

6.0 ENGINEERING FEASIBILITY

The Forest Service has conducted an environmental analysis and topographic survey of the project area. From this information conceptual design and drawings of the Project were made (Plate 3 & 4). All data indicates that the Project is engineeringly feasible.

7.0 COST ESTIMATE

An engineer's cost estimate for the Project based on the conceptual drawings (Plates 3 & 4) is shown below.

ACTIVITY	QUANTITY	1999 DOLLARS
Construction:		
Construction Staking	0.48 miles	\$ 5,000
Clearing, Grubing, Burning	2.5 acres	\$ 42,300
Excavation and Embankment	40 hours*	\$ 36,700
6" Aggregate Base	3,346 TN	\$ 107,100
3" Hot Bituminous Plant Mix	1,875 TN	\$ 168,800
Culverts	30 feet	\$ 1,200
Erosion Control	1.5 acres	\$ 2,500
Parking Lot Striping	Lump Sum	\$ 5,500
Waterline Relocation	600 feet	\$ 5,400
Mobilization (7%)	Regional Cost Guide	\$ 22,500
Signs	3	\$ <u>500</u>
Design & Contract Admin. (8%)	SUBTOTAL	\$ 397,500 \$ <u>31,800</u>
Contingency (10%)	SUBTOTAL	\$ 429,300 \$ <u>42,900</u>
Escalation for one year @ 3.5%	SUBTOTAL	\$ 472,200 \$ <u>16,500</u>
	TOTAL	\$488,700

* 3 D7 dozers, Sheeps foot. Motor Grader, Water Truck plus personnel

8.0 ECONOMIC JUSTIFICATION

Addition of the improvement will increase the number of recreationists by 71% who can use the Dark Day Launching Facility at any one time by increasing the parking area from 100 spaces to 171 spaces.

8.1 Benefits

The Forest Service expects that the additional parking area would be used, on the average, at about 50% capacity on weekends and holidays during the normal boating season. This relates to an additional 2,700 boat launching recreationists utilizing the new parking area per year. Total benefits over the 20 year life of the Project are estimated at \$1,179,750 (*see Application for Boat Launching Facility Grant An Improvement Project* page 13 for additional detail).

8.2 Cost

Estimated construction costs for the Project are about \$488,700. This amount, plus the estimated operating costs over the 20 year life of the Project total \$646,650 (*see Application for Boat Launching Facility Grant An Improvement Project* page 13 for additional detail).

8.3 Benefits Versus Costs

Benefits of constructing and operating the Project exceed the cost by a factor of about 1.82. In addition, the recreational quality for both boaters and other recreationists would improve from reduced crowding and reduced conflicts over parking availability at the Dark Day complex. There will be less frustration to the boating public in being able to find approved parking spaces. Resources would be better protected due to the fact that vehicles will not park on soft vegetated roadside shoulders, and less personnel time will be spent monitoring and repairing these damaged areas.

9.0 FINANCIAL FEASIBILITY

The Yuba County Water Agency is committed, under its FERC license NO. 2246, to providing and maintaining recreational opportunities on New Bullards Bar Reservoir. Because the reservoir is located largely on the Tahoe National Forest, the Forest Service is also committed to providing quality recreational opportunities at the reservoir. These two agencies have participated in a partnership for over 30 years to provide these recreational opportunities. These two agencies have the financial capability of and commitment to operate and maintain the Project for 20 years.

10.0 LEGAL DESCRIPTION

The project legal description is as follows:

A 2.5 acre parcel located in the N1/2, NW 1/4, SE 1/4, SE 1/4, NW 1/4 Section 17, T.18N., R.8E., MDM.