticipated that the campground would fill-up during the peak season and the overall impact on the economic viability of the campground would not be largely affected and most likely would be improved.

This Alternative should have fewer impacts to neighbors on the northern boundary than Alternative 2 because the two-way road is located in the center of the campground. Relocation of the Administrative Center away from the residential houses would reduce its effects on neighbors, as well. Siren noise is not expected to have a significant impact on campground activities and neighboring residences because sirens would not be activated under normal emergency operations until reaching the highway/campground intersection. The aesthetics of living next to a campground would be improved over those expected in Alternative 2 because the main roadway (and subsequent increased activity) is located on the interior of the campground.

Impacts to the William Kent day use beach area are the same as Alternative 2 and may result in a reduction in flat areas for picnic use.

Alternative	$12' \text{ w}^1 \text{ x } 25' \text{ l}^2$	20' w x 60'1	16' w x 60' l	16' w x 40' l
Alt 1	95	0	0	0
Alt 2	0	5 utility	43 utility	33 non-utility
Alt 3	0	5 utility	13 utility	31 non-utility, 32 utility

Table 3-1 Number of camping spurs for each alternative by size and type.

width, ²length

Direct and Indirect Effects from Construction common to Alternative 2 and 3

The noises that would be generated from the campground construction would come from asphalt grinding machines, dump trucks, and heavy rolling equipment. Road construction noise would be heard by campers and nearby neighbors during the construction period. The campground usually does not reach capacity until the 4th of July weekend. Many of the neighboring homes serve as vacation homes and are not often occupied until early summer. The project can be phased to produce as little impact as possible on campground operations, the neighbors, and the recreating public.

The permit holder may experience a loss of revenue if the whole or sections of the campground is closed during any of the construction periods. Some campers may avoid William Kent due to construction activities. Campers would be notified of the status of construction activities when they make reservations and prior to their decision to select William Kent. The permit holder may also be impacted by having to manage visitors around construction zones. Information about the construction would be added to the online registration system, as well as at the kiosk.

Construction of the administrative building would span at least one entire calendar year. Ground-disturbing activities would be limited to the grading season (May 1 to October 15), but non-ground disturbing activities may continue outside of this period. Noises associated with construction of the administrative building would be typical building construction noises.

3.1.4 Cumulative Effects

Cumulative recreation impacts from this project would be represented by the number of campsites lost from this and other projects in the Lake Tahoe Basin Management Unit. No other non-Forest Service reductions in available campsites are known at this time.

Using a geographical area based on a 30 minute drive in each direction from William Kent, this project would reduce the number campsites by 14 units and 70 PAOTs, which represents only a 6% reduction in this geographical area. This project would, in turn, increase the quality of the camping experience in this region by upgrading the campground and providing improvements to meet changing user needs (e.g. showers, larger campsites and electric utility hookups).

When looking at the entire Lake Tahoe Basin Management Unit, there are cumulative losses to the number of campsites from the Camp Richardson Campground and Vehicle Circulation BMP Retrofit Project. This project is still in the planning stages and is anticipated to result in a decrease of campsites over the range of alternatives. The reduction in campsites from the Camp Richardson BMP Project and the William Kent BMP Project represent a loss of campsites currently available in the Lake Tahoe Basin in Forest Service campgrounds and resorts. The PAOT capacity of these campgrounds is reached only on a few weekends during the summer months. It is not anticipated that the loss in PAOTs will result in a loss of the ability to camp in the Lake Tahoe Basin or negatively affect the range of camping experiences available to the public. For these reasons this project does not contribute to significant negative cumulative effects due to decreased numbers of campsites. Water Quality improvements to the William Kent day use beach area would not decrease the public's ability to access Lake Tahoe.

3.1.5 Analytical Conclusions

Alternative 1 - No Action:

The result of not installing BMP's and removing the roadway from the SEZ would allow the campground to continue as it is currently operating with the associated resource damage. This action prolongs the period that the recreation site is managed below resource sustainability standards. Campsites would continue to be too small for the larger camping vehicles and the restrooms would remain non-universally accessible and in poor condition. Some campsites would remain close to the fence line and residences. Traffic stacking up onto Hwy 89 during busy periods would continue, as well as the perpetuation of confusing circulation within the campground.

Alternative 2 - Proposed Action:

Alternative 2 would bring the recreation sites up to resource sustainability standards by improving the circulation, accessibility, and quality of the recreation experience. Though the proposed action represents a net loss of 14 campsites available to the public, it provides improved campsite accessibility, showers, yurts and electric hookups. Providing amenities requested by the public would increase the overall desirability of the campground and encourage more visitors to use the facility in the early and late seasons. The new administrative center is not anticipated to negatively impact the permittee's operations, the overall campground economic viability, or the overall visitor experience. The proposed roadway/kiosk reconfigurations and administrative building location near the northern campground boundary would result in the neighbors along the northern boundary experiencing more vehicle movement, noise and headlights than they currently experience.

Alternative 3 - Alternative Action:

Alternative 3 would bring the recreation sites up to resource sustainability standards, and would have fewer impacts to visitors and neighbors than Alternative 2. By constructing the Administrative site to the south of the entrance road, the closest campsites would become more modified and less rustic. The overall camping experience in the campsites adjacent to the Administrative site would be less of a forested experience than in the past.

This Alternative should have fewer impacts to neighbors on the northern boundary than Alternative 2. This would be a result of relocating the 2-way road through the center of the campground and moving campsites away from the edges of the property. This would lessen campsites proximity to neighbors and minimize potential conflicts.

3.2 Wildlife Resources

3.2.1 Introduction

This section discloses the existing conditions and potential effects of the three alternatives on 1) species and their habitats listed as endangered, threatened, or proposed under the Endangered Species Act of 1973 as amended (ESA); 2) species designated as sensitive by the Regional Forester in Region 5; 3) habitats designated for Management Indicator Species (MIS) for the Lake Tahoe Basin Management Unit (MIS Report); and 4) wildlife and fisheries threshold standards as designated by the TRPA. This discussion is based on the Biological Assessment/Biological Evaluation (BA/BE) for Aquatic and Terrestrial Species Report (Project Record Document E-5), the MIS Report (Project Record Document E-9), and the TRPA Project Impact Analysis (Project Record Document E-6).

The existing condition of forest vegetation and the changes that would likely occur as a result of the proposed alternatives, as they relate to wildlife habitat suitability, are quantified using the California Wildlife Habitat Relationship (CWHR) personal computer program developed by California Department of Fish and Game (2005) and by field visits to the site collected prior to January 31, 2011. The CWHR program describes vegetation conditions through metrics such as tree size classes and canopy closure and functions as a predictive model of habitat suitability for wildlife species. Habitat suitability within each vegetation type is ranked as 0.0 (not suitable), 0.33 (low), 0.66 (moderate), or 1.0 (highly suitable) for each wildlife species. Changes in vegetation condition are therefore correlated to changes in habitat suitability. This correlation provides a useful tool to estimate the direction and magnitude of changes in wildlife habitat suitability caused by changes in vegetation condition.

3.2.2 Existing Condition

The CWHR program classifies the vegetation community within the William Kent campground as white fir and sagebrush. Vegetation communities within 0.5 miles of the campground include mid seral coniferous and lacustrine or lake. The open canopy white fir forest is extremely thick, with 44% canopy cover, 16 inches mean diameter at breast height, and consists of white fir, Jeffery pine, huckleberry oak, and Coulter pine. Shrubs include sagebrush and green leaf Manzanita. Herbaceous understory is sparse.

In general, the William Kent campground is considered unsuitable habitat for wildlife species because it is an urban campground that is surrounded by residential housing and is highly and frequently disturbed by intense recreational use.

Black bears frequently travel from north to south through the campground. The bears travel the same routes and often knock down the fence in attempt to pass through the campground. Human-bear interactions in the past have resulted in trapping and relocation of individuals.

Special Status Wildlife

The U.S. Forest Service's wildlife sensitive species are listed according to the Pacific Southwest Region's list as of 1988, which was most recently amended on October 15,

2007. These are the most current versions for the LTBMU. There is no proposed or designated critical habitat for federally listed species on the LTBMU. Table 3-2 below summarizes the distribution, habitat requirements, potential for occurrence, and rationale for exclusion or inclusion in the effects analysis.

Table 3-3. Special status wildlife distribution, habitat, and occurrence

Wildlife (genus and species)	Legal status	Distribution	Suitable habitat in project area	Known to occur in project area ²	Comments
Birds					
Bald eagle (Haliaeetus leucocephalus	D, S, SI, MB	Occurs throughout California. Nests in dense forest with supercanopy trees within one mile of large lakes with abundant fish prey.	Yes	no	Suitable habitat along the shore of Lake Tahoe. No bald eagles were detected during 2009 and 2010 surveys. The nearest nest is 12 miles southeast of the project area.
Northern goshawk (Accipiter gentiles)	S, SI	Occurs in the north Coast Ranges, Sierra Nevada, Klamath, Cascade, Warner, San Jacinto, and San Bernardino Mountains. Found in older-age coniferous, mixed conifer, and deciduous forest habitats at mid to high elevations during breeding season.	Yes	no	Forested portions of the project area are potential habitat for this species. No protocol-level surveys were completed during 2009 and 2010, because William Kent is a fragmented patch of habitat in an urban neighborhood, and no major tree removal is planned. The nearest detection is 0.6 mile north. 1.6 miles south to the East Blackwood PAC, with an active nest in 1981. Forested areas may be used for foraging, but human disturbance and road traffic makes nesting unlikely.
California spotted owl (Strix occidentalis occidentalis)	S, MIS, MB	Species occurs from the southern Cascades in Shasta County south through the Sierra Nevada into the mountains of southern California, and in the central Coast Ranges as far north as Monterey County. Usually found in old, dense, and layered mixed conifer forest. Also found in riparian/hardwood, ponderosa pine/hardwood, red fir, and east side pine forest.	Yes	no	Forested portions of the project area are potential habitat for this species. No protocol-level surveys were completed during 2009 and 2010, because William Kent is a fragmented patch of low quality mid seral habitat surrounded by an urban neighborhood, and no major tree removal is planned. The nearest detection is 0.8 mile north of the project area, 0.9 mile northwest to the Page Meadow East PAC, with no known active nest. Forested areas may be used for foraging, but human disturbance and road traffic makes nesting unlikely.

Wildlife (genus and species)	Legal status	Distribution	Suitable habitat in project area	Known to occur in project area ²	Comments
Great gray owl (Strix nebulosa)	S	Found in the Sierra Nevada from Plumas County south into the southern Sierra Nevada. Nest in mature mixed conifer, red fir, or lodgepole pine forests within 600 feet of large meadow openings greater than 10 acres.	No	no	There is no suitable habitat for this species in or adjacent to the project area. Not known to occur in the Lake Tahoe Basin. The nearest detection is 30 miles south of the project area near Carson Pass.
Willow flycatcher (Empidonax traillii)	S, MB	A near arctic- neotropical migrant that breeds across North America and winters in Mexico to northern South America. In the Sierra Nevada, the species occurs in wet meadow and montane riparian habitats larger than 15 acres. Nest in dense willow thickets, with standing or running water on June 1.	No	no	There is no suitable habitat for this species in or adjacent to the project area. The nearest detection is 2 miles west of the project area.
Mammals					
Townsend's big-eared bat (Corynorhinu s townsendii)	S	Found throughout California in arid western desert scrub and pine forest regions. Strongly associated with caves, mines, tunnels, or rocky outcrops near wetlands or forest edges with moths. Occasionally found in old, abandoned buildings and other manmade structures.	No	no	There is no suitable roosting habitat for this species in or adjacent to the project area. This species may forage in the project area. The nearest documented occurrence is 11 miles east of the project area.

Wildlife (genus and species)	Legal status	Distribution	Suitable habitat in project area	Known to occur in project area ²	Comments
American marten (Martes americana)	S, MIS	In California, this species occurs in the North Coast regions, Sierra Nevada, Klamath, and Cascade Mountains. The subspecies, Sierra marten, is found in dense late successional coniferous forest with snags, down logs, debris piles, and abundant squirrel prey. Usually found in mature red/white fir mix, lodgepole pine, and Sierran mixed conifer. Also found in montane hardwood-conifer, aspen, and red fir.	No	no	There is no suitable habitat for this species in or adjacent to the project area. The nearest detection is 0.7 mile north of the project area, but the residential neighborhood is considered a barrier to marten movement. The campground is mid successional white fir, and lacks abundant snags, down logs, debris piles, and abundant squirrel prey.
California wolverine (Gulo gulo luteus)	S	This species historically occurred throughout the Sierra Nevada and the North Coast Mountains. In the Sierra Nevada the species has historically occurred in a variety of habitats, including red fir, mixed conifer, lodgepole pine, subalpine conifer, alpine dwarf-shrub, barren, wet meadows, montane chaparral, and Jeffrey pine. The species has a large home range, and usually avoids areas of human disturbance.	No	no	There is no suitable habitat for this species in or adjacent to the project area. Species has not been documented in the Lake Tahoe Basin (CDFG, 2011).

Legal status	Distribution	Suitable habitat in project area	Known to occur in project area ²	Comments
S	Historically found across the Sierra Nevada. Currently known to occur in Lassen National Park. Detected in 2010 at Sonora Pass in the Toiyabe National Forest. Found in lodgepole pine, red fir, sub-alpine conifer, and alpine dwarf shrub with interspersed meadows or alpine fell-fields over 7,000 feet.	No	no	There is no suitable habitat for this species in or adjacent to the project area. Species has not been documented in the Lake Tahoe Basin and usually avoids areas of human disturbance (Perrine et al., 2010)
C, S	Found in the Sierras between 4,500 and 12,000 feet elevation in streams, lakes, and ponds in montane riparian, lodgepole pine, subalpine conifer, and wet meadow habitats. Usually utilize open, gently sloping areas along aquatic habitats within a short distance of pools with refugia such as rocks, undercut banks, woody debris, and vegetation.	No	no	There is no suitable habitat for this species in or adjacent to the project area; habitat contains predatory trout that feed on frog tadpoles. Yellow-legged frogs have been extensively surveyed for in the Lake Tahoe Basin, and are currently known at one location 24 miles southeast of the project area.
S	Species occurs sporadically in California, and may mostly be introduced populations. Historic occurrences in the Lake Tahoe Basin are thought to be introductions from Nevada. Found in riverine and wet meadow habitat.	No	no	There are historic occurrences from Fallen Leaf Lake, Taylor Creek, and near William Kent (CNDDB 2011). The LTBMU has conducted extensive amphibian surveys in streams, lakes, ponds, and meadows around the lake and have never located a northern leopard frog.
	status 1	Historically found across the Sierra Nevada. Currently known to occur in Lassen National Park. Detected in 2010 at Sonora Pass in the Toiyabe National Forest. Found in lodgepole pine, red fir, sub-alpine conifer, and alpine dwarf shrub with interspersed meadows or alpine fell-fields over 7,000 feet. Found in the Sierras between 4,500 and 12,000 feet elevation in streams, lakes, and ponds in montane riparian, lodgepole pine, subalpine conifer, and wet meadow habitats. Usually utilize open, gently sloping areas along aquatic habitats within a short distance of pools with refugia such as rocks, undercut banks, woody debris, and vegetation. Species occurs sporadically in California, and may mostly be introduced populations. Historic occurrences in the Lake Tahoe Basin are thought to be introductions from Nevada. Found in riverine and wet	Legal status 1 Historically found across the Sierra Nevada. Currently known to occur in Lassen National Park. Detected in 2010 at Sonora Pass in the Toiyabe National Porest. Found in lodgepole pine, red fir, sub-alpine conifer, and alpine dwarf shrub with interspersed meadows or alpine fell-fields over 7,000 feet. Found in the Sierras between 4,500 and 12,000 feet elevation in streams, lakes, and ponds in montane riparian, lodgepole pine, subalpine conifer, and wet meadow habitats. Usually utilize open, gently sloping areas along aquatic habitats within a short distance of pools with refugia such as rocks, undercut banks, woody debris, and vegetation. Species occurs sporadically in California, and may mostly be introduced populations. Historic occurrences in the Lake Tahoe Basin are thought to be introductions from Nevada. Found in riverine and wet	Legal status 1 Historically found across the Sierra Nevada. Currently known to occur in Lassen National Park. Detected in 2010 at Sonora Pass in the Toiyabe National Forest. Found in lodgepole pine, red fir, sub-alpine conifer, and alpine dwarf shrub with interspersed meadows or alpine fell-fields over 7,000 feet. Found in the Sierras between 4,500 and 12,000 feet elevation in streams, lakes, and ponds in montane riparian, lodgepole pine, subalpine conifer, and wet meadow habitats. Usually utilize open, gently sloping areas along aquatic habitats within a short distance of pools with refugia such as rocks, undercut banks, woody debris, and vegetation. Species occurs sporadically in California, and may mostly be introduced populations. Historic occurrences in the Lake Tahoe Basin are thought to be introductions from Nevada. Found in riverine and wet

Wildlife (genus and species)	Legal status	Distribution	Suitable habitat in project area	Known to occur in project area ²	Comments
Fish					
Lahontan Lake tui chub (Gila bicolor pectinifer)	S	Found in Lake Tahoe, Pyramid Lake, and Walker Lakes. Species occurs in large, deep lakes. Spawns in shallow water with aquatic vegetation.	Yes	no	Species is known to occur in Lake Tahoe, but not within 0.5 mile of the project area. No direct effects anticipated and indirect effects would be avoided through BMPs.
Lahontan cutthroat trout (Oncorhynch us clarkii henshawi)	T, SI	Found in lakes and streams, including Fallen Leaf Lake, Pyramid Lake, Walker Lake, Independence Lake, Summit Lake, and associated tributaries.	No	no	Extirpated from Lake Tahoe by 1939 because of predation by non-native trout, hybridization, overfishing, and siltation of spawning streams. No direct effects anticipated and indirect effects would be avoided through BMPs.
Aquatic invertebrates					
Great Basin rams-horn (Helisoma newberryi newberryi)	S	Currently found in and around the periphery of the northern Great Basin. Also found in Shasta and Lassen Counties of California. Known populations in the lower Truckee River. Found in cold and highly oxygenated water, large spring complexes, large lakes, and slow rivers with soft sediments and a muddy substrate.	Yes	no	Lake Tahoe may provide habitat for this species, but the project area is outside its known range. No direct effects anticipated because there is no project work in the lake, and indirect effects would be avoided through BMPs. BMPs in the SEZ would improve water quality, riparian, and aquatic habitat.

¹Legal status:

E = Endangered species listed by the USFWS under the Endangered Species Act.

T = Threatened species listed by the USFWS under the Endangered Species Act. The Delta smelt and Central Valley steelhead are threatened species for the LTBMU. The LTBMU is outside the current and historical range of these species, and would not be affected by this project.

- C = Candidate species for federal listing by the USFWS under the Endangered Species Act. The American wolverine, Pacific fisher, and Yosemite toad are candidate species for the LTBMU. An American wolverine was detected on the adjacent Tahoe National Forest in 2008 using bait stations with motion triggered cameras. DNA analysis concluded that the male originated from the Sawtooth Mountains in Idaho. A female American wolverine has not yet been detected. The LTBMU is outside the current and historical range of these species, and would not be affected by this project. No federally listed wildlife species would require technical assistance from the USFWS.
- D = Delisted species by the USFWS under the Endangered Species Act. Species would be monitored for 5 years.
- S = Sensitive species listed by Region 5, US Forest Service. Regional Forester sensitive species list was revised on October 15, 2007.
- MIS = Management indicator species listed by Region 5, US Forest Service. Sierra Nevada MIS amendment on December 14, 2007.
- SI = Special interest species listed by the TRPA. Regional plan of Lake Tahoe Basin, code of ordinances, 1987.
- MB = Migratory bird.

² Known to occur in or within 0.5 mile of the project area to account for potential direct and indirect effects according to TRPA guidelines.

Management Indicator Species

Management Indicator Species (MIS) for the LTBMU are identified in the 2007 SNF MIS Amendment (USDA Forest Service 2007a). Habitats, ecosystem components, and MIS to analyze for this project were selected from this list of MIS in Table 1. The table identifies the habitat or ecosystem component, the CWHR types defining each habitat or ecosystem component, the associated MIS, and whether or not the habitat of the MIS is affected by the project.

Table 3-4. Selection of MIS for project-level analysis

Habitat or ecosystem component	California wildlife habitat relationship types which define the habitat component ¹	Sierra Nevada Forests management indicator species	Analysis category ²
Riverine & lacustrine	Riverine, and lacustrine or lake.	Aquatic macroinvertebrates ³	2
Riparian	Montane riparian, and valley foothill riparian.	Yellow warbler (Dendroica petechia)	3
Wet meadow	Wet meadow, freshwater emergent wetland.	Pacific tree frog (Pseudacris regilla)	1
Early seral coniferous forest	Ponderosa pine, Sierran mixed conifer, white fir, red fir, and eastside pine. Tree sizes 1, 2, and 3. All canopy closures.	Mountain quail (Oreortyx pictus)	1
Mid seral coniferous forest	Ponderosa pine, Sierran mixed conifer, white fir, red fir, and eastside pine. Tree size 4. All canopy closures.	Mountain quail (Oreortyx pictus)	3
Late seral open canopy coniferous forest	Ponderosa pine, Sierran mixed conifer, white fir, red fir, and eastside pine. Tree size 5. Sparse and open canopy.	Blue grouse (Dendragapus obscurus)	1
Late seral closed canopy coniferous forest	Ponderosa pine, Sierran mixed conifer, white fir, and red fir. Tree size 5 (moderate and dense canopy) and 6.	California spotted owl (Strix occidentalis occidentalis) American marten (Martes americana) Northern flying squirrel (Glaucomys sabrinus)	1
Snags in green forest	Medium and large snags in green forest.	Hairy woodpecker (Picoides villosus)	2
Snags in burned forest	Medium and large snags in forest burned by a stand-replacing fire.	Black-backed woodpecker (Picoides arcticus)	1

All California wildlife habitat relationship size classes and canopy closures are included (Mayer and Laudenslayer, 1988). DBH =

diameter at breast height. Tree size classes and canopy closure classifications are: 1 = seedling less than 1" DBH. S = sparse cover, 10% to 24% canopyclosure. 2 = saplingfrom 1" to 5.9" DBH. P = open cover, 25% to 39% canopy closure. 3 = polefrom 6" to 10.9" DBH. M = moderate cover, 40% to 59% canopy closure. 4 = small treefrom 11" to 23.9" DBH. D = dense cover, 60% to 100% canopy closure.

^{5 =} medium to large tree over 24" DBH.

^{6 =} multi-layered tree in pine and Sierran mixed conifer.

² Category of management indicator species habitat for project analysis:

^{1 =} habitat is not in or adjacent to the project area, and would not be affected by the project.

- 2 = habitat is in or adjacent to project area, but would not be directly or indirectly affected by the project. Habitat would be buffered or fenced off, there would be no reduction in acres of forest or understory shrub cover, or there would be no removal of designated nest trees, perch trees, or down woody debris.
- 3 = habitat would be directly or indirectly affected by the project.

Aquatic macroinvertebrates include worms, clams, snails, shrimp, crayfish, mayflies, caddisflies, stoneflies, diving beetles, and other invertebrates that are highly sensitive to changes in water quality and condition of aquatic habitat. Gravel and cobble substrates provide interstitial spaces that trap organic particles, habitat for aquatic macroinvertebrates, and prey for fish and riparian birds. The index of biotic integrity was last monitored at 17 sites in the Lake Tahoe Basin from 2000-2001. The ratio of observed to expected macroinvertebrate species = 0.89, which is a very good score of aquatic sensitive species richness (Sierra Nevada Forests bioregional management indicator species report, January 2008). The management indicator species list was last revised in August 2006.

Migratory Birds

In late 2008, a *Memorandum of Understanding between the USDA Forest Service and the USDI Fish and Wildlife Service to Promote the Conservation of Migratory Birds* was signed. The intent of the MOU is to strengthen migratory bird conservation through enhanced collaboration and cooperation between the Forest Service and the Fish and Wildlife Service as well as other federal, state, tribal and local governments. Within the National Forests, conservation of migratory birds focuses on providing a diversity of habitat conditions at multiple spatial scales, and ensuring that bird conservation is addressed when planning for land management activities.

3.2.3 Direct and Indirect Effects

Alternative 1 - No Action

There are no known special status wildlife species currently present on the site, but suitable habitat for multiple species does exist. There would be no change to the habitat, timing of nesting, denning, or foraging for special statues species, migratory birds, or waterfowl. Existing sediment levels contributed by hill slope and channel bank erosion would not measurably change. Shade provided by riparian vegetation along stream reaches would not change. There would be no change in stream temperatures and no effect on any aquatic species. There would be no reduction in impervious coverage within the SEZ. Black bear would continue to knock over the perimeter fence on their migratory paths.

Alternative 2 - Proposed Action

There are no known special status wildlife species currently present on the site, but suitable habitat for multiple species does exist. Special status wildlife may be temporarily disturbed by construction during the breeding season. LOPs for special status wildlife species would be implemented as necessary unless surveys confirm that special status wildlife species are not nesting. Project activities could alter the timing of nesting, denning, and foraging. However, the scale of this reduction is small, and design features and mitigation measures would reduce both direct and indirect impacts. Direct effects during construction may include short term displacement of migratory bird individuals to suitable habitat adjacent to the project area. Short term displacement would not cause any substantial negative impacts to wildlife species. Disturbance from the project activity would not be greater than disturbance from existing road traffic, commercial, residential, and recreational activity.

Direct effects to individual waterfowl may occur during construction. Disturbance from the project activity is not greater than disturbance from existing road traffic,

commercial, residential, and recreational activity. There is a minor potential for disturbance to individuals during construction but improved habitat conditions in the long term.

Tree removal associated with construction activities would increase soil moisture, improve resistance to drought, disease, and insects; decrease competition, allow big trees to grow faster, enhance habitat quality for species that prefer a more open understory, and protect wildlife habitat by developing stands that are more resistant to catastrophic wildfires.

Indirect effects after construction include an initial reduction in canopy cover as some trees are removed during campground reconfiguration, followed by improved habitat conditions over the long term. Old forest characteristics that are lacking include a multilayered canopy, species diversity, structural complexity, abundant snags, and large amount of down woody debris. Late successional habitat characteristics would be accelerated. Compacted soil and areas of disturbance would be reduced, and vegetative diversity would be improved.

Alternative 3 - Alternative Action

Effects to special status wildlife, migratory birds, and waterfowl would be to the same as Alternative 2. Riparian habitat would be enhanced to a greater degree under this alternative because impervious coverage in the SEZ would be reduced by 90% from 0.6 acres to 0.06 acres in the campground area.

3.2.4 Cumulative Effects

Alternative 1

Current management including past, present, and reasonably foreseeable actions on all ownerships would cause very little change in sedimentation, stream shade, and water temperature. No cumulative effects would result from the No Action alternative, because current conditions in the project area would continue.

Alternative 2

Projects considered include the Sierra Pacific power line upgrade Environmental Impact Statement (EIS), and the Carnelian fuels reduction and healthy forest restoration Environmental Assessment (EA). Phased construction over more than one construction season would keep the campground open during the summer, would reduce the disturbed area at any one time, and would allow individuals to find refuge in adjacent suitable habitat.

No cumulative effects to waterfowl or their population sites are expected as the result of the incremental impact of the proposed action when added to other past, present, or reasonably foreseeable future actions, because of the limited scope and anticipated impacts of the project.

The proposed action when combined with past, present, and reasonably foreseeable future actions are not expected to have a cumulative effect to migratory birds, because effects to survival are unlikely, and because effects to reproduction are not expected. The suitability of migratory bird habitat would increase in the long term, because soil decompaction would increase the prey base.

Alternative 3

Cumulative effects to special status wildlife, migratory birds, and waterfowl would be similar to Alternative 2. Riparian habitat would be enhanced to a greater degree under this alternative because impervious coverage in the SEZ would be reduced by 90% from 0.6 acres to 0.06 acres in the campground area.

3.2.5 Analytical Conclusions

The following determinations were found based on the description of the proposed alternatives and the analysis considered. The No Action Alternative would have **no effect** on all special status wildlife species, because current conditions in the project area would continue. The Proposed Action and Alternative Action would have **no effect** on the **great gray owl, willow flycatcher, Townsend's big-eared bat,**American marten, Sierra Nevada red fox, California wolverine, Sierra Nevada (mountain) yellow-legged frog, northern leopard frog, Lahontan Lake tui chub, Lahontan cutthroat trout, and Great Basin rams-horn, because the proposed action is outside the current range of these species or because there is no suitable habitat in or within 0.5 miles of the project area. The Proposed Action and Action Alternative of the William Kent Project may affect individuals, but is not likely to result in a trend toward Federal listing or loss of viability for the bald eagle, northern goshawk, and California spotted owl.

The project would not affect riverine and lacustrine habitat, wet meadow, early seral coniferous forest, late seral open canopy coniferous forest, late seral closed canopy coniferous forest, snags in green forest, and snags in burned forest MIS habitat. The William Kent BMP project would affect riparian and mid seral coniferous forest MIS habitat, but these effects would be less than significant.

The proposed action will have no effect, or will not likely adversely affect migratory landbird species.

The project **Will Not Affect** the golden eagle, peregrine falcon, mule deer, Lahontan cutthroat trout, lake habitat, stream habitat, and instream flow. The William Kent BMP project **May Affect** the northern goshawk, osprey, bald eagle, and waterfowl.

3.3 Botanical Resources

3.3.1 Introduction

The most recent species list for the LTBMU was obtained from the US Fish and Wildlife Service (USFWS) Sacramento Fish and Wildlife Office website on March 11, 2011, which had been updated on April 29, 2010. This list fulfills the requirements of the USFWS to provide a current species list pursuant to section 7 of the Endangered Species Act (ESA). The LTBMU does not currently support any plant species listed as threatened or endangered under the ESA; however, *Rorippa subumbellata* (Tahoe yellow cress), a candidate species for listing, does occur on lands administered by the LTBMU, but there is no population in the vicinity of the proposed project.

A pre-field review of existing information from the LTBMU flora atlases and available GIS coverages was performed to evaluate the extent of potential habitat and known populations of sensitive plants within the proposed project areas.

Botanical surveys conducted in July 2006 in proposed project areas focus on species with potential habitat; however, surveys are floristic in nature and attempts are made to identify all plants encountered in the field. Many species have specific habitat preferences (such as wet meadows, fens, granite scree), and botanists search for these as well as their constituent species.

3.3.2 Existing Condition

There is pebble-size rocky habitat on the beach area, which is limited suitable habitat for Tahoe yellow cress. The campground campsite loop road has an overstory of *Pinus jeffreyi* (Jeffrey pine), *Abies concolor* (white fir), and *Calocedrus decurrens* (incense cedar). The shrub layer consists of *Arctostaphylos patula* (Greenleaf Manzanita), *Ceanothus cordulatus* (mountain whitethorn), *Ceanothus prostratus* (*Squaw carpet*), *Prunus emarginata* (bitter cherry), and *Salix scouleriana* (Scouler's willow). There is a seasonal rain runoff SEZ running through the middle of the campground with a lot of forbs (herbaceous plants) and graminoids (grasses). There are sections dominated by herbaceous layer of *Artemisia douglasiana* (Douglas' sagewort), *Lotus nevadensis* (Nevada's bird's-foot trefoil), and *Wyethia mollis* (woolly mule's ear). Species are diverse near the stream channel and less diverse away from it.

The William Kent Campground and administrative site was surveyed by the LTBMU Botany Department for sensitive plants and noxious weeds in July 2006. No sensitive species were located at that time. However, this survey expired July, 2011, and the project area would be resurveyed prior to project implementation. Any sensitive species found would be flagged and avoided. No sensitive species habitat other than *Hulsea brevifolia, Lewisia kelloggii ssp. hutchisonii, Lewisia kelloggii ssp. kelloggii, and Rorippa subumbellata* occur in the project area. No noxious weeds were found on the site, however there are St. Johns Wort and bull thistle infestations adjacent to the project area.

Table 3-3 lists all candidate and sensitive plant and fungi species that are known to occur or have potential to occur on the LTBMU as of March 2011. No other

threatened, endangered, proposed, or sensitive plant species have known occurrences or potential habitat on the LTBMU. Species that do not have potential habitat in the project area, based on the reasons given in Table 3-3, are not further analyzed in this document.

<u>Table 3-5.</u> Candidate and sensitive plant and fungi species with potential habitat in the proposed project area and are known or suspected to occur on the LTBMU.

Species	Legal Status ¹	Suitable habitat in project area	Known to occur in project area	Distribution and Comments
Galena Creek rock cress (Arabis rigidissima var. demota)	S	No	No	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). Project is below elevational habitat.
Tiehm's rock cress (Arabis tiehmii)	S	No	No	Species is known from open rocky soils in the Mt. Rose Wilderness. No rocky outcrops in the project area.
Upswept moonwort (Botrychium ascendens)	S	No	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. SEZ is present in the project area but no suitable habitat was detected during the 2006 survey.
Scalloped moonwort (Botrychium crenulatum)	S	No	No	See Botrychium ascendens
Slender moonwort (Botrychium lineare)	S	No	No	See Botrychium ascendens
Common moonwort (Botrychium lunaria)	S	No	No	See Botrychium ascendens
Mingan moonwort (Botrychium minganense)	S	No	No	See Botrychium ascendens
Western goblin (Botrychium montanum)	S	No	No	See Botrychium ascendens
Bolander's candle moss (Bruchia bolanderi)	S	No	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. The eroded banks are too dry for potential habitat for this species. Erosion may be too extreme.

Species	Legal Status ¹	Suitable habitat in project area	Known to occur in project area	Distribution and Comments
Branched collybia (Dendrocollybia racemosa)	S	No	No	This species is a mycoparasite growing on old decayed or blackened mushrooms or occasionally in coniferous duff, usually within old growth stands. There are no areas with coniferous duff in old growth.
Tahoe draba (Draba asterophora var. asterophora)	S, SI	No	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. Outside elevation, species was not seen during 2006 surveys.
Cup Lake draba (<i>Draba asterophora</i> var. <i>macrocarpa</i>)	S, SI	No	No	This species is found on steep, gravelly or rocky slopes at elevations of 8,400 to 9,235 ft. Outside elevation, species was not seen during 2006 surveys.
Subalpine fireweed (Epilobium howellii)	S	No	No	Plants are known from wet meadows and mossy seeps at 6,500 to 9,000 ft in subalpine coniferous forest. No meadows or seeps in project area.
Starved daisy (Erigeron miser)	S	No	No	Plants are known from high elevation granitic rock outcrops above 6,000 ft. No rocky outcrops in the project area.
Torrey's or Donner Pass buckwheat (Eriogonum umbellatum var. torreyanum)	S	No	No	This species grows in dry gravelly or stony sites, often on harsh exposures such as ridge tops or steep slopes. Project area is outside ridge top or steep slopes.
Blandow's bog-moss (Helodium blandowii)	S	No	No	Habitat for this moss is in bogs and fens, wet meadows, and along streams under willows. There are no fens, bogs, or wet meadows in project area.
Short-leaved hulsea (Hulsea brevifolia)	S	Yes	No	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 ft to 8,860 ft. The project area is a campground surrounded by a neighborhood. Conifer forest is sparse in the area.
Kellogg's lewisia (Lewisia kelloggii ssp. Hutchisonii)	S	Yes	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. Project area was determined suitable during 2006 survey.
Kellogg's lewisia (Lewisia kelloggii ssp. Kelloggii)	S	Yes	No	See Lewisia kelloggii ssp. Hutchisonii

Species	Legal Status ¹	Suitable habitat in project area	Known to occur in project area	Distribution and Comments
Long-petaled lewisia (Lewisia longipetala)	S, SI	No	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. The project area is not found in areas where late snow persists.
Three-ranked hump- moss (Meesia triquetra)	S	No	No	This moss prefers bogs and fen habitats, but is also found in very wet meadows. There are no fens, bogs, or wet meadows in project area.
Broad-nerved hump- moss (Meesia uliginosa)	S	No	No	This moss prefers bogs and fen habitats, but is also found in very wet meadows. There are no fens, bogs, or wet meadows in project area.
Veined water lichen (Peltigera hydrothyria)	S	No	No	This species is found in cold unpolluted streams in mixed conifer forests. Dry stream in project area is result of drainage from neighborhood.
Tahoe yellow cress (Rorippa subumbellata)	C, S, SI	Yes	No	This species is endemic to the shorezone around Lake Tahoe in CA and NV. Typically found in back beach areas between elevations of 6,223 and 6,230 ft. Habitat present.

^aStatus explanations

- No species in LTBMU are currently listed as "Endangered" by USFWS under ESA
- C = USFWS Candidate species for listing as threatened or endangered under ESA
- S = USFS LTBMU Sensitive Species, Regional Forester's Sensitive Species List, Amended 2006
- SI = TRPA Special Interest Species, Regional Plan for the LTBMU: Goals and Policies (1986) and Code of Ordinances (1987)

3.3.3 Direct and Indirect Effects

Alternative 1 - No Action

There are no sensitive plants within the footprint of the proposed project. Therefore, no direct effects are anticipated from the No Action Alternative.

The following species may experience indirect insignificant effects from Alternative 1: *Hulsea brevifolia, Lewisia kelloggii ssp. hutchisonii, Lewisia kelloggii ssp. kelloggii and Rorippa subumbellata*

Indirect insignificant effects may occur as a result of "No Action" alternative within the proposed project area. It is anticipated that erosion of the stream channel would continue and damage to native soils from vehicles will continue to occur in the campground area. Any sensitive plants found within SEZ ecosystems may be impacted through habitat loss resulting from decreased soil moisture due to loss of topsoil to erosion. There may also be an increase in growth and density of the existing

shrub layer across the landscape. All these combined factors can result in the loss of potential habitat for all sensitive species with suitable habitat within the project area by decreasing the amount of available suitable acreage. This may occur in forest, meadow, riparian, and shrub dominated areas.

There are no known noxious weed sites on the site; however there is always a certain level of risk of introduction. The risk of introduction of noxious weeds to the site would not change under this alternative.

Alternative 2 - Proposed Action

There are no sensitive plants within the footprint of the proposed project. Therefore, no direct effects are anticipated from implementation of the proposed project.

Indirect effects include impacts on sensitive plant species habitat. It is anticipated that project activities would increase the vegetation health on the site, however there is also an increase in potential noxious weed invasions and subsequent changes in vegetation structure as a result of project implementation. There are no known noxious weed sites known on the site, but there are known noxious weed sites in the vicinity of the project area. Standard noxious weed management requirements would be used during project implementation, greatly minimizing the risk of noxious weed establishment or spread. (see William Kent Campground BMP Retrofit and Administrative Site Redevelopment Noxious Weeds Risk Assessment Summary).

Alternative 3 - Alternative Action

Direct and indirect effects for Alternative 3 would be to the same as Alternative 2.

3.3.4 Cumulative Effects

Alternative 1

Alternative 1 does not result in an increase in negative cumulative effects on the site. The existing resource damage and vegetation health issues would continue to contribute to an overall reduction in suitable habitat for sensitive plant species in the area around William Kent.

Alternative 2 and Alternative 3

It is anticipated that project activities would increase the vegetation health on the site, contributing positively to cumulative effects from other projects where vegetation is improved. However, disturbing the site increases the risk of colonization by invasive species, which could contribute negatively to the control of noxious weed populations in the area.

Noxious weed invasion can result in negative impacts to all ecosystems, although different habitats may be invaded by different noxious weed species. Noxious weed infestations can lead to changes in habitat characteristics that are detrimental to sensitive plant species. Once weeds have become established they can indirectly impact sensitive species through allelopathy (the production and release of chemical compounds that inhibit the growth of other plants), altering fire regimes, and competing for nutrients, light, and water. Because noxious weeds can be difficult to control or eradicate, weed control efforts that must be conducted on a regular basis, such as hand-pulling, digging, or use of herbicides could also negatively impact

sensitive plants. The risk of the spread of noxious weeds from project activities is considered moderate and it is anticipated that the project design features would ensure project activities would have a less than significant effect on the cumulative effects from noxious weeds.

3.3.5 Analytical Conclusions

Based on the description of the proposed action and the evaluation contained herein, it is the determination that the proposed project alternatives would not have a significant effect on botanical resources and that the project:

- 1. will not affect Arabis rigidissima var. demota, Arabis tiehmii, Botrychium ascendens, Botrychium crenulatum, Botrychium lineare, Botrychium lunaria, Botrychium minganense, Botrychium montanum, Bruchia bolanderi, Dendrocollybia racemosa, Draba asterophora var. asterophora, Draba asterophora var. macrocarpa, Epilobium howellii, Eriogonum umbellatum var. torreyanum, Erigeron miser, Helodium blandowii, Lewisia longipetala, Meesia triquetra, Meesia uliginosa, and Peltigera hydrothyria, because there is no suitable habitat for these species within the project area.
- 2. **may affect** individuals, but is not likely to result in a trend toward Federal listing or loss of viability for *Hulsea brevifolia*, *Lewisia kelloggii* ssp. *hutchisonii*, *Lewisia kelloggii* ssp. *kelloggii*, *and Rorippa subumbellata*. Due to the presence of suitable habitat for the above mentioned species, it is possible that isolated populations may occur within the project area and undiscovered individuals may be inadvertently affected. For this reason (potential impact to undiscovered individuals) a determination of "may impact individuals but not likely to cause a trend toward federal listing or loss of viability" has been made for these species.

The overall risk of noxious weed establishment as a result of the proposed action and alternative proposed action is moderate. This determination is based on the following:

- 1. There are St. Johns Wort and bull thistle infestations adjacent to the project area.
- 2. There will be considerable ground disturbance.
- 3. Design features are planned to reduce the potential spread of non-native invasives.

3.4 Scenic Resources

3.4.1 Introduction

The LTBMU Land and Resources Management Plan (LRMP) addresses visual concerns within this site. With respect to the developed recreation the plan "assure[s] an attractive and usable forest setting within and surrounding existing [developed recreation] sites" (LRMP IV-46). With respect to the administrative site, the management prescription directs the LTBMU to "make [administrative facilities] visually compatible with the surrounding setting. In some cases, administrative facilities may be combined with dispersed or developed recreation facilities" (LRMP IV-48).

Scenic Resource management on National Forest System lands in the Lake Tahoe Basin is directed by the Visual Quality Objectives (VQO) adopted in the LTBMU Land and Resource Management Plan (Forest Plan). The VQO describes objectives for maintaining different degrees of "naturally appearing" landscapes. Scenic stability is a measure of the likelihood of the valued scenic attributes of a place being perpetuated into the future. Additionally, the USFS Built Environment Image Guide (BEIG) provides direction for constructed facilities and features on National Forest System lands to ensure that they reflect the visual character and cultural identity of the landscape within which they are built. The BEIG describes the lands within the Lake Tahoe basin as belonging to the "North Pacific" design province, which includes the alpine architectural approaches and building designs that are commonly locally referred to as having "Tahoe Style".

This analysis would consider the effects to scenic resources from the three alternatives, and would use VQO and BEIG compliance, in addition to scenic stability as the measures of effect.

3.4.2 Existing Condition

The site is consistent with the adopted Visual Quality Objective (VQO) of *Partial Retention* when viewed as middleground and *Modification* or better when viewed as foreground. The *Partial Retention* VQO allows for management activities which are visible in the landscape as long as they do not dominate the view of the naturally appearing landscape when viewed from a middleground distance of greater than one-half mile. The *Modification* VQO when viewed from a foreground distance allows for management activities, such as the construction of a campground, to be a dominant view compared to the naturally appearing setting.

The restroom buildings at the William Kent Campground and the Meeks Bay Fire Station do not meet the standards of the BEIG.

Scenic stability within this landscape is moderate. Tree density is currently high in some locations on the site, resulting in a condition in which individual trees compete for scarce resources.

Most of the campground is heavily vegetated and the campground living areas are fairly well screened. However, some campsites along the border of the campground are in close proximity to neighboring residences and the campsites currently situated

in the SEZ have less screening vegetation and feel more open. The administrative site currently contains very little screening vegetation. The William Kent House and Garage that were removed from the administrative site in 2011 were readily visible to the adjacent neighboring residences along the northern boundary. Currently there are no buildings on the administrative site and the view from the neighbors is that of parked employee vehicles and campground overflow vehicles.

3.4.3 Direct and Indirect Effects

Alternative 1 - No Action

There would be no direct effects to scenic resources resulting from the No Action alternative. Current scenic conditions within campground, administrative site, and beach area would remain consistent with the Partial Retention VQO. Scenic stability within this landscape would remain moderate. Tree density is currently high in some locations on the site, resulting in a condition in which individual trees compete for scarce resources. The valued scenic attributes of forested land may be reduced over time under the No Action alternative as individual trees become stressed under conditions such as drought or insect infestation. Flows of storm water through the ephemeral stream channel would continue to erode channel banks, undermining existing vegetation and development. The visual quality of the SEZ would continue to be negatively affected by the adjacent impervious surfaces. Negative effects to scenic stability and channel stability are considered indirect effects of the No Action alternative. The restrooms and Meeks Bay Fire Station would continue to not meet the guidelines outlined in the BEIG. The administrative site would continue to contain only an overflow parking area and no structures, and the residential neighbors would continue to be in proximity to an overflow parking area.

Alternative 2 – Proposed Action

Implementation of Alternative 2 would reduce the density of trees within the campground, however the valued scenic attribute of forested land would remain. Removal of roadway and drainage structures within the Stream Environment Zone (SEZ), and reestablishment of these areas with native plants would increase the scenic attractiveness of the area. The Proposal would result in an improvement in the visual quality of the campsite in a manner than maintains consistency with the VQO of Partial Retention. Elimination of the development and incised drainage channel within the SEZ would increase the scenic stability of the area. Additionally, the reduction in tree density within the campground is anticipated to result in individual trees with greater vigor and health compared to trees in competition for limited resources. These healthier trees may grow larger over time and may trend toward an additional valued scenic attribute of large diameter trees. These indirect effects to forested lands are considered an improvement in scenic stability as a result of this Alternative.

All of the existing campground restroom buildings would be replaced in this Alternative, as well as the campground check-in kiosk. These new structures would include steep roof pitches, and architectural detailing consistent with the Tahoe area, resulting in structures that meet the guidelines of the BEIG.

The construction of a fire station / administrative office building would represent an increase in building mass compared to the existing condition in this area. The design

of the administrative building is consistent with the BEIG, and includes rock bases and large wood posts. The design style and massing is not unlike many of the newer residences in the project area. The proximity of the proposed administrative building to neighboring residences would be increased from current conditions, but is consistent with local building regulations regarding setback from property lines. The proximity of this building to adjacent neighboring buildings is consistent with spacing between existing neighborhood structures.

Proposed work to expose the drainage channel through the beach site would alter the appearance of this portion of the project area. The proposal would result in an increase in topography in this area and elimination of the pipe outfall at the lakeshore. Picnic tables which exist at the site would be positioned in closer proximity to each other than exists in current conditions. Construction of an accessible path to the lake shore would include slope stabilization measures. These measures would include use of materials selected to reduce visual contrast with the surrounding landscape. Proposed work within the beach area would be consistent with the VQO.

Removal of the Meeks Bay Fire Station would positively impact the scenic integrity along that section of Highway 89. The developed footprint would decrease as a result of removing the building and restoring the site. In general that section of Highway 89 has a low level of development and removal of the building would improve the view from the highway.

Alternative 3 – Alternative Action

Actions under Alternative 3 are to the same as those in Alternative 2 with a few exceptions. The western-most campground restroom is proposed in closer proximity to the campground center compared to Alternative 2. Additionally, the fire station / administrative building is proposed for location further south within the property. This alternate facility locations increase the distance between the facilities and neighboring properties. Alternate configuration of roadways, traffic circulation routes and parking areas in Alternative 3 result in an improvement in the visual quality of the campsite in a manner than maintains consistency with the VQO of Partial Retention, increase compliance with the BEIG, and increase the scenic stability of the campground. Scenic integrity from Highway 89 would be improved with the removal of the Meeks Bay Fire Station.

3.4.4 Cumulative Effects

Redevelopment of the William Kent facilities under Alternatives 2 and 3 would result in a reduced density of trees within the property. This reduction would be consistent with the VQO and would increase the scenic stability within the property. Fuels reduction projects within the region that are considered for analysis would not result in any lasting negative cumulative effects to scenic resources when combined with the effects from this project. Similarly, shorezone work associate with this project would not result in negative cumulative effects when combined with effects from other shorezone projects on public and private lands.

3.4.5 Analytical Conclusions

Each of the proposals analyzed are consistent with the established VQO of Partial Retention. Alternatives 2 and 3 would increase the scenic stability of the area and

improve the consistency of built features on the property with the BEIG. Alternative 3 increases visual separation of constructed features from neighboring properties compared to Alternative 2. Management actions proposed at the beach site under both Alternatives 2 and 3 would improve the visual appearance of the area compared to existing conditions but would remain consistent with the VQO. The scenic stability will continue to decline under the No Action Alternative.

3.5 Transportation/Traffic

3.5.1 Introduction

The following are important definitions for analyzing effects to transportation and traffic, as defined by the TRPA (TRPA Code of Ordinances, Chapter 93):

Insignificant Increase: An insignificant increase is an increase of 100 or fewer daily vehicle trips, determined from the Trip Table (Subsection 32.2.H) or other competent technical information.

Minor Increase: A minor increase is an increase of more than 100, but not more than 200 daily vehicle trips, determined from the Trip Table or other competent technical information.

Significant Increase: A significant increase is an increase of more than 200 daily vehicle trips, determined from the Trip Table or other technical information.

Trip Table: TRPA shall adopt and maintain a trip table for the purpose of estimating the number of vehicle trips resulting from additional development or changes in operation. TRPA shall generate and update the date in the Trip Table by referring to recent publications on traffic and trip generation (for example, publications of the Institute of Transportation Engineers and California Department of Transportation) and field surveys conducted in the Tahoe Region by TRPA or other competent technical experts.

Vehicle Trip: A vehicle trip is a one directional vehicle movement to or from a project area. The number of vehicle trips assigned to a project shall be the total daily vehicle trips to or from the project at its maximum hours of full operation during the review period. When exact numbers of vehicle trips are not known for a use, they shall be determined from the Trip Table or other competent technical information.

3.5.2 Existing Condition

The William Kent Campground has 95 campsites with two vehicles allowed per site. The paved footprint of most of the campsites is too small to fit two vehicles, resulting in parking on non-paved surfaces. Visitors will often try to fit vehicles in between trees or have portions of vehicles hanging out into the roadway, causing problems with traffic flow. Larger RVs or trucks with trailers do not fit into most of the camp spurs. The small turning radii of the campground roads often result in vehicles having to back up on the one-way roads to complete a multi-point turn or drive off the pavement, resulting in soil compaction and damage to vegetation. The counter-intuitive circulation pattern sometimes results in vehicles driving the wrong way down the one-way roads, as well.

The administrative site has parking room for approximately 5 vehicles which are used by employees of the campground operator; overflow parking for campers with more than two vehicles; and occasionally visitors to the kiosk. The kiosk serves as the center for campground operations, visitor information, and the backcountry

permit office with a small pullout drive that can fit up to 3 small vehicles or one large vehicle with a trailer. Once this pullout becomes full, vehicles begin stacking up to wait for a spot, sometimes extending onto the highway shoulder and increasing congestion on the highway. The beach day use site has 9 parking spaces that are almost always full during the summer months.

The Meeks Bay Fire Station shares the highway entryway with the Meeks Bay Resort, which can result in confusion for visitors to the resort, as well as conflicts with the fire vehicles when responding to fire calls. The line-of-sight to the south on Highway 89 is poor in this location.

Traffic volumes are most commonly measured in vehicle daily vehicle trips (DVT). DVT for William Kent Campground and Administrative Site is 481 (see Table 3-6), with peak use during summer holiday weekends and no use during winter months when the campground is closed behind a gate.

3.5.3 Direct and Indirect Effects

Alternative 1 - No Action

There would be no direct or indirect effects from the No Action alternative. Traffic would continue periodically stacking up onto Hwy 89 during peak use times on summer weekends. The DVT for the campground and administrative site would remain at 481 (see Table 3-6). Confusion and congestion within the campground would continue. Existing traffic patterns and conflicts at the Meeks Bay Fire Station would remain.

Alternative 2 - Proposed Action

There would be no significant direct or indirect effects from the Proposed Action. The DVT would increase by only one trip to 482 (see Table 3-6). The decrease in traffic as a result of 14 fewer campsites is offset by an increase in traffic due to the use of the administrative site. TRPA considers an increase of less than 100 trips-perday as an "insignificant" increase. The reconfiguration of the entryway and circulation patterns in the campground should result in positive effects on the flow of traffic in and out of the site and eliminate vehicles stacking up onto Highway 89. Larger turning radii and efficiently designed roadways would decrease driver confusion and resource damage within the campground.

Impacts to congestion and traffic on Hwy 89 may temporarily increase during the construction period, but it is anticipated that this increase would be offset by the reduced visitor levels due to the closure of the campground during the construction of the campground elements of the proposed action; and the proposed timing of the administrative center construction, which is planned to occur during the non-peak season as much as possible. General traffic levels on Hwy 89 are reduced during this period, as well. Design features are planned to reduce the impacts from construction on traffic and circulation within the campground and on Hwy 89.

The use of the administrative site during winter months will increase traffic levels from the current winter use, however general traffic levels on Hwy 89 are already

reduced during this period and the resulting increase is considered less than significant.

Traffic from the Meeks Bay Fire Station would be eliminated at that site, resulting in reduced congestion and fewer conflicts with visitors to Meeks Bay Resort.

There is no proposed change to the parking or vehicle circulation at the beach day use site and no resulting direct or indirect effects.

Alternative 3 – Alternative Action

Direct and indirect effects from changes to the campground would be similar to Alternative 2 because the proposed change in the number of camping sites is the same under both alternatives.

In this alternative there is no public visitor information center associated with the administrative building. The proposed public parking will be used as parking for the administrative center. This results in an increase of only 2 DVT from Alternative 1.

All other effects from Alternative 3 to transportation are similar to Alternative 2 and result in no significant direct or indirect effects.

Category	Factor	Alternative 1 DVT	Alternative 2 DVT	Alternative 3 DVT
Visitor Information Center ¹	45.5/1,000 sf GFA ²	61	23	61
Developed Campground/RV Park	5/campsite	475	405	405
Employee parking	3.5/employee	0	42	42
Admin Center long term parking	2/parking space	0	0	18
Fire Vehicles	6/vehicle	0	12	12
Total		481	482	483

Table 3-6. Daily vehicle trips (DVT) generated by each alternative.

3.5.4 Cumulative Effects

Alternative 1 - No Action

This alternative would not contribute to any cumulative effects to transportation and traffic in the region.

The campground check-in kiosk currently serves as a small visitor information center. The 6 trips-per-day shown for Alternative 1 and 3 represent existing visitors to the kiosk for purposes other than campground check-in, such as for Desolation Wilderness permits.

² GFA = Gross Floor Area, which includes all areas that serve the public space, such as the restrooms and behind-the-counter space associated with the visitor information center.

Alternative 2 - Proposed Action

This alternative would contribute to the overall increase of traffic on the Hwy 89 corridor during the winter months, but the cumulative effects are insignificant. The Homewood Resort Master Plan project is anticipated to increase congestion on Hwy 89. The William Kent project does not have any significant direct or indirect effects that would contribute to cumulative effects from the Homewood project. Caltrans is planning water quality improvements to the Highway 89 corridor, but it is not anticipated that the project timelines will overlap. No other large construction projects are currently known to occur during the same period as the planned project implementation that would cause cumulative impacts during construction.

Alternative 3 - Alternative Action

Cumulative effects from this alternative would be the same as Alternative 2.

3.5.5 Analytical Conclusions

Alternative 1 – No Action

This alternative would not contribute to any cumulative effects to transportation and traffic in the region.

Alternative 2 and 3

Both Alternative 2 and 3 will improve the circulation within the campground and reduce stacking onto Highway 89. There are no negative effects to traffic or congestion with either alternative. When comparing the alternatives, the circulation pattern of Alternative 3 is anticipated to improve circulation in the campground more than Alternative 2 due to the traffic circle and a separate drive "lane" for the kiosk that is removed from the main road.

3.6 Hydrology/Soils

3.6.1 Introduction

In the project area, water runoff and associated erosion/sedimentation or flooding is directly related to the condition of the soil resource. Onsite improvement of the soilwater interactions (hydrologic function) will result in reduced threats of overland flow, erosion/sedimentation, and flooding. As such, effects to the water resource will be discussed in the context of changes to properties of the soil resource. Effects to soil hydrologic function would occur primarily as an indirect effect of reduction in soil porosity, so these indicators are discussed together. The following soil quality objectives (USDA Handbook 25.09) are used as indicators for this analysis and are defined and discussed below.

Soil Porosity and Soil Hydrologic Function

This indicator is expressed as the change in the amount of compacted/impervious surface area. Soil hydrologic function describes the ability of water to move into and through soils. Infiltration is the movement of water *into* soils, while hydraulic conductivity (sometimes called permeability) is the movement of water *within* soils. Soil hydrologic function is primarily controlled by physical soil properties such as texture, structure, and porosity. Soil texture (the relative distribution of sand, silt, and clay) is not affected by forest management activities. Soil structure (the arrangement of individual soil particles into aggregates) and soil porosity can both be affected by forest management activities that cause compaction. Infiltration can also be reduced when the soil surface becomes hydrophobic (water repellent).

Effective Soil Cover

This indicator is expressed as a qualitative estimate of change. The presence of effective soil cover generally indicates that the soil surface is adequately protected from accelerated surface erosion. Accelerated erosion can impair site productivity and water quality. The topsoil (the A horizon of the soil profile) is the most fertile and biologically active part of the soil profile due to its enrichment by organic matter in varying stages of decomposition. Loss of all or part of this horizon through erosion impairs the ability of the soil to support natural vegetation communities and often imparts a competitive advantage to nonnative invasive species (weeds). When eroded soil is deposited in water bodies it can affect water quality and aquatic habitats.

As noted above, effects to water quality are closely associated with effects to soil characteristics. In addition, potential effects to water quality would be evaluated by the following indicators:

<u>Tahoe Regional Planning Agency (TRPA) Land Capability.</u> TRPA uses the Bailey Land Scoring System to assist in evaluating the level of development an area can tolerate without sustaining permanent damage through erosion and other causes (Bailey 1974).

- Category 1b: 6.4 acres
- Category 5: 15.6 acres

According to the TRPA Bailey Land Scoring System, Category 1b is allowed 1-5% impervious surfaces and Category 5 is allowed 25% impervious surfaces.

Effects to Stream Environment Zone.

This would be a qualitative discussion regarding the potential beneficial effects to the SEZ from the action alternatives, as compared to taking no action.

3.6.2 Existing Condition

Topography

The project area is gently rolling land with north-south slopes ranging from 2-15 percent. Elevation ranges from of 6,290 feet to 6,380.

Climate

The precipitation in the project area averages 20 to 30 inches per year. The area has summers that are dry and cool and winters that are wet and cold. About 80 percent of the annual precipitation occurs between October and April. Although winter precipitation falls primarily as snow, heavy winter rains can occur. Flooding can result from rain-on-snow events as well as from intense summer thunderstorms (Bailey 1974). The design storm used by regulatory agencies for Tahoe Basin BMPs is the 20-year/1-hour storm which is 1 inch of rain (USDA Forest Service 2007).

Hydrology

The project proposes restoration and improvement actions within 22 acres of the *Ward Creek Frontal* watershed. There are a total of 6,208 acres in the Ward Creek Frontal watershed. The proposed project encompasses less than one percent of the total watershed area. This sub-watershed is moderately developed with houses and roads, as well as development along the shore of Lake Tahoe. The only drainage with a clearly defined channel within the project area is an ephemeral channel that runs through the project area. The channel is incised and show signs of sedimentation.

Stream Environment Zone

The SEZ is approximately 6.4 acres in size with approximately 0.79 acres of existing project area coverage in the campground and administrative site (0.6 acres of which is in the campground only). Vegetative indicators were primary used to map the extent of SEZ. This channel is an ephemeral drainage, fed from urban runoff and ground water. Currently, there are 22 campsites located within the SEZ. There are 8 culvert crossings over the stream. Project Record G-4, Soil Scientist Specialist Report.

Beneficial Uses

Of the beneficial uses identified in the Lahontan Basin Plan for the Minor Surface Waters (LRWQCB 1995), one is applicable to the project site:

<u>Non-contact Water Recreation.</u> Beneficial uses of waters used for recreational activities involving proximity to water, but not normally involving body contact with water where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping,

boating, tide pool and marine life study, hunting, sightseeing, and aesthetic enjoyment in conjunction with the above activities.

Soils

The Tahoe Basin, a subset of the Sierra Nevada range, is underlain predominantly with granitic rocks. Areas not dominated by bedrock, such as along the lake shore and much of the southern portion of the basin; consist primarily of glacial moraine and outwash terrain. In general, the soils in the basin are shallow (3 feet or less) and rocky, with gravelly loamy sands overlying impervious bedrock. Being coarse textured and poorly aggregated, with resulting low water holding capacity, the soils are generally very permeable and are susceptible to erosion, particularly on slopes greater than 20 percent (Bailey 1974).

Currently, the site is covered by 169,490 square feet of paved surfaces, 134,897 ft² (1.4%) on high capability land and 34,563 ft² (3.6%) on low capability land. Current recreational use by vehicles, foot traffic, and campers has caused compaction of the soils and decreased vegetative cover throughout the 22-acre project area. There are approximately 207,098 square feet (4.75 acres) of impervious land surface coverage in the project area. The exposed soils in the camping areas, for the most part, are considered impervious surfaces due to the extensive past recreational use including unconstrained vehicle parking. This past use has resulted in decreased infiltration of precipitation and accelerated runoff from the area with an increased risk of potential for erosion and offsite deposition. The only documented riparian area within the project area is an ephemeral stream channel fed mainly by urban runoff.

Soil cover has been lost, rendering the exposed soil surface susceptible to accelerated runoff and erosion. Surface runoff drainage has also been severely altered, redirected, or obliterated as a result of vehicle and human traffic patterns and onsite camping.

The soil survey for the project area (USDA NRCS 2011a) indicates that 100 percent of the project area is Kneeridge gravelly sandy loam, moderately well drained to well-drained. There are three soil types evident within the project boundary. These are listed in Table 3-5.

Table 3-7. Acres of Soil Map Units in Project Area

Map Unit Symbol	Map Unit Name	% project area
7171	Kneeridge gravelly sandy loam, 2 to 9% slopes, extremely stony	38
7172	Kneeridge gravelly sandy loam, well drained, 5 to 15 % slopes, very stoney	38
7173	Kneeridge gravelly sandy loam, 2 to 5% slopes, very stoney	24

In addition to supporting native vegetation and wildlife, soils play a critical role in supporting watershed and ecosystem health through their functions of accepting, storing, and releasing water. Under natural conditions, the predominant soil types in the project area are very permeable in infiltration of water and are not subject to flooding. Table 3-6 displays key attributes of the soil types.

Table 3-8. Soil Characteristics

Soil Series (symbol)	Permeability	Runoff Potential	Flood Frequency
Kneeridge (7171, 7172 & 7173)	Moderately high to very high	Low	None
Source: USDA NRCS 2011b.			

The soil survey indicates that under undisturbed circumstances that most of this site (71%) is within Bailey's 1974 mapping capability classes 5. This class is identified as having a low disturbance hazard, having a slight erosion potential and allowing for an impervious cover of from 25 to 30 percent. The exception is the 6.4 acres of the project area in land Class 1b which are among the least tolerant to land use exhibiting high erosion and disturbance hazards and very poor drainage capacity (Fig. 1.4).

3.6.2 Direct and Indirect Effects

The temporal scope for assessment of soil, water, and riparian area resource environmental effects includes short term (1–10 years following project implementation) and long term (10–20+ years following project implementation) for this analysis. This timeframe would capture both the immediate effects of the proposed project activities and the expected effects to the point where they are no longer discernible from other activities. The action alternatives have the potential to affect soil, water, and riparian resources.

Alternative 1 - No Action

The campground, administrative site, and day use beach area would continue to not meet current BMP standards associated with developed recreational sites (USDA Forest Service 2011). The project site would continue to be at risk of ongoing soil damage and offsite erosion. Vehicle circulation and camp site locations are poorly defined, consisting mainly of unpaved surfaces with extensive soil compaction. The existing conditions would continue to have the potential to contribute sediment to the ephemeral drainage and SEZ. Soil porosity and hydrologic function would continue to degrade as current use continues. Soil cover would not be able to re-establish itself, and organic matter would continue to be lost by repeated vehicle and foot traffic in unmanaged camping areas. Approximately 37,600 square feet of essentially impermeable and compacted native surface soils would persist and may possibly increase above current recreational use in the future. This is an estimate of the amount of native soil that is compacted adjacent to the paved surfaces based upon site visits. Soils would continue to be compacted by users. The SEZ would continue to decline as a result of campsite use. The 8 stream crossing culverts within the campground would remain. No BMP or design features would be implemented to offset the environmental degradation in the project area.

Alternative 2 - Proposed Action

With implementation the BMPs and design features and because the William Kent project is situated on soils that have inherent high infiltration rates, the risks of deleterious runoff and associated erosion are minimal following project completion.

The elimination of existing campsites, roads, and impervious surfaces in the SEZ and creation of new, updated, and BMP-improved campsites, roads, and trails would have a net benefit to soil and water resources over both the short and long term. Sedimentation and associated runoff from the existing campground sites and road and trail systems would be reduced, and soil structure and hydrologic function would be improved due to increases in ground cover, properly managed stormwater runoff, and reductions in impervious surfaces, which would allow greater onsite infiltration of precipitation. This alternative would manage stormwater runoff to infiltrate it on site, as close to its point of origin as possible. Paved surfaces in the campground and administrative site would reduce erosion and the generation of sediment by gathering and infiltrating runoff as part of a designed drainage system that includes the most current BMP guidelines. Stormwater would be directed to shoulders, micro-basins, drip-line trenches, and swales where appropriate for infiltration. Decompaction (where appropriate) of existing compacted soils not planned for campground use would allow for dispersed infiltration and a reduction in sheet flow of water through the site. These treatments would improve the porosity and hydrologic function of soils in the project area. Removal and improvement of campsites and roadways within the SEZ would reduce riparian area impervious surface coverage by 83 percent in the campground area, from 26,245 to 4,531 square feet (from 0.6 acres to 0.17 acres). Across the entire site the reduction of riparian area impervious surface coverage is by 63 percent; from 34,600 to 12,800 square feet (0.8 acres to 0.3 acres). See Table 2-4 for a summary of all coverage information.

Actual *paved* surface impervious coverage (across the entire site, not just in the SEZ) increases by 18 percent from existing paved surfaces due to the addition of the administrative site. However, as mentioned above, the estimation of *actual* existing impervious surface coverage includes areas compacted by pedestrian and off-pavement vehicular traffic. It is therefore estimated that the overall impervious surface coverage would actually decrease by 3% under this alternative. Reduction in the square footage of compacted area coverage via circulation management and campsite reduction in conjunction with soil de-compaction would accelerate the rate of hydrologic conductivity recovery (porosity-infiltration/permeability) in the project area. Increased infiltration, permeability, and soil cover would substantially decrease surface runoff and associated erosion. Dispersal of chipped material would increase soil protective cover and introduce surface organic matter. The added surface organic materials would hold moisture close to the surface for an extended period of time, affording re-vegetation of areas not planned for campground use.

With the implementation of design features and BMPs the proposed action is expected to improve the function and viability of the soil resources, protect the quality of water flowing from the site, and enhance riparian areas. The beneficial uses of the project site would also be fully protected.

As stated in the Water Quality Management Plan, TRPA's environmental threshold goal is to "preserve existing naturally functioning SEZ lands in their natural condition and restore 25% of the SEZ lands that have been identified as disturbed, developed, or subdivided, to attain a 5% total increase in the area of naturally functioning SEZ lands" (TRPA 1998). This project would contribute towards meeting the TRPA goal by improving the SEZ and reducing potential effects from the adjacent campgrounds and traffic infrastructure.

Alternative 3 - Action Alternative

The beneficial effects of Alternative 3 are slightly greater than Alternative 2 because there is a decrease in the amount of impervious surface remaining in the SEZ in the campground area as compared to Alternative 2 (2742 square feet as compared to 4531 square feet under Alternative 2, which is a 90% reduction versus 83%). Overall impervious surface coverage is reduced by 8% as compared to 3% in Alternative 2.

This alternative, like the proposed action, would improve the management of stormwater runoff to infiltrate it on site, as close to its point of origin as possible. The recreational and traffic facilities would be designed consistent with current BMPs, which would provide for effectively collecting and transporting of runoff to road shoulders, micro-basins, drip-line trenches, and swales for infiltration.

As compared to Alternative 2, smaller areas of soil would be disturbed because of the savings in coverage needed to construct the circulation pattern. Therefore, these treatments would improve the porosity and hydrologic function of soils on a greater portion of the project area. The extent of soil hydrologic conductivity (porosity-infiltration/permeability) would be improved over this comparatively larger area.

With the implementation of design features and BMPs, Alternative 3 is expected to improve the function and viability of the soil resources, improve the quality of water flowing from the site, and enhance riparian areas within the William Kent site.

3.6.3 Cumulative Effects

Under the No Action alternative, existing conditions would continue to have the potential to contribute sediment to the ephemeral drainage and SEZ and ultimately contribute to the degrading water quality of Lake Tahoe. In Alternative 2 and Alternative 3, the ability of stormwater to infiltrate into the ground and be filtered by vegetation and the soil column is greatly increased, which decreases the negative cumulative effects to the lake clarity and water quality of Lake Tahoe that are currently occurring. The project would contribute to the positive cumulative effects from the reduction in sediment reaching Lake Tahoe when combined with other projects such as the Blackwood Creek Floodplain Restoration project. Because there are no negative direct or indirect impacts associated with either alternative 2 or 3, there are no negative cumulative effects.

3.6.4 Analytical Conclusions

Alternative 3 would have slightly more beneficial effects on soil and water resources than Alternative 2 because it would (1) allow a larger surface of the project area to be decompacted, (2) have less concentrated runoff from paved surfaces, and 3) still provide for the restoration of the SEZ area. The beneficial uses associated with the project area would be protected.

3.7 Air Quality

3.7.1 Introduction

This analysis is based in part upon the William Kent BMP Retrofit and Administrative Site Redevelopment Transportation Specialist Report (Project Record Document G-9). Most of the Lake Tahoe Basin air quality thresholds developed by the TRPA show a positive trend toward attainment. The most detrimental air pollutants in the area are greenhouse gasses (GHGs) such as nitrous oxides (NO_x), carbon monoxide (CO), and sulfur dioxide (SO_2). The most common source of GHGs is from vehicle emissions. Particulate matter less than 10 microns in diameter (PM10) is also studied to determine effects on air quality. Particulate matter is expelled into the atmosphere through exhaust and dust.

The project would have effects from vehicle emissions. Vehicle Miles Traveled (VMT) is used as a proxy for estimating the changes in vehicle emissions. The project may also have effects from temporary fugitive dust that would be generated during implementation of the project. No burning is proposed, so no smoke-related emissions would occur.

3.7.2 Direct and Indirect Effects

Alternative 1—No Action

Under this alternative, no increase in fugitive dust emission levels would be produced from construction activities.

Current vehicular use and emissions would remain the same. During the busy summer weekends there may be continued need for vehicles to idle as they wait to check-in at the kiosk.

Alternative 2—Proposed Action

Effects of fugitive dust caused by construction and use of unpaved roads during construction would be localized and would be mitigated by effective dust abatement methods on staging areas and construction areas using project design features and BMP's.

The Transportation Report identified an increase in 1 Daily Vehicle Trip (DVT) (Table 3-4) from the No Action Alternative. TRPA considers an increase of less than 100 DVT as an "insignificant" increase. The increase in trips-per-day under this alternative is not considered to have a significant effect on air quality or greenhouse gases in the basin.

The year-round administrative facilities would require snow removal following snow storms. Snow removal activities have the potential to increase air pollution above base-line conditions. In the context of the ongoing snow-removal in the surrounding area, this addition does not represent a significant increase in air pollutants.

Alternative 3 - Alternative Action

Direct and indirect effects from construction activities would be similar to Alternative 2. The estimated increase in DVT from the alternative proposed action is only 2 more (Table 3-4) than the No Action Alternative, which is substantially below the TRPA threshold for an insignificant increase in DVT.

3.7.3 Cumulative Effects

Alternative 1

Over 5 million people visit the basin each year. The distance between recreation sites and the many dispersed recreation activities means that most of these visitors travel to and within the basin in a motor vehicle. The *Transportation Monitoring Program* 2008 document from the Tahoe Metropolitan Planning Organization (TMPO), states that 87% of summer visitors to a recreation site in the basin come in a private vehicle (data from the 2006 TRPA Transportation Survey). The remaining visitors walked (8%), rode a bike (4%), or took transit (1%). Leaving the William Kent site in its current configuration would maintain the status quo of private vehicles as the major mode of transportation in the basin.

Alternative 2

There is likely to be fugitive dust from recreational activities, nearby construction activities, and firewood cutting of local residents.

This alternative does not change the private vehicle as the major mode of transportation to and from the site. The increase in DVT under this alternative is considered insignificant and cumulative effects to increasing greenhouse gases and emissions in the basin are considered to be minimal.

Alternative 3

Cumulative effects would be the same as for Alternative 2.

3.7.4 Analytical Conclusion

The no-action alternative would not result in any change to direct, indirect, or cumulative effects to air quality. The use of recreation vehicles would continue to contribute to increased emission levels.

Effective dust abatement methods on staging areas and dirt-surfaced roads as required by the design features of the proposed action and alternative proposed action, and which would be included as contractual requirements, would ensure that there are minimal to no direct effects from Alternative 2 or 3.

4.0 Consultation and Coordination

The Forest Service consulted the following individuals, Federal, State, tribal, and local agencies during the development of this environmental assessment:

4.1 Interdisciplinary Team Members:

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4.2 Federal, State, and Local Agencies:

Tahoe Regional Planning Agency

Caltrans

Lahontan Regional Water Quality Control Board

4.3 Tribes:

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Ralph and Diana Davisson

Leslie Aldredge

4.5 Organizations

League to Save Lake Tahoe

California Land Management (site permittee)

Friends of the West Shore

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Appendix A

Best Management Practices for the William Kent Campground BMP Retrofit & Administrative Site Redevelopment

This appendix discusses the applicable BMPs for the proposed action's design features. Details are provided for application of the BMPs. These BMPs are designed to reduce or eliminate direct, indirect, and cumulative impacts to soil and hydrologic conditions and to reduce potential impacts (nutrient and sediment loads, affecting lake clarity) to Lake Tahoe, a unique national feature. Actual application of these BMPs is based on the proposed action and integration (further refinement) with project design features (Section 2.3.2 of the EA).

Sections 208 and 319 of the federal Clean Water Act, as amended, acknowledge land treatment measures as being an effective means of controlling non-point sources of water pollution and emphasize their development. Working cooperatively with the California State Water Quality Control Board (SWQCB), the Forest Service developed and documented non-point pollution control measures applicable to NFS lands. Following evaluations of the control measures by SWQCB personnel as they were applied on site during management activities, assessment of monitoring data, and the completion of public workshops and hearings, the Forest Service's measures were certified by the state and approved by the U.S. Environmental Protection Agency (EPA) as the most effective means the Forest Service could implement to control non-point source pollution. These measures were termed best management practices. BMP control measures are designed to accommodate site-specific conditions. They are tailor-made to account for the complexity and physical and biological variability of the natural environment.

In the 1981 Management Agency Agreement between the SWQCB and the Forest Service, the State agreed that "the practices and procedures set forth in the Forest Service document constitute sound water quality management and, as such, are the best management practices to be implemented for water quality protection and improvement on NFS lands." The implementation of BMPs is the performance standard against which the success of the Forest Service's non-point pollution water quality management efforts is judged.

The Clean Water Act provided the initial test of effectiveness of the Forest Service non-point pollution control measures because it required the evaluation of the practices by the regulatory agencies (SWQCB and EPA) and the certification and approval of the practices as the best measures for control. Another test of BMP effectiveness is the capability to custom fit the measures to a site-specific condition where non-point pollution potential exists. The Forest Service BMPs are flexible in that they are designed to account for diverse combinations of physical and biological environmental circumstances. A final test of the effectiveness of the Forest Service BMPs is their demonstrated ability to protect the beneficial uses of the surface waters in the state. The BMPs incorporate 75 years of erosion control and watershed protection experience and are based on sound scientific principles. The land treatment

measures incorporated into Forest Service BMPs evolved through research and development and have been monitored and modified over several decades with the expressed purpose of improving the measures and making them more effective. Onsite evaluations of the control measures by state regulatory agencies found the practices were effective in protecting beneficial uses and certifiable for Forest Service application as their means to protect water quality.

Implementation, effectiveness, and forensic monitoring would be performed to monitor project activity. Implementation monitoring consists of detailed visual monitoring of treated areas and roads/landings prior to the rainy season with emphasis placed on determining if management measures (such as erosion control measures or riparian buffers) were implemented.

Included within the Tahoe Regional Planning Agency (TRPA) 2008 Water Quality Management Plan for the Tahoe Basin (TRPA 2008) is a section devoted to SEZ protection and restoration. The term SEZ was developed by TRPA to denote perennial, intermittent, and ephemeral streams and drainages, as well as marshes and meadows. SEZs generally possess the following characteristics: riparian or hydric (wet site) vegetation; alluvial, hydric soils; and the presence of surface water or near-surface groundwater at least part of the year. SEZs are essential because they provide multiple resource benefits; provide natural treatment and conveyance of surface runoff; contain significant fish and wildlife habitat; improve and maintain environmental amenities of the Lake Tahoe region; and achieve TRPA's environmental thresholds for water quality, vegetation preservation, and soil conservation.

As stated in the Water Quality Management Plan, TRPA's environmental threshold goal is to "preserve existing naturally functioning SEZ lands in their natural condition and restore 25% of the SEZ lands that have been identified as disturbed, developed, or subdivided, to attain a 5% total increase in the area of naturally functioning SEZ lands" (TRPA 2008). BMPs, as described in this document, have been effective in protecting beneficial uses within the affected watersheds and have been applied in other projects within the Lake Tahoe Basin Management Unit. Where proper implementation has occurred, there have not been any substantive adverse impacts to cold-water fisheries habitat conditions or primary contact recreation use of the surface waters. The practices specified herein are expected to be equally effective in maintaining the identified beneficial uses.

The following management requirements are designed to address the watershed management concerns. BMPs are derived from the Forest Service publications Nation Best Management Practices for Water Quality Management on National Forest System Lands (USDA Forest Service 2012) and Water Quality Management for National Forest System Lands in California (USDA Forest Service 2001).

Table A-1. William Kent Campground BMP Retrofit & Administrative Site Redevelopment Soil and Hydrology Best Management Practices.

Nation Core BMPs	Best Management Practice Objective Description
Plan-1. Forest and Grassland Planning	Use the land management planning and decision making processes to incorporate direction for water quality management consistent with laws, regulation, and policy into land management plans.
Plan-2. Project Planning and Analysis	Use the project planning, environmental analysis, and decision making processes to incorporate water quality management BMPs into project design and implementation.
Plan-3. Aquatic Management Zone Planning	To maintain and improve or restore the condition of land around and adjacent to waterbodies in the context of the environment in which they are located, recognizing their unique values and importance to water quality while implementing land and resource management activities.
AqEco-1. Aquatic Ecosystem Improvement and Restoration Planning	Reestablish and retain ecological resilience of aquatic ecosystems and associated resources to achieve sustainability and provide a broad range of ecosystem services.
AqEco-2. Operations in Aquatic Ecosystems	Avoid, minimize, or mitigate adverse impacts to water quality when working in aquatic ecosystems.
AqEco-4. Stream Channels and Shorelines	Design and implement stream channel and lake shoreline projects in a manner that increase the potential for success in meeting project objectives and avoids, minimizes or mitigates adverse effects to soil, water quality and riparian resources.
Fac-1. Facilities and Nonrecreation Special Uses Planning	Use the applicable special use authorization and administrative facilities planning processes to develop measures to avoid, minimize or mitigate adverse effects to soil, water quality and riparian resouces during construction and operation of facilities and nonrecreation special uses activities.
Fac-2. Facility Construction and Stormwater Control	Avoid, minimize or mitigate adverse effects to soil, water quality and riparian resources by controlling erosion and managing stormwater discharge originating from ground disturbance during construction of developed sites.

Nation Core BMPs	Best Management Practice Objective Description
Fac-3. Potable Water Supply Systems	Provide potable water supplies of sufficient quality and quantity to support the use at facilities.
Fac-4. Sanitation Systems	Avoid, minimize or mitigate adverse effects to soil and water quality from bacteria, nutrients and other pollutants resulting from collection, transmission, treatment and disposal of sewage and wastewater at facilities.
Fac-5. Solid Waste Management	Avoid, minimize or mitigate adverse effects to water quality from trash, nutrients, bacteria and chemicals associated with solid waste management at facilities.
Fac-6. Hazardous Materials	Avoid or minimize short- and long-term adverse effects to soil and water resources by preventing releases of hazardous materials.
Fac-7. Vehicle and Equipment Wash Water	Avoid or minimize contamination of surface water and groundwater by vehicle or equipment wash water that may contain oil, grease, phosphates, soaps, road salts, other chemicals, suspended solids, and invasive species.
Rec-1. Recreation Planning	Use the applicable recreation planning process to develop measures to avoid, minimize or mitigate adverse effects to soil, water quality and riparian resources during recreation activities.
Rec-2. Developed Recreation Sites	Avoid, minimize or mitigate adverse effects to soil, water quality and riparian resources at developed recreation sites by maintaining desired levels of ground cover, limiting soil compaction and minimizing pollutants entering waterbodies.
Rec-9. Recreation Special Use Authorizations	Avoid, minimize or mitigate adverse effects to soil, water quality and riparian resources from physical, chemical and biological pollutants resulting from activities under recreation special use authorizations.
Road-2. Road Location and Design	Locate and design roads to avoid, minimize or mitigate adverse effects to soil, water quality and riparian resources.
Road-3. Road Construction and Reconstruction	Avoid or minimize adverse effects to soil, water quality and riparian resources from erosion, sediment and other pollutant delivery during road construction or reconstruction.
Road-4. Road Operations and	Avoid, minimize, or mitigate adverse effects to soil, water quality and riparian resources by controlling road use and operations and providing adequate and appropriate maintenance to minimize

Nation Core BMPs	Best Management Practice Objective Description
Maintenance	sediment production and other pollutants during the useful life of the roads.
Road-6. Road Storage and Decommissioning	Avoid, minimize or mitigate adverse effects to soil, water quality and riparian resources by storing closed roads not needed for at least 1 year and decommissioning unneeded roads in a hydrologically stable manner to eliminate hydrologic connectivity, restore natural flow patterns and minimize soil erosion.
Road-7. Stream Crossings	Avoid, minimize or mitigate adverse effects to soil, water quality and riparian resources when constructing, reconstructing or maintaining temporary and permanent waterbody crossings.
Road-9. Parking Staging Ares	Avoid, minimize or mitigate adverse effects to soil, water quality and riparian resources when constructing and maintaining parking and staging areas.
Road-10. Equipment Refueling and Servicing	Avoid or minimize adverse effects to soil, water quality and riparian resources from fuels, lubricants, cleaners and other harmful materials discharging into nearby surface waters or infiltrating through soils to contaminate groundwater resources during equipment refueling and servicing activities.
Veg-1. Vegetation Management Planning	Use the applicable vegetation management planning processes to develop measures to avoid, minimize, or mitigate adverse effects to soil, water quality and riparian resources during mechanical vegetation treatment activities.
Veg-2. Erosion Prevention and Control	Avoid, minimize or mitigate adverse effects to soil, water quality and riparian resources by implementing measures to control surface erosion, gully formation, mass slope failure, and resulting sediment movement before, during and after mechanical vegetation treatments.
Veg-3. Aquatic Management Zones	Avoid, minimize, or mitigate adverse effects to soil, water quality and riparian resources when conducting mechanical vegetation treatment activities in the AMZ.
Veg-4. Ground- Based Skidding and Yarding Operations	Avoid, minimize or mitigate adverse effects to soil, water quality and riparian resources during ground-based skidding and yarding operations by minimizing site disturbance and controlling the introduction of sediment, nutrients and chemical pollutants to waterbodies.
Veg-6. Landings	Avoid, minimize or mitigate adverse effects to soil, water quality and

Nation Core BMPs	Best Management Practice Objective Description		
	riparian resources from the construction and use of log landings.		
Veg-8. Mechanical Site Treatment	Avoid, minimize, or mitigate adverse effects to soil, water quality and riparian resources by controlling the introduction of sediment, nutrients, chemical or other pollutants to waterbodies during mechanical site treatement.		
WatUses-1. Water Uses Planning	Use the applicable authorization and administrative planning processes to develop measures to avoid minimize or mitigate adverse effects to soil, water quality and riparian resources during construction, operation, maintenance and restoration of water use infrastructure.		

Appendix B

Projects Considered for Cumulative Effects

Present Projects

No projects were considered in this category because there are no projects currently in construction in the area considered.

Projects in the Foreseeable Future

The following projects were considered for the overall cumulative effects analysis for this project. However, the scale and time frame was considered individually for each resource discussed in this chapter. Some projects were considered under certain resources and not others, and some projects considered for cumulative effects may not be listed below. This list was the master list from which analysis was further refined for each resource.

Table B-1. Future projects considered for cumulative effects.

Project	Description	Potential Cumulative Effects
Homewood Resort Master Plan	Proposed improvements to the existing ski area, both on-mountain and at the existing North and South Base Areas to include a 50-60 room lodge-hotel, small neighborhood retail village, a residential area on the South Base, upgrades to chairlifts and snowmakers, and a new mid-mountain lodge facility accessible year-round by a new 8-passenger high-speed gondola. The project also includes forest health and fire protection measures, watershed management, and storm water runoff management. Buildings are planned to be LEED certified and the North-Base neighborhood development is planned to be LEED ND (Neighborhood Development) certified.	This project will lead to increased congestion on Hwy 89, significantly during the winter and summer months. The William Kent project is not anticipated to have significant negative effects on congestion and therefore does not contribute to negative cumulative effects. Watershed management and storm water runoff management is planned, which could provide increased ecosystem resilience in combination with this project. Additional impacts to wildlife and botany are not anticipated from the William Kent project.
Caltrans Water Quality Improvement Project	Water quality improvement projects along the Hwy 89 corridor and within Tahoe City. The William Kent/Sunnyside portion is tentatively scheduled for 2015.	Positive cumulative effects to water quality. No negative cumulative effects during construction are expected because project timelines do no overlap.

Project	Description	Potential Cumulative Effects
64-Acres Transit Center	This project is currently under construction. The project includes construction and operation of a transit center and associated parking facilities on the NW portion of the tract (west of SR 89 just south of Fanny Bridge over the Truckee River in Tahoe City, California). Associated with the transit center is roadway system improvements and recreation trail alternation necessary to accommodate the new facility. The transit center will provide parking for 6 buses at a time. The facility will also provide an enclosed structure with a heated waiting area to serve 40 patrons. The parking area has 130 spaces to support the Intermodal Transit Center. Intermodal transportation includes bicycling, roller blading, and walking as well as bus, shuttle, and taxi transportation.	The Transit Center is expected to reduce congestion on Hwy 89, therefore there are no negative cumulative effects on congestion. Construction of the facility will not overlap with construction at William Kent, therefore there is not cumulative effects from construction.
Blackwood Creek Phase III, Stream and Floodplain Restoration Project	This final phase (Phase III) would address excessive bank erosion and channel incision as well as diminished nutrient uptake capacity along Blackwood Creek's mainstem. The approach involves installation of physical structures made of boulders and logs, recontouring of existing floodplain surfaces and channel, plug and fill of existing gully channel, and new channel construction. Riparian vegetation transplant and planting of containerized riparian stock would occur where needed.	Cumulative effects involve an increase in SEZ vegetation health in the area, increased forest health, and possible increased habitat for plant and animals.
Camp Richardson Resort BMP Project	Upgrades to the campground, water quality BMPs. Reduction in campsites. Decision not yet published.	Reduction in campsites available to the public.

Waste Discharge Identification Number (WDID):

STORM WATER POLLUTION PREVENTION PLAN

for

William Kent BMP Retrofit Project

USDA Forest Service, Lake Tahoe Basin Management Unit

Legally Responsible Person (LRP)

Nancy Gibson, Forest Supervisor
Lake Tahoe Basin Management Unit
530-543-2600

Approved Signatory

Jordan Burge, P.E.
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Date

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I. Introduction and Certifications

I.A. SWPPP Objectives

This SWPPP has been developed for the William Kent BMP Retrofit Project to comply with the requirements to implement BMPs to achieve compliance with effluent limits and receiving water objectives as directed by the Construction General Permit for the Lake Tahoe Hydrologic Unit (Board Order R6T-2011-0019, NPDES No. CAG616002). This SWPPP has been developed and will be amended, when necessary, to meet the following objectives:

- 1. Identify, construct, implement and maintain BMPs to reduce or eliminate pollutants in storm water discharges and authorized non-storm water discharges from construction sites.
- 2. Identify pollutant sources including sediment sources that may affect the quality of storm water discharges associated with construction activity.
- 3. Identify non-storm water discharges.
- 4. Identify all effluent discharge outfall locations, sampling and analysis strategy and protocols, and a sampling schedule for discharges from the identified outfalls from the project area.

I.B. SWPPP Implementation Schedule

The specific construction schedule will be determined by the contractor when a contractor is selected for this work. There are several aspects of the construction that will be controlled by the Forest Service, including:

- Construction will occur between May 1 and October 15.
- Micro-basins will be one of the first features constructed. They will be used as a BMP to capture storm water flows from open graded or impervious surfaces.
- Temporary BMPs (such as straw wattles) will be required to be on site prior to any grading.
- The new channel in the day-use site shall be constructed only when the water level elevation of Lake Tahoe is 6226 feet or lower. In addition, the final connection from storm drain pipes to new channel will be made when there is less than a 30% prediction of precipitation in the forecast (see Section II.A.2 of the Project Description for more details).

I.C. Permit Registration Documents

Required Permit Registration Documents (PRD) shall be submitted to the State Water Board via the Storm water Multi Application and Report Tracking System (SMARTS) by the Legally Responsible Person (LRP), or authorized personnel (i.e., Approved Signatory) under the direction of the LRP. The project specific PRDs include:

- Notice of Intent (NOI);
- 401 (subject to decision of ACOE);
- Site Maps;
- Annual Fee;
- Signed Certification Statement (LRP Certification is provided electronically with SMARTS PRD submittal); and
- SWPPP

Site maps can be found on Figures 1 - 7. A copy of all other submitted PRDs shall be kept in Appendix F, along with the Waste Discharge Identification (WDID) confirmation.

I.D. Certification and Training Requirements

The SWPPP must be prepared, signed and certified by a QSD. Additionally, the SWPPP must identify the QSP. See the following sections for the identification and qualifications of the QSD/QSP.

I.D.1. Qualified SWPPP Developer

The QSD shall certify and amend the SWPPP. Jordan Burge is the QSD and meets the certification requirement of Section VII.B.1 of the Construction General Permit based on:

- Registered Professional Civil Engineer, State of California # 78252
- Qualified SWPPP Developer (QSD) Registration # 01217

The QSD has received the following training:

California Construction General Permit Training, June 2011

I.D.2. SWPPP Certification and Approval

Qualified SWPPP Developer

Project Name: William Kent BMP Retrofit Project

"This Stormwater Pollution Prevention Plan and Appendices were prepared under my direction to meet the requirements of the Construction General Permit for Storm Water discharge in the Lake Tahoe Hydrologic Unit (Board Order No R6T-2001-0019). I certify that I am a Qualified SWPPP Developer in good standing as of the data signed below."

QSD Signature

Date

I.D.3. Qualified SWPPP Practitioner

The QSP shall meet the certification requirement of Section VII.B.3 of the Construction General Permit. Jordan Burge will also be the QSP for this project. For Jordan Burge's information, see section I.D.1. Qualified SWPPP Developer. If another QSP is identified for this project, his/her qualifications will be given to LRWQCB, and the SWPPP will be amended.

The QSP shall have primary responsibility and significant authority for the implementation, maintenance, and inspection/monitoring of SWPPP requirements.

Duties of the above QSP, including a QSP designated in a future amendment, include but are not limited to:

- Ensuring full compliance with the SWPPP and the Construction General Permit
- Implementing all elements of the SWPPP, including but not limited to:
 - o Ensuring all BMPs are implemented, inspected and properly maintained;
 - Preparing weekly, pre-storm, during storm, and post-storm BMP inspection reports;
 - Performing non-storm water visual observations and inspections;
 - Performing non-storm water sampling and analysis, as required;
 - Performing routine inspections and observations;
 - Implementing non-storm water management, and materials and waste management activities such as: monitoring discharges; general Site clean-up; vehicle and equipment cleaning, fueling and maintenance; spill control; ensuring that no materials other than storm water are discharged in quantities which will have an adverse effect on receiving waters; etc.;
 - Conducting pre-storm inspections for storm events;
 - Conducting daily inspections during storm events;
 - Conducting post-storm inspections for storm events;
 - Monitoring weather forecasts for both likely precipitation events and rain events;
 - Preparing and implementing Rain Event Action Plans for likely precipitation events;
 - Submitting numeric effluent limitations (NELs) exceedence data, including storm water effluent limits and receiving water limits and reports to the QSD and Approved Signatory. Following receipt of QSD's and/or Approved Signatory's approval, QSP shall upload the NEL exceedence data or report to the SWRCB's SMARTS;
 - Ensuring elimination of all unauthorized discharges;
 - Mobilizing crews in order to make immediate repairs to the control measures;

- Notifying the LRP or Authorized Signatory immediately of off-site discharges or other non-compliance events;
- Submitting Notices of Discharge and reports of Illicit Connections or Illegal Discharges;
- Preparing Annual Report summarizing corrective actions, sampling and analyses, and any corrective actions not implemented.

The QSP may delegate the inspections and activities to an appropriately trained employee, but shall ensure adequacy and adequate deployment.

The QSP shall also be responsible for providing training of project personnel on SWPPP implementation procedures. Before construction operations commence the QSP will conduct an on-site training with project personnel to review the SWPPP, construction operations and necessary BMPs. Additionally, trainings will be held as necessary on specific tasks as the project progresses and tasks change. Training logs (Appendix G) will be filled out for each training and kept with the SWPPP.

I.D.4. Legally Responsible Person

Approval and Certification of the Storm Water Pollution Prevention Plan

Project name: William Kent BMP Retrofit Project

"I certify that this document and all Appendices were prepared under my direction in accordance with a system designed to ensure that qualified personnel properly gather and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information."

Nancy Gibson	Lake Tande Basin Management Onit
Legally Responsible Person	Organization
LRP Signature	12/5/13 Date
Forest Supervisor	530-543-2600
Title	Telephone Number

I.E. Contractor List

A contractor has not yet been selected for this project. When a contractor is selected, the SWPPP will be amended with the updated information.

I.F. Emergency contact person and 24-hour phone number

Owner: US Forest Service, LTBMU

35 College Drive

South Lake Tahoe, CA 96150

530-543-2600

QSD/QSP: Jordan Burge, P.E.

Civil Engineer

Office: 530-543-2670

Hazardous Spill: Genevieve Villemaire

Forest Spill Coordinator, LTBMU

530-543-2783

I.G. SWPPP Availability and Public Records Access

A copy of the SWPPP will be kept on the project site at all times. Additionally, the SWPPP will be available for view in the SMARTS database.

I.H. Required Changes

The SWPPP shall be maintained such that it reflects the actual site conditions for the duration of the project. This will require the QSD to amend the SWPPP whenever a qualifying change is made. The SWPPP shall be revised when:

- There is a change in construction, or operations, which may affect the discharge or
 pollutants to surface waters or ground waters as determined using the criteria
 outlined under section V.G.2. "Planned Changes;"
- There is an increase in the disturbed acreage;
- BMPs do not meet the objectives of reducing or eliminating pollutants in storm water discharges;
- There is a General Permit violation. If the LRWQCB determines that a Permit violation has occurred, the SWPPP shall be amended and implemented within 72 hours of notification, or as soon as additional materials can be obtained, if needed.
- When deemed necessary by the QSD or project engineer.

The following items shall be included in each amendment:

- Who requested the amendment;
- The location of proposed change;
- The reason for change;
- The original BMP proposed, if any;
- The new BMP proposed

Approved amendments shall be uploaded into the SMARTS database and inserted into the appropriate section of the SWPPP or Appendix and a SWPPP Amendment Certification shall be kept with the SWPPP. The SWPPP text shall be revised, replaced, and/or hand-annotated as necessary to properly convey the amendment. Additionally, LRWQCB staff will be notified by email of all SWPPP amendments once uploaded into SMARTS.

A blank copy of the SWPPP Amendment Certification and Approval form is in Appendix A. A SWPPP amendment log will be kept on-site with the SWPPP during construction operations. The SWPPP amendment log form can be found in Appendix A.

Table 1 displays the changes that have been designated by the QSD as "to be field determined" and constitute minor changes that the QSP may implement based on field conditions. The QSP shall document these change in the SWPPP amendment log and document the reason they don't need QSD approval.

Table 1. List of Changes to be Field Determined			
Candidate changes for field location or determination by QSD ¹	Changes that can be field located or field determined by QSP		
Increase quantity of an Erosion or Sediment Control Measure	√		
Reduction in disturbed acres	√		
Relocate/Add stockpiles or stored materials in mapped area	√		
Locate and add portable toilets	√		
Relocate storage and/or fueling locations within mapped area	√		
Relocate areas for waste storage	√		
Locate water drafting areas	√		
Minor changes to schedule or phases	√		

¹Any field changes not identified for field location or field determination by QSP must be approved by QSD.

II. Project Information

II.A. Project Description, site address and driving directions

The William Kent Facilities BMP Retrofit project will renovate a Forest Service campground and day-use site to improve water quality and protect the clarity of Lake Tahoe. The project is scheduled for implementation beginning May 01, 2014 and will be completed by October 15, 2014. The campground is scheduled to be closed to the public during 2014 and will reopen in 2015. Project funding will include a number of option items which will be awarded based on final construction contract negotiations. All option items are included in the description and permit for this project.

The project is located approximately two miles south of Sunnyside-Tahoe City on Hwy 89 West Lake Blvd, Section 24 Township 15N, Range 16E. The project covers approximately 25 acres and consists of the campground and administrative site west of the highway, and the day-use site located east of the highway. All facilities within the project area are federally owned and managed by the US Forest Service. The campground is bounded by private, mostly residential properties to the north, south, and west.

II.A.1. Campground Improvements

The campground originally dates back to 1924, however current development and infrastructure dates to 1963. The current campground consists of 95 campsite spurs and a paved road system that provides vehicle access to them. Six flush toilet restroom buildings are located within the campground. A small campground check-in kiosk building is located near the facility entrance. A sewer dump for use by RV campers is located near the southern-most restroom building. Fencing separates the campground from adjacent properties.

A conifer-dominated Stream Environment Zone (SEZ) begins near the north-west corner of the property and stretches toward the southern boundary before terminating near the north-east corner of the property. Surface storm water from adjacent private property flows into the campground and is carried through the SEZ in a shallow man-made drainage ditch. Nine crossings over this ditch exist within the current campground. A portion of the southern-most campground road and campsites are located within an area of the SEZ that is dominated by grasses and shrubs. Recent neighborhood BMP improvements have substantially reduced the amount of surface water that flows through the campground, and soil/vegetation/hydrology investigations following US Army Corps Wetland Delineation Guidelines do not show evidence of seasonal groundwater near the surface, and find that no wetlands or navigable waters are present within the project area. Moist surface soils exist during late spring snow melt periods.

A catch basin is located near the highway campground entry which is connected via a pipe

under the highway to another basin. Storm water flow from the campground and surrounding land uses that does not infiltrate from this current system flows through a large buried pipe before being discharged to Lake Tahoe.

This project will remove a total of 16,117 square feet of impervious coverage from the project area, including the removal of approximately 1,060 linear feet of road and 12 campsites from delineated SEZ, totaling 15,816 square feet of impervious coverage removed from these sensitive soil areas. In addition to removal of pavement surface, prism, and structures (including 5 culverts), these areas will be decompacted and revegetated/restored. The anthropogenic drainage channel within the lower portion of the SEZ (see Figure 2) will be recontoured to mimic conditions that existed prior to facility development in the past century. Areas in which impervious coverage has been removed or in which the drainage channel has been re-contoured will be hydromulched with native seed to stabilize and protect the newly reclaimed areas from potential surface water flows that could cause erosion. Asphalt surfaces located outside of delineated SEZ areas may be pulverized for use as road base elsewhere within the project. Temporary water quality protection BMPs will be installed consistent with Section III. Best Management Practices, prior to project ground disturbing work and will be maintained until implementation is complete.

New roadways and campsite spurs will be constructed in high capability soils. This includes 15 new campsite spurs and 9 reconstructed and/or reoriented campsite spurs. In order to maintain facility circulation in light of the project's SEZ restoration, a new segment of road will be constructed which crosses SEZ soils and includes one new culvert. Approximately 160 cubic yards of fill will be placed in SEZ to construct this crossing. New impervious coverage within the SEZ associated with this project element totals 1,400 square feet. Approximately 150 trees with their stumps will be removed from the campground to accommodate the facility retrofit and reconfiguration. Barriers may be placed to prevent vehicles from travelling or parking off of paved surfaces. New paved areas will be constructed to direct storm water run-off to infiltration micro-basins designed to accommodate volumes associated with storm intensities of 2-inches of rain within 24-hours, consistent with Environmental Protection Agency standards. Micro-basins will also be constructed in areas of the campground that will be unaffected by the project, to capture and slow surface water runoff where it currently concentrates. The permanent BMP micro-basins will be constructed early during project implementation to help provide water quality protection while the facility retrofit is underway, in association with temporary BMPs.

Other project elements which will occur on high capability soils include the replacement of the campground check-in kiosk building. The new building will be a pre-manufactured unit which will be placed on a newly constructed concrete pad with new utility connections approximately

100-feet west of its current location, in an area currently disturbed. The current check-in building will be removed. A code-compliant sewer dump station will be constructed approximately 30-feet north of its current location to allow public visitors in RVs to empty vehicle waste chambers. The existing station will be decommissioned in compliance with plumbing code safety standards. Two campground host sites closest to the campground entry will be renovated with code-compliant water, sewer, and electrical utility services, and water spigots within the campground will be replaced with units that meet requirements for use by people with disabilities. Upon completion of this project the campground will have a capacity of 81 campsites which will include 24 reconstructed sites that meet current USFS standards for universal accessibility, including 2 host sites.

II.A.2 Beach Day-use Site Improvements

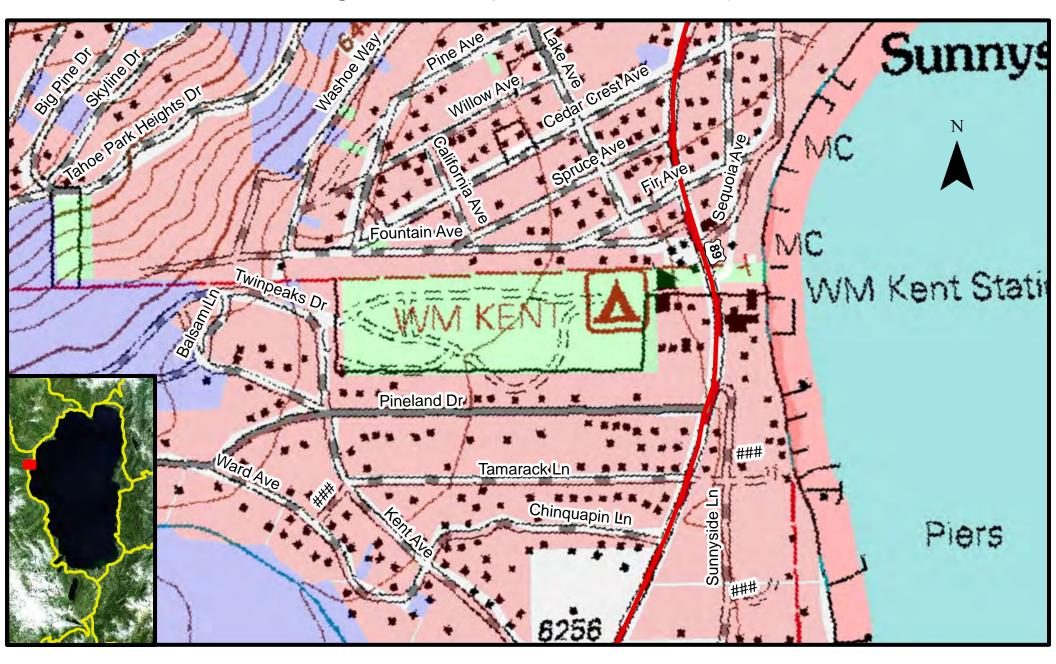
The one-half-acre William Kent Day-use site is located east of Highway 89 and includes approximately 150 linear feet of pebble beach on the shore of Lake Tahoe. A small parking area along with a bike path that connects north and south of the site provides access to the site. A 6-unit flush toilet building is located on the site, as are several picnic tables and an informational sign board. The elevation change from the picnic area to the beach occurs rapidly, resulting in a steep slope leading to the water.

Storm water runoff from upland areas west of the highway, in addition to the residential and commercial areas surrounding the day-use site, flows through a series of catch basins before being collected in an underground pipe which flows to Lake Tahoe. The outfall of this pipe is below the lake's high water elevation, and all areas below this high water mark was determined to be "jurisdictional water of the US" by the US Army Corp of Engineers (ACOE). The LTBMU is now in the process of applying for a permit consistent with Section 404 of the Clean Water Act.

Work within the Day-use site, between Highway 89 and Lake Tahoe, will consist of excavating and removing approximately 80-linear feet of the underground pipe including the concrete headwall at the pipe's terminus (see Figure 7). In its place, the project will construct a sinuous channel approximately 110 feet in length that provides opportunity for storm water to infiltrate before it reaches the surface waters of Lake Tahoe. The bottom of the open channel will be 5 feet wide, ensuring the volume capacity will not change from the current storm pipe system. Channel slopes will be stabilized with a combination of riprap rock and granite boulders with slopes varying between 1:1 and 3:1. Removal of 5 trees, including two cottonwood trees will be associated with this element of the facility retrofit. Day-use site grading activity will include approximately 450 cubic yards of cut and 290 cubic yards of fill. The fill in this area will consist of boulders, riprap, and rounded gravel similar to existing rock on site.

The construction of the new channel will only occur when the elevation of Lake Tahoe is at 6226 feet or lower. Because the outlet of the new channel will be at the same elevation of the invert of the current pipe (6227.2 feet), this will allow for minimal disturbance during construction. To prevent uphill storm water from flowing through the channel during construction, the current storm drain pipes will remain functioning in place as long as possible. The final channel connection will be the last thing constructed, and will be executed quickly, preferably during dry weather conditions. The final connection will be made when there is less than 30% chance of precipitation in the predicted forecast, according to the National Atmospheric and Oceanic Administration. Prior to completion, a sandbag/plastic barrier will be constructed at the end of the channel, and the channel will be "seasoned" by washing the new channel, and pumping the water to an area it will infiltrate. The outlet of the new channel will be approximately 20 feet south of the current outlet of the storm drain pipes. The steep area between these outlets will be stabilized with planted vegetation and a biodegradable erosion control blanket. The remainder of the disturbed area is flat and will be stabilized with weed-free pine needle mulch.

Figure 1: Project Location Map



0 0.125 0.25 0.5 Miles

Contours are in 40 ft. increments. The construction site is the whole of the green area in the center of the map. For more detailed information on surface water within the construction area, see Figures 2 through 7.

III. Best Management Practices

III.A. Site Management Narrative

Construction site management shall consist of controlling potential sources of pollution before they come in contact with storm water systems or watercourses. Potential sources of pollution may include storm water over newly graded areas, asphalt grindings, uncompacted pavement, concrete waste, open sewer piping, or stockpiles. Other potential pollutants may include improperly functioning portable restrooms, fluids from mechanical equipment used on site, or excessive dust. See Tables 2 – 5 for specific CASQA BMPs used to mitigate these possible pollutants. Appropriate site management measures shall be implemented to control material pollution and manage waste by implementing effective handling, storage, use and disposal practices. Additionally, many non-storm water pollution control BMPs (below) are necessary for proper site management.

Waste management and materials pollution control BMPs shall be implemented to minimize storm water contact with construction materials, wastes and service areas and to prevent materials and wastes from being discharged off-site. The primary mechanisms for storm water contact that shall be addressed include:

- Direct contact with precipitation
- Contact with storm water run-on and runoff
- Wind dispersion of loose materials
- Direct discharge to the streams and watercourse through spills or dumping

The following Waste Management and Materials Pollution Control BMPs Table indicates the BMPs that shall be implemented to handle materials and control construction site wastes associated with these construction activities. See Appendix B for identified CASQA specifications.

Table 2. CONSTRUCTION SITE MANAGEMENT WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs				
CASQA BAR Name			Used	If Not Head Why
Fact	BMP Name	YES	NO	If Not Used, Why
WM-1	Material Delivery and Storage	√		
WM-2	Material Use	1		
WM-3	Stockpile Management	1		
WM-4	Spill Prevention and Control	1		
WM-5	Solid Waste Management	1		
WM-6	Hazardous Waste Management	1		

WM-7	Contaminated Soil Management		1	No contaminated soil on site
WM-8	Concrete Waste Management	√		
WM-9	Sanitary/Septic Waste Management	7		
WM-10	Liquid Waste Management		1	No liquid waste on site

The following list of BMPs and narrative explain how the selected BMPs will be incorporated into the project. Where CASQA fact sheets contradict information contained in the Technical Specifications or the Drawings, the QSD shall determine which criteria applies. Selection criteria will be documented in a SWPPP Amendment.

WM-1, WM-2 Materials Delivery, Storage and Use

In general, BMPs shall be implemented to help prevent discharges of construction materials during delivery, storage and use. See Figure 2 for specific staging areas. Materials, equipment, stockpiles, spoils, and waste will be limited to new or existing asphalt, unless otherwise noted on Figure 2. A barrier shall be provided along the downslope edge of the staging areas to prevent runoff leaving the area. If the QSP determines there is a risk of run-on, a barrier shall be provided along the upslope edge of the staging area.

WM-3 Stockpile Management

Stockpile Management shall be implemented to reduce or eliminate pollution of storm water from stockpiles of soil and rock materials. Any stockpiles will be located in already disturbed and flat areas, typically on existing asphalt (see Figure 2 for exceptions). All stockpiles will be located to avoid run-on. Stockpiles shall be surrounded with sediment controls, and if a stockpile is inactive for 14 days it will be stabilized with hydraulic mulch or geotextile. If any soil or other erodible material is stockpiled over the winter, it will be covered with hydraulic mulch by October 15

WM-4 Spill Prevention and Control

Spill Prevention and Control shall be implemented to contain and clean up spills, and to prevent material discharge to waterways.

WM-5, WM-6 Solid and Hazardous Waste Management

Solid Waste Management and Hazardous Waste Management BMPs shall be implemented to minimize storm water contact with waste materials and prevent waste discharges. Solid wastes (trash) shall be disposed of offsite daily. If onsite storage is necessary, solid wastes shall be stored inside a locked storage container.

Liquid hazardous waste shall be disposed of offsite the same day it is generated. If it is necessary to store liquid hazardous waste, it will be stored in the same storage container referenced above. Hazardous wastes shall be contained in appropriate and clearly marked containers and segregated from other non-waste materials. All hazardous waste shall be stored, transported and disposed as required.

WM-8 Concrete Waste Management

All concrete waste, including concrete washout, shall be collected and taken offsite. A majority of concrete will be underground (i.e. gate posts).

WM-9 Sanitary and Septic Wastes

Portable toilets shall be located and maintained at the staging areas for the duration of the project. Specific locations will be determined in the field by the QSD. Weekly maintenance shall be provided and wastes shall be disposed offsite. The toilets shall be located away from concentrated flow paths. Toilet location shall not interfere with traffic flow.

III.B. Sediment and Erosion/Stabilization Control Narrative

III.B.1. Erosion Control

Erosion control is any source control practice that protects the soil surface and prevents soil particles from being detached by rainfall, flowing water or wind. Erosion control consists of using project scheduling and planning to reduce soil and/or vegetation disturbance, controlling drainage in disturbed areas and preparing and stabilizing disturbed soil areas.

This construction project will implement the following practices to provide effective temporary and final erosion control during construction:

- Preserve existing vegetation; disturbed soil areas are displayed on Figures 2 7, existing vegetation will be preserved outside of these boundaries;
- The area of soil disturbing operations shall be controlled such that either erosion control BMPs (Table 3) can be quickly and effectively implemented or the site can be permanently stabilized in that area;
- Non-active areas will be stabilized within 14 days of cessation of construction activities;
- Prior to the completion of construction, apply permanent stabilization to disturbed soil areas.

Sufficient erosion control materials shall be maintained onsite to allow implementation in conformance with this SWPPP. This includes implementation requirements for active and non-active areas that require deployment of BMPs before the onset of rain. If precipitation occurs, and before runoff develops within disturbed areas of the new channel and/or demolition of the

storm drain pipes in the day-use site, any open grading will be covered with plastic to avoid direct erosion into Lake Tahoe. As a secondary measure, fiber rolls or silt fence will be staged within the day-use site and will be placed at the outlet of the channel before runoff from disturbed areas develops.

The following erosion control BMP selection table indicates the BMPs that shall be implemented to control erosion on during construction. CASQA Fact Sheets for temporary erosion control BMPs are provided in Appendix B.

Table 3. EROSION CONTROL BMPs					
CASQA			Used		
Fact	BMP Name	YES	NO	If Not Used, Why	
Sheet			110		
EC-1	Scheduling	√			
EC-2	Preservation of Existing Vegetation	√			
EC-3	Hydraulic Mulch	1			
EC-4	Hydroseed	√			
EC-5	Soil Binders		1	Not necessary	
EC-6	Straw Mulch		1	Using wood mulch	
EC-7	Geotextiles and Mats	1			
EC-8	Wood Mulching	√			
EC-9	Earth Dikes and Drainage Swales	√			
EC-10	Velocity Dissipation Devices	1			
EC-11	Slope Drains		1	Not necessary	
EC-12	Stream Bank Stabilization	1			
EC-14	Compost Blankets		1	Not necessary	
EC-15	Soil Preparation- Roughening	1			
EC-16	Non-Vegetated Stabilization	1			
WE-1	Wind Erosion Control	1			

The following list of BMPs and narrative explain how the selected BMPs will be incorporated into the project. Where CASQA fact sheets contradict information contained in the Technical Specifications or the Drawings, the more stringent criteria (as determined by the QSD) shall apply. Selection criteria will be documented in a SWPPP Amendment.

EC-1, EC-2 Scheduling, Preservation of Existing Vegetation

Surface disturbance activities will begin after May 1 and continue no later than October 15, depending on stream flow, ground water levels and weather conditions. Grading activities are scheduled to be completed prior to October 3, ensuring enough time for winterization activities before the October 15 grading deadline. A grading ordinance exemption may be requested from TRPA and LRWQCB if the QSD and Project Engineer deem it necessary and appropriate to work past October 15. When there is a 30 percent or greater chance of precipitation in the project area as predicted by the National Oceanographic and Atmospheric Administration (NOAA), further actions may be taken (see section IV.B. Rain Event Action Plan Narrative).

The project schedule will sequence construction activities with the installation of both soil stabilization and sediment control measures. Micro-basins will be constructed before major grading begins, in order to capture stormwater flows from open graded or impervious surfaces. BMPs will be deployed in a sequence to follow the progress of grading and construction. The construction schedule will be arranged as much as practicable to leave existing vegetation and other ground cover undisturbed until immediately prior to grading. See Figures 2 – 7 for disturbed soil areas; existing vegetation will be preserved outside of these displayed boundaries. Construction fencing may be used as a safety precaution within the day-use site during construction.

EC-3, EC-4 Hydraulic Mulch, Hydroseed

Hydraulic mulch and hydroseeding will be used to stabilize and revegetate areas within the SEZ disturbed by construction and channel restoration.

Hydraulic mulch may also be used to stabilize any soil stockpile area that is inactive for more than 14 days. If any soil or other erodible material is stockpiled over the winter, it will be covered with hydraulic mulch by October 15.

EC-7 Geotextiles and Mats

A biodegradable Rolled Erosion Control Product (RECP) will be used to temporarily stabilize the steeper portion of the disturbed slope within the day-use area. This will temporarily stabilize the slope and allow the vegetation to establish a root system.

EC-8, EC-16 Wood Mulching, Non-Vegetated Stabilization

Decompaction of soils and application of wood mulch will be used in combination with slash material as long-term stabilization for disturbed areas that will not be revegetated upon completion of the project. These areas include staging and stockpile areas as well as disturbed areas outside the SEZ.

Wood mulch may be used to cover small exposed soil areas that have the potential to release sediment discharge to a live waterbody prior to a forecast storm event. If wood mulch is used in such an instance it shall be applied to depth that will protect soil and prevent movement to mulch (approximately 2''-4'').

EC-9 Drainage Swales

Drainage features, such as pavement outsloping and shoulder grading, will be used as permanent BMPs to convey water from travel surfaces. See Figures 2 – 7 for locations of infiltration basins, where water will be conveyed to.

EC-10 Velocity Dissipation Devices

A rock velocity dissipation device will be used at the outlet of the planned channel crossing shown on Figures 2 and 5.

EC-12 Stream Bank Stabilization

The banks of the new channel in the day-use site will be stabilized with riprap and large boulders. If precipitation occurs, and before runoff develops within disturbed soil areas, open graded areas of the new channel will be covered with plastic to avoid erosion of sediment into Lake Tahoe. As a secondary measure, fiber rolls or silt fence may be placed at the outlet of the channel. All material placed into the channel will be washed prior to placement, and temporary BMPs will be installed to capture any remaining fine sediment. The channel will also be "seasoned" to clean fine materials before completion.

EC-15 Soil Preparation / Roughening

Compacted areas to be restored will be decompacted to increase water infiltration capacity and prepare the surface for revegetation. A uniform decompaction of the soil will be accomplished to a depth of 6 to 12 inches.

WE-1 Wind Erosion Control

Water shall be applied to disturbed areas to control dust, and the water will be applied using water trucks. Water application rates will be minimized as necessary to prevent runoff and ponding. Water equipment leaks will be repaired as soon as possible. Material stockpiles may also be watered if wind erosion is evident.

Stockpiles that are not actively being used will be covered with hydraulic mulch or a plastic cover.

III.B.2. Sediment Control

Sediment controls are structural measures that are intended to complement and enhance the selected erosion control measures and reduce sediment discharges from construction areas. Sediment controls are designed to intercept and settle out soil particles that have been detached and transported by the force of water. Additional temporary sediment control materials will be maintained onsite throughout the duration of the project, ready for implementation in an anticipated precipitation event (see Section IV.B. Rain Event Action Plan Narrative for protocol during an anticipated precipitation event), rapid response to failures, or emergencies, as described below. This includes implementation requirements for active areas and non-active areas before the onset of rain. The following sediment control BMP selection table (Table 4) indicates the BMPs that shall be implemented to control sediment on the construction site.

If precipitation occurs, and before runoff develops within disturbed areas of the new channel and/or demolition of the storm drain pipes in the day-use site, any open grading will be covered with plastic to avoid direct erosion into Lake Tahoe. As a secondary measure, fiber rolls or silt fence will be staged within the day-use site and will be placed at the outlet of the channel before runoff from disturbed areas develops.

Table 4. SEDIMENT CONTROL BMPs					
CASQA		BMP Used			
Fact	BMP Name	YES	NO	If Not Used, Why	
Sheet		,			
SE-1	Silt Fence	√			
SE-2	Sediment Basin	√			
SE-3	Sediment Trap		√	Not necessary	
SE-4	Check Dam			Not necessary	
SE-5	Fiber Rolls	√			
SE-6	Gravel Bag Berm		1	Not necessary	
SE-7	Street Sweeping	√			
SE-8	Sandbag Barrier	√			
SE-9	Straw Bale Barrier		√	Not necessary	
SE-10	Temporary Drain Inlet Protection		√	Not necessary	
SE-11	ATS		1	Not necessary	
SE-12	Temporary Silt Dike		1	Not necessary	
SE-13	Compost Sock and Berm		1	Not necessary	
SE-14	Biofilter Bags		√	Using other methods	

TC-1	Stabilized Construction Entrance/Exit	1		
TC-2	Stabilized Construction Roadway		√	Using permanent roads
TC-3	Entrance Outlet Tire Wash	1		

The following list of BMPs and narrative explain how the selected BMPs will be incorporated into the project. Where CASQA fact sheets contradict information contained in the Technical Specifications or the Drawings, the more stringent criteria (as determined by the QSD) shall apply. Selection criteria will be documented in a SWPPP Amendment.

SE-1 Silt Fence

Within the day-use site, silt fence may be used at the outlet of the new channel, or at the outlet of the existing storm drain pipes during their removal. If precipitation occurs, and before disturbed soil area runoff occurs, silt fence may be installed to contain erosion from these openly graded areas.

SE-2 Sediment Basin

Permanent infiltration basins will be constructed before any major grading begins. The basins will be built to capture the eroded or disturbed soil that is washed off during storms, and protect the quality of all nearby surface water.

SE-5 Fiber Rolls

Fiber rolls will be used to surround any stockpile area that is inactive for more than 14 days or when there is an anticipated precipitation event (see Section IV.B. Rain Event Action Plan Narrative for a definition of an anticipated precipitation event). They may also be used to stabilize newly graded slopes during the threat of precipitation, such as the new channel within the day-use site. Additional fiber rolls will be kept on-site to be deployed as needed.

SE-7 Street Sweeping

If tracking is evident due to construction, the excess sediment from the project site will be broomed to an area where it won't be carried away by storm water flows.

SE-8 Sandbag Barrier

Sandbag barriers with plastic will be used to contain wash during channel construction at the day-use site. Additional installations may be required at the direction of the QSD or QSP.

TC-1, TC-2 Stabilized Construction Entrance/Exit, Entrance Outlet Tire Wash

Tracking will not occur off Forest Service property. Brooming will be the main BMP used to prevent tracking off of Forest Service property. If this is not sufficient as determined by the QSP, a stabilized exit and/or a tire wash may be used.

III.C. Non-Storm water and Material Management Narrative

The selection of non-storm water BMPs is based on the list of construction activities with a potential for non-storm water discharges identified above. The following non-storm water control BMP selection table (Table 5) indicates the BMPs that shall be implemented to prevent non-storm water discharges at the construction Site.

Table 5. NON-STORM WATER POLLUTION CONTROL BMPs					
CASQA		BMP Used			
Fact Sheet	BMP Name	YES	NO	If Not Used, Why	
NS-1	Water Control and Conservation	1			
NS-2	Dewatering Operations	√			
NS-3	Paving & Grinding Ops	√			
NS-4	Temp Stream Crossing		1	Not necessary	
NS-5	Clear Water Diversion	√			
NS-6	Illicit Connection & Illegal Discharge	V			
NS-7	Potable Water/ Irrigation	√			
NS-8	Vehicle and Equipment Cleaning	√			
NS-9	Vehicle and Equipment Fueling	√			
NS-10	Vehicle and Equipment Maintenance	V			
NS-11	Pile Driving Operations		1	No pile driving in project	
NS-12	Concrete Curing	√			
NS-13	Concrete Finishing	√			
NS-14	Material & Equipment Used Over Water		1	Not necessary	
NS-15	Demolition/ Removal Adjacent to Water	√			
NS-16	Temporary Batch Plants		√	Not necessary	

The following list and narrative of BMPs explain how the selected BMPs will be incorporated into the project. Where CASQA fact sheets contradict information contained in the Technical Specifications or the Drawings, the more stringent criteria (as determined by the QSD) shall apply. Selection criteria will be documented in a SWPPP Amendment.

NS-1, NS-7 Water Control and Conservation, Potable Water / Irrigation

Water application rates will be minimized as necessary to prevent runoff and ponding. Water equipment leaks will be repaired immediately. If irrigation is used to establish vegetation, irrigated areas within the construction limits will be inspected for excess watering and watering times and schedules will be adjusted to ensure that the appropriate amount of water is being used and runoff is being minimized.

NS-2, NS-5 Dewatering Operations, Clear Water Diversion

A sandbag barrier with plastic will be utilized to capture groundwater coming to the surface within the new channel in the day-use site. It will also be utilized to capture water used to wash the new construction and "season" the channel. This water will then be pumped to an upland area where it will not cause erosion and will infiltrate.

NS-3 Paving and Grinding Operations

Asphalt waste will be disposed of offsite. Any material produced from potential grinding operations may be used as base in non-SEZ areas. Micro-basins will be in place to capture storm water flow from paved surfaces.

NS-6 Illicit Connection and Illegal Discharge Connection

The LTBMU will implement the Illicit Connection/Illegal Discharge Detection Reporting BMP throughout the duration of the project.

NS-8, NS-9, NS-10 Vehicle and Equipment Operations

Vehicle and Equipment Fueling (NS-9), and Vehicle and Equipment Maintenance BMPs (NS-10) will be utilized to prevent discharges of fuel and other vehicle fluids. Vehicles will be cleaned and inspected (NS-8) prior to arrival on site. Vehicle cleaning will not be performed onsite, except as part of normal maintenance to remove excess dirt/mud from equipment. This type of cleaning will take place within the staging area (BMP area) and be performed such that runoff is not generated; wash water will be contained within the project area.

Fuel trucks, each equipped with absorbent spill clean-up materials, shall be used for all onsite fueling. Drip pans or absorbent pads shall be used during all vehicle and equipment

maintenance activities that involve grease, oil, solvents, or other vehicle fluids. All vehicle maintenance shall be conducted at least 50 feet away from stream channels and on a level graded area. If mobile maintenance is necessary due to an equipment failure within the construction area that prevents the equipment from be moved to a staging area, drip pans and/or absorbent pads shall be used to prevent any contamination of the site.

NS-12, 13 Concrete Curing, Concrete Finishing

There will be concrete used for the following portions of this project: building foundation, gate post installations, and sewer and water underground utility relocations. A majority of placed concrete will be underground, and any surface concrete curing will be covered during predicted storms, and will not affect surface waters.

NS-15, Demolition/Removal Adjacent to Water

Fill material and storm drain pipes will be removed adjacent to Lake Tahoe. BMPs will be in place to avoid pollutants into surface waters. If precipitation occurs during culvert removal, and before runoff develops within disturbed soil areas, all disturbed areas will be covered with plastic to avoid erosion directly into Lake Tahoe. Silt fence and/or fiber rolls at the outlet may be used as a secondary measure if erosion is occurring. Spill kits will be in place for any equipment leaks, and equipment will be stored on asphalt, away from the shoreline. See NS-2, Dewatering Operations, and NS-5, Clear Water Diversion, for more information on BMPs during channel construction.

III.D. Dewatering and Diversion Plan Narrative

The only dewatering and diversion actions that may take place will be within the day-use site of the project. Scheduling will be an important piece of this plan. The channel construction and pipe removal within the day-use site will not take place unless the water level of Lake Tahoe is 6226 feet or lower. During construction of the new channel and the demolition of the existing storm drain pipes, and if groundwater is coming to the surface, a sandbag barrier with plastic will be utilized in order to capture the water before it comes into contact with the surface waters of Lake Tahoe, and pump it to an area it will not cause erosion and will infiltrate (see NS-2 and NS-5, Dewatering Operations and Clear Water Diversion). To prevent uphill storm water from flowing through the channel during construction, the current storm drain pipes will remain functioning in place as long as possible. This same type of sandbag barrier with plastic will be used towards the end of construction in order to "season" the channel by washing the new channel, and pumping the captured water to an area it will infiltrate and not cause erosion.

III.E. Active Treatment System Plan Narrative

No active treatment system operations are planned as part of this project.

III.F. Post-Construction Storm Water Management Measures Narrative

All features constructed during this project, including roads, camping spurs, and drainages are designed to function during storms. Micro-basins will be designed to handle the capacity of a two inch in 24-hour storm, and runoff from new asphalt will be collected in these basins. The newly constructed intermittent channel through the campground will be designed to handle the same flow capacity as the existing channel, and it will be monitored post construction for any unexpected erosion. This project will be monitored post-construction to determine if the roads, camping spurs, and drainages are functioning as designed. See Section V.B. Visual Inspections for further monitoring information. In addition, the Forest Service National BMPEP protocol will be used to evaluate this project. This national protocol can be found at the following website:

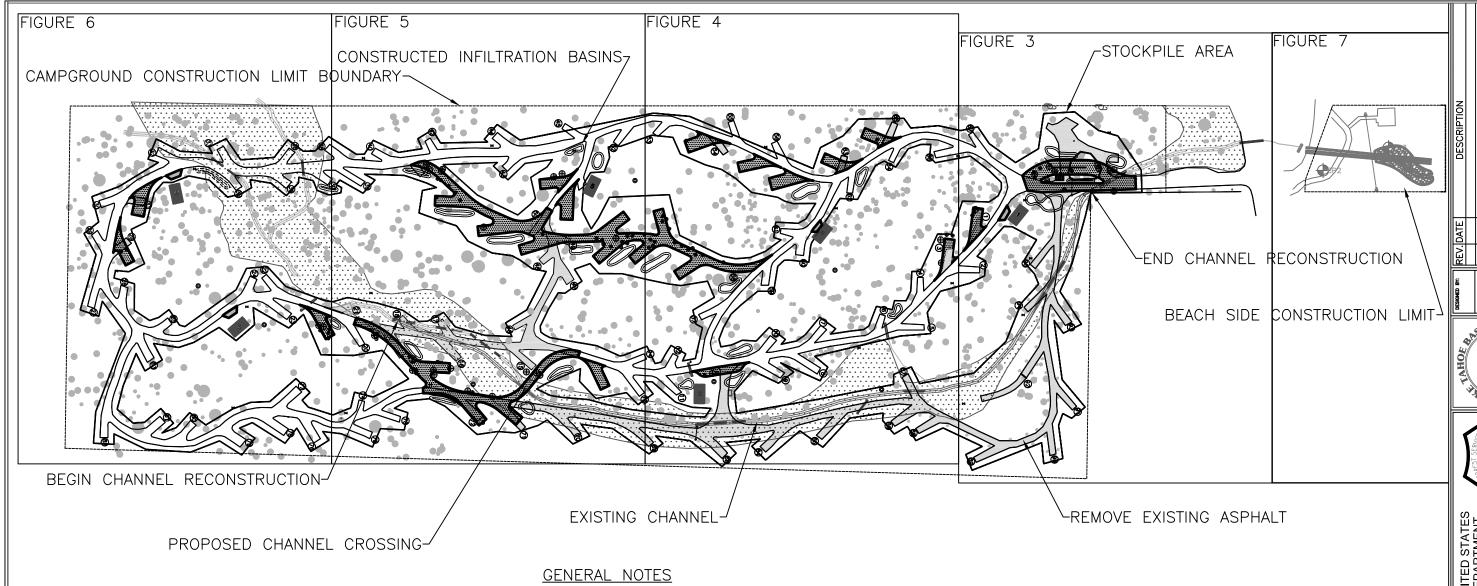
http://fsweb.wo.fs.fed.us/wfw/watershed/national bmps/bmp docs-recreation.html

III.G. Schedule for BMP Implementation

BMPs will be implemented, modified, and maintained appropriately for the site and weather conditions encountered during the project. Fiber rolls will be placed at the base of all material stockpiles, and material piles will be watered if excessive wind erosion is occurring.

III.H. BMP and Disturbed Soil Area maps

Figures 2 through 7 show the disturbed soil areas (DSAs), drainage crossings, and staging area BMPs for this project. Due to the large area of construction, orange construction fence is only planned to be installed to define project limits at the day-use site. Section IX. H. Mapping Requirements, of the R6T-2011-0019 requires that DSA maps be of a scale no smaller than 1 inch equals 50 feet (1:600). Figure 2 displays the entire project and does not meet this requirement. Because of the large area of this project, only key areas are shown on maps to this scale (Figures 3 – 7).



<u>LEGEND</u>

EXISTING ASPHALT TO REMAIN

ASPHALT TO BE REMOVED

PROPOSED ASPHALT

NFILTRATION BASIN

- TREES (DBH LESS THEN 20")
- TREES (DBH 20"-40")
 - TREES (DBH GREATER THAN 40")
- REMOVE TREE
- □□□ EXISTING CULVERT
 - **EXISTING BUILDING**
 - CAMPSITE NUMBER EXISTING

SEZ

- EXISTING CHANNEL
- NEW CHANNEL
- --- DISTURBED SOIL AREA BOUNDARY

---- PROPERTY BOUNDARY

- 1. MATERIALS, EQUIPMENT, STOCKPILES, SPOILS AND WASTES, INCLUDING CONCRETE MIXING AND WASHOUT WILL BE LIMITED TO EXISTING OR NEW ASPHALT OR WITHIN DISTURBED SOIL AREAS SHOWN ABOVE.
- 2. VEHICLE ACCESS WILL BE FROM EXISTING OR NEW ASPHALT OR BY GROUND DIRECTLY ADJACENT TO ASPHALT IN ORDER TO COMPLETE RECONSTRUCTION OF THE CHANNEL. VEHICLE FUELING, STORAGE AND SERVICE AREAS WILL BE LIMITED TO PAVED AREAS. VEHICLE CLEANING WILL NOT BE ALLOWED ON THE SITE.
- 3. DISTURBED SOIL AREAS WILL BE LIMITED TO APPROXIMATELY 10 FEET ON EITHER SIDE OF NEW AND EXISTING ASPHALT. DISTURBED CHANNEL AREAS WILL BE LIMITED TO APPROXIMATELY 10 FEET ON EITHER SIDE OF CHANNEL FOR LENGTH OF RECONSTRUCTION. OTHER DISTURBED AREAS WILL INCLUDE AREA AROUND CONSTRUCTION OF INFILTRATION BASINS, BUILDING CONSTRUCTION, AND BEACH CHANNEL CONSTRUCTION. ALL OTHER AREAS OF EXISTING VEGETATION WILL BE PRESERVED.
- 4. NEW CONSTRUCTED INFILTRATION BASINS WILL BE CONSTRUCTED FIRST AND SERVE AS TEMPORARY AND PERMANENT BMPS. FIBER ROLLS WILL BE STOCKPILED ON—SITE TO BE USED IN SPECIFIC APPLICATIONS AS NEEDS ARISE.

60 80 0 160 230 SCALE IN FEET

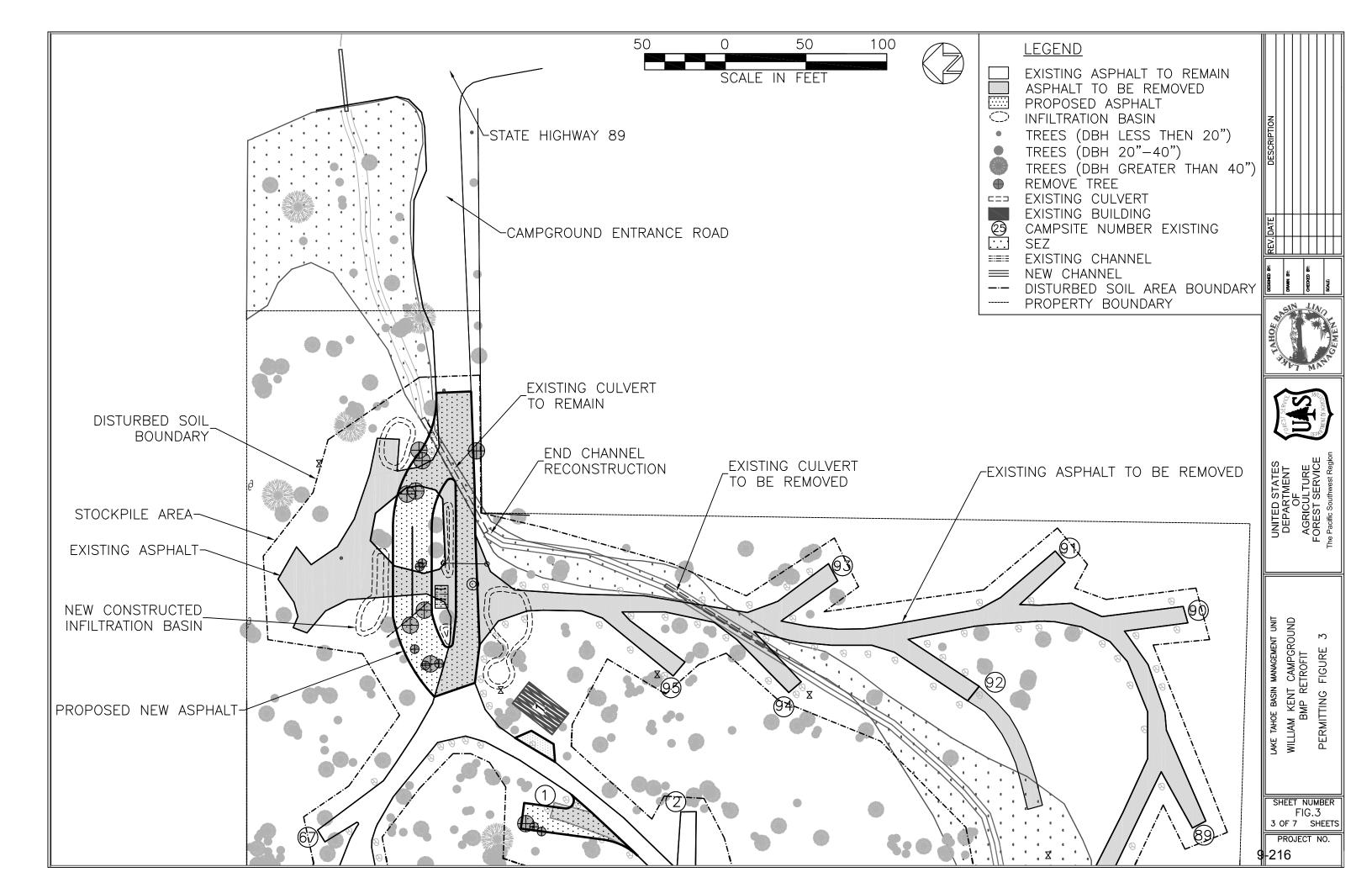


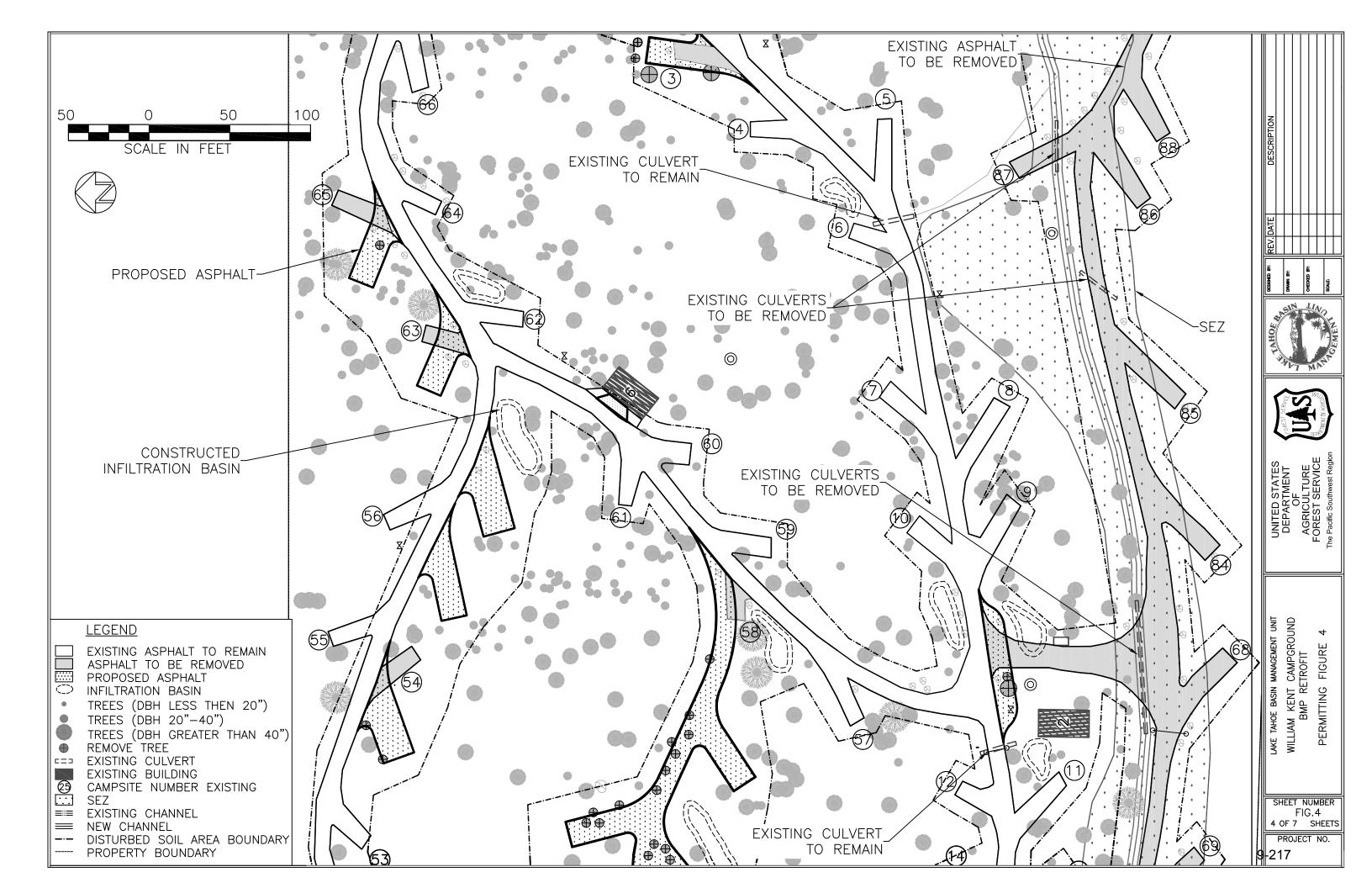
LAKE TAHOE BASIN MANAGEMENT UNIT
WILLIAM KENT CAMPGROUND
BMP RETROFIT
FIGURE 2

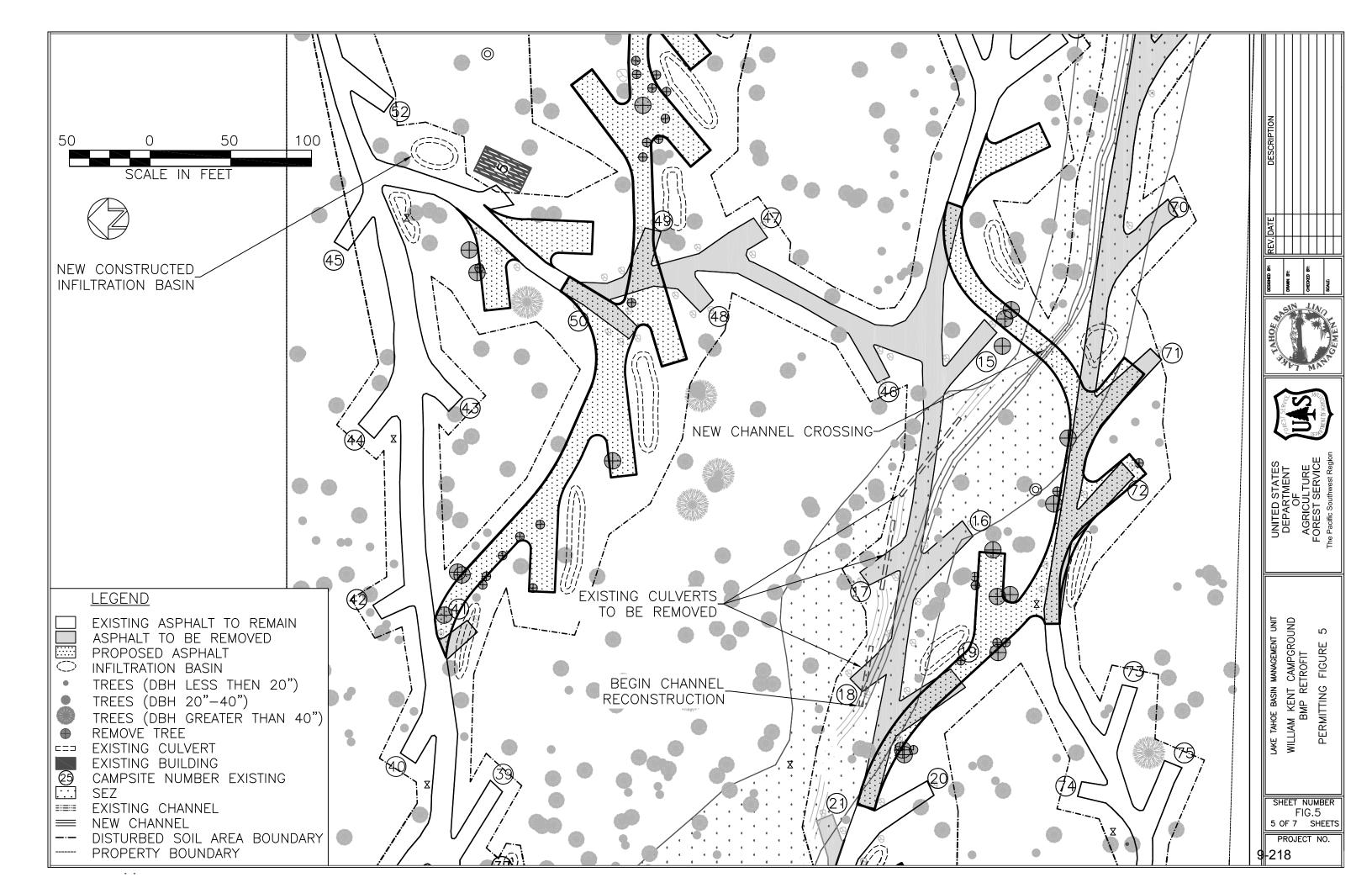
SHEET NUMBER FIG.2 2 OF 7 SHEETS

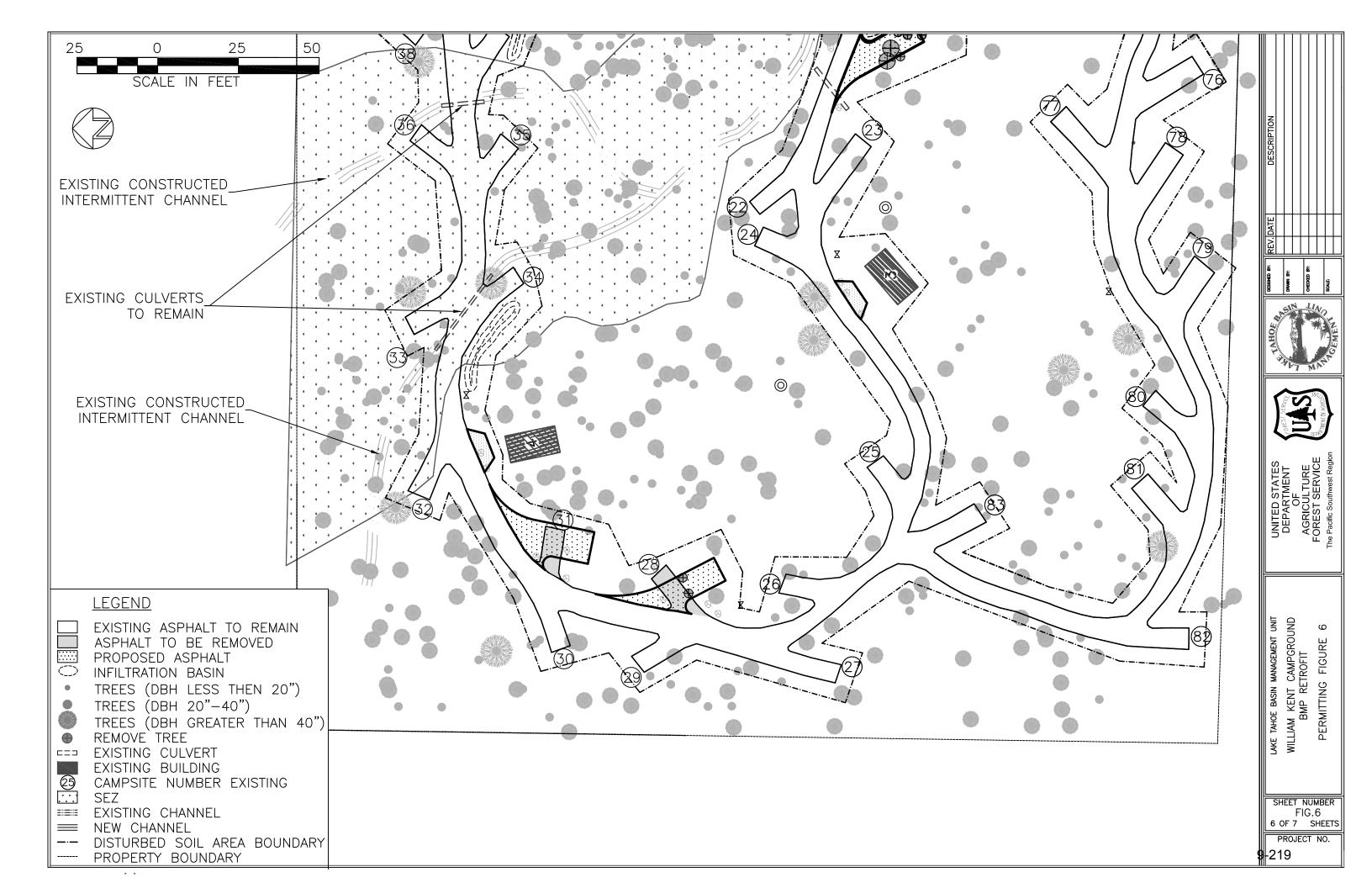
PROJECT NO.

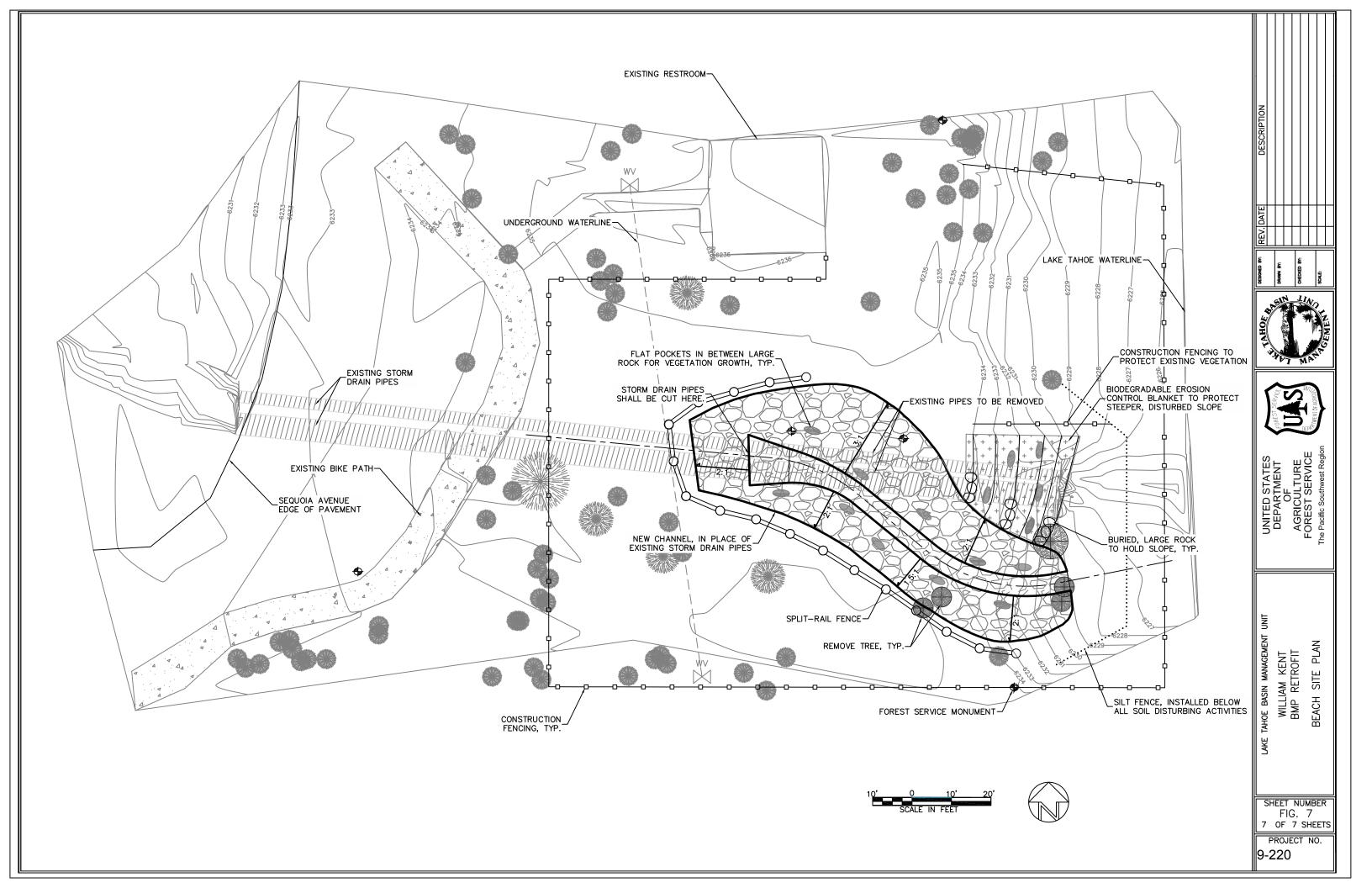
9-215











IV. BMP Inspection, maintenance and Rain Event Action Plans

IV.A. BMP Inspection and Maintenance Narrative

The General Permit requires that an inspection of the construction site be made at the end of each work day and before, during, and after rain events. Additionally, during the winter or inactive periods, inspections must be conducted at least once per month during daylight hours. During some months, a visual inspection may not be possible because of excessive snow covering the ground. Monthly inspections will continue through the Spring following final construction to ensure permanent soil stabilization measures function through Spring runoff.

The purpose of the inspections is to discover potential water quality problems so that corrective measures can be implemented immediately. A BMP inspection checklist will be filled out for each inspection and maintained on-site with the SWPPP. A blank inspection checklist can be found in Appendix D. Completed checklists shall be kept with the SWPPP. Inspections of BMPs are conducted to identify and record:

- BMPs that are properly installed;
- BMPs that need maintenance to operate effectively;
- BMPs that have failed; or
- BMPs that could fail to operate as intended.

IV.B. Rain Event Action Plan Narrative

The Rain Event Action Plan (REAP) is a document designed to be used as a planning tool by the QSP to protect exposed portions of the project sites prior to and during precipitation events and to ensure that the discharger has adequate materials, staff and time to implement erosion and sediment control measures. These measures are intended to reduce the amount of sediment and other pollutants that could be generated during a rain event. It is the responsibility of the QSP to be aware of precipitation forecasts and to obtain and keep copies of forecasted precipitation from NOAA's National Weather Service Forecast Office (http://srh.noaa.gov/forecast).

The SWPPP includes REAP templates, but the QSP will need to customize them for each rain event, to reflect site conditions related to current phase of construction. A site-specific REAP template can be found in Appendix E. Completed REAPs shall be maintained on-site with the SWPPP. Additionally, a printed copy of the forecast for each day of forecast precipitation shall be kept with the SWPPP monitoring records.

The QSP will develop an event-specific REAP no later than the calendar day 24 hours prior to any anticipated precipitation event. An anticipated precipitation event is any weather pattern that is forecast to have a 30 percent or greater chance of producing precipitation as rainfall in the project area as predicted by the National Oceanographic and Atmospheric Administration

(http://www.srh.noaa.gov/). During periods when thunderstorm activity is anticipated, weather conditions shall be monitored during the course of the day. If the chance of thunderstorms becomes 30 percent or greater, or when visual observations indicate imminent precipitation, the QSP shall prepare and implement a REAP.

The REAP will be onsite and implemented no later than 24-hours in advance of a predicted precipitation event or if predicted less than 24-hours in advance, as soon as possible. At a minimum the REAP shall include the following site and phase-specific information:

- QSP name and contact number;
- The date(s) rain is predicted to occur, and predicted chance of rain;
- A description of all DSAs, material storage areas, stockpiles, vehicle and equipment storage and maintenance areas, and waste management areas. These areas must be cross-referenced to BMP plans or DSA maps by sheet or page number;
- For each area described above, list specific items to review and actions to perform prior to the rain event;
- A certification by the QSP that the REAP will be carried out as required by the General Permit; and
- A printout of the NOAA weather forecast

The REAP must be checked and updated daily for storms expected to last over a period of several days.

V. Construction Site Monitoring and Reporting Plan (CSMRP)

V.A. Purpose

This Construction Site Monitoring Plan was developed to address the following objectives:

- Demonstrate that the site is in compliance with the discharge prohibitions and applicable effluent limitations;
- Determine whether non-visible pollutants are present at the construction site and are causing or contributing to exceedence of water quality objectives;
- Determine whether immediate corrective actions, additional BMPs, or SWPPP revisions are necessary to reduce pollutants in storm water discharges and authorized non-storm water discharges;
- Determine whether BMPs included in the SWPPP/REAP are effective in preventing or reducing pollutants in storm water discharges and authorized non-storm water discharges; and
- Demonstrate that appropriate sample collection, handling and analysis procedures are implemented.

V.B. Visual Monitoring

During the active construction season, an inspection of the construction site shall be made at the end of each work day. Additionally, during the inactive period, inspections must be conducted at least once per month during daylight hours. Monthly inspections may not occur during winter months if site is covered in snow.

During both active and inactive periods, a construction site inspection shall also be performed within the 24-hour period prior to an anticipated rain event (chance of precipitation is forecasted at 30 percent or greater), daily during the event, and within 24 hours after actual storm events. This requirement does not apply during snow events. Inspections shall be documented on the BMP Inspection Checklist (Appendix D) and kept with the monitoring records with the SWPPP. If inspections cannot be completed within the specified time frames, the reason for the delay shall be recorded in writing and maintained with the next inspection report.

Visual observations will be made at all active areas of construction. In addition, visual observations must be made at all designated effluent outfalls and locations where storm water may discharge from the project boundary. Focus areas for these visual observations will take place in the drainage on the beach side of the project area, and at the outfall of the pipe at the northeast section of the campground near the entrance.

After the completion of construction, additional visual monitoring will take place at least once during the Spring, Summer, and Fall to ensure the restoration portions of the project were effective. Pre and post-construction photo-point locations will be established to determine this effectiveness at the following locations:

- The outlet of the new channel within the day-use site,
- The new channel crossing within the campground,
- The areas within SEZ where pavement will be removed, and
- The areas within SEZ where the existing channel will be recontoured.

These photo points will be monitored to determine the vegetative cover of the site, the survival of any new vegetation, and the success of the implemented erosion and sediment control measures. In addition, each micro-basin will be inspected to find evidence of its success. If evidence of failure of any of the above measures exists, the Forest Service will take further action. For example, if evidence of erosion is found circumventing the newly constructed micro-basins, these basins may be reconstructed to fully capture future storm flows. If vegetative cover is not adequate as determined by a Forest Service botanist, more vegetation may be planted or more native seed with hydromulch may be placed.

In addition, the newly updated Forest Service National BMPEP protocol will be used to evaluate this project. The protocol from "Recreation Management A" will be used to evaluate the effectiveness of BMP construction for this project. This national protocol can be found at the following website:

http://fsweb.wo.fs.fed.us/wfw/watershed/national bmps/bmp docs-recreation.html

V.C. Water Quality Sampling and Analysis

Storm water runoff generated from the project area which is discharged to surface waters must not contain constituents in excess of the following numeric effluent limitations (NELs):

Table 8. Storm Water Effluent Limitations					
Parameter	Units	Maximum Daily Effluent Limitation for Discharge			
Total Nitrogen (N)	mg/L	0.5			
Total Phosphorus (P)	mg/L	0.1			
Total Iron	mg/L	0.5			
Turbidity	NTU	20			
Grease and Oil	mg/L	2			

Total Nitrogen, Total Phosphorus, Total Iron, and Grease and Oil will only be sampled if there is reason to believe it is present in excess amount as a result of project activities, or there are visual indicators (Grease and Oil) that a substance is present in the storm water runoff.

Additionally, waters generated within the project area that are discharged to surface waters must not contain the following:

- Substances in concentrations that are toxic to, or produce detrimental physiological responses in human, plant or animal life; and
- Coliform organisms attributable to human wastes.

Samples will not take place for these substances unless there is reason to believe they are present.

For protection of receiving waters the pH of effluent samples should not fall outside of the range of 6.0 to 9.0. Concrete placement is extremely minor, and no impact is expected to occur on receiving waters. Because no activity of the project is expected to affect pH, samples will not be taken unless there is reason to believe that pH levels are adversely impacted.

In addition, and during construction, storm water runoff turbidity samples will be taken from visible surface water discharge locations deriving from newly constructed areas. Water samples will be collected by the Forest Service during the first two hours of discharge from rain events or as soon as staff are able to get to the site if rain event occurs outside of normal construction time. A minimum of three samples will be collected each day storm water that is derived from new construction is discharged off site to receiving waters. These water samples will document BMP effectiveness and ensure ambient water quality is not degraded. Water samples will be collected during daylight hours (sunrise to sunset) during the event and cease when turbidity falls to background levels. Water samples will not be collected if unsafe conditions exist.

V.D. Watershed Monitoring Option

This project consists of routine road construction and drainage restoration and does not require additional monitoring of the watershed.

V.E. Quality Assurance and Quality Control

For initial verification of field analysis, duplicate samples shall be collected at a rate of 10 percent or one minimum duplicate per sampling event for the first three days of the project or whenever there is an addition of a sampler. The duplicate samples shall be collected, handled and analyzed using the same protocols as primary samples. A duplicate sample shall be collected at each location immediately after the primary sample has been collected. Duplicate samples shall not influence any evaluations or conclusions; however, they will be used as a check on quality assurance.

V.F. Reporting Requirements and Records Retention

V.F.1. Record Keeping

The following shall be retained for a minimum of three years:

- Approved SWPPP document and amendments;
- Site Inspection Reports;
- Site Inspection Report Corrections Summary;
- Rain Event Action Plans;
- Notice of Discharge reports;
- Numeric Effluent Limit (NEL) Exceedence Reports;
- Sampling records and analysis reports;
- Annual Compliance Certifications; and
- Copies of all applicable permits.

V.G. Non-Compliance Reporting

V.G.1. 24-Hour Reporting

The discharger shall immediately notify the Lahontan Water Board orally within 24 hours whenever an adverse condition occurs as a result of a discharge. An adverse condition includes, but is not limited to, a violation or threatened violation of the conditions of this General Permit, significant spills of petroleum products or toxic chemicals, or damage to control facilities that could affect compliance pursuant to Section 13267(b) of the California Water Code, a written notification of the adverse condition shall be submitted to the Lahontan Water Board within 5 business days of occurrence. The written notification shall identify the adverse conditions, describe the actions necessary to remedy the condition, and/or the actions implemented to abate the problem from continuing, and specify a timeline, subject to the modifications of the Lahontan Water Board, for remedial actions.

In the event that sampling results exceed any applicable NEL, the dischargers shall orally notify the Lahontan Water Board within 24 hours after the NEL exceedance has been identified and electronically submit all storm event sampling results through the SMARTS within 5 business days after the NEL exceedance has been identified.

V.G.2. Planned Changes

The LTBMU shall notify the LRWQCB of planned changes, as well as upload SWPPP Amendments into SMARTS. This will include any planned physical alterations or additions to the permitted project. Notice is required when the alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitation under this permit (40 CFR 122.41 (I)(1)(ii)).

V.G.3. Anticipated Noncompliance

The LTBMU shall give advance notice to the LRWQCB and upload a SWPPP Amendment describing planned changes in the permitted facility of activity that may result in noncompliance.

V.H. Annual Report

On or before November 30 of each year, an Annual Report shall be prepared and electronically submitted through SMARTS. The Annual Report shall cover the time period from Oct 16 of the previous year through October 15 of the current year. The SMARTS reporting module requests the following information for the Annual Report:

- The project name and location
- Any significant problem(s) that occurred during project construction and remedial measures planned or implemented.
- A summary and evaluation of all sampling and analysis results, including copies of laboratory reports and rain gauge measurements, from monitoring activities conducted.
- A certified statement indicating whether or not the site has been winterized in accordance with BMPs for erosion prevention and sediment control.
- Documentation of required QSP certifications and personnel training.
- A certified statement, signed by the QSD, indicating whether or not the project site is in compliance with the conditions of the general permit and the SWPPP.

V.I. Final Report

Following completion of the project, the LTBMU shall prepare and electronically submit through SMARTS a final report containing the information required under the Annual Report as well as the following information:

- Details of any modification to the construction plans for the proposed restoration work.
- Details on any change in the amount of impervious coverage for the project site.
- Records of all inspections (including the inspection log book), compliance certificates, monitoring reports and noncompliance reporting must be maintained by the LTBMU for a period of at least three years.

The final monitoring report shall be certified by the LRP, or the approved signatory of the LRP, and submitted within 30 days of project completion.

Appendices

Appendix A - SWPPP Amendment Forms

SWPPP Amendment Log						
Date	Requested by:	Brief Description	Date			
	Date	Date Requested by:	Date Requested by: Brief Description			

SWPPP Amendment Certification and Approval

SWPPP Amendment #

WDID #: Change requested by: Description of and reason for change:	
Description of and reason for change:	
Location of change:	
Original BMP, if any:	
New BMP:	

SWPPP Amendment Certification and Approval

SWPPP Amendment #

Qualified SWPPP Developer's Certification of the Storm water Pollution Prevention Plan Amendment

"This Storm water Pollution Prevention Plan and attachments were prepared under my direction to meet the requirements of the California Construction General Permit (Order No R6T-2011-0019). I certify that I am a Qualified SWPPP Developer in good standing as of the date signed below."

QSD's Signature	Date
QSD Name	QSD Certification Number
QOD Nume	QOD CERTINGUION NUMBER
Title	Telephone

Appendix B - CASQA BMP Standard Specifications

Index of CASQA Fact Sheets*

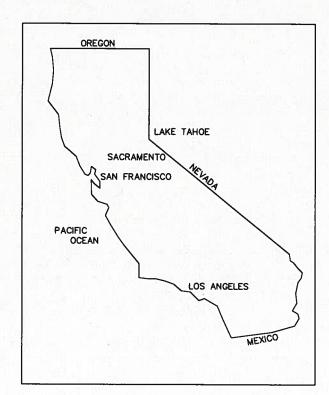
WM-1 Material Delivery and Storag	WM-1	Material	Delivery	and Storag
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- WM-2 Material Use
- WM-3 Stockpile Management
- WM-4 Spill Prevention and Control
- WM-5 Solid Waste Management
- WM-6 Hazardous Waste Management
- WM-8 Concrete Waste Management
- WM-9 Sanitary/Septic Waste Management
- EC-1 Scheduling
- EC-2 Preservation of Existing Vegetation
- EC-3 Hydraulic Mulch
- EC-4 Hydroseed
- EC-7 Geotextiles and Mats
- EC-8 Wood Mulching
- EC-9 Earth Dikes and Drainage Swales
- EC-10 Velocity Dissipation Devices
- EC-12 Stream Bank Stabilization
- EC-15 Soil Preparation-Roughening
- EC-16 Non-Vegetated Stabilization
- WE-1 Wind Erosion Control
- SE-1 Silt Fence
- SE-2 Sediment Basin
- SE-5 Fiber Rolls
- SE-7 Street Sweeping
- SE-8 Sandbag Barrier
- TC-1 Stabilized Construction Entrance/Exit
- TC-3 Entrance Outlet Tire Wash
- NS-1 Water Control and Conservation
- NS-2 Dewatering Operations
- NS-3 Paving & Grinding Ops
- NS-5 Clear Water Diversion
- NS-6 Illicit Connection and Illegal Discharge
- NS-7 Potable Water/Irrigation
- NS-8 Vehicle and Equipment Cleaning
- NS-9 Vehicle Equipment Fueling
- NS-10 Vehicle and Equipment Maintenance
- NS-12 Concrete Curing
- NS-13 Concrete Finishing
- NS-15 Demolition/Removal Adjacent to Water

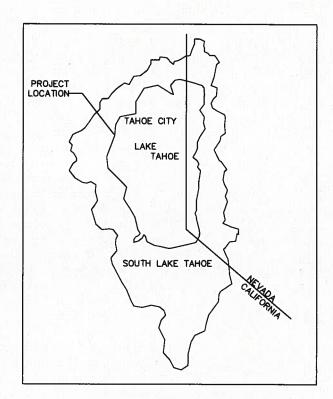
^{*}The CASQA fact sheets referenced above are not included in this document, but they will be available on site during construction.

Appendix C - Engineering Plans and Specifications (EPS)

i



STATE MAP



LAKE TAHOE BASIN MANAGEMENT UNIT

UNITED STATES DEPARTMENT OF AGRICULTURE FOREST SERVICE - REGION FIVE



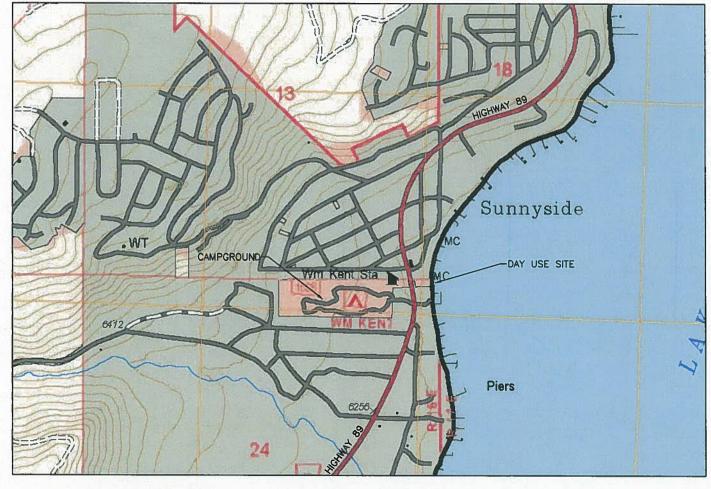
LAKE TAHOE BASIN MANAGEMENT UNIT



DRAWINGS FOR

WILLIAM KENT CAMPGROUND **BMP RETROFIT**

PLACER COUNTY, CALIFORNIA TOWNSHIP 15N, RANGE 16E, SECTION 24



PROJ	ECT	AREA
NOT	TO S	CALE

SHEET INDEX NO. SHEET TITLE TITLE SHEET SHEET LOCATOR & GENERAL NOTES DEMOLITION PLAN PROPOSED SITE PLAN SITE PLAN- MACGYVER SITE PLAN- BO SITE PLAN- LUKE SITE PLAN- ENTRANCE CAMPSITE LAYOUT C8 BEACH SITE PLAN C9 DETAILS - CAMPGROUND C10 DETAILS - DRAINAGE C11 DETAILS - GATE & SIGNS 14 C12 DETAILS - BMPS

SHEET OF 14 SHEETS

REVIEWED BY:

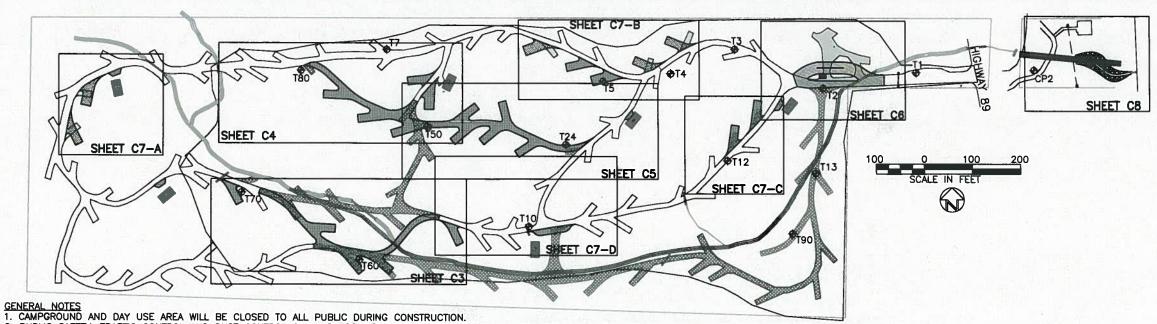
CIVIL ENGINEER

2-25-14

RECOMMENDED BY

APPROVED BY:





REVIEWING AGENCY:
USDA FOREST SERVICE
LAKE TAHOE BASIN MANAGMENT UNIT 35 COLLEGE DRIVE SOUTH LAKE TAHOE, CA 96150 PHONE: (530)-543-2620 CONTACT: KATIÉ KUCHENBECKER

WARD WELL WATER CO PHONE: 530-581-2231 CONTACT: RICK DEWANTE

TAHOE CITY PUBLIC UTILITY DISTRICT PHONE: 530-583-3796 ADDRESS: 221 FAIRWAY DR

				2
	CONTROL P	OINT TABLE		3
Control				4
Number	NORTHING	EASTING	ELEVATION	5
CP2	9963.154	9862.487	6233.486	6
T1	9958.133	9617.049	6242.601	7
T2	9925.852	9424.111	6247.076	8
Т3	10006.589	9239.374	6265.523	9
T4	9955.669	9105.518	6280.41	10
T5	9940.121	8964.686	6289.199	11
T7	10005.433	8514.177	6305.753	12
T10	9637.694	8810.319	6271.62	13
T12	9775.088	9223.992	6258.549	14
T13	9749.432	9408.253	6250.131	15
T24	9808.351	8887.445	6285.437	16
T50	9845.715	8597.444	6301.785	17
T60	9568.548	8456.805	6280.734	18
T70	9708.723	8211.429	6288.045	19
T80	9961.878	8335.69	6313.847	20
T90	9623.706	9359.655	6253.031	21

2	6245.04	9449.71	9860.29
3	6246.06	9430.41	9811.89
4	6247.29	9387.03	9741.71
5	6250.54	9344.19	9671.33
6	6252.68	9287.77	9612.93
7	6255.07	9195.84	9594.61
8	6257.68	9118.74	9589.18
9	6259.75	9039.89	9572.58
10	6262.19	8949.08	9549.66
11	6265.60	8816.56	9539.82
12	6270.01	8711.84	9551.81
13	6272.08	8652.59	9565.08
14	6275.09	8571.25	9575.76
15	6275.55	8548.08	9585.92
16	6276.80	8517.45	9610.86
17	6277.67	8493.53	9632.20
18	6279.88	8424.52	9674.27
19	6281.44	8369.79	9692.62
20	6283.11	8311.98	9715.07
21	6283.88	MATCH	EXISTING

CAMPGROUND CHANNEL LAYOUT TABLE PT NO. ELEV. (FT) NORTHING EASTING

6242.73 9463.19 9922.50

	CONTROL P	OINT TARIF	100			
ntrol	CONTROLL	DINT TABLE		4	6247.29	
mber	NORTHING	EASTING	ELEVATION	5	6250.54	2
P2	9963.154	9862.487	6233.486	6	6252.68	
T1	9958.133	9617.049	6242.601	7	6255.07	
Γ2	9925.852	9424.111	6247.076	8	6257.68	
T3	10006.589	9239.374	6265.523	9	6259.75	17
T4	9955.669	9105.518	6280.41	10	6262.19	10
T5	9940.121	8964.686	6289.199	11	6265.60	
T7	10005.433	8514.177	6305.753	12	6270.01	3
10	9637.694	8810.319	6271.62	13	6272.08	
12	9775.088	9223.992	6258.549	14	6275.09	
13	9749.432	9408.253	6250.131	15	6275.55	17
24	9808.351	8887.445	6285.437	16	6276.80	
50	9845.715	8597.444	6301.785	17	6277.67	6
60	9568.548	8456.805	6280.734	18	6279.88	
70	9708.723	8211.429	6288.045	19	6281.44	E
80	9961.878	8335.69	6313.847	20	6283.11	19
90	9623.706	9359.655	6253.031	21	6283.88	

111111111111111111111111111111111111111			MEH	CAMPS	ITE LAYOU	T TABLE	1 1 1 1 1 1		
CAMPSITE #	CUT (CY)	FILL (CY)	A (ELEV)	B (ELEV)	C (ELEV)	D (ELEV)	CL LENGTH (FT)	AZIMUTH (DEG)	OUTSIDE R
1	11	3	6255.57	6255.89	6255.89	6255.57	53.01	7° 34' 51.6"	40
3	19	0	6258.48	6258.80	6259.05	6258.73	49.81	7" 32' 20.4"	40
15	5	13	6276.19	6276.19	6275.94	6275.94	47.66	154° 40' 58.8"	40
16	1	12	6279.45	6279.79	6279.52	6279.20	43.56	129° 22' 19.2"	40
17	5	5	6282.35	6282.67	6282.67	6282.35	49.82	139° 58' 51.6"	40
65	8	0	6283.63	6283.63	6283.38	6283.38	49.03	93° 27' 10.8"	40
67	8	2	6289.18	6289.50	6289.50	6289.18	50.41	151° 12' 25.2"	40
72	11	6	6309.77	6309.45	6309.45	6309.77	49.76	272* 30' 54.0"	40
73	17	7	6304.71	6304.39	6304.64	6304.96	57.10	263° 28' 51.6"	40
74	14	4	6302.02	6301.53	6301.45	6301.77	54.87	253° 21' 36.0"	40
75	9	0	6299.09	6298.77	6298.52	6298.84	49.42	230° 3' 46.8"	40
76	5	0	6299.43	6299.43	6298.68	6298.68	51.36	52° 57' 14.4"	35
77	5	3	6297,97	6297.65	6297.40	6297.72	47.11	230° 53' 27.6"	25
78	15	0	6296.64	6296.64	6296.89	6296.89	47.41	345* 24' 32.4"	35
79	12	7	6290,89	6290.57	6290.82	6291.14	44.98	236° 40' 26.4"	25
80	9	0	6301.76	6301.36	6301.61	6302.01	48.33	91° 21' 25.2"	40
81	13	0	6301.71	6301.71	6302.21	6302.21	46.41	263° 52' 26.4"	40
52	10	0	6292.70	6292.38	6292.13	6292.45	50.30	257° 46' 48.0"	40
54	14	0	6289.34	6288.94	6289.19	6289.59	49.90	254° 46' 48.0"	40
OPTIONAL					1350			101- 1/	
31	5	14	FIELD FIT		A= 11	Liß	49.59	332* 41' 52.8"	40
33	10	0	FIELD FIT	-81	use To		49.00	11° 36' 39.6"	40
50	2.3	14	6292.70	6292.30	6292.05	6292.45	45.77	250° 20' 45.6"	40
59	20	0	6284.98	6284.98	6285.73	6285.73	45.00	293* 20' 34.8"	40
61	22	0	6280.60	6280.60	6281.35	6281.35	45.00	291° 42' 57.6"	40

NOTE: CUT QUANTITIES SPECIFIED IN TABLE ABOVE INCLUDE A LAYER OF ORGANIC MATERIAL 2\$6 8675309 NOT ALL MATERIAL WILL MEET THE SPECIFICATIONS AS FILL MATERIAL

2. PUBLIC SAFETY, TRAFFIC CONTROL AND DUST CONTROL SHALL BE PROVIDED BY CONTRACTOR IN ACCORDANCE WITH STATE AND COUNTY REQUIREMENTS. SAFE VEHICULAR AND PEDESTRIAN ACCESS SHALL BE PROVIDED AT ALL TIMES DURING CONSTRUCTION. CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN DETAILING STREETS, HIGHWAY, BIKE PATH, AND

3. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE CONTRACTING OFFICER OF ANY DISCREPANCIES ENCOUNTERED IN THE FIELD OR ERRORS IDENTIFIED ON THE PLANS.
4. THE CONTRACTOR SHALL KEEP DETAILED RECORDS AND AS-BUILTS SHOWING ALL MODIFICATIONS MADE TO THESE PLANS. THESE RECORDS AND AS-BUILTS SHALL BE PROVIDED TO

THE CONTRACTING OFFICER UPON PROJECT COMPLETION FOR USE IN PREPARING RECORD DRAWINGS.

5. FOR THE PURPOSE OF THESE PLANS, THE TERM CONTRACTING OFFICER SHALL REFER TO THE FOREST SERVICE CONTRACTING OFFICER OR AUTHORIZED REPRESENTATIVE. 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION STAKING. STAKING SHALL ADHERE TO SECTION 152 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAY PROJECTS (FP-03).

7. CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING MONUMENTS AND OTHER SURVEY MARKERS. ANY MARKERS DESTROYED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTORS EXPENSE.

8. AT NO TIME SHALL THE CONTRACTOR UNDERTAKE TO CLOSE OFF ANY UTILITY OR OPEN VALVES OR TAKE ANY OTHER ACTION WHICH WOULD AFFECT THE OPERATION OF THE EXISTING SYSTEM EXCEPT AS SPECIFICALLY REQUIRED BY THE PLANS, AND AFTER APPROVAL IS GRANTED BY THE RESPECTIVE UTILITY COMPANY.

9. EQUIPMENT STORAGE AND MATERIAL STOCKPILES WILL ONLY BE ALLOWED ON EXISTING OR NEW ASPHALT OR OTHER AREAS APPROVED BY THE CONTRACTING OFFICER.

10. ALL VEGETATION OUTSIDE OF THE DISTURBED SOIL BOUNDARY SHALL BE PROTECTED. 11. WORK HOURS WILL ONLY BE ALLOWED FROM 7:00 A.M. - 7:00 P.M., MONDAY THROUGH FRIDAY. CONSTRUCTION OUTSIDE OF THESE ALLOWABLE HOURS MUST BE COORDINATED

AND APPROVED BY THE CONTRACTING OFFICER. 12. NO RESTROOM WILL BE PROVIDED BY THE GOVERNMENT, CONTRACTOR IS RESPONSIBLE FOR PORTABLE RESTROOMS. LOCATION OF PORTABLE RESTROOMS MUST BE APPROVED BY THE CONTRACTING OFFICER. FOLLOW CASQA SPECIFICATIONS WM-9 SANITARY/SEPTIC WASTE MANAGEMENT, SEE ATTACHED SUPPLEMENT.

13. WATER AND ELECTRICITY IS AVAILABLE AT THE SITE. USE OF THESE UTILITIES MUST BE COORDINATED AND PAID FOR THROUGH THE SPECIAL USE PERMIT HOLDER, CALIFORNIA

14. CAMPING FOR CONTRACTOR'S EMPLOYEES WILL BE PERMITTED WITHIN THE CAMPGROUND. USE OF ANY UTILITIES MUST BE COORDINATED AND PAID FOR THROUGH THE SPECIAL

15. ALL MATERIAL MUST BE CERTIFIED WEED FREE AND COME FROM A LOCATION APPROVED BY THE CONTRACTING OFFICER.

16. CONTRACTOR MUST PROVIDE AN EROSION CONTROL PLAN AND DESIGNATE AN ON-SITE EMPLOYEE TO COMPLETE DAILY BMP INSPECTIONS. PERMITTING THROUGH THE STATE WATER BOARD WILL BE COMPLETED BY THE LTBMU. CONTRACTOR WILL BE REQUIRED TO FOLLOW ALL PERMIT REQUIREMENTS. THESE PLANS AND DRAWINGS ARE CONSISTENT WITH THE PERMITTING REQUIREMENTS. 17. ALL EQUIPMENT WILL ARRIVE ON SITE WASHED AND FREE OF ALL VISIBLE SOIL, DEBRIS, OR ORGANIC MATTER. ALL EQUIPMENT WILL BE INSPECTED BY THE

CONTRACTING OFFICER PRIOR TO ARRIVING ON THE PROJECT SITE. 18. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND VERIFYING LOCATION OF UTILITIES. UTILITY LOCATIONS SHOWN ON DRAWINGS ARE APPROXIMATE.

LEGEND

EXISTING ASPHALT TO REMAIN EXECUTION EXISTING ASPHALT TO BE REMOVED OPTION ITEMS

TREES (DBH LESS THEN 20") TREES (DBH 20"-40")

TREES (GREATER THAN 40")
TREE REMOVAL

WATER SPIGOT SEWER MANHOLE EXISTING CULVERT

EXISTING BUILDING CAMPSITE NUMBER EXISTING CO EXISTING UTILITY POLE E EXISTING CHANNEL

PROPOSED CHANNEL NEW ASPHALT BASE BID NEW ASPHALT OPTIONAL CAMPSITES

NEW ASPHALT OPTIONAL CAMPS
ZZZZ NEW ASPHALT OTHER OPTIONS INFILTRATION BASIN

PROPOSED BUILDING (NIC) CAMPSITE NUMBER NEW DISTURBED SOIL AREA PROPERTY BOUNDARY

CONTROL POINT PROPOSED SIGN @ EXISTING BOULDER

VIII 7/	AB	BREVIATIONS	
AB	AGGREGATE BASE	FG	FINISH GRADE
ABA	ARCHITECTUAL BARRIERS ACT	FIG	FIGURE
AC	ASPHALT CONCRETE	FT	FEET
AGG	AGGREGATE	IB	INFILTRATION BASIN
AQ	ACTUAL QUANTITY	K	RATE OF VERTICAL CURVATURE
ВМР	BEST MANAGEMENT PRACTICES	L L	LENGTH
BP	BEGINNING POINT	LS	LUMP SUM
BVCE	BEGINNING OF VERTICAL CURVE ELEVATION	LSQ	LUMP SUM QUANTITY
BVCS	BEGINNING OF VERTICAL CURVE STATION	LTBMU	LAKE TAHOE BASIN MANAGEMENT UNIT
CASQA	CALIFORNIA STORMWATER QUALITY ASSOCIATION	LVC	LEGTH OF VERTICAL CURVE
CL	CENTER LINE	MAX	MAXIMUM
СМР	CORRUGATED METAL PIPE	MIN	MINIMUM
со	CONTRACTING OFFICER	NIC	NOT IN CONTRACT
COR	CONTRACTING OFFICER REPRESENTATIVE	NOAA	NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
CP	CONTROL POINT	oc	ON CENTER
cq	CONTRACT QUANTITY	PC	POINT OF CURVATURE
CY	CUBIC YARD	PSI	POUNDS PER SQUARE INCH
DBH	DIAMETER AT BREAST HEIGHT	PT	POINT OF TANGENCY
DEG	DEGREE	PVI	POINT OF VERTICAL INTERSECTION
DIA	DIAMETER	R	RADIUS
DWG	DRAWING	REV	REVISION
ELEV	ELEVATION	SF	SQUARE FEET
EP	END POINT	SQ	SQUARE
EVCE	END OF VERTICAL CURVE ELEVATION	STA	STATION
EVCS	END OF VERTICAL CURVE STATION	TYP	TYPICAL

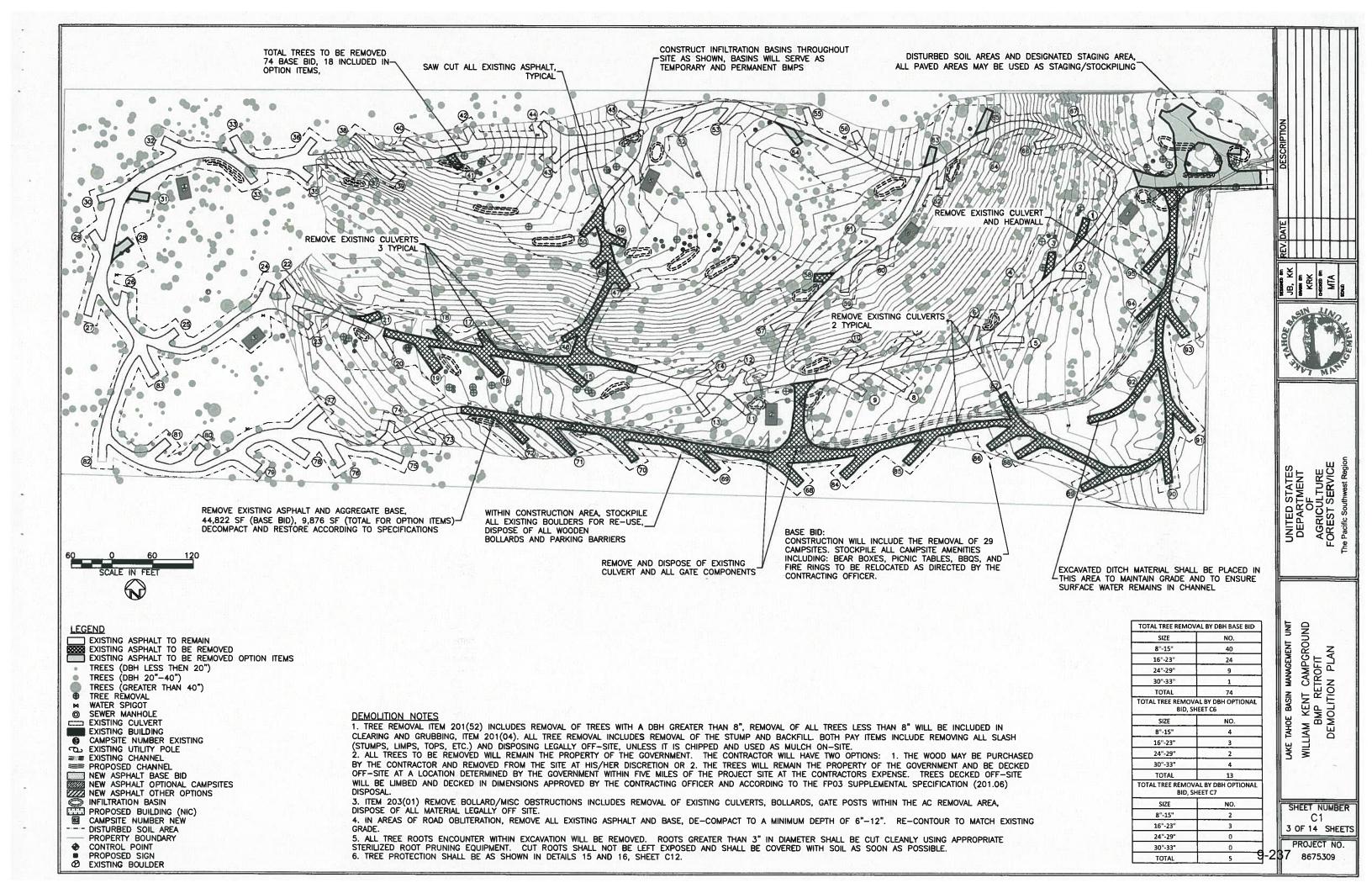
BAS	IN LAYOUT TAI	BLE
NO.	BASE AREA	BASE ELEV.
	150	6247
	640	6246
	300	6244
	320	6243
	50	6245
	15	6246.6
	112	6260
17/4	240	6267.8
	240	6267
	150	6269
	170	6276.5
17	216	6776.5
	208	6783
	86	6287
111	FIELD FIT	FIELD FIT
	50	6299
5	100	6313
	233	6307
3	360	6302
	212	6299
)	375	6297
L	390	6294
2	250	6282
3	100	9298
	250	6297
,	460	6286
5	183	6280.5
	400	

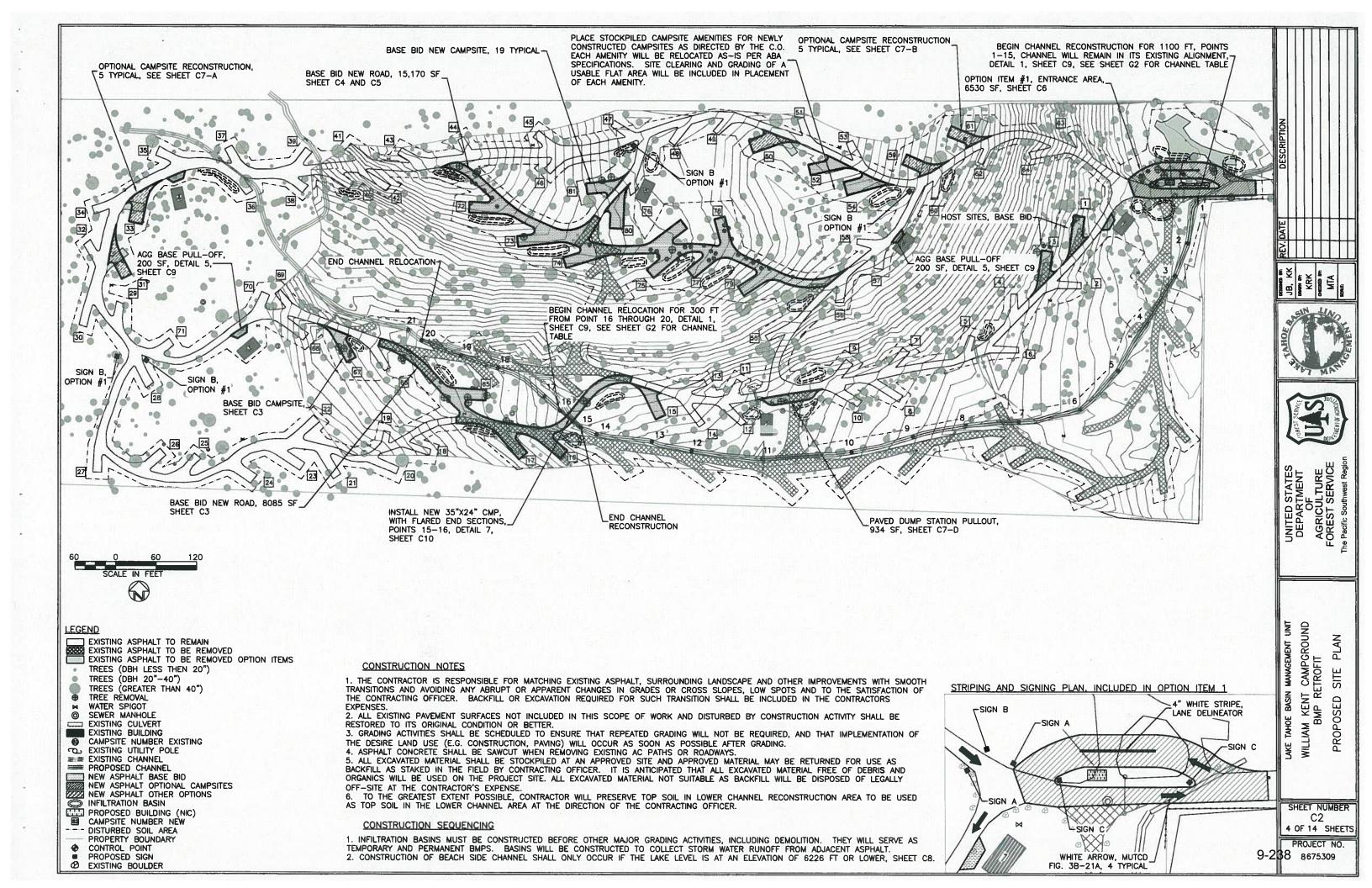
TAHOE CITY, CA 96145

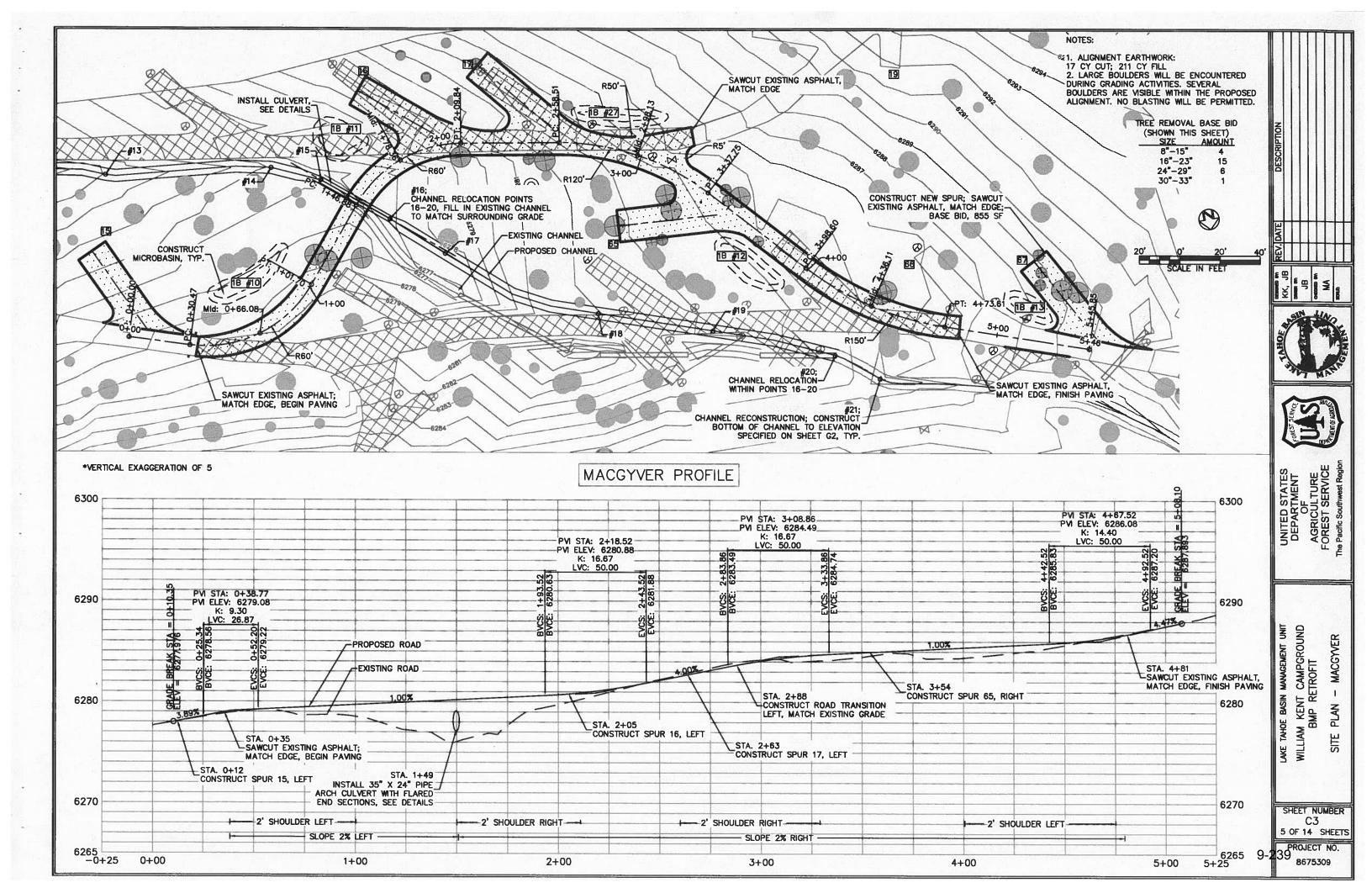
CAMPGROUND MANAGEMENT WILLIAM

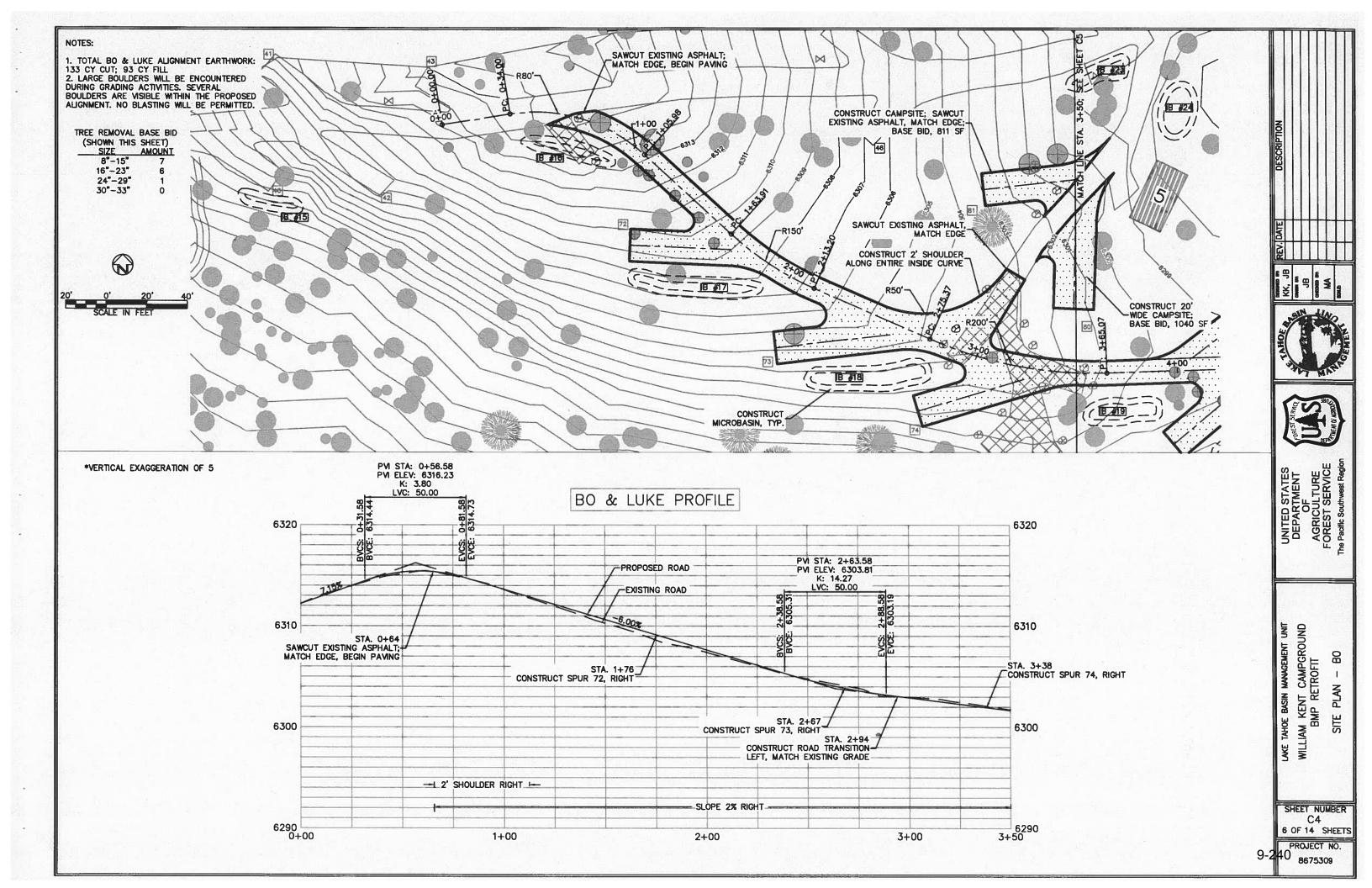
SHEET NUMBER 2 OF 14 SHEETS

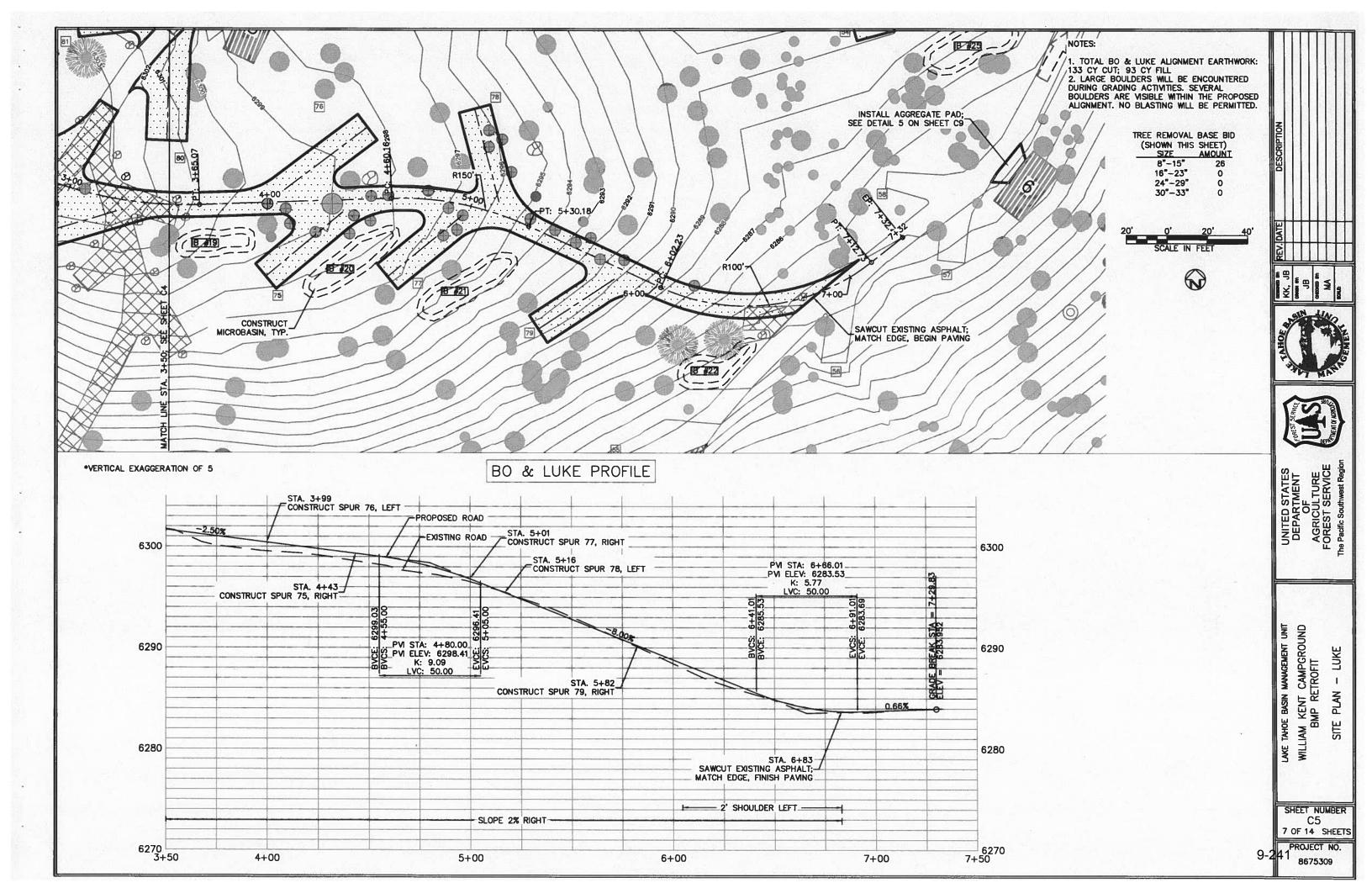
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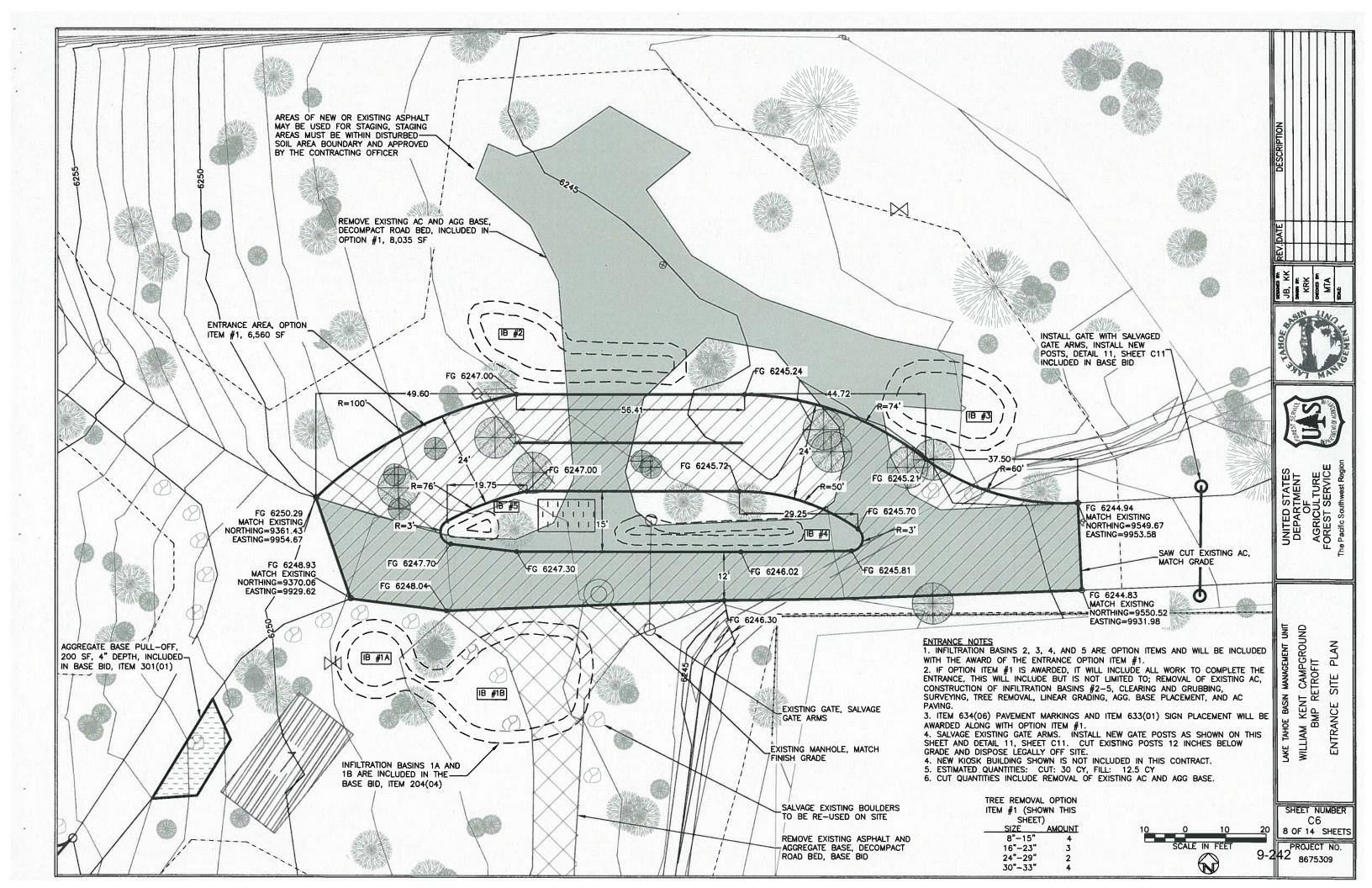


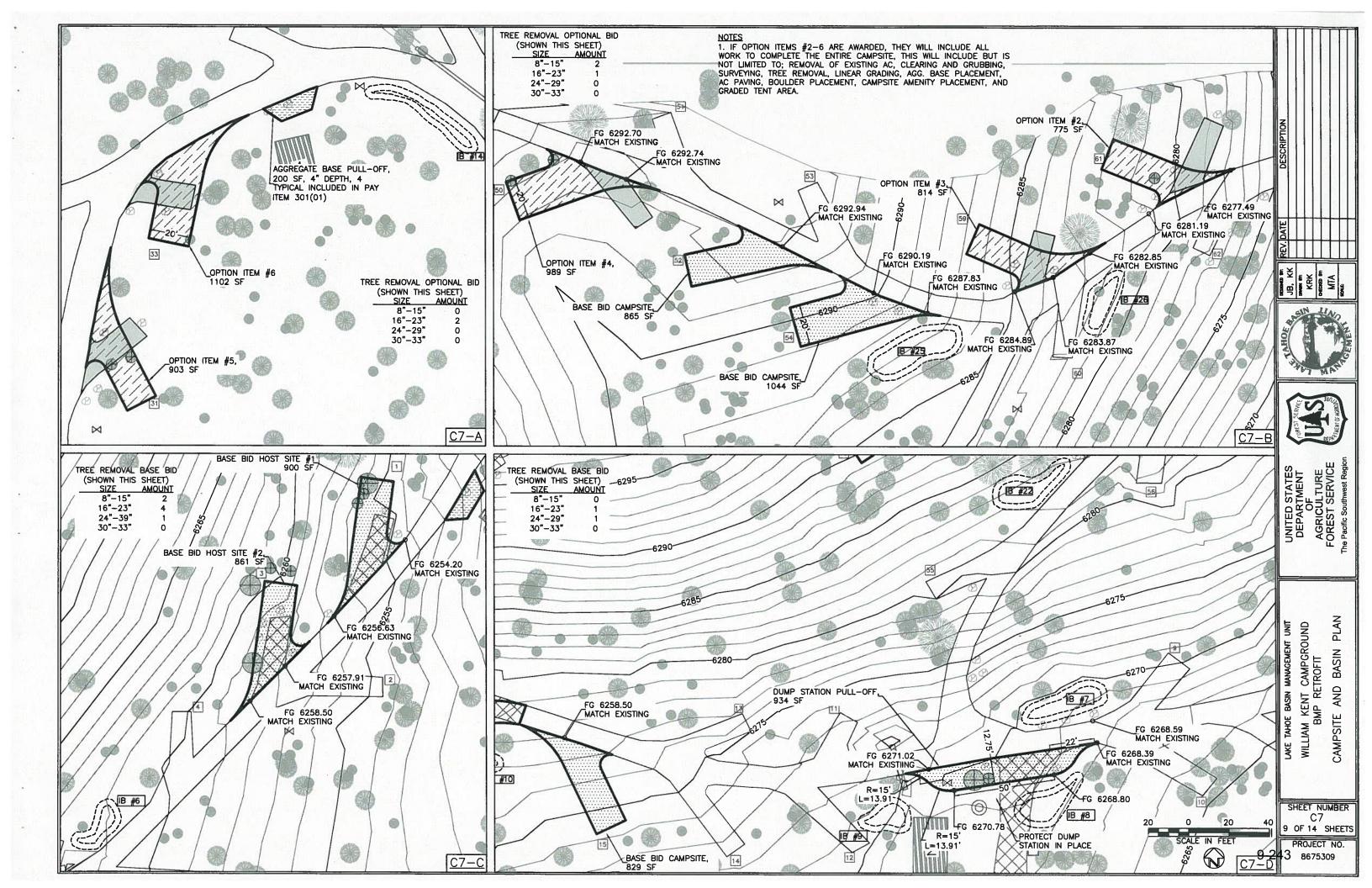


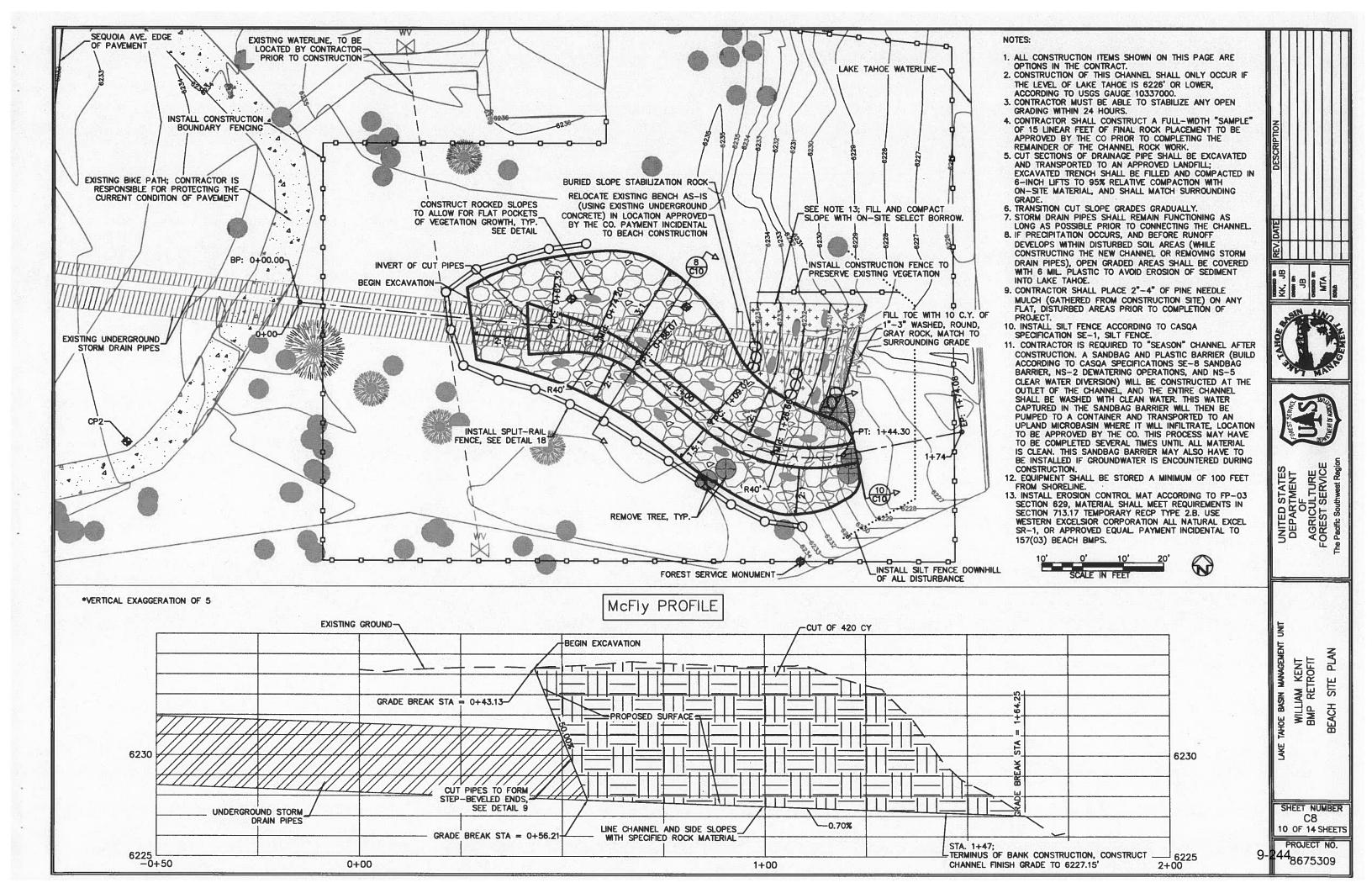


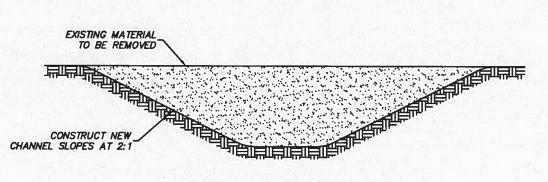




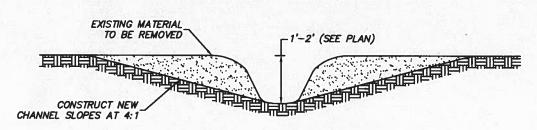








CHANNEL RELOCATION (POINTS 16-20)



CHANNEL RECONSTRUCTION (POINTS 1-15)

*CURRENT CHANNEL ALIGNMENT DOES NOT CHANGE FOR CHANNEL RECONSTRUCTION

-1'-2' (SEE PLAN) CUT 2:1 **ASPHALT** 5% MAX. SLOPE 2% PER PLAN FILL3:1 COMPACT SELECT BORROW FILL TO DAYLIGHT

PAVEMENT SURFACE SHALL BE 3" COMPACTED ASPHALT ON 4" COMPACTED AGGREGATE BASE. ALL BASE MATERIAL TO BE COMPACTED TO 95% RELATIVE COMPACTION.

MAX 4' CLEAR MIN 1/3 BELOW]
GRADE COMPACT TOP 6" OF SUBGRADE TO 85%-EMBED BOULDER RELATIVE COMPACTION. IN SOIL TO APPEAR NATURAL.

NOTES:

1. LOCATE BOULDERS 2' MIN, 3' MAX FROM EDGE OF PAVEMENT. 2. MAXIMUM SPACE BETWEEN FACE OF BOULDERS SHALL BE 4'. 3. ALL BOULDERS TO BE RELOCATED FROM ON SITE. PAYMENT FOR MOVEMENT AND PLACEMENT ONLY.

BOULDER PLACEMENT

4. HANDLE BOULDER WITH CARE TO AVOID SCRATCHES AND DAMAGE.

ROAD SECTION

BUILD BASE ELEVATION AND AREA ACCORDING TO MICROBASIN TABLE

ROADWAYS INTO BASIN 3:1 MAX. SIDE SLOPE (TYP) -

MICROBASIN TYPICAL

NATIVE SOILS-

MAINTAIN POSITIVE SLOPE TO COLLECT WATER FROM

4" COMPACTED AGGREGATE PAD

INSTALL A 4 INCH, 200 S.F. COMPACTED AGGREGATE PAD ADJACENT TO THE ROAD AT EACH RESTROOM (TOTAL OF 4 PADS).
WORK SHALL CONSIST OF MINOR CLEARING AND GRUBBING,
RELOCATING BOULDERS, AND COMPACTING AGGREGATE TO 95%
RELATIVE COMPACTION. NO GRADING WILL BE NECESSARY.

5 **AGGREGATE PAD NEAR RESTROOMS**

CHANNEL DETAILS

RADIUS VARIES, SEE CAMPSITE TABLE 25' PARKING AREA -12" SHOULDER FDGF OF PAVEMENT 16 FEET, UNLESS OTHERWISE NOTED AZIMUTH VARIES, SEE CAMPSITE TABLE PLACE 4 BOULDERS AROUND EACH NEW SPUR IN LOCATIONS APPROVED BY THE CO CENTERLINE CAMPSITE LENGTH TRAFFIC R5', TYP. DISTANCE VARIES, SEE TABLE

A, SEE TOP OF

PAVEMENT ELEVATION

90% RELATIVE COMPACTION ON SELECT

AS REQUIRED FOR A LEVELING COARSE

BORROW OR NATIVE MATERIAL (TYP.)

WITHIN CAMPSITE TABLE

CAMPSITE DETAIL TYPICAL

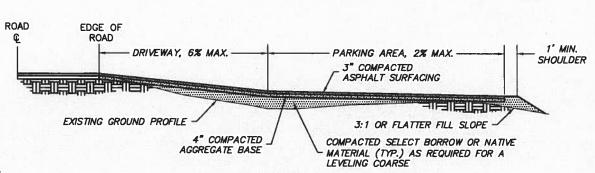
--- 12" SHOULDER

3:1 OR FLATTER FILL

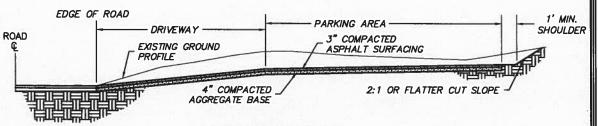
SLOPE

CAMPSITE NOTES:

- 1. CROSS SLOPE OF CAMPSITE SHALL BE 2% MAX.
- 2. MATCH ELEVATIONS PROVIDED WITHIN CAMPSITE TABLE; TRANSITION GRADUALLY TO AVOID ABRUPT ELEVATION CHANGES.
- 3. CONSTRUCT 12" MINIMUM SHOULDERS OF AGGREGATE SIDES AND BACK, COMPACTED TO 95% RELATIVE COMPACTION. SEE SURFACE DETAIL.
- 4. SUITABLE EXCAVATED MATERIAL MAY BE USED AS ADDITIONAL BACKFILL OUTSIDE OF SHOULDER TO MEET DESIRED GRADE, AS APPROVED BY CO.
- 5. REFER TO SITE PLAN FOR SPUR NUMBERS LISTED IN THE TABLE.
- PLACE STOCKPILED CAMPSITE AMENITIES FOR NEWLY CONSTRUCTED CAMPSITES AS DIRECTED BY THE COR. EACH AMENITY WILL BE RELOCATED AS-IS PER ABA SPECIFICATIONS. PAYMENT FOR SITE CLEARING AND GRADING OF A USABLE FLAT AREA WILL BE INCLUDED IN PLACEMENT OF EACH AMENITY.



CAMPSITE PROFILE IN FILL



CAMPSITE PROFILE IN CUT

SHEET NUMBER OF 14 SHEETS

INT CAMPGROUND
RETROFIT

M KENT BMP RF

CAMPGROUND

UNITED STATES
DEPARTMENT

PROJECT NO. 9-245 8675309

TYPICAL CAMPSITE CROSS SECTION

16' UNLESS

OTHERWISE NOTED

3" COMPACTED

ASPHALT SURFACING

EXISTING GROUND PROFILE

CAMPSITE DETAILS

4" COMPACTED

AGGREGATE BASE

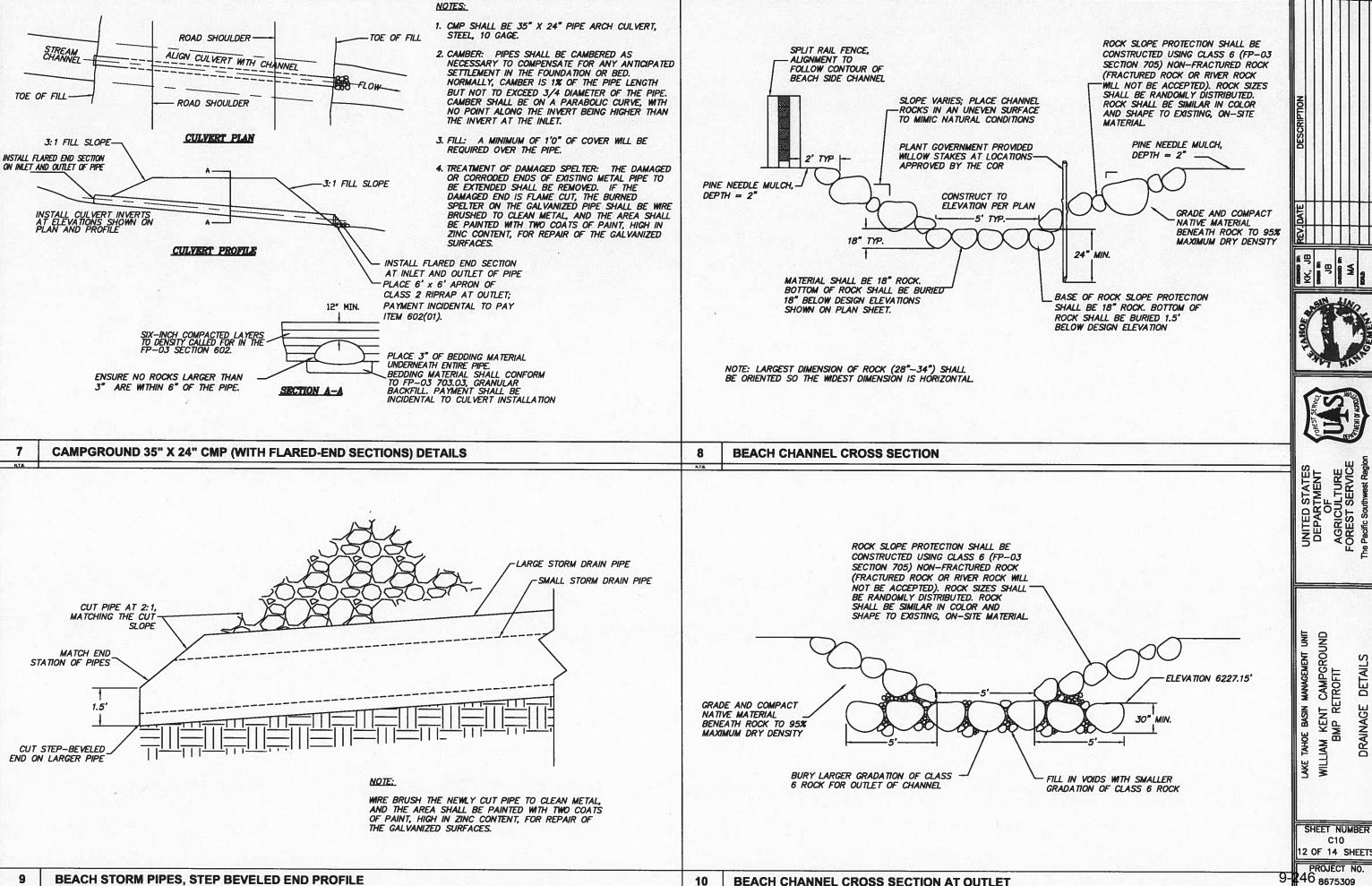
2:1 OR FLATTER

CUT SLOPE

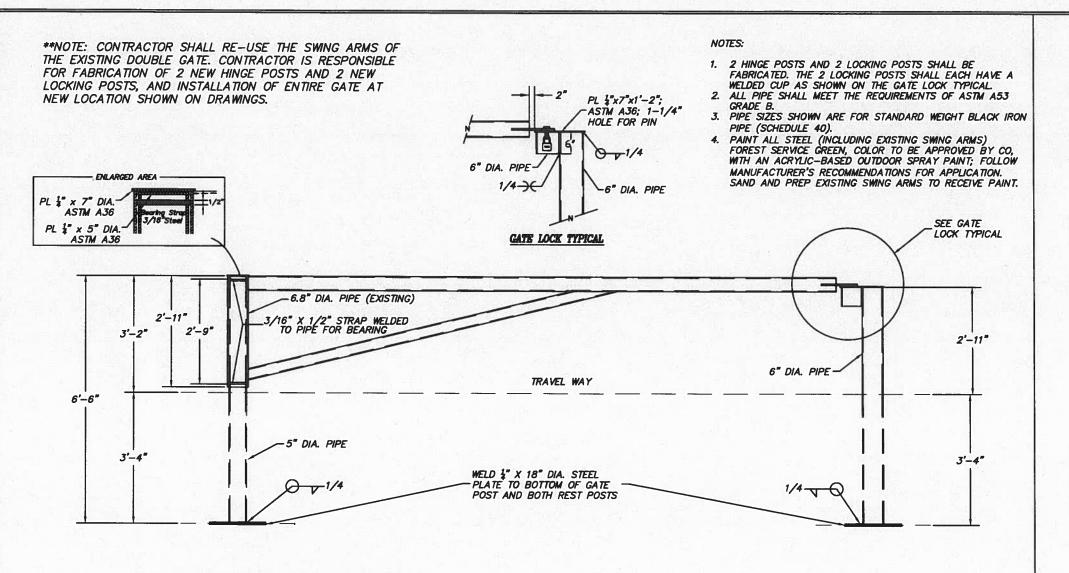
CAMPGROUND ROAD

CENTERLINE

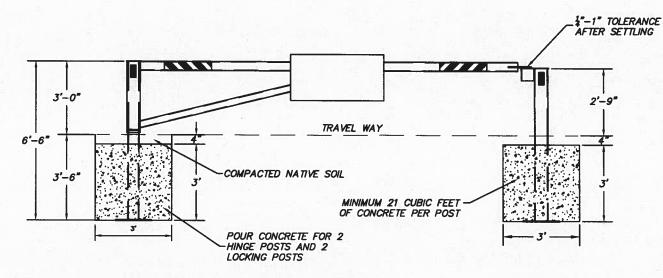
12" SHOULDER -



C10 2 OF 14 SHEETS PROJECT NO. 9-246 8675309



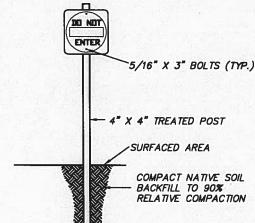
GATE PABRICATION (DISPLAYING HALF OF DOUBLE GATE)



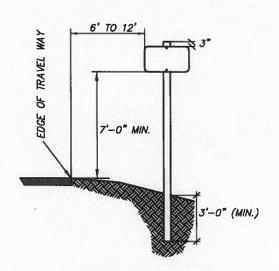
GATE INSTALLATION (DISPLAYING HALF OF DOUBLE GATE)

NOTES:

- CONCRETE SHALL HAVE A 3000 PSI 28-DAY COMPRESSIVE STRENGTH, AND SHALL FOLLOW FP-03 SPECIFICATIONS 701
- 2. CONCRETE SHALL BE POURED INTO HOLES FOR THE 2 HINGE POSTS AND THE 2 LOCKING POSTS.
- OVER EXCAVATED POST HOLES SHALL BE FILLED WITH
- ALL CONCRETE WASTE (INCLUDING WASHOUT) SHALL BE COLLECTED AND DISPOSED OF OFF-SITE. PIPE SIZES SHOWN ARE FOR STANDARD WEIGHT BLACK IRON
- PIPE (SCHEDULE 40).
 GATE AND LOCKING MECHANISM SHALL BE INSPECTED BY
 THE CO PRIOR TO GATE INSTALLATION.
 LOCATION OF GATE WILL BE APPROVED BY THE CO PRIOR
- TO INSTALLATION.
- APPLY GREASE TO TOP OF HINGE POST AND BEARING SURFACES DURING INSTALLATION.



SINGLE POST SIGN



SIGN INSTALLATION DETAILS

SIGN LIST

SIGN #A:	STOP SIGN	R-1-24"	(2 REQ.)	
SIGN #B:	DO NOT ENTER	R5-1-30"	(5 REQ.)	
SIGN #C:	KEEP RIGHT	R4-7a-18x24" (2 REQ.)		

NOTES:

- 1. ALL SIGNS SHALL BE 0.06" THICK ALUMINUM, HIGH INTENSITY GRADE, RETROREFLECTIVE.
- ALL SIGNS AND POSTS SHALL BE CENTERED AND LEVEL. DIMENSIONS FOR SIGN INSTALLATION ARE SCHEMATIC.
- FINAL PLACEMENT OF SIGN SHALL BE APPROVED BY THE CO PRIOR TO INSTALLATION. SEE FP-03 SECTION 633 FOR ADDITIONAL REQUIREMENTS. ALL SIGNS SHALL BE INSTALLED USING VANDAL RESISTANT
- BOLTS AND NUTS.
- INSTALLATION DATE AND VANDAL WARNING LABELS SHALL BE INSTALLED ON ALL SIGNS IN ACCORDANCE WITH FS MANUAL EM 7100-15.





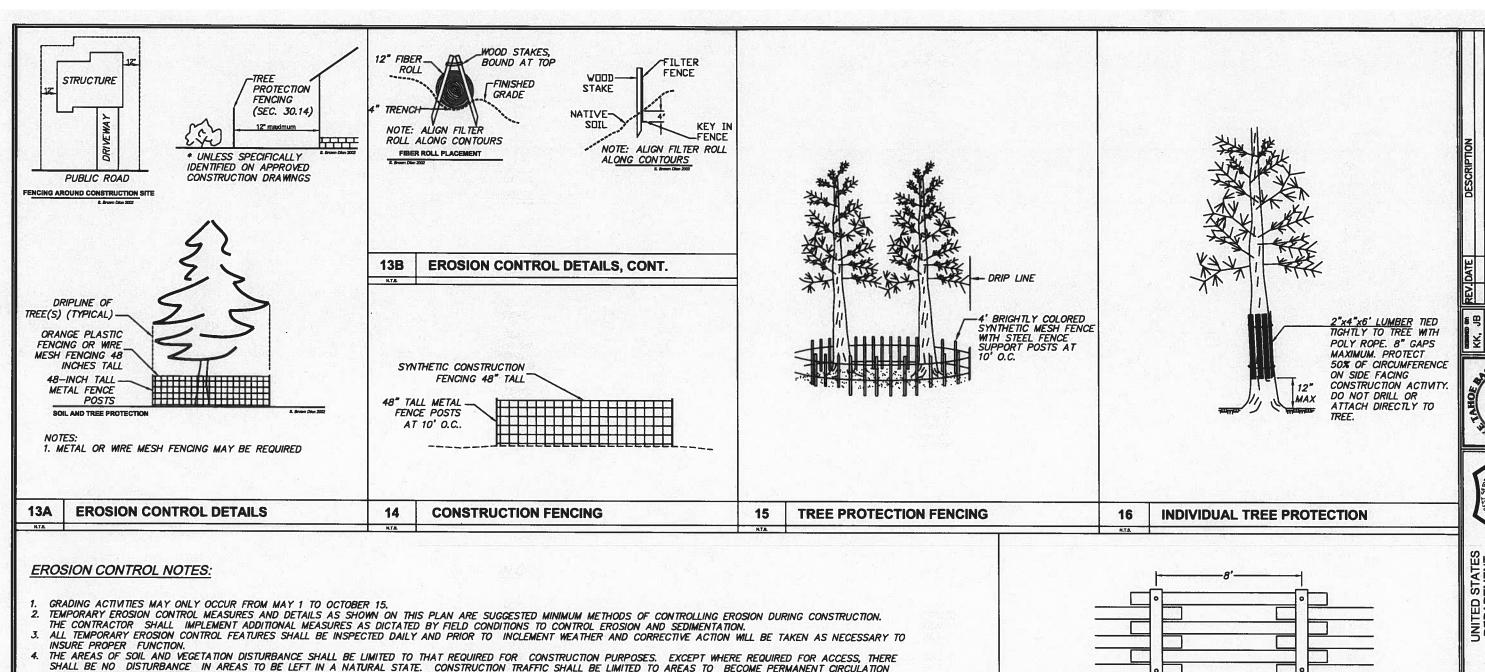


OF AGRICULTURE FOREST SERVICE UNITED STATES
DEPARTMENT

> DETAILS SIGN M KENT BMP RE GATE

SHEET NUMBER C11 3 OF 14 SHEETS

PROJECT NO. 9-247 8675309



THE AREAS OF SOIL AND VEGETATION DISTURBANCE SHALL BE LIMITED TO THAT REQUIRED FOR CONSTRUCTION PURPOSES. EXCEPT WHERE REQUIRED FOR ACCESS, THERE SHALL BE NO DISTURBANCE IN AREAS TO BE LEFT IN A NATURAL STATE. CONSTRUCTION TRAFFIC SHALL BE LIMITED TO AREAS TO BECOME PERMANENT CIRCULATION (E.G., ROADWAYS AND PARKING AREAS, ETC.) OR OTHER DESIGNATED ROUTES APPROVED BY THE CO.
FIBER ROLLS SHALL BE PLACED ALONG THE DOWNSLOPE EDGE OF STAGING AREAS TO PREVENT CONTAMINATED RUNOFF.

STOCKPILES SHALL BE LOCATED IN ALREADY DISTURBED AND FLAT AREAS, AND SHALL BE SURROUNDED WITH FIBER ROLLS. IF A STOCKPILE IS INACTIVE FOR 14 DAYS, IT SHALL BE STABILIZED WITH HYDRAULIC MULCH OR GEOTEXTILE.

CONTRACTOR IS REQUIRED TO HAVE SEDIMENT CONTROLS ON SITE. IF A 30% OR GREATER CHANCE OF PRECIPITATION IS PREDICTED BY NOAA, CONTRACTOR SHALL TAKE NECESSARY STEPS TO PROTECT AREAS DISTURBED BY CONSTRUCTION FROM EROSION AND/OR SUBSEQUENT DISCHARGE OF EARTHEN MATERIALS FROM THE SITE, FOR EXAMPLE, IF A RECENTLY GRADED AREA DOES NOT LEAD TO AN INFILTRATION BASIN, FIBÉR ROLLS MAY HAVE TO BE PLACED ON THE DOWNSLOPE EDGE OF DISTURBANCE

REMOVAL OF NATIVE VEGETATION SHALL BE MINIMIZED. CONTRACTOR WILL PLACE WOOD OR PINE NEEDLE MULCH 2"-4" THICK IN DISTURBED AREAS DESIGNATED BY THE CO. ALL DISTURBED AREAS SHALL BE MULCHED, EXCEPT FOR THE LOWER CHANNEL RECONSTRUCTION AREA (THIS AREA WILL BE REVEGETATED BY OTHERS). ALL MATERIAL TO BE CHIPPED WILL BE OBTAINED FROM SLASH ONSITE.

CONTRACTOR SHALL MAINTAIN ADEQUATE DUST CONTROL PER STANDARD SPECIFICATIONS (PAYMENT FOR WATERING IS INCIDENTAL TO CONTRACT). MEASURES SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:

A. CONSTRUCT MAJOR DUST—GENERATING ACTIVITIES WHEN WIND VELOCITIES ARE LOW.

B. SPRINKLE WORK AREAS, CONSTRUCTION EQUIPMENT TRAVEL ROUTES, AND EQUIPMENT TO CONTROL DUST.

C. RESTRICT ALL TRUCKS AND VEHICLES WITHIN CONSTRUCTION SITE TO A MAX. SPEED OF 15 MPH.

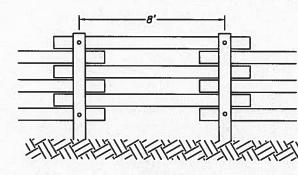
D. WATER APPLICATION RATES SHALL BE MINIMIZED AS NECESSARY TO PREVENT RUNOFF AND PODDING.

10. IF TRACKING IS EVIDENT DUE TO CONSTRUCTION, CONTRACTOR SHALL BROOM EXCESS SEDIMENT TO AN AREA IT WON'T BE CARRIED AWAY BY STORM FLOWS. IF THIS PROVES INADEQUATE, CONTRACTOR SHALL INSTALL A STABILIZED EXIT, SUCH AS A TIRE WASH OR ROCK APRON.

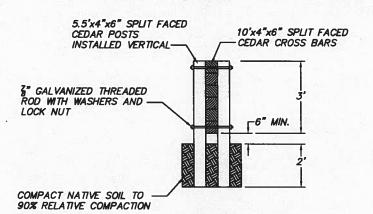
11. SPILL KITS WITH ABSORBENT PADS SHALL BE ON SITE AT ALL TIMES IN PREPARATION OF EQUIPMENT LEAKS. ALL VEHICLE MAINTENANCE SHALL TAKE PLACE AT LEAST 100 FEET FROM SURFACE WATER AND ON A LEVEL AREA.

12. IN CONSTRUCTION AREAS TO BE REVEGETATED WHERE THE SUBSOIL LAYER HAS BEEN COMPACTED, RIPPING SHALL BE CONDUCTED DURING THE FINAL STAGES TO LOOSEN SOIL, ALLOWING FOR BETTER SUBSURFACE DRAINAGE AND ROOT PENETRATION. TOPSOIL AND OTHER FILL MATERIAL TEMPORARILY STORED SHALL BE PROTECTED FROM EROSION BY MEANS APPROVED BY THE CO.

13. DISTURBANCE CREATED BY CONSTRUCTION SHALL BE STABILIZED WITHIN 24 HOURS OF CESSATION OF TRAVEL INTO SUCH AREAS. IF WORK HAS CEASED IN AN AREA OR IF AN AREA IS FOUND TO BE SUBJECT TO POTENTIAL EROSION PROBLEMS ASSOCIATED WITH VEGETATION LOSS AND SOIL COMPACTION, EFFORTS TO STABILIZE SUCH AREAS SHALL BE INITIATED THE NEXT WORK DAY FOLLOWING THE INSPECTION. STABILIZATION OF THESE AREAS SHALL BE CARRIED OUT UTILIZING BMP'S.



PROFILE



SECTION

I KENT CAMPGROUND BMP RETROFIT TAHOE BASIN MANAGEMENT

OF AGRICULTURE FOREST SERVICE

SHEET NUMBER C12 4 OF 14 SHEETS

TEMPORARY BMP NOTES

SPLIT RAIL FENCE DETAIL (OPTION #8)

PROJECT NO.

9-148 8675309

Appendix D - Visual Monitoring/BMP Inspection Form

Visual Monitoring/BMP Inspection Form

Observer:

FEATURE INSPECTED DISCREPANCY
DETECTED? CIRCLE ONE

	DETECTED:	
DAMAGE TO CONTAINMENT MEASURES OR EROSION CONTROL FENCING	YES	NO
IMPROPERLY INSTALLED OR INEFFECTIVE BOUNDARY FENCE	YES	NO
VEHICLE ACCESS INTO A "NO DISTURBANCE AREA"	YES	NO
DISTURBED AREAS WITH INADEQUATE EROSION PREVENTION AND SEDIMENT CONTROL PROTECTION	YES	NO
EVIDENCE OF SEDIMENT LEAVING OR NOT ENTERING INTO ADJACENT SEDIMENT BASINS; APPROXIMATE % OF SEDIMENT BASIN CAPACITY IF WATER IS PRESENT	YES	NO
SEDIMENT PILES LEFT UNPROTECTED OR LOCATED IN A DRAINAGE WAY	YES	NO
SPILLED OR IMPROPERLY STORED HAZARDOUS MATERIALS	YES	NO
ANY EVIDENCE OF SEDIMENT TRACKING DUE TO CONSTRUCTION	YES	NO
ANY SIGNS OF SOIL EROSION OR DEPOSITION DOWNGRADIENT FROM RUNOFF DISCHARGES	YES	NO
SEDIMENT ACCUMULATION WITHIN ONSITE WATER DRAINAGE CONTROL STRUCTURES.	YES	NO
ANY EVIDENCE OF ILLICIT, NOT AUTHORIZED, OR AUTHORIZED NON-STORM WATER DISCHARGES.	YES	NO
ANY OBSERVED IMPACTS TO A RECEIVING WATER	YES	NO

IF "YES" IS AN ANSWER TO ANY OF THE QUESTIONS ABOVE, THE FOLLOWING PAGE WILL BE FILLED OUT WITH A DOCUMENTED EXPLANATION AND A DESCRIPTION OF REMEDIAL ACTION TAKEN.

Date/Time:
Observer:
Describe Discrepancy Detected:
Location of Discrepancy (include photo of incident):
Weather Conditions:
Remedial Action(s) Taken:

Appendix E - Rain Event Action Plan Template

Rain Event Action Plan (REAP)				
William Kent BMP Retrofit Project				
Site Information: Placer County, CA T15N, R16E Section 24				
QSP (name and emergency contact): J	lordan Bur	ge, 530-543-2670		
Storm water sampler:				
Date of REAP:		WDID No:		
Date Rain Predicted to Occur:		Predicted % chance of rain:		
Predicted Rain Event Triggered Actions Below is a list of suggested actions and items to review for this project. All material storage areas, stockpiles, waste management areas, vehicle and equipment storage and maintenance, areas of active soil disturbance, and areas of active work shall be checked to ensure the proper implementation of BMPs. Project-wide BMPs should be checked and cross referenced to the appropriate map, EPS sheet and/or BMP Fact sheet.				
Activity	Suggeste	d action(s) to perform / items to review		
Scheduling	☐ Inform project personnel of predicted rain ☐ Check scheduled activities and reschedule as needed ☐ Schedule staff for rain inspections (including weekends & holidays) ☐ Other: ☐			
Material Stock and Storage	 ☐ Hazardous materials or materials that could be damaged by precipitation are under cover or in a storage container ☐ Ensure enough plastic material and other temporary BMPS are available and ready for the day-use site, if open graded areas exist ☐ Verify Erosion and Sediment Control (ESC) material stock is adequate and available ☐ Perimeter control around stockpiles ☐ Materials and equipment properly stored and covered ☐ Other: 			

	☐ Waste and debris removed from site			
	☐ Open excavations properly protected			
	$\hfill\Box$ Perimeter controls around disturbed areas and site boundaries			
Operations	☐ Port-a-potty closed and maintained			
	$\ \square$ Pumps fueled and BMP materials ready or in place for day-use site			
	☐ Any open utility piping stabilized or covered			
	☐ Any concrete or asphalt waste removed from site			
	□ Other:			
	☐ Spill kits ready and available			
	☐ All incident spills and drips contained and cleaned			
C. III. O. D. I.	☐ Drip pans emptied			
Spills & Drips	☐ Other:			
Other/ Discussion/ Diagrams				
Attach a printout of the weather forecast from the NOAA website to the REAP				
I certify under penalty of law that this Rain Event Action Plan (REAP) will be performed in accordance with the General Permit by me or under my direction in accordance with a system designed to assure qualified personnel properly gathered and evaluated information submitted.				
Qualified SWPPP Practitioner (QSP)	Date			

Appendix F - Permit Documents

*This appendix will be updated with permit documents when permits are approved.

Appendix G - Training Logs

Personnel Training Log

Storm water Management Training Log and Documentation					
Project Name:					
WDID #:					
Storm water Management Topic: (circle as appropriate)					
Erosion Control Sedimer	Sediment Control Wind Erosion Control Storm water Sampling				
Non-Storm water Management	vater Management Waste Management and Materials Pollution Control				
Storm Water Sampling					
Specific Training Objective: _					
Location:	ocation: Date:				
nstructor: Telephone:					
Course Length (hrs):					
Attendee Roster					
Name of Personnel	Name of Person	nnel	Name	of Personnel	

Appendix H - Prohibition Exemption Information

From Attachment F, Waste Discharge Prohibition Information for Activities in Stream Environment Zones and Floodplains of the Lake Tahoe Hydrologic Unit, of the Tahoe Construction Permit R6T-2011-0019

Chapter 5, section 5.7 of the Basin Plan provides that exemptions may be granted in floodplains under certain categories. The William Kent BMP Retrofit Project fits most appropriately under the following categories:

- 1. Public outdoor recreational facilities if: (a) the project is a necessary part of a public agency's long range plans for public outdoor recreation; (b) the project, by its very nature, must be sited in a floodplain; (c) there is no feasible alternative that would reduce the extent of encroachment in a floodplain; and (d) the impacts on the floodplain are minimized; and
- 4. Erosion control projects, habitat restoration projects, SEZ restoration projects and similar projects provided that the project is necessary for environmental protection, and there is no reasonable alternative which avoids or reduces the extent of encroachment in the floodplain.

Chapter 5, section 5.8 of the Basin Plan provides that exemptions may be granted in SEZs under certain categories. The William Kent BMP Retrofit Project fits most appropriately under the following category:

Public Outdoor Recreation facilities, when all of the following findings can be made:

 (a) the project, by its very nature, must be sited in an SEZ;
 (b) there is no feasible alternative that would reduce the extent of SEZ encroachment;
 (c) impacts are fully mitigated;
 (d) SEZs are restored in an amount 1.5 times the area of SEZ disturbed or developed for the project.

The following answers #1 from Section 5.7 and 5.8 of the Basin Plan.

1. (a) the project, by its very nature, must be sited in a floodplain and SEZ:

See the William Kent BMP Retrofit and Administrative Site Redevelopment Environmental Assessment for a full analysis of the location and impacts of the campground and storm drain system. Also see Section II.A. Project Description for a detailed explanation of construction planned for 2014. The William Kent Campground is located within a confined site, surrounded by non-Forest Service property on all sides. There are currently two

constructed channels that enter the campground, and they combine into one channel that exits the campground. The SEZ boundary primarily follows these channels. This project will move a significant portion of the campground away from this SEZ boundary, but in order to connect the road and storm drain system, a minimized portion must remain.

The storm drain pipes that drain directly into Lake Tahoe are in a confined location. They drain the campground across from Highway 89, the neighborhoods above the campground, and the highway corridor north of the project site. In order to drain these areas, the drainage location must remain.

1. (b) there is no feasible alternative that would reduce the extent of floodplain and SEZ encroachment:

One of the main goals of this project is to locate infrastructure away from SEZ. The portions of the project still within the SEZ boundary were minimized. For example, this project will reduce roadway crossings over the main channel from 9 crossings to 4 crossings. Additionally, the amount of disturbance in SEZ will be reduced from 23,028 square feet to 7,212 square feet.

The storm drain pipes adjacent to Lake Tahoe drain a portion of Highway 89, the William Kent Campground, and portions of the neighborhood above the campground. There are currently several infiltration basins that capture most surface water from the neighborhood and campground. But a drainage location must remain to accommodate the highway corridor and large storms in which surface water overtops basins.

1. (c) impacts on the floodplain are minimized; and impacts in the SEZ are fully mitigated:

As discussed above, permanent impacts to the floodplain and SEZ will be minimized. During construction, the impacts will also be minimized. Construction will take place between May 1 and October 15, maximizing the chance that the SEZ will be dry. Construction impacts will be minimized within the SEZ by limiting disturbance to within a maximum of 10 feet of the channel, or on existing or proposed roads (see Figures 2-7). The removal of a section of the storm drain pipes will only occur when the Lake Tahoe water level is at an elevation of 6,226 feet or lower. This will ensure minimal disturbance to the lakeshore during construction of the new channel. Additionally, micro-basins will be constructed within the campground to ensure storm water from impervious surfaces is captured to infiltrate. During construction, these micro-basins will be one of the first

features built in order to capture sediment from recently graded ground during summer storms.

Impacts in the SEZ will be fully mitigated through temporary BMPs during construction, and permanent BMPs post-construction. Within the SEZ, BMPs will include uniform decompaction, recontouring the existing ditch to mimic a natural swale condition, and hydromulch placement with native seed. Mitigation measures for this project include BMPs found in the William Kent BMP Retrofit Environmental Assessment, as well as with BMPs specifically identified for this type of construction. Each applicable BMP is described below. For the monitoring requirements that ensure these permanent BMPs are functioning correctly, see the actions reported in Section V.B. Visual Monitoring.

Applicable BMPs from the William Kent BMP Retrofit EA:

Nation Core BMPs	Best Management Practice Objective Description
Plan-1. Forest and Grassland Planning	Use the land management planning and decision making processes to incorporate direction for water quality management consistent with laws, regulation, and policy into land management plans.
Plan-2. Project Planning and Analysis	Use the project planning, environmental analysis, and decision making processes to incorporate water quality management BMPs into project design and implementation.
Plan-3. Aquatic Management Zone Planning	To maintain and improve or restore the condition of land around and adjacent to waterbodies in the context of the environment in which they are located, recognizing their unique values and importance to water quality while implementing land and resource management activities.
AqEco-1. Aquatic Ecosystem Improvement and Restoration Planning	Reestablish and retain ecological resilience of aquatic ecosystems and associated resources to achieve sustainability and provide a broad range of ecosystem services.
AqEco-2. Operations in Aquatic Ecosystems	Avoid, minimize, or mitigate adverse impacts to water quality when working in aquatic ecosystems.
AqEco-4. Stream Channels and Shorelines	Design and implement stream channel and lake shoreline projects in a manner that increase the potential for success in meeting project objectives and avoids, minimizes or mitigates adverse effects to soil, water quality and riparian resources.

Fac-1. Facilities and Nonrecreation Special Uses Planning	Use the applicable special use authorization and administrative facilities planning processes to develop measures to avoid, minimize or mitigate adverse effects to soil, water quality and riparian resouces during construction and operation of facilities and nonrecreation special uses activities.
Fac-2. Facility Construction and Stormwater Control	Avoid, minimize or mitigate adverse effects to soil, water quality and riparian resources by controlling erosion and managing stormwater discharge originating from ground disturbance during construction of developed sites.
Fac-4. Sanitation Systems	Avoid, minimize or mitigate adverse effects to soil and water quality from bacteria, nutrients and other pollutants resulting from collection, transmission, treatment and disposal of sewage and wastewater at facilities.
Fac-5. Solid Waste Management	Avoid, minimize or mitigate adverse effects to water quality from trash, nutrients, bacteria and chemicals associated with solid waste management at facilities.
Fac-6. Hazardous Materials	Avoid or minimize short- and long-term adverse effects to soil and water resources by preventing releases of hazardous materials.
Fac-7. Vehicle and Equipment Wash Water	Avoid or minimize contamination of surface water and groundwater by vehicle or equipment wash water that may contain oil, grease, phosphates, soaps, road salts, other chemicals, suspended solids, and invasive species.
Rec-1. Recreation Planning	Use the applicable recreation planning process to develop measures to avoid, minimize or mitigate adverse effects to soil, water quality and riparian resources during recreation activities.
Rec-2. Developed Recreation Sites	Avoid, minimize or mitigate adverse effects to soil, water quality and riparian resources at developed recreation sites by maintaining desired levels of ground cover, limiting soil compaction and minimizing pollutants entering waterbodies.
Road-2. Road Location and Design	Locate and design roads to avoid, minimize or mitigate adverse effects to soil, water quality and riparian resources.
Road-3. Road Construction	Avoid or minimize adverse effects to soil, water quality and riparian resources from erosion, sediment and other pollutant delivery during road construction or reconstruction.
Road-4. Road Operations and Maintenance	Avoid, minimize, or mitigate adverse effects to soil, water quality and riparian resources by controlling road use and operations and providing adequate and appropriate maintenance to minimize sediment production and other pollutants during the useful life of the roads.
Road-6. Road Storage and Decommissioning	Avoid, minimize or mitigate adverse effects to soil, water quality and riparian resources by storing closed roads not needed for at least 1 year and decommissioning unneeded roads in a hydrologically stable manner to eliminate hydrologic connectivity, restore natural flow patterns and minimize soil erosion.

Road-7. Stream Crossings	Avoid, minimize or mitigate adverse effects to soil, water quality and riparian resources when constructing, reconstructing or maintaining temporary and permanent waterbody crossings.
Road-9. Parking Staging Areas	Avoid, minimize or mitigate adverse effects to soil, water quality and riparian resources when constructing and maintaining parking and staging areas.
Road-10. Equipment Refueling and Servicing	Avoid or minimize adverse effects to soil, water quality and riparian resources from fuels, lubricants, cleaners and other harmful materials discharging into nearby surface waters or infiltrating through soils to contaminate groundwater resources during equipment refueling and servicing activities.
WatUses-1. Water Uses Planning	Use the applicable authorization and administrative planning processes to develop measures to avoid minimize or mitigate adverse effects to soil, water quality and riparian resources during construction, operation, maintenance and restoration of water use infrastructure.

Temporary and permanent BMPs are discussed extensively in Section III of this SWPPP, and all identified CASQA specifications are listed in Appendix B.

1. (d) SEZs are restored in an amount 1.5 times the area of SEZ disturbed or developed for the project:

See below numbers for SEZ restoration calculations developed for construction in 2014:

New permanent SEZ disturbance: 1,400 S.F. SEZ Restored: 15,816 S.F.

As shown above, the amount of permanent infrastructure in SEZ restored greatly exceeds the amount of new permanent infrastructure in SEZ. The 1,400 S.F. of new SEZ disturbance was calculated within the new crossing depicted in Figures 2 and 5. The 15,816 S.F. of SEZ restoration was calculated from the campground loop road and spurs to be removed (see Figures 2-6). The amount of temporary disturbance in SEZ for this project is 9110 S.F. This was calculated based on the temporary disturbance required to restore SEZ, including removing roads and spurs, and recontouring the existing drainage ditch to mimic a natural drainage swale.

See *Section II. Project Description* for a detailed narrative of the project and its associated construction.

The following answers #4 from Section 5.7 of the Basin Plan, which states, "Erosion control projects, habitat restoration projects, SEZ restoration projects and similar projects provided that the project is necessary for environmental protection, and there is no reasonable alternative which avoids or reduces the extent of encroachment in the floodplain."

This category specifically applies to the portion of the project within the day-use site. In order to remove a portion of the storm drain overflow pipes and concrete headwall from the shoreline of Lake Tahoe at the William Kent Day Use site, there is no reasonable alternative which avoids or reduces encroachment below the high water of Lake Tahoe. These storm drain pipes drain a portion of Highway 89, the William Kent Campground, and portions of the neighborhood above the campground. There are currently several infiltration basins that capture most surface water from the neighborhood and campground. The current pipe outfall and concrete headwall are located below the high water elevation. The constructed channel maintains the slope and elevation of the pipe which will be removed. During periods of lake high water, water will back into the channel as currently occurs within the pipe. Project design includes stabilization of exposed slopes with boulders ranging in size from approximately three feet to one foot diameter, and grade control structures at the channel bottom and outfall.

The erosion control project will enable non-peak storm water flows to reduce velocity and infiltrate before reaching waters of Lake Tahoe. This provides an environmental protection benefit within the constraint of established adjacent land uses which generate the storm water runoff conveyed in the channel restoration project area.