ROCK CREEK LAKE BOAT LAUNCHING FACILITY FEASIBILITY REPORT

Existing Boat Launch Ramp

Existing Restrooms

United States Department of Agriculture, Forest Service
$1,500,000 Construction Grant

SUMMARY

The Boating and Waterways Commission (Commission) is being asked to provide Advice and Comment on the United States Department of Agriculture, Forest Service's (Forest Service) request for a $1,500,000 construction grant from the Harbors and Watercraft Revolving Fund (HWRF) for improvements to the Rock Creek Lake Boat Launching Facility (BLF) at Rock Creek Lake.

The proposed grant would fund construction costs to improve the Rock Creek Lake BLF. Proposed project improvements include replacement of the existing single-lane boat launch ramp with a concrete V-grooved boat launch ramp consisting of both cast-in-place and pre-cast panels, rock slope protection, installation of a cable-guided boarding float, reconfiguration and rehabilitation of the main and overflow parking areas, creation of an accessible path of travel, replacing the existing non-compliant ADA flush toilet structure with a compliant vault restroom, utilities, and installation of project signage.

There are no expected problematic financial, engineering, permitting, stakeholder, or public access issues associated with this project. If approved, the construction is expected to be completed by February 1, 2023.

Department of Parks and Recreation, Division of Boating and Waterways (DBW) seeks Commission Advice and Comment on this proposed $1,500,000 HWRF construction grant to the Forest Service, for the Rock Creek Lake BLF improvements described in this August 12, 2021, Feasibility Report.

GRANT APPLICANT AND PREVIOUS COMMISSION ACTION

Grant Applicant

The grant applicant for this project is the Forest Service, which would be responsible for operating and maintaining the proposed boat launching facility for 20 years once construction is completed.

Commission Site Visit

Due to the COVID-19 Pandemic, the Boating and Waterways Commission will be conducting a virtual tour of the site during its scheduled Commission Meeting on August 12, 2021 in lieu of an in-person site visit. However, Boating and Waterways Commission representatives completed an official visit to the Rock Creek Lake BLF on August 9, 2016 for the planning grant.

Previous Commission Action

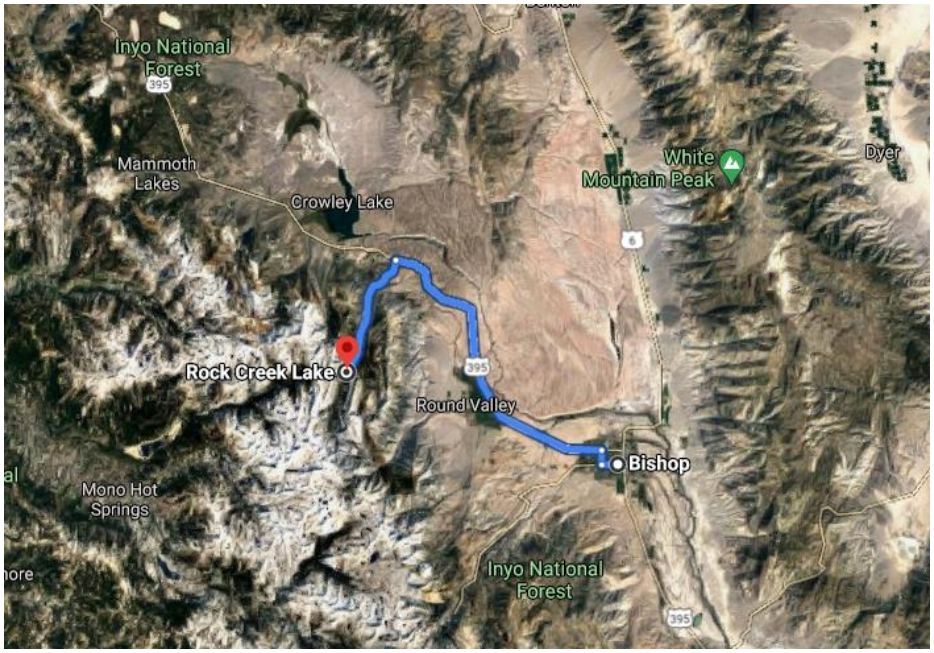
In FY 2017/18, the Commission approved a planning grant of $200,000 to fund design of the improvements needed at the Rock Creek Lake.

GENERAL LOCATION AND AREA

Location

Rock Creek Lake is in the southeastern Sierra Nevada Mountain range of the Inyo National Forest in Inyo County near the southern Mono County border. The proposed project is Rock Creek Lake BLF and is located on Rock Creek Lake. The BLF is 33 miles northwest of Bishop and 34 miles south of Mammoth Lakes. It is 51 miles south of Mono Lake Tufa State Natural Reserve, 80 miles south of Bodie State Historic Park, and approximately 190 miles south of Reno, Nevada.

To reach the Rock Creek Lake BLF from Bishop, travel on Highway 395 north approximately 24 miles to Rock Creek Road. Turn left onto Rock Creek Road and continue in a southwest direction for 9 miles, then turn off to the Rock Creek Lake BLF.



Route from Bishop to Rock Creek Lake (source: Google Earth)

Area

The Inyo National Forest (Forest) is an outdoor playground for millions of visitors every year. The Forest extends 165 miles along the California and Nevada border and covers about 2 million acres. Located mostly on the eastern slope of the Sierra Nevada range, the Forest contains pristine lakes, high elevation meadows, winding streams, unique Jeffrey Pine forest, rugged peaks, and arid Great Basin mountains, with elevation ranges from 4000 feet in Owens Valley to peaks over 14,000 feet including Mt. Whitney, the highest peak in the contiguous United States.

The trailhead and parking area for Little Lakes Valley, two miles beyond Rock Creek Lake at the end of Rock Creek Road, is the one of the highest trailheads in the Sierra at a 10,300 ft. elevation. This location is also home to over 50 fishable lakes and streams which, according to the local tourism commission, offer some of the best brook and rainbow trout fishing in California. Other lakes in the area include Lake Crowley 16 miles north, Silver Lake 45 miles north and Lake Sabrina 44 miles south.

Rock Creek Lake is at an altitude of approximately 9,600 feet above sea level and is one of the highest drive-to lakes in the area and offers great views of the surrounding Sierra Crest. Visitors have opportunities to experience a wide variety of outdoor activities such as camping, rock climbing, horseback riding, hiking, bicycling, and fishing. In the winter, the road to the lake is not plowed and closed to vehicle traffic. California State Parks, Off-Highway Vehicle Division operates, in conjunction with the Forest Service, a SNO-PARK nearby that provides visitors access to winter activities such as cross-country skiing, snowshoeing, and general snow play.

There is a Forest Service campground near the BLF. The campground contains 29 sites, most of which are walk-in tent sites, there are a few RV sites, and one group site on the lake. Current facilities include drinking water, flush toilets, picnic tables, campfire rings, and bear-proof food lockers. The campground receives up to 13,000 visitors annually beginning at the start of the camping season in May and ending by mid-October. There is a private resort that offers cabin and boat rentals, a general store, and a café all within walking distance of the BLF.

Existing Boat Ramp

Usage

Rock Creek Lake has a surface area of approximately 55 acres. The Forest Service allows free day use parking and free public access to the lake. The California Department of Fish and Wildlife stocks the lake with brown and rainbow trout. Due to a five mile-per-hour speed restriction, the

lake can accommodate small fishing motorboats and is popular with those seeking outdoor recreational opportunities for fishing, swimming, rowing, kayaking, canoeing, float tubes, and paddle boarding.

The launch ramp is inaccessible to vehicles during the snowy winter months. Snowplows typically clear the road in April for the opening of the fishing season.

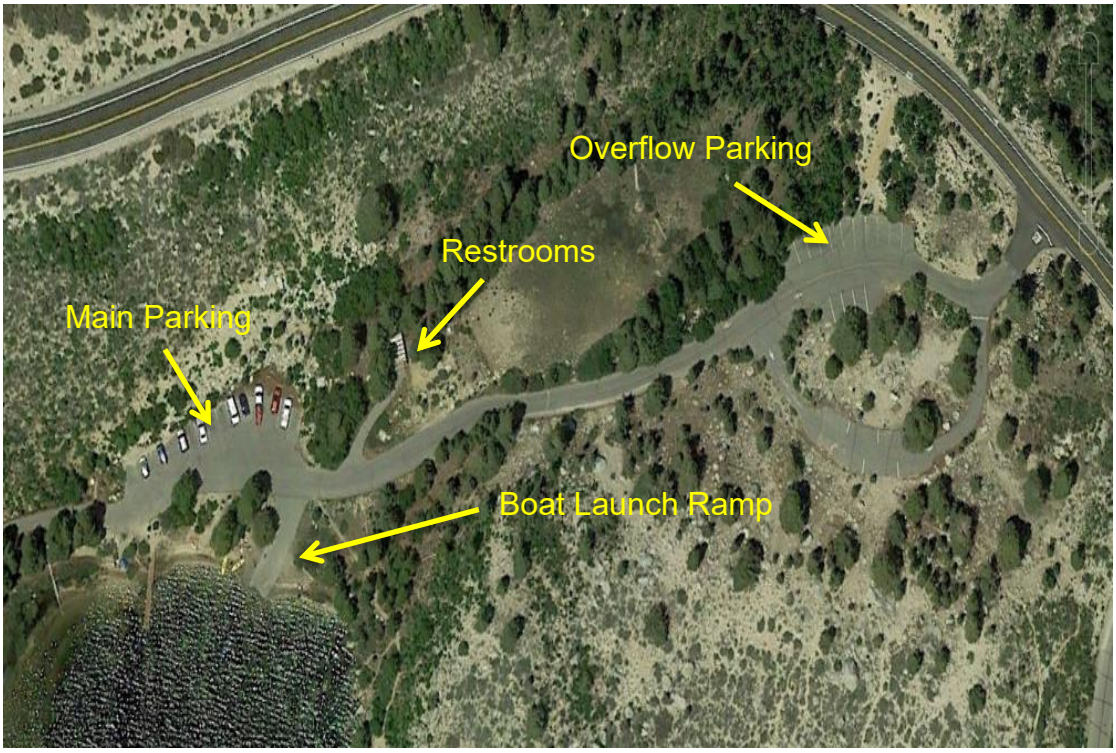
Existing Conditions

The Forest Service does not know when the existing asphalt boat launch ramp was constructed or by whom.

The single-lane launch ramp's angle of entry into the water does not meet DBW's design guidelines. The shallow slope is not steep enough to keep launching vehicle's tailpipes from being submerged during launching/retrieving. The asphalt has deteriorated and contains many cracks. A rubber fabric matting in an X pattern was added and filled with gravel at the toe of the ramp to increase traction. The fabric-gravel area shows signs of extensive use, the gravel within the fabric is loose, and that attempted repair has since failed. According to the Forest Service, a four-wheel drive vehicle should be used to launch trailered vessels due to potential loss of traction.

The shoreline surrounding the BLF is gently sloped allowing launches for kayaks, canoes, and other non-motorized vessels to be made directly from shore. The water depth at the ramp is shallow for 40 – 50 feet before the lakebed drops off. The Forest Service states the lake level can fluctuate three feet, receding up to 20 feet at the boat ramp. The lake is also subject to high winds and surface waves.

The BLF parking area includes 16 single-vehicle parking spaces and a two-unit restroom. The site is not currently compliant under the American with Disabilities Act (ADA) and does not contain any vehicle-trailer parking. The asphalt surface of the main parking area is worn and the striping is faded.



Rock Creek Lake BLF (source: Google Earth)

The existing restroom has two unisex flush toilets that require continuous maintenance and must be shut down in the winter to avoid freezing and bursting pipes. The Forest Service would like to change from a flush restroom to a vault style restroom. This will allow the restroom to be open year round. The restroom will be relocated closer to the main parking area to reduce costs for accessibility, if the new location is free of large underground granite boulders.

There is over-flow parking approximately one block from the BLF, consisting of two sections that include 20 single-vehicle spaces. Expansion of the over-flow parking area is not possible; however, rerouting the traffic flow to add vehicle-trailer parking is a part of this proposed plan. Costs associated with improvements to the road between the two sections of the over-flow parking area are not eligible for grant funding. The Forest Service anticipates improving the road in the near term.

PROJECT DESCRIPTION

Proposed Project Scope

If approved, DBW would contribute up to $1,500,000 to complete the following proposed improvements:

Boat Launch Ramp – Demolish the existing boat launch ramp, regrade the angle of the ramp to meet DBW's ramp design guidelines and construct a single-lane, concrete V-grooved ramp for launching during all water levels. The single-lane ramp would be constructed with a combination of cast-in-place and precast concrete panels.

Slope Protection - Install slope protection to both sides and at the toe of the ramp for erosion protection.

Boarding Float System - Install one 8' X 60' cable-guided boarding float.

Vault Restroom – Demolish the existing flush restroom building and install an ADA-compliant, double unisex vault restroom near the parking area. The Forest Service will fund half the cost of the restroom.

Parking Area - Reconfigure the main parking area and overflow parking area to provide a minimum of 40 total vehicle trailer, single vehicle, and ADA accessible spaces.

Accessible Pathway - Construct an accessible path of travel from the main parking area and restroom to the top of the boat launch ramp.

Retaining Wall - Construct a retaining wall near the vault restroom.

Project Credit Sign – Install a new project credit sign giving credit for funding the project to the Harbors and Watercraft Revolving Fund and the USDA Forest Service for operation and maintenance of the facility.

COST ESTIMATE

The estimated project cost to complete construction is $1,500,000. See Table 1 for the project cost estimate which is based on the 100% engineering submittal.

Table 1: Rock Creek Lake BLF Project Cost Estimate		
	COST ESTIMATE	
CONSTRUCTION SCOPE	**DBW**	**USFS**
Mobilization	$ 137,000	$ -
Demolition	110,000	-
Boat Launch Ramp	233,135	-
Boarding Float System	125,000	-
Rock Slope Protection	60,000	-
Vault Restroom	50,000	50,000
Parking Area	250,000	-
Retaining Wall	89,375	-
Accessible Pathway	69,490	-
Utilities	40,471	-
Project Credit Sign	12,000	-
Construction Subtotal	**$ 1,176,471**	**$ 50,000**
NON-CONSTRUCTION SCOPE		
Escalation 4%**	$ 47,059	$ -
DBW Contingency 10%*	117,647	-
Mitigation	100,000	
Engineering (N/A)	-	-
Inspection 5%*	58,824	-
Permits (N/A)	-	-
Non-Construction Subtotal	**$ 323,529**	**$ -**
TOTAL ESTIMATED PROJECT COST	**$ 1,500,000**	**$ 50,000**
Source = 100% Submittal Cost Estimate (dated 4/20/21)		
*Percentages are of the Construction Subtotal		
**2% per year for 2 years = 4% escalation		

Project Status

The proposed project site plan completed to the 90% level is attached (see Proposed Project Design) on pages 9 & 10.

Timeline

The Forest Service estimates that the construction would be completed by February 1, 2023.

Engineering Feasibility

There are no particularly difficult or unusual problems associated with the proposed project.

Environmental Impact and Permits

The Forest Service is expecting to complete the National Environmental Policy Act (NEPA) and the following permits by the winter of 2021.

Required Permits:

- U.S. Army Corps of Engineers Section 404 Permits

PROJECT METRICS

Annual Launches

Current: According to the Forest Service's grant application, the annual number of motorized boat launches is 400 and the number of non-motorized boat launches is 600.

Future: The Forest Service estimates that the annual number of motorized boat launches at the improved facility will have a substantial increase of 100 percent, to 800 launches per year, with the number of non-motorized launches to increase by 67 percent, to 1000 launches per year. For purposes of this analysis, staff agrees with the Forest Service assumption for motorized launches but assumes a modest 20 percent increase for non-motorized launches for a total of 1,520 launches (800 motorized and 720 non-motorized).

Annual User Days

Current: Based on the California Boating Needs Assessment study published in 2002, the area average for numbers of users per boat (motorized) in this area is 3.4, however, with the speed restrictions in place, it has been observed there are approximately 2 users per motorized boat launched at this lake. Therefore, the current estimated annual number of user days is 800 motorized (annual motorized launches * users per boat) and 600 non-motorized for a combined total of 1,400 user days. The 2018 California Boating Needs Assessment Study does not establish the average number of users per boat.

Future: DBW estimates that the annual user days for this facility would increase by 100 percent for motorized to 1600 and increase by 20 percent for non-motorized to 720 for a combined 2,320 annual user days.

User Day Value

Current: The 2018 Boating Needs Assessment Study established a unit day value in the Northern California region. The unit day value is an established way to measure recreational benefits boaters gain from the experience of boating on a particular body of water. The user day value for the Sierra's is $40.38. The total current annual user day value for this facility is $56,532 (user day value * annual user days).

Future: DBW estimates that the total annual user day value for the proposed facility would increase after the facility is constructed by $37,150to $93,682 (user day value * projected annual user days).

Benefit-Cost Ratio

A common method in the analysis of investments is to establish net present value of the benefits and costs associated with a project. If the Benefit/Cost ratio exceeds "1" then the investment, weighed against available investment alternatives, is worthy of consideration from a financial perspective. The results of this analysis are as follows:

Benefit: The total benefits over the 20-year life of the project are estimated to be $1,903,000.

Cost: The estimated grant to construct the project is $1,500,000 added to the previously funded planning and design grant of $200,000 equals a total of $1,700,000. This amount plus the estimated increased operating costs of $11,240 over the 20-year life of the project total $1,711,240.

Ratio: Therefore, the estimated Benefit-Cost Ratio is 1.11.

User Fees

The Forest Service does not currently charge fees for usage of the site. After the project is complete, the Forest Service has stated this facility will remain a free public boating access facility in the near term but may add nominal fees to offset operation and maintenance in future years.

CONCLUSION

The Department's analysis indicates that this project, as proposed, makes needed improvements, is feasible from an engineering perspective, is cost effective, and increases public access.

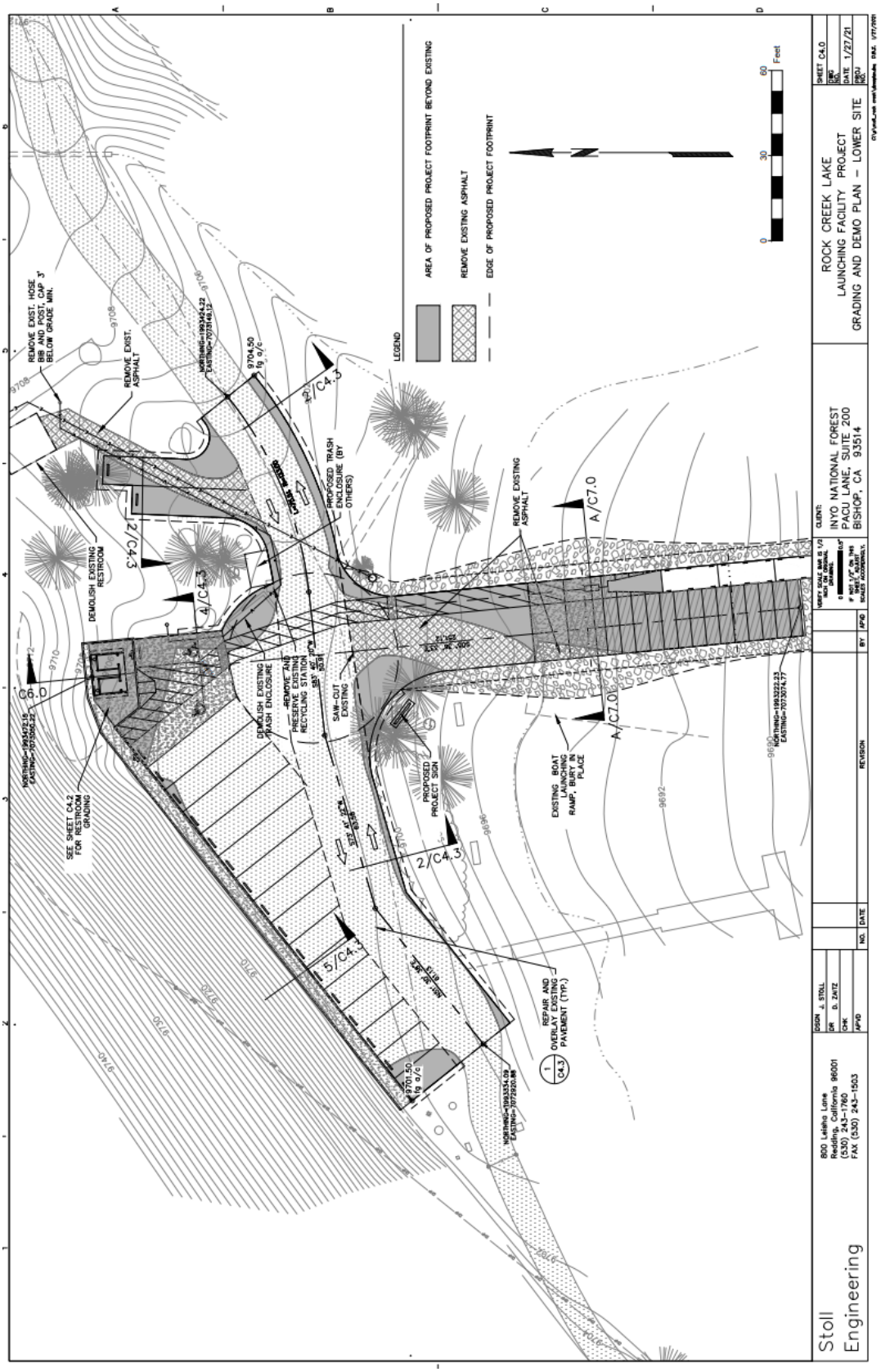
COMMISSION ADVICE AND COMMENT

DBW seeks Commission Advice and Comment on the proposed $1,500,000 (HWRF) construction grant to the United States Department of Agriculture Forest Service for the Rock Creek Lake Boat Launching Facility improvements described in this August 12, 2021, Feasibility Report.

CONDITIONS

The Forest Service, at its expense, must complete all NEPA requirements by December 30, 2021. No reimbursement will occur until NEPA is complete.

Proposed Main Parking Area and Boat Launch Ramp



Overflow Parking Area