

ROUND 12 CAPITAL PROJECT NOMINATION FORM
LAKE TAHOE FEDERAL SHARE EIP CAPITAL PROJECTS
APPENDIX K

Project Name:	William Kent Campground BMP Retrofit	EIP Number: <i>(Required)</i>	1007
Federal Agency Sponsor: <i>(Required)</i>	USDA Forest Service	Contact:	Ashley Sommer
Threshold:	Water Quality	Phone Number:	530-543-2615
Threshold Standard:	WQ-5	Email:	asommer@fs.fed.us
FUNDING REQUESTED IN THIS ROUND:		\$ 750,000.00	

Federal Share EIP Consideration

Select "yes" or "no" for each question. If you have a "yes" response, briefly describe. **Projects must meet one or more of these 5 items.**

1. Does the project involve federal land? Yes No
 If yes, is the federal land involved important to successful implementation of the project? Yes No

Implementation of water quality protection BMPs on federal lands on the William Kent Campground, William Kent Administrative Site, and William Kent Beach Day Use Area will lead to improved water clarity in Lake Tahoe.

2. Is this project identified in the EIP? If yes, please ensure the EIP number is identified in the above project information box. If no, provide a description of the project's contribution to the EIP program. Yes No

EIP #16

3. Does the project involve the conservation of a federal or regional threatened, rare, endangered, or special interest species? If yes, identify. Yes No

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4. Does the project involve an identified federal interest such as the detection and eradication of non-native invasive species (aquatic or terrestrial)? If yes, identify. Yes No

Project would treat identified federal interest noxious weed species within the project area.

5. Does the project develop knowledge and/or information to develop future capital projects in the EIP? (such projects that fulfill this function would include technical assistance, data management, and/or resource inventories) Yes No

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Check all Capital Focus Area(s) that apply (as defined in the Federal Vision):

- 1. **Watershed and Habitat Improvement**
- 2. **Forest Health**
- 3. **Air Quality and Transportation**
- 4. **Recreation and Scenic**

Check all that apply (must meet a minimum of one category):

- 1. **Continued emphasis on forest ecosystem health/fuels reduction projects considering the LTBMU Stewardship Fireshed Assessment and Lake Tahoe Basin Multi-Jurisdictional Fuels Reduction and Wildfire Prevention Strategy.**
- 2. **Continued implementation and/or completion of projects approved in Rounds 5 through 11 which implement the EIP. Project proposal should clearly describe the phase/product being produced along with the consequence of not completing the project phase proposed for Round 12.**

List Previously Approved Rounds and funding(provide project titles):

Round 6 (F060) - Site analysis, identification of opportunities and constraints, determine and refine site goals.

Round 8 (F112) - Conceptual design, NEPA development, and implementation of initial Facility BMP retrofits at the William Kent Site.

- 3. **Project is consistent with and contributes toward TMDL pollutant reductions within the four source categories (atmospheric, urban & groundwater, forested uplands, and stream channel). NOTE: If “yes”, then please respond to questions in the Accomplishments section of the nomination proposal.**
- 4. **Control of aquatic invasive species and prevention and/or detection of new aquatic invasive species.**

Project Nomination Proposal Outline

Project Summary (a brief summary which clearly describes the proposed project –maximum 200 words)

- Summarize ONLY the Round 12 project (also summarize scaling of funding to be described in more detail in the “Project Description” section below).

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). The Round 12 project will complete the water quality BMPs that are scheduled to begin in September of 2011 and are identified in the William Kent NEPA documentation that is currently underway. Included in the design is a reconfiguration of the campground roads and spurs to locate them outside the SEZ that runs through the campground, construction of infiltration basins along the paved surfaces, implementation of water quality BMPs around the administrative building, restrooms, and parking areas, restoration of the SEZ and stream channel in the campground, slope stabilization on the beach day use site, daylighting of a stormwater pipe on the beach site, and construction of accessible walkways on the site.

Project Description

Introduction

- Provide project background which explains the situation and state the problem and how it will be addressed.

Note: Focus needs to be the project in Round 12 not a history of an ongoing project or program.

The William Kent site is 22 acres situated in the middle of an urban neighborhood along Hwy 89 on the west shore of Lake Tahoe. The site consists of a 95-site campground, an administrative site, and a beach day use area. An ephemeral stream and Stream Environment Zone (SEZ) run through the middle of the campground and beach day use area. The stream was previously channelized (presumably in the 1960's) and severe erosion and soil deposition occurs along the channel. Approximately 26,000 ft² of the campground is located within the SEZ. Stage I of the BMPs developed under Round 8 funding will remove 14,675 ft² of asphalt from within the SEZ. The Round 12 project would implement Stage II of the water quality BMPs and public health and safety improvements. Stage II further reduces the amount of coverage within the SEZ to 4,500 ft² and the number of stream crossings is reduced from eight to two in the campground. This reduction is accomplished by reconfiguring the spurs and roadways within the campground and locating them outside the SEZ. Increasing the road width to 12 ft. one-ways and 22 ft. two-ways, as well as integrating 45 ft. turning radii, will decrease erosion due to off-road vehicular travel. Infiltration basins along the roads and spurs reduce peak flow volume, velocity, and sediment/nutrient load. Completed restoration of the stream channel and SEZ in Stage II further allows for infiltration and improvement of water quality in the stream. Restoration includes regrading of the stream channel, restoration of natural vegetation, and slope stabilization with boulders where needed.

The stream channel flows directly into Lake Tahoe through the beach day use site via a large pipe that brings the water under Hwy 89. Stage II will stabilize the slope along the beach, daylight approximately 100 ft of the stormwater pipe, and improve the outfall condition with the goal of infiltrating the water before it reaches Lake Tahoe. In addition to water quality improvements, improvements to the site in Round 12 also address public health, safety, and accessibility improvements of the entire site by defining accessible campsite spurs, walkways, and kiosk. These accomplishments may change based upon the final NEPA decision scheduled for June 2011.

- Describe what Round 12 is specifically funding; list the number of years the requested funding will cover; briefly describe how this project links into previous projects/rounds (identify and describe other round projects and funding received). Show scaling of project (reduced funding request and associated reduction in accomplishments).

NOTE: Focus should be on finishing current/phased projects. If project is new in Round 12, clearly identify if the project is for planning or implementation and how it will be completed with Round 12 funds. Identify if other funds will be needed to complete the project. Please identify total non-SNPLMA funds that are being contributed/dedicated to the proposed Round 12 project and the source of those funds.

The project would implement the remaining portion of the site BMPs developed under Round 8 funding. This project would result in an implementation contract which is anticipated to be completed within one year. Project design, management, contract solicitation, administration, and project close-out would result in a two-year overall project duration.

This project would implement water quality protection BMPs within the campground, the administrative site, and the beach day use site. Utility and non-utility hook-up campsite spurs, vehicle circulation, and parking would be re-configured to provide erosion source control and dispersed stormwater infiltration permanent BMPs. Implementation of a mainline utility service loop would be concurrent with surface BMP retrofit activities, but would not provide campsite utility hook-up connections using SNPLMA funds.

The reconstructed campground road system would allow for emergency vehicle access, which is currently limited, in the event of a medical or wildfire emergency. Project area vehicle circulation would be improved, and the Highway 89 driveway would be re-configured to reduce traffic congestion and allow for emergency vehicle entrance/exit. These improvements would incrementally reduce traffic congestion as well as air pollution and other associated negative effects in this portion of the highway corridor.

This Round 12 project would implement Stage II of campground BMP improvements on the site. This would complete the BMP retrofit for the 95-site campground, beach day use area, and administrative site, building on the BMP implementation under Round 8. Non-SNPLMA funds would be sought to fund replacement of restrooms and other identified priorities.

This project could be reduced in scale by reducing the BMP retrofit activities within a portion of the campground and at the administrative site. Eliminating the administrative building parking lot BMP improvements and paving in one of the campground loops would reduce the project cost by approximately \$150,000, resulting in a total project cost of \$600,000. However, reductions in the project scale lower the ability to leverage funding from other sources for project implementation and upgrades, such as utility improvements proposed to be funded by Granger Thye Fee offset funds, which could be integrated with the BMP retrofit construction. Project scale reductions also incrementally lower the water quality benefit of the project.

Round 6 funding (BLM #F060) provided for the development of a pre-NEPA conceptual plan, and site opportunity and constraint identification. Round 8 funding (BLM #F112) provided for NEPA analysis, and design and implementation of initial BMPs at William Kent and two other LTBMU facilities. Round 12 funding will complete the BMPs at the William

Kent site.

- Describe the “readiness” of this project to move forward (urgency, capacity, capability, environmental documentation, interagency agreements, etc).

Implementation of this project to address existing threats to water quality has been recognized as an urgent need by a number of organizations, including the Forest Service, TRPA, and the Tahoe Science Consortium. NEPA analysis and documentation is currently underway and is anticipated to be complete in June 2011. The Proposed Action and Scoping Letter are expected to be shared with the community in December 2010, leading to a NEPA decision in June 2011. Round 8-approved funding is ready to be implemented in September 2011 for Stage I water quality protection BMPs in the project area.

- Describe partnerships for this project. (if applicable, project should identify and describe committed/secured partner funding and/or other partner contributions and how it is integrated into the project).

This project would be implemented in coordination with the campground permittee, California Land Management (CLM). The Tahoe Science Consortium has expressed interest in support of achieving the project, specifically the BMPs and stream daylighting on the beach area. The desire to highlight the William Kent Beach for a possible SNPLMA project was expressed in email correspondence from Zach Hymanson, Executive Director of the Tahoe Science Consortium to complement BMP work that has been completed in the Tahoe Park community.

***Note:** The form requests information about project goals, objectives, accomplishments, and questions the program is designed to answer across several different sections. These issues are closely linked and your individual responses should provide a cohesive description.*

Goal – Purpose and Need (“larger” statement of future expected outcome – usually not measurable)

This project would help protect the water clarity and quality of Lake Tahoe by reducing stormwater peak flow volume, peak flow velocity, and nutrient/sediment loading that reaches the lake.

The project would improve stormwater infiltration and increase water quality through methods such as:

- Minimizing coverage and compaction within the SEZ and low capability soils.
- Managing and improving stormwater quality through the use of BMPs to capture and infiltrate stormwater.
- Improving conditions of storm water outflow at the William Kent Beach.

The project would improve the recreation experience and accessibility of the site by:

- Providing efficiently designed universally accessible campsites and amenities.
- Providing safe and efficient pedestrian and vehicular circulation within the campground and connecting to the beach site.

Objectives (specific measurable statements of action – Round 12 only - which when completed will move towards achieving the goal)

Note: Objectives will form the basis for the milestones/deliverables to be identified in Appendix B-8

- Describe how fulfilling objectives will contribute to the achievement of one or more environmental thresholds (air quality, water quality, soil conservation, vegetation, fisheries, wildlife, scenic, noise, recreation). Provide measures if applicable. For example: acres treated, miles of stream restored for each objective.

Air Quality threshold – The entrance to the campground will be widened to allow for one entrance lane, one exit lane, and an emergency vehicle lane. Moving the kiosk into the campground and the entrance reconfiguration will reduce congestion on this section of Hwy 89, and subsequently reduce the amount of vehicles idling and creating emissions. Feasibility of moving the existing kiosk to the new location will be assessed upon the project start. In the event that the condition of the existing kiosk prevents its relocation, a new kiosk will be constructed. Construction of the new kiosk would utilize non-SNPLMA funding sources.

Water Quality threshold- The Round 12 project will reduce the peak flow volume, peak flow velocity, and the nutrient/sediment transport of the stream channel. Round 12 project work will restore 6,200 ft² of SEZ that is currently paved, implements over 2000 ft² of infiltration basins, and daylighting approximately 100 ft of stream channel that is enclosed in a pipe. The result is a net decrease in the amount of stormwater and subsequent nutrient/sediment load that reaches Lake Tahoe. Campground roads and campsite spurs, along with pedestrian paths, will reduce the generation of fine and course sediment compared to current conditions.

Soil conservation threshold- The stream was previously channelized (presumably in the 1960's) to reduce flooding in the campground. The result has been erosion, channel incision, and soil deposition. Restoration of the stream channel and SEZ will significantly reduce the soil loss along the channel. Natural vegetation plantings in the restoration areas will help reduce compaction and improve soil health. Daylighting the stormwater pipe will reduce soil erosion along the beach.

Vegetation threshold- Natural vegetation will be planted in at least 6,200 ft² of area previously covered by pavement. Restoration of the stream channel will allow for a healthier population of SEZ vegetation to thrive along the stream bed.

Scenic threshold – Improvements to the campground will relocate 11 campsites that are currently within 20 feet of a residential lot, improving the aesthetic experience of both the campers and neighboring residents. Restoration of the beach slope and daylighting the stormwater pipe will improve the scenic experience both on the beach and from the lake looking towards the shore.

Recreation threshold- Round 12 reduces the number of campsites from 92 (the number of campsites after Phase I implementation) to 81, but the quality of the remaining sites and camping experience is greatly improved by upgrading the camping spurs to meet current standards, improving the vehicular circulation pattern. An accessible path to the beach area

improves access to the Lake for people with disabilities.

- Describe the estimated environmental risks from unintended consequences of the proposed project (if applicable).

Implementation of the Round 12-funded BMP retrofit project at William Kent Campground will include the full suite of approved temporary construction BMP measures designed to manage potential erosion generated during construction activities. During project implementation, campground facilities would be temporarily closed to the public, resulting in reduced recreation access to camping opportunities at Lake Tahoe. Construction activities within the Highway 89 Right-Of-Way may require temporary traffic control measures which could cause short-term traffic delays. These delays could result in short-term increases in vehicle emissions and air quality impacts associated with stopped and idling vehicles. The environmental risks of implementing this project are out-weighed by the anticipated environmental benefits that would be realized following project completion.

The vegetation communities that have developed on the site are a result of the existing artificial hydrology patterns. Restoration of hydrologic functioning and removal of significant amounts of asphalt will change the hydrology patterns in some areas of the site. Resulting shifts in vegetation patterns may also result. It is anticipated that the project activities will increase the health of the plant communities overall, but there may be some small areas where the shifting hydrology patterns may negatively impact the health of some individual trees and/or understory vegetation.

Daylighting and restoration of the beach site will change the configuration of the day use area. No changes to the parking area are anticipated, but the remainder of the site will be affected.

The design and construction approaches proposed to implement water quality protection Best Management Practices and restore previously compacted areas within the project area are considered to be standard landscape architecture and engineering practices, and have been widely applied to address similar environmental, road, and facility conditions throughout the Lake Tahoe Basin. There are very few, if any, environmental risks from unintended consequences of the proposed project.

Accomplishments

- Describe the anticipated project accomplishments (i.e. products or identifiable environmental benefits being produced or implemented under this project), and how the project results/accomplishments will be communicated and made available to the public.

Note: Differentiate between direct and/or primary project effects and secondary and/or overall watershed effects.

Restoration of the SEZ and stream channel, daylighting of the stormwater pipe on the beach, restoration of the beach slope, and installation of infiltration basins will directly contribute to a reduction in stormwater peak flow volume, peak flow velocity, and nutrient/sediment transport on the site. The result is a net decrease in the amount of stormwater and subsequent nutrient/sediment loads that reaches Lake Tahoe due to the reduction in direct connection of the site to the waters of Lake Tahoe. Secondary effects include reduced soil erosion, increased soil health, improved air quality, and increased SEZ vegetation community health.

Implementation of this project will be monitored by LTBMU staff to evaluate effectiveness of water quality protection BMP measures through qualitative and quantitative methods. Results of this effectiveness monitoring will be made available to the public via the LTBMU website, and included in the annual BMP monitoring reports.

This project is located in a highly visible area and implementation would occur in a highly populated area. A project sign would be erected during construction to inform the public that water quality protection BMPs were being implemented in the campground, and provide contact information if a member of the public wanted further information.

- If you checked “yes” for the project being consistent with and contributing to TMDL pollutant reductions, please consider and integrate the following in the project description:

a) Describe whether, and how, the project demonstrates advanced, alternative, or innovative practices.

The project will be implemented using the approach of Low Impact Development (LID) to achieve storm water management, erosion control, and water quality improvements within the project area. The LID approach of distributing storm water run-off and infiltrating it as close to where it originated, in contrast to concentrating and conveying it, will reduce long term facility maintenance needs as they relate to sediment and storm water control. This approach will increase the project’s long term viability and overall sustainability.

b) If project includes project level monitoring, describe ability of proposed monitoring strategy to contribute to the state of TMDL knowledge. Also describe if purpose of the capital project is to conduct data collection and/or analysis related to Lake Tahoe clarity.

To capture the improvement to water quality, the Pollutant Load Reduction Model (PLRM) or similar hydrolic analysis will be completed. The analysis will show the reduction in runoff volume. This will be correlated to reductions in fine sediment, nitrogen, and phosphorus. In addition, physical water flow sampling will be done pre-project and post-project to determine the effectiveness of the project and the accuracy of the analysis model used.

c) Describe treatment approach for reducing pollutants and/or measures to address connectivity between pollutant sources and Lake Tahoe or its tributaries. Identify target pollutants, and, to the degree feasible, provide quantitative estimates of project effectiveness at reducing pollutant loads (and/or a commitment to provide post-project estimates).

The Low Impact Development approach to control sediment and storm water within the project area will utilize the area's natural soil infiltration capability to reduce erosion and sedimentation within the project area. By distributing storm water rather than concentrating it, the erosive forces of this run-off can be avoided. This treatment approach will target fine sediment particles to keep them within the project area, and out of Lake Tahoe and its tributaries. Through the use of paved vehicle travel surfaces and source control, the generation of sediment will be reduced. Any sediment that is tracked into the campground road system will be shed to the roadside during storm events as a result of the detailed grading of the road surface. Capture of larger sediment particles, achieved through this grade and source control will reduce the amount of fine sediment that is initially generated, and will improve the designed system's effectiveness at capturing fine sediment and holding it in place within the project area.

Treatment is designed to reduce the areas of compacted surfaces where possible, and to hydrologically disconnect remaining compacted surfaces from water bodies. The target pollutant is sediment and associated nutrients. There is currently no quantitative estimate of the project's effectiveness at reducing pollutant loads, as modeling has not yet been completed. Please reference other sections of this proposal for quantitative estimates regarding removal of paved surfaces within an SEZ.

d) If appropriate, describe whether, and how, the project can be combined or coordinated with other TMDL implementation projects.

This project can serve as an example for other TMDL projects of ways that Low Impact Development can help disconnect stormwater from Lake Tahoe and reduce the occurrence of sediment and nutrient loads that reach the Lake.

Monitoring

- Describe the project monitoring that will be implemented as part of this project including:
 - List the questions the monitoring program is designed to answer.

Were temporary and permanent BMPs implemented as planned/designed and are they effective at protecting soil and water quality?

- Describe any coordination with, or input from, the science community on monitoring and adaptive management that has occurred on the development of this nomination and what changes (if any) to the project were made as a result of this input.

Monitoring protocols are based on the Region 5 USFS Best Management Practices Evaluation Program (BMPEP) handbook. This handbook has gone through extensive peer review within the agency, and continues to be revised as practitioners identify problems with, or improvements to, the protocols. This project is similar to other Facility BMP retrofit projects conducted by the LTBMU in the past.

- Describe the methods and strategies (i.e. monitoring, research, or both) that will be used to verify whether the project goals and objectives have been met? (*Note: A*

detailed monitoring plan and/or research plan is not required, however, enough detail must be provided to allow someone that is unfamiliar with the project to understand and evaluate the proposed methods and strategies.)

During implementation project will be included in pool for random selection of Regional BMP monitoring. If project is selected, monitoring will be conducted using Region 5 USFS BMPEP protocols. These protocols walk the reviewer through a set of questions to evaluate whether BMPs were implemented as planned/designed and whether they were successful at protecting soil and water quality based on visual observations of erosion and sediment transport processes. The answers to these questions are then scored using a “rule set” imbedded within the database used to store the data, which rates the BMPs evaluation as either successful or unsuccessful, for both implementation and effectiveness. The BMPEP data is input into a regional database to provide a statistically robust sample for each suite of BMPs across the Region. The data provided is qualitative in nature, relying on visual observations rather than quantitative measurements. BMPEP monitoring is funded through USFS appropriations and will not be funded through this project.

In addition, temporary construction BMPs will be inspected daily as required under the anticipated Lahontan permit. The Lahontan permit specifies how these inspections are to be conducted, documented and reported. The purpose of these inspections is to ensure that BMPs are installed and maintained, and to correct deficiencies in a timely manner.

Water flow measurements will be taken at two pipes in the project area pre-project, during the project, and post-project to aid in the determination of the effectiveness of the BMPs and the modeling methods.

- Describe whether the monitoring or research associated with this project fits into or is part of a larger monitoring or research program.

The BMPEP is part of a Regional Monitoring Program within the Forest Service, and may be adopted nationally. Both protocols are part of the larger Soil and Water Quality Monitoring Program at the LTBMU.

- Describe how information from the monitoring and/or research will be used to improve the continued performance of the proposed project or future similar projects.

In the short term, information collected is used to fix or redesign individual project BMPs that are rated as unsuccessful. In the long term, information is used at both the local and regional level to develop solutions to chronic problems identified in either implementation or effectiveness of BMPs.

Attachments

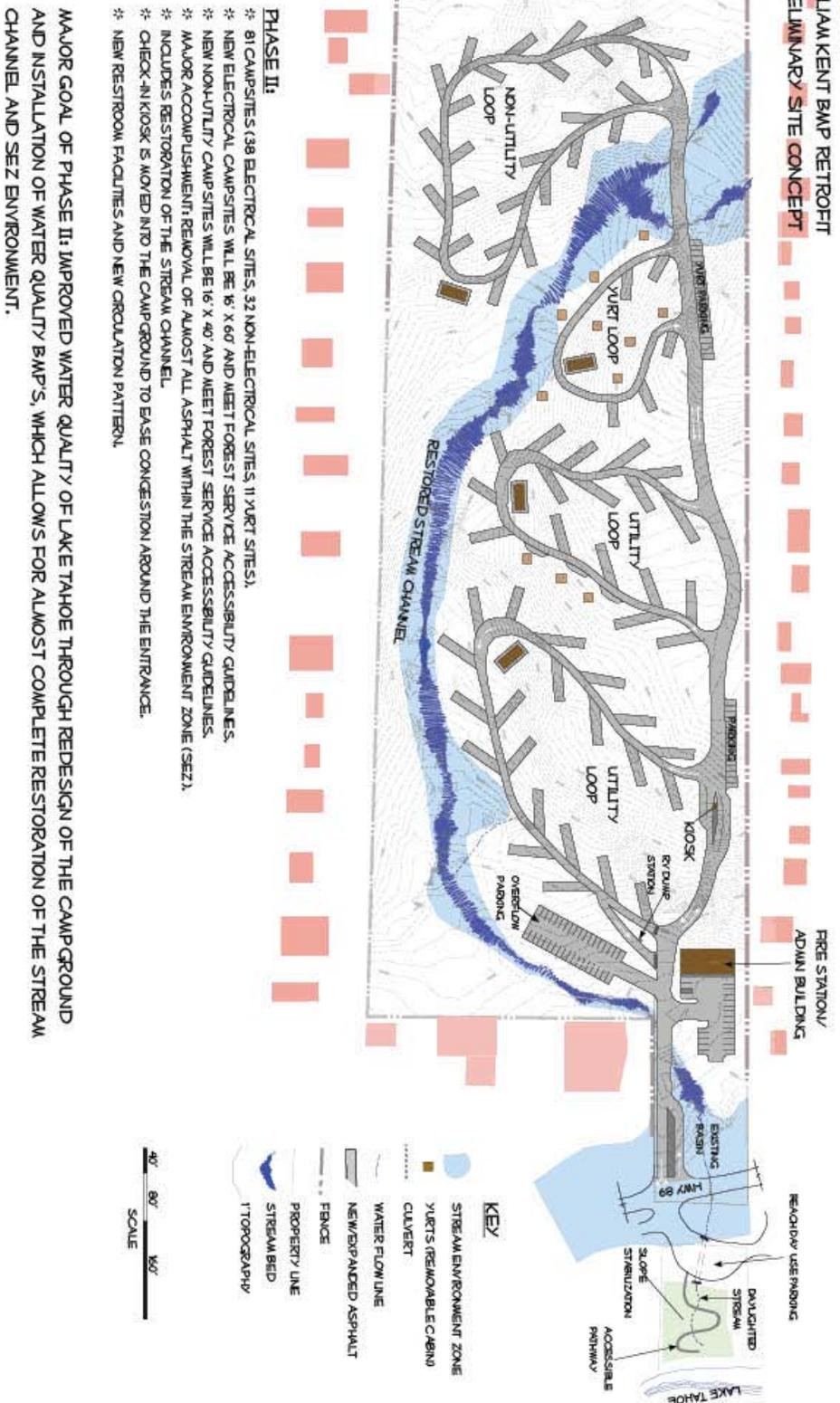
- Existing Conditions Diagram.
- Site Concept Plan for Round 12 improvements.

WILLIAM KENT BMP RETROFIT AND ADMINISTRATIVE SITE REDEVELOPMENT

PHASE II

WILLIAM KENT BMP RETROFIT
PRELIMINARY SITE CONCEPT

FIGURE 3



Appendix B-8

LAKE TAHOE RESTORATION PROJECTS ESTIMATED NECESSARY EXPENSES & KEY MILESTONE DATES

Project Name:	William Kent BMP Retrofit	Agency:	USDA FS LTBMU
Prepared by:	Ashley Sommer	Phone:	530-543-2615
SNPLMA Project #:		EIP #:	F16

Identify estimated costs of eligible reimbursement expenses:

1. Planning, Environmental Assessment and Research Costs (specialist surveys, reports, monitoring, data collection, analysis, NEPA, etc.)	\$ 5,000	0.7 %
2. FWS Consultation – Endangered Species Act	\$ 0	0 %
3. Direct Labor (Payroll) to Perform the Project	\$ 0	0 %
4. Project Equipment (tools, software, specialized equipment, etc.)	\$ 1,000	0.13 %
5. Travel (including per diem where official travel status required to carry out project, such as serve as COR, experts to review reports, etc.)	\$ 0	0 %
6. Official Vehicle Use (pro rata cost for use of Official Vehicles when required to carry out project)	\$ 2,000	0.27 %
7. Cost of Contracts, Grants and/or Agreements to Perform the Project	\$ 622,000.00	82.9 %
8. Other Direct and Contracted Labor: Agency payroll for the Contracting Officer to do project procurement, COR, Project Inspector, Sec. 106 Consultation if required, NEPA Lead, Project Manager, Project Supervisor, and subject experts to review contracted surveys, designs/drawings, plans, reports, etc.; Also covered is the cost to contract for a Project Manager and/or Project Supervisor if contracted separately from other project contract(s)	\$ 30,000	4 %
9. Other Necessary Expenses (see Appendix B-11): Indirect costs associated with implementing a project, such as support services, budget tracking etc.	\$ 90,000	12 %
TOTAL:	\$ 750,000	100 %

Estimated Key Milestone Dates:

Milestones/Deliverables:	Date:
Round 8 NEPA Decision	6/1/2011
Round 12 Engineering Design and Design-Build Contracts Awarded	5/1/2012
Construction Implementation	9/4/2012
Final Completion Date: 11/15/2013	

COMMENTS:

