



Proposed Action for Meeks Bay Resort BMP Retrofit

US Forest Service Pacific Southwest Region
Lake Tahoe Basin Management Unit
El Dorado County, California

Desired Condition

The desired condition at Meeks Bay Resort is to provide a high quality recreation setting and facilities that meet BMP and accessibility standards. Measures to achieve this desired condition include reduced sediment loads, increased infiltration onsite, and reduced and controlled stormwater runoff. Electrical and other utilities need to comply with current health and safety codes. Implementing these retrofits will increase the quality, safety, and accessibility of the recreation experience for all visitors to the Meeks Bay Resort and help protect the natural, cultural, and historic resources of the site.

Background/Existing Conditions

The Meeks Bay Resort facilities were constructed between the 1930's and 1960's, and do not meet Forest Service accessibility standards. Approximately 8 cabins along the lakeshore have parking areas and walkways that do not meet water quality standards and do not meet a 5% accessibility slope.

The Meeks Bay Resort provides for a variety of recreation uses and overflow parking during high traffic periods sometimes extends into the wooded areas, which causes compaction of the soil around trees, and destruction of understory vegetation, resulting in barren soils. These conditions result in potential erosion and impacts to water quality.

The roads within the resort are eroded and covered with a crushed aggregate and a layer of wood chips in most areas. Approximately 100 feet of unimproved road runs directly adjacent to the lakeshore and erosion onto the beachfront is readily evident.

The Kehlet House (located directly on the lakefront), is sometimes used for special events. The parking area, which is not part of the structure, does not comply with current water quality standards. The Kehlet house is eligible for listing on the National Register of Historic Properties, and as such the visual qualities of the structure and the areas



directly surrounding it require careful consideration. Overhead electrical wires are supported by trees, and do not comply with current building codes.

Proposed Action

Improvements are planned to bring the Kehlet House site, the area between the marina and the lodge, the marina parking area, the cabin area parking, and off-pavement overflow parking areas into compliance with water quality protection best management practices (BMP) and accessibility requirements. This includes an accessible entrance to the beach/lakefront area. Additional maintenance improvements associated with the BMP work include utility maintenance to the water and electrical systems and removing power lines from the trees. BMPs would be designed to infiltrate the 1 inch 1 hour event, and the 2 inch 24 hour rainfall event. The existing 2005 Meeks Bay Resort Campground Rehabilitation Decision Memo covering the installation of bollards/barrier rocks in the campground will be implemented in conjunction with this project. **See the attached site plan for an illustration of anticipated BMPs.**

BMP and utility work within the resort may include (but is not limited to):

- Terracing (approximately 100 linear feet or less)
- Slope stabilization using vegetation (approximately 5,000 square feet)
- Infiltration basins, including rock-lined infiltration trenches, shallow infiltration depressions, and vegetated swales (approximately 8,000 square feet of basins)
- Regrading of the Kehlet House drive (approximately 13,000 square feet)
- Surface improvements that could include (but are not limited to) spreading of mulch and the hardening of surfaces using concrete, asphalt, pervious paving systems, paver stones, or gravel (approximately 20,000 square feet)
- Installation of bollards or boulders to prevent parking on bare soil areas
- Roofline drip trenches (approximately 400 linear feet) along the cabins and the Kehlet House
- Approximately 1,000 linear feet of trenching at a depth of 24 inches for underground utility installation.
- Approximately 500 linear feet of trenching to a depth of 42" for a large diameter (anticipated 6 inch) water line.

Roadways leading to the marina and marina parking are not considered for a full retrofit at this time because current planning related to the restoration of Meeks Creek is underway and decisions related to the future configuration of the marina have not yet been determined. Low cost, short-term BMPs such as minimal regrading, gravel, or wood chips are planned to help alleviate some of the water quality problems until a long term plan is implemented.

Purpose and Need:

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

- Removing power lines from trees and retrofitting equipment such as transformers, switch gear, and distribution panels to meet existing codes.
- Improving the quality of the unimproved roads within the resort and improving wayfinding mechanisms to prevent vehicular damage and vehicular-pedestrian conflicts.

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

- Providing efficiently designed FSORAG compliant parking areas and walkways within the resort.
- Providing safe and efficient pedestrian and vehicular circulation within the Resort.
- Providing an accessible pathway to the beach area.

There is a need to improve the stormwater infiltration and increase water quality on the site by managing and improving stormwater quality through the use of BMPs to capture and infiltrate stormwater. The most urgent need occurs in the following areas:

- Off-pavement parking areas in the campground area and near the existing pavement parking.
- Resort roads going from the main lodge out to Kehlet House.
- Cabin parking and walkways along the resort road.
- Kehlet House parking area.
- Areas along the beach where sheet flow from the campground area becomes concentrated and flows directly onto the water front.

Decision Framework

The LTBMU Forest Supervisor will decide whether to implement the Meeks Bay Resort BMP Retrofit and Administrative Site Redevelopment project and amend the special use permit to reflect changes as proposed, or whether to take no action at this time. This decision would only effect National Forest System lands.

The Forest Supervisor expects to make a decision on the project in spring 2011. Implementation of BMPs and utility work could begin as early as May 2011. Implementation is anticipated to be completed by 2012.

Project Design Features:

Project design features are elements of the project that are applied to the project area as part of the Proposed Action. These features are developed based on Forest Plan direction and site

specific evaluations in order to reduce or avoid negative environmental impacts of the proposed action. Project design features associated with this project include the following:

Recreation and Access

- Safety buffers would be provided around the construction site (i.e. signing and temporary fencing).
- Temporary facility closures will be coordinated with the concessionaire.

Scenic Resources

- New 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.
- Removal of large trees (greater than 24 inches dbh) would be minimized to maintain the natural character of the site.

Heritage Resources

- 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

- Project activities would occur within the TRPA grading ordinance season (May 01 - October 15). If grading or movement 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 LWQCB for approval. During periods of inclement weather, operations would be shut down until conditions are sufficiently dry and stable to allow construction to continue without the threat of substantial erosion, sedimentation, or offsite sediment transport.
- Erosion control and prevention of sediment transport for this project would be implemented in accordance with; *USDA, Water Quality Management for Forest System Lands in California -Best Management Practices* (USDA 2000). This project will also be included in the Region 5 Best Management Practices Evaluation Program (BMPEP) monitoring sample pool and will be subject to temporary BMP (TBMP) monitoring evaluations while construction is ongoing.
- Provision for hazardous materials spill kits would be included in the contract specifications.
- 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.

- 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.

Botany/Non-Native Invasive Plant Species

- Surveys of sensitive plants have already been conducted and the TES species *Rorippa subumbellata* was found in the marina area. The project is not anticipated to affect these habitat areas. If any sensitive plants or special interest plants are found they would be flagged and avoided.
- Include non-native invasive species prevention measures in project contract. The noxious weed coordinator would be consulted for clause terminology (found in the noxious weeds risk assessment, Project Record Document 03).
- All construction and earth-moving equipment would be sanitized 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 Contracting Officer's Representative does not reveal soil, seeds, plant material, or other such debris.
- When working in known weed infested areas clean equipment before moving to other NFS lands which do not contain invasive weeds.
- All gravel, fill, mulches 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 LTBMU botanist, noxious weed coordinator or ecologist.
- 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" or treated before implementation.
 - Cheatgrass infestations affected by project activities would be treated and covered with weed matting prior to and during project implementation. Treatment would be done as described in the Terrestrial Invasive Plant Species Treatment Decision Notice (October 2010).
 - Staging areas for equipment, materials, or crews will be designated in parking lot areas away from cheatgrass and invasive weed infestations.
- Disturbed areas will be revegetated with weed free native seed mix. All activities that require seeding or planting must utilize locally collected native seed sources when

possible. Plant and seed material should be collected from or near the project area, from within the same watershed, and at a similar elevation when possible. Seed mixes must be approved by a LTBMU botanist, noxious weed coordinator or ecologist.

- 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.

Wildlife

- No limited operating periods currently apply to this project. If special status wildlife species are detected in the project vicinity, limited operating periods would be implemented as determined by the project biologist (LTBMU FP standards and guidelines page IV-10, IV-27, IV-90, Forest Order 19-86-99; SNFPA 2004 standards and guidelines 57, 62, 76, 77, 78, 79, 83, 85, 88; TRPA Code of Ordinances, Chapter 78).
- Currently, no northern goshawk or California spotted owl PACs occur within the project area. Any sightings of threatened, endangered, candidate, sensitive, management indicator, or special interest species would be reported to the project biologist. Nests, dens, and sensitive plants would be protected with flagging, fencing, or limited operating periods in accordance with management direction in the Lake Tahoe Basin Management Unit Forest Plan as amended. Species identification, known locations, and protection procedures for both plants and animals would be brought up during a pre-construction meeting.
- Minimize the removal of larger trees as required for an efficient road system. Species preference for retention would be given to large cedars, then pines, and finally to firs. Structural preference would be given to live trees with spreading branch structure, large diameter broken tops, or cavities in the bole for wildlife habitat (LTBMU FP IV-26.1, SNFPA 51.11).
- Snags would be retained for wildlife unless deemed a hazard tree according to the Region 5 Hazard Tree Protocol (Project Record Document 02).
- Use bear-proof garbage dumpsters or remove all trash associated with the project daily.
- Ground and vegetation disturbance would be minimized during implementation of the proposed action to avoid or minimize loss of native vegetation and disturbance to terrestrial wildlife habitat.

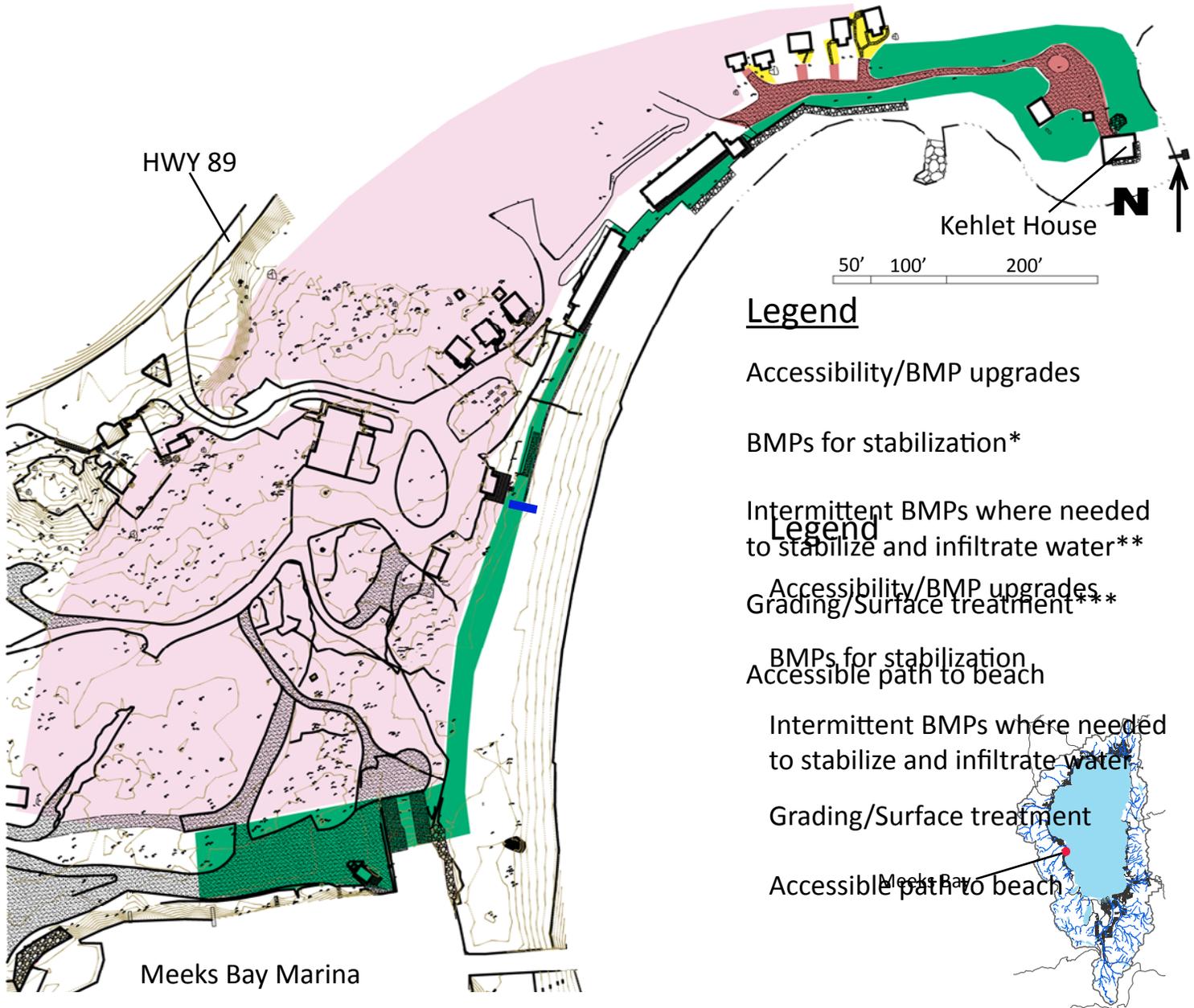
Monitoring

The following is a preliminary list of monitoring items that would be carried forward as a part of the project implementation.

1. Meeks Bay Resort 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.

Meeks Bay Resort BMP Retrofit

Proposed BMP Locations



Legend

Accessibility/BMP upgrades

BMPs for stabilization*

Intermittent BMPs where needed to stabilize and infiltrate water**

Accessibility/BMP upgrades
Grading/Surface treatment***

BMPs for stabilization
Accessible path to beach

Intermittent BMPs where needed to stabilize and infiltrate water

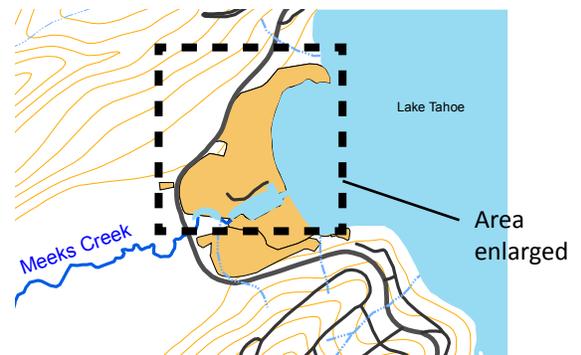
Grading/Surface treatment

Accessible path to beach

* BMPs for stabilization may include (but are not limited to) terraces, stabilization using vegetation, infiltration basins, and vegetated swales.

** BMPs to stabilize and infiltrate water may include (but are not limited to) infiltration basins, rock-lined infiltration trenches, shallow infiltration depressions, and vegetated swales.

*** Grading and surface treatments may include (but are not limited to) spreading of mulch, and the hardening of surfaces using concrete, asphalt, pervious paving systems, paver stones, or gravel).



The orange/yellow area represents the Meeks Bay Resort and Campground boundaries.