
ROCKY REACH COMPREHENSIVE RECREATION RESOURCES MANAGEMENT PLAN

Final Draft

**ROCKY REACH HYDROELECTRIC PROJECT
FERC Project No. 2145**

February 15, 2005



**Public Utility District No. 1 of Chelan County
Wenatchee, Washington**

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EXECUTIVE SUMMARY

The Recreation Resources Management Plan contained in this Chapter updates the existing Recreation Plan submitted by Chelan PUD in 1976 in conjunction with the addition of four new generators to the Rocky Reach Hydroelectric Project dam powerhouse in 1968. It describes Chelan PUD's plans for the utilization, design, and development of Project recreation facilities and public access to the Project Area, as required by 18 CFR 4.51 (f) (5). The plan was prepared in consultation with appropriate local, state and federal recreation agencies and planning commissions, the National Park Services and the United States Department of Agriculture Forest Service and other federal and state agencies with land management responsibilities for any part of the Project Area (Social Sciences Working Group).

Based on the studies conducted, the Social Sciences Working Group identified project impacts and recreation enhancement measures. The identified recreation measures were prioritized based on five primary considerations:

1. Ongoing Project impacts
2. Consistency with study results
3. Effectiveness of proposed measure
4. Costs (including cost-sharing opportunities)
5. Existence of mandatory conditioning authority

The following recreational measures are to be implemented through this Recreation Resources Management Plan:

1. Continued operation and maintenance of Rocky Reach Visitor Center and Park, Entiat Park, Chelan Falls/Powerhouse Parks, Beebe Bridge Park, Daroga State Park and Lincoln Rock State Park.
2. Renovations and enhancements at Lincoln Rock State Park and Daroga State Park
3. Completion of a paved one mile trail from Lincoln Rock State Park to a fish by-pass viewing station 300 feet downstream of Rocky Reach Dam.
4. Design and implementation of an irrigation system throughout Orondo Park
5. Revitalization of Entiat Park, including:
 - Wastewater treatment plant upgrade
 - Ball field development
 - Trade-lease/purchase of 17.85 shoreline acres currently owned by Chelan PUD to city of Entiat
 - Partnership agreement for O & M at Entiat Park
 - Construction of Entiatqua Trail
6. Creation of a Recreation Enhancement Fund
7. Completion of a Recreation Use Study
8. Development and implementation of Recreation Resources Monitoring and Evaluation Program.

SECTION 1: INTRODUCTION

1.1 Purpose

The Recreation Resources Management Plan (RRMP) contained in this chapter updates the existing Recreation Plan (Exhibit R to the existing License) submitted by Chelan PUD in 1976 in conjunction with the addition of four new generators to the Rocky Reach Hydroelectric Project (Project) dam powerhouse in 1968. It describes Chelan PUD's plans for the utilization, design, and development of Project recreation facilities and public access to the Project Area, as required by 18 CFR 4.51(f)(5). The plan was prepared in consultation with appropriate local, state and federal recreation agencies and planning commissions, the National Park Service (NPS) and the United States Department of Agriculture Forest Service (USDA-FS) and other federal and state agencies with land management responsibilities for any part of the Project Area.

1.2 Exhibit R Summary

The 1976 Rocky Reach Project Exhibit R Recreation Plan (Exhibit R) identified seven sites in the Project Area for recreational development. Three were completed by the Chelan PUD and opened to the public in the late 1970s, one in the 1980s and three in the 1990s. These recreation sites represent Chelan PUD's commitment to providing recreational facilities and access to the Project. Over one million people visit these parks each year. (As-built drawings of these sites are contained in Appendix A.)

The seven sites are described below. The location of these recreation sites, as well as other public recreation sites in the Project Area, is shown on Figure 1.

Rocky Reach Dam Site

Located on the dam site on the west side of the Project, this park provides several educational and interpretative opportunities for visitors. It consists of a four-story public information and tour center, landscaped grounds, fish viewing rooms and an innovative fish by-pass system, Interpretive history gallery and turbine exhibit, picnic shelters, restrooms and playground equipment. The park is owned and operated by Chelan PUD.

Orondo Park

Located 15 miles north of Rocky Reach dam on the east side of the Project, this park was originally developed in the early 1970s. Under Exhibit R, additional lands were acquired, and the park was expanded, over several years to include irrigated lawns, a gazebo, swimming area, boat launch, day moorage, day-use area, restrooms, 14 RV camping sites and tent camping in a grassy area within the park. This park is owned in part by Chelan PUD and owned in part and operated by the Port of Douglas County.

Entiat Park

Entiat Park is located 15 miles north of Rocky Reach dam on the west side of the Project. Built in the 1970s, this park was a result of the joining of two existing community parks, Silico Saska and Will Risk Memorial Park. This park provides 4,000 feet of shoreline and includes a day-use picnic area, restrooms, boat launch and boat handling facilities. In addition, overnight tent

camping is available, RV sites with partial hook-ups and day moorage facilities. This park is owned in part by Chelan PUD and in part by the City of Entiat. It is operated by the City of Entiat.

Lincoln Rock State Park (Eastbank)

This park is located at the dam site on the east side of the Project. Beginning as a 17-acre site called Eastbank, this park was later expanded to 60 acres and re-named Lincoln Rock State Park. The park offers 94 campsites with full and partial hookups, three picnic shelters, five restrooms, outdoor activity courts, swim area, boat launch and docking facilities and a multi-use play area. This park is owned by Chelan PUD and operated by Washington State Parks.

Daroga State Park

Daroga Park is located 25 miles north of the dam on the east side of the Project. This park's 140 acres offers facilities consisting of a camp loop with 28 camping units, 17 hike-in or boat-in camp units, and one large group camp area with a capacity of 50 camping units for a total of 94 units to accommodate the public. Partial hookups are provided for recreational vehicles. Other park facilities include three picnic shelters, five restrooms, outdoor activity courts, multi-use sports field, shoreline trails, large landscaped day-use areas, wind surfing beach area, swim area, playground area, boat launching and docking facilities. This park is owned by Chelan PUD and operated by Washington State Parks.

Chelan Falls/Powerhouse Parks

These parks are located 34 miles north of the dam on the west side of the Project. The development of these sites provides a boat ramp, a boat dock, trails, an extensive day-use picnic area, restrooms, irrigated landscaping, two swim beaches and expansive playfields. These parks are owned and operated by Chelan PUD.

Beebe Bridge Parks

This park is located 34 miles north of the dam on the east side of the Project. Beebe Bridge Park provides two loops of overnight camping (46 units), full hook-ups for recreational vehicles, restrooms, guest parking, day-use and picnic facilities, swim beach, boat ramp, boat docks and irrigated landscaping. This park is owned and operated by Chelan PUD.

1.3 Planning Process

The FERC relicensing process regarding recreation issues requires extensive planning, including environmental studies; consultation with relevant agencies and organizations; and public involvement. This RRMP is the result of a five-year planning process undertaken by a Social Sciences Working Group (SSWG) consisting of the USDA Forest Service, National Park Service, Washington Department of Ecology, Washington Department of Fish and Wildlife, Interagency Committee for Outdoor Recreation, Washington Department of Parks and Recreation Commission, Bureau of Land Management, Entiat Focus Group, Entiat School District, Boat Club of Wenatchee, Columbia Breaks Fire Interpretative Center, Entiat Valley Chamber of Commerce, Trout Unlimited, City of Entiat, the People along the Project, Chelan PUD and other interested stakeholders.

The SSWG identified relicensing-related recreation issues, including the need for recreation use monitoring, a recreation needs analysis, and the development of recreation enhancement options. Agency and public involvement has been an integral part in the identification of recreation issues, development of study plans, preparation of the Recreation Use Assessment and Recreation Needs Forecast and Analysis studies, and development of this RRMP. Early in the relicensing process, agencies, the public, and Chelan PUD developed an overall Recreation Study Plan to include recreation studies and information needs for the ultimate development of the RRMP. The following are the studies conducted as part of the relicensing process to assess and record recreational use at Project recreation facilities and other related public recreational sites:

- Recreation Use Assessment Study Report, March 2, 2001. This report provides the results of data collection efforts and surveys regarding existing recreational use. It was conducted during the summer and fall of 1999 and spring of 2000.
- Recreation Needs Forecast and Analysis Report, September 21, 2001. This report provides an analysis of the current and future recreation use, demand, and needs at public recreation sites and waters within the Project Area. The study was conducted in late 1999 and early 2000.

Over 50 agency, public, and recreation working group meetings (consisting of agency and public representatives) have been held during this process. Numerous meetings were held to identify recreation issues and several versions of draft and final study plans were developed in coordination with Chelan PUD, state, federal, and local agencies, and the public.

The SSWG developed individual study plans, and scopes of work for the studies, held. Additional meetings, discussions, and reviews as the studies proceeded, obtained further information, and prepared final study results and reports

The following studies were also used in developing the RRMP contained in this Chapter.

- Recreation Resources Inventory, September 21, 2001
- Socioeconomic Study, December 1, 2000
- Project Lands Management Study, May 30, 2003
- Sportsmans Access on the Wenatchee River, December 15, 2000
- Washington State Comprehensive Outdoor Recreation Planning Document (SCORP) 2002-2005, October 2002

This RRMP is based on the results of these studies, as well as the extensive consultation effort undertaken through the SSWG. It is also consistent with the relevant recreation management planning documents prepared by federal, state, and other local recreation management agencies.

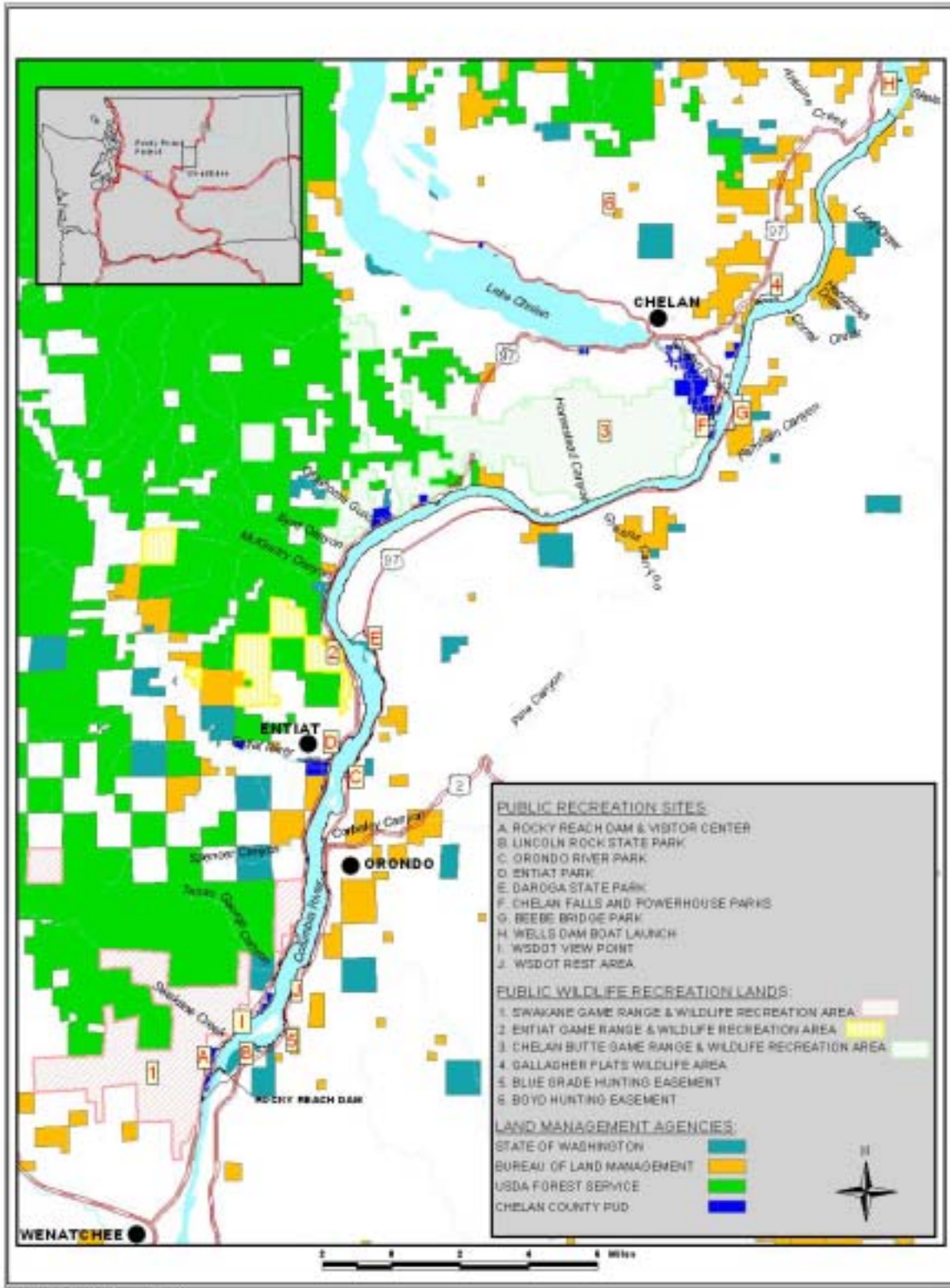


Figure 1: Public Recreation Sites and Designated Wildlife Recreation Lands

SECTION 2: EXISTING CONDITIONS

2.1 Existing Recreation Development

2.1.1 Public Recreation Facilities

For each of the existing public recreation facilities shown on Figure 1, the facilities provided and site acreage is shown in Table 1.

Chelan PUD constructed seven public recreation sites that provide access to the Rocky Reach Hydroelectric Project (Project). All seven of these sites are within and adjacent to the Project boundary. Upstream of Project is Douglas County PUD's Wells Dam. Douglas County PUD operates and maintains a boat launch at the tailrace of Wells Dam. This boat launch provides access to the Project.

All seven of these sites have irrigated lawns, hardened surfaces, paved trails, and flush toilets and can take a high level of use. In addition, each site also offers "natural appearing" landscape character and allows visitors to realize a semi-primitive experience.

2.1.2 Private Recreation Facilities

Few private recreation sites are available in the Project Area, and none of the private facilities are open to the general public.

Wenatchee Boat Club

The Wenatchee Boat Club is located on the west bank of the Project, upstream of the Rocky Reach dam and visitor center and across the river from Turtle Rock Island. The marina is open to club members only. The marina has 24 boat moorage slips and 4 day-use boat slips. The marina site also has a boat launch and a small campground with 18 campsites.

Subdivisions

Sun Cove, located on the east side of the Project on US 97 between Daroga State Park and Beebe Bridge Park, has a park, boat launch and boat moorage for use by property owners in the subdivision. The McDonald subdivision, north of Entiat has a dock for use by subdivision property owners.

Many private homes along the Project have their own private docks. The location of private docks in the Project Area has been inventoried and is included in the Inventory of Shoreline Development Map included in the Project Lands Management Study Report.

2.1.3 Public Recreation Sites

Washington State Department of Transportation (WSDOT) has a viewpoint, located on the west side of the Project just north of Rocky Reach Dam, on US 97A. WSDOT also has a rest area, located on the east side of the Project just north of Lincoln Rock State Park, on US 97.

2.1.4 Public Recreation Use Areas

Washington Department of Fish and Wildlife (WDFW), Bureau of Land Management (BLM) as well as the USDA-FS own lands adjacent to the Project that are managed for hunting, fishing access and other dispersed recreation. No developed recreation facilities are located on these lands. Recreation Resources Inventory Summary Report (September 21, 2001) discusses designated wildlife recreation areas in the Project Area. Chelan PUD owned lands adjacent to the Project that are known to be used for dispersed recreation activities are discussed in this document as well.

2.1.5 Wildlife Areas

The Swakane, Entiat and Chelan Butte Wildlife Areas, managed by WDFW, are located in Chelan County just west and northwest of the Project. In 1963, Chelan PUD provided funds, as mitigation resulting from the Rocky Reach Project, for the purchase of 20,397 acres of lands for inclusion in the Swakane, Entiat and Chelan Butte Wildlife areas. These are managed by WDFW for hunting and deer and upland bird and game habitat. These areas are popular for hunting upland birds, deer and big horn sheep. Wildlife viewing is also possible in these areas.

The Swakane and Entiat Wildlife Areas together cover approximately 19,200 acres. The Swakane Wildlife Area is five miles north of Wenatchee, just west of Rocky Reach dam and extends to the Entiat River. This area has approximately 25 miles of underdeveloped roads; primitive, undeveloped campsites; and parking areas. Because this area is easily accessible, it is a very popular hunting area. Entiat Wildlife Area is located between the Navarre Coulee Road and Entiat River on US 97A. This area has approximately 35 miles of underdeveloped roads; primitive, undeveloped campsites; and parking areas. Both areas are important winter range for mule deer and offer year-round habitat for upland game birds. Non-game species including birds and small mammals also inhabit the areas. The 1988 Dinkleman fire burned nearly all of the Swakane Wildlife Areas, changing the habitat primarily to grass.

Chelan Butte Wildlife Area is located between 25 Mile Creek Road on US 97A and Chelan Falls and extends to just outside of the town of Chelan on the south-facing slopes of Chelan Butte. The Chelan Butte Wildlife Area covers approximately 8,200 acres. This area has over 20 miles of underdeveloped roads; primitive, undeveloped campsites; and parking areas. Chelan Butte Wildlife area is also a popular hunting area. This area contains upland game habitat favorable for game birds including chukar, quail, grouse, and mourning doves. The area was burned in the 1994 Tyee fire.

A 173-acre parcel called Gallagher Flats was purchased by Chelan PUD, as part of the 1963 license agreement to mitigate impacts resulting from the Rocky Reach Project. Gallagher Flats, located upstream of Beebe Bridge along the west bank of the Project, is managed by WDFW for hunting. There is evidence of trash dumping, off-road vehicular traffic and non-designated camping occurring at this site.

Chelan PUD acquired hunting easements on two privately owned areas to be managed by WDFW. These two sites are not located adjacent to the Project but are mentioned here because they were included as part of the 1963 agreement to mitigate impacts resulting from the Rocky Reach Project. The Blue Grade hunting easement is located in Douglas County just east of

Lincoln Rock State Park. The Boyd hunting easement is located in Chelan County, west of the Project and north of Lake Chelan. Both of these sites are currently undeveloped.

Lands were purchased by Chelan PUD in the vicinity of the project, as part of the 1963 license agreement to mitigate wildlife impacts resulting from the Project, including 22 easements that provide public stream bank accesses and fishing areas along the Wenatchee River. These areas were created as off-site mitigation for sports fishing access areas inundated by construction of Rocky Reach Dam. These easements were deeded to WDFW. These areas are located from the Wenatchee River mouth (located approximately five miles downstream of Rocky Reach Dam) upstream to approximately one mile below Leavenworth. Some of these easements include parking, and others include only public access across private lands from the road to the shoreline and lands along the shoreline.

2.1.6 Other Chelan PUD Owned Lands Used for Dispersed Recreation

Chelan PUD-owned Turtle Rock Island is a 160-acre island located approximately two miles upstream from the Rocky Reach Dam. A small (less than one acre) sandy beach attracts boat-in visitors to the island. While no recreational facilities are located on the island, boat-in visitors use the beach for swimming and relaxing. Given the small size of the beach area, use is limited by the number of boats (approximately 4-5) the beach can accommodate at one time. The island possesses wildlife habitat value, and a Washington State fish hatchery is located on the island.

The Entiat River, at its confluence with the Columbia River, is used for dispersed recreation activities, although currently no developed recreation facilities exist in this area. Most of this area is owned by Chelan PUD. Several established trails that lead to the Entiat River provide fishing access. Numerous people have been observed using these trails. People have also been observed visiting the beach and swimming along the Project shoreline adjacent to the mouth of the Entiat River.

2.1.7 Availability of Public Boat Launches at the Project

Boat launches that provide public access to the Project Area are summarized below. The times of year that the launches are open to the public are also shown. Entiat locals are given the combination to the Entiat Park gate so that they may access the boat launch year-round.

Rocky Reach Project Public Boat Launches

Boat Launch When Open to General Public (2001)

Lincoln Rock State Park Boat Launch March 12 to October 23

Orondo River Park Boat Launch May 1 to September 30

Entiat Park Boat Launch Mid-April to Mid-October

Daroga State Park Boat Launch March 16 to October 16.

Chelan Falls Boat Launch Open year-round

Beebe Bridge Park Boat Launch Early April to November 1

Douglas Co. PUD Boat Launch Open year-round

2.1.8 Trails In and Near Project Area

Developed designated trails located within and/or adjacent to the Project Boundary are located within public recreation sites developed by Chelan PUD.

Numerous trails exist nearby the Project Area.

- The Columbia Breaks Fire Interpretive Center Foundation has developed a 1/2 mile interpretive trail, "Trail of Fire and Forest," located on the west side of Highway 97A, at the north end of the town of Entiat. The interpretive trail was designed to explain various elements of fire history, fire suppression and fire ecology. The graveled self-guided loop interpretive trail currently passes two historic lookouts and has twelve numbered stations highlighting interpretive messages that are described in the trail brochure. The trail goes through the 18-acre future site of the proposed Columbia Breaks Fire Interpretive Center and amphitheater.
- The Apple Capital Recreation Loop Trail located in Wenatchee and East Wenatchee, just south of the Project Area, traverses more than 10 miles of Columbia River shorelines. The trail has three bridges - two over the Columbia River and one spanning the Wenatchee River. Wenatchee Confluence State Park is located near the northwest end of the Apple Capital Recreation Loop Trail.
- Entiat River Valley, located west of the Project Area, has many multiple use trails that can be accessed from the Entiat Valley Road off of Highway 97A.
- Badger Mountain, located several miles east of the Project Area, also has many hiking and mountain biking trails.

Additional trail/walkways of various lengths are located within and/or adjacent to the Project Boundary.

- Rocky Reach Dam Site 0.45 mile
- Lincoln Rock State Park 1.3 miles
- Daroga State Park 2.5 miles
- Chelan Falls and Powerhouse Parks 0.2 mile
- Beebe Bridge Park 0.6 mile

2.1.9 Existing Recreation Use Sites near Project Area

During development of the Recreation Inventory Study Plan, the working group decided that the Inventory should include descriptions of public recreation facilities at the lower end of Wells Project, upstream of the Project Boundary, and at the upper end of Rock Island Project, downstream of the Project Boundary. In addition, the USDA-FS requested that the Inventory include descriptions of Forest Service recreation sites in the Entiat River Valley, west of the Project Boundary. These recreation use sites are described in the Recreation Inventory Study Plan.

2.2 Existing Recreational Use

Recreation sites along the Project provide facilities for a variety of recreation activities including camping, picnicking, boating, launching watercraft, walking, swimming, field sports, tennis, basketball, horseshoes, and playing on playgrounds.

The Recreational Use Assessment Study estimated average daily use by activity at the seven Chelan PUD- developed recreation sites in the Project Area. Table 2 summarizes the estimated average daily use by activity for the peak, fall, and spring seasons. Field data was collected in the peak-season, from Memorial Day weekend through Labor Day week of 1999 and 2000. Off-

season data collection was conducted in the fall months of mid-September through October 1999 and in the spring months of April and May 2000. Data was collected by Chelan PUD, Washington State Parks, Port of Douglas County, City of Entiat and other recreation facility managers within the study area. Additional methods used for assessing daily use included observation, license plate monitoring, boat counts, on-site interviews and written surveys.

During the peak-season monitoring (most peak-season use is during July and August), camping had the greatest use followed by picnicking, walking and boating. During the fall-season monitoring, camping showed the greatest use followed by visits to the dam and the visitor center. Picnicking had the highest visitor use followed by camping during spring-season monitoring. As can be seen from Table 2, significantly more daily visitor use occurred during peak-season monitoring (1999) than during the fall- and spring-season monitoring. More visitor use occurred during fall-season monitoring (1999) than during spring-season monitoring (2000).

2.3 Existing Recreation Facilities and Physical Capacity

Collectively, existing facilities on the Rocky Reach Project include 397 acres of developed recreational land, 213 RV sites, 100 tent sites, 4 RV dump sites, 13 picnic shelters, 11 boat launch lanes, 19 boat docks, 250 boat trailer parking spaces, 408 picnic tables, 170 toilets, 1975 linear feet of swimming beaches, and 4.69 miles of trails/walkways. The facilities all have restrooms with showers, and a variety of amenities such as picnic shelters with power, amphitheatres, landscaping and lawns, RV and tent camp sites, RV dump stations and concession buildings. Table 1 summarizes the existing facilities at the recreation sites in the Project study area. With the exception of Orondo Park, Entiat Park, and Lincoln Rock State Park, these facilities were mostly developed during the early 1990s. The following reviews existing camping, boating, and non-boating day-use facilities in the project study area and the physical capacities of these facilities. Further comparisons of visitor use and facility capacity will be provided in the Recreation Needs Forecast and Analysis Study (September 21, 2001).

2.3.1 Camping

Existing Facilities

Five out of the seven recreation sites in the study area have camping facilities. These include Lincoln Rock State Park, Orondo River Park, Entiat Park, Daroga State Park, and Beebe Bridge Park. These sites have a total of 292 campsites and 2 group sites (Table 1).

As explained in Recreation Use Assessment Study Report, March 2, 2001, during the 1999 monitoring, the City of Entiat allowed a maximum of 50 tent sites in the day-use area; this number is included in the 292 campsite total. Due to limited capacity of the Entiat sewer treatment facility, Entiat Park has reduced the number of tent sites allowed in the day-use area in 2001 to 25.

Physical Capacity

Use estimates of the number of people camping at recreation sites were based on the number of campsites occupied multiplied by a factor of 5 people per campsite. The number of occupied group camping areas at Daroga State Park was multiplied by 50 people per group sites, since they each have a capacity of 50 people per site. In this way a direct comparison can be made regarding campsite occupancy whether or not numbers of campsites or numbers of people are used. Using the above multipliers, the capacity of campgrounds at Rocky Reach campgrounds was 1,560 people per day/night in 1999, when peak-season monitoring was conducted. Since the allowed number of tent sites at Entiat Park has been reduced from 50 to 25 tent sites, the current (2001) Project Area campground capacity is 1,435 people per night.

2.3.2 Boating

Existing Facilities

Six out of the seven parks in the Project Area have boating facilities. Rocky Reach Dam and Visitor Center is the only recreation site that does not have boating facilities. There are a total of 11 launch lanes, 19 boat tie-up docks, and 250 boat trailer parking spaces at the six recreation sites. Orondo Park has a marina with marine gas available (Table 1). Douglas County PUD operates and maintains a boat launch at the tailrace of Wells Dam. This boat launch provides access to the Rocky Reach Project but is located within the Wells Project boundary; therefore it is not evaluated in detail or included in the Recreation Resources Inventory Summary Report (September 21, 2004). The site consists of a one-lane boat launch and about six boat trailer parking spaces. There is additional parking along the dirt access road. Portable restrooms are placed at the site in the summer. Unlike the other boat launches in the Project Area, the Wells Dam boat launch is used mainly by locals and by walleye and steelhead anglers. Due to the swift currents near the site, relatively few other recreation boaters use this launch, although some water skiers have used the launch but need to motor down river. Parking in the designated parking area fills up on some weekends and evenings, but there is generally always additional boat trailer parking space along the dirt access road (pers. comm. G. Brett, Douglas County PUD, March 2001).

Physical Capacity

Project recreation sites have the capacity to accommodate 440 boats or 1,320 people per day, using Bureau of Reclamation (BOR) general design standards for boat launches of 40 boats per launch lane per day and 3 persons per boat. Currently there are 250 boat trailer parking spaces at recreation sites in the project study area.

Using a turnover rate of 2, it can be estimated that approximately 500 vehicles per day can park at publicly owned boat launch facilities. Using an average of 3 people per car, it can be assumed that public boat launch parking can accommodate approximately 1,500 people per day.

2.3.3 Non-Boating Day-Use Activities

All seven public recreation sites in the study area have day-use facilities (Table 1). The following summarizes day-use parking, picnic, beach, trails and other day-use facilities provided in the Project Area and discusses the physical capacity of day-use facilities.

Parking Facilities

Currently, there are 942 day-use parking spaces at Project Area recreation sites. Currently there is day-use parking available in the Project Area to accommodate approximately 5,400 people per day. This estimate is based on the number of day-use parking spaces, multiplied by an average of 3 people per vehicle and a turnover rate of 2 per day, minus 250 (the estimated number of Chelan PUD employees that use the Rocky Reach Dam site parking area per day).

Picnic Facilities

Currently there are approximately 438 picnic tables at project recreation sites. The existing picnic tables have capacity for approximately 3,504 people per day using general design standards of 4 people per table and a turnover rate of 2 per day.

Swimming/Sunbathing (Beach) Facilities

A total of 1,975 linear feet of swimming beaches are provided at Project recreation sites. Assuming an average beach width of 50 feet, it is estimated that approximately 2.4 acres of swimming beaches are available at project recreation sites. The current swimming beaches in the Project Area have capacity for approximately 1,056 people per day using general design standards of 220 people per acre and a turnover rate of 2 per day for swimming beaches...

Trails

Project recreation sites currently have a total of over 5 miles of developed trails/walkways. The existing trails/walkways at Project recreation sites are assumed to have the capacity for 450 people per day using National Recreation and Park Administration (NRPA) general standards for trails of 90 people per day per mile.

Other Day-Use Facilities

Six of the seven Project recreation sites provide playground equipment. Additional facilities such as horseshoe pits, baseball fields, volleyball courts, tennis courts, basketball courts, and open court areas are provided at all sites, although available facilities vary from site to site (Table 1). The Rocky Reach Dam Site has a visitor center and museum, and provides concessions, tours of the dam, fish bypass and fish viewing.

2.3.4 Park Acreage

Within Project Area, the majority of visitors are not from the local Chelan/Douglas County region; yet it would not be logical to plan for parks at Rocky Reach based on the population of the Seattle Metropolitan area. Currently, there are not standards available that provide recommendations related to the number of park acres per number of park visitors.

City and County park planners generally use standards for planning city and regional parks. For instance, NRPA [spell out] standards for regional parks include 5-10 acres per 1,000 population. However, this is based on the population of the region that is accommodated by the park.

2.4 Social Capacity

Recreation site capacity is based on the physical capacity of existing facilities and design standards as described above, as well as social capacity. Social capacity refers to visitors' perceptions of crowding and conflict, as well as visitor attitudes towards recreation sites and

their recreation experience. On-site surveys conducted at Project recreation sites in 1999 included questions intended to determine the social capacity of Project Area recreation sites. Visitors were generally satisfied with the recreation sites along the Project waters and in the activities that they participated in during their visit. Less than 2 percent of those responding indicated that “fewer people” would have made their experience better. Results of the visitor survey are provided in the 1999/2000 Recreational Use Assessment Study Report (Chelan PUD, 2001a). Further evaluation of survey responses in regards to social capacity was conducted as part of the Rocky Reach Project Recreation Needs Analysis Study and is presented in the Recreation Needs Forecast and Analysis Report (Chelan PUD, 2001b).

2.5 ADA Accessibility

The Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG) require that all areas of newly designed or newly constructed buildings and facilities, and altered portions of existing buildings and facilities, provide accessible features as outlined in the Guidelines (ADAAG, 1998). The Guidelines have been revised. Proposed rules were published in July 1999. The proposed rules amend the Guidelines by adding a new special application section for newly constructed and altered recreation facilities that are not adequately addressed by the existing guidelines. Proposed guidelines provide additional accessibility provisions for boating facilities including boat launch ramps and boat slips. ADA accessible facilities already exist at all Project recreation sites. Projects are currently underway to improve ADA accessibility at Orondo River Park. Additional ADA accessible facilities will also be provided at all Project recreation sites as existing facilities are improved or replaced.

Table 1: Existing Facilities at Public Recreation Sites in Project Study Area

| Site | Acres | Camping | Picnic & Day-Use Facilities | Boating Facilities | Swimming Beach | Trails/Walkways | Interpretation Facilities | ADA Facilities* |
|---|-------|---|--|--|-----------------|-----------------|---------------------------|---------------------------------|
| Rocky Reach Dam and Visitor Center | 38 | No | 20 picnic tables, 2 shelters formal gardens, visitor center, museum, playground equipment 2 horseshoe pits 3 restrooms 241 parking spaces | No | No | 0.45 mi. | Yes | Yes |
| Lincoln Rock State Park | 65 | 94 RV/tent spaces RV dump | 166 picnic tables, 3 shelters, amphitheater, playground equipment, 1 baseball field 2 volleyball courts 2 tennis courts 2 basketball courts 3 horseshoe pits 1 open court area concession building 6 restrooms/44 toilets/ 12 showers 148 day-use parking spaces | 3 launch lanes 6 tie up docks 102 boat trailer parking spaces | 175 linear feet | .94 mi. | No | Yes |
| Orondo River Park | 5 | 14 RV/tent sites Grassy area: 10-15 tents | 14 picnic tables, 1 shelter 1 volleyball court 1 horseshoe pit 1 restroom/4 toilets/4 showers 22 day-use parking spaces | 1 launch lane 3 tie up docks marina overnight moorage 14 boat trailer parking spaces | 225 linear feet | No | No | ADA improvements are in process |

Table 1: Existing Facilities at Public Recreation Sites in Project Study Area

| Site | Acres | Camping | Picnic & Day-Use Facilities | Boating Facilities | Swimming Beach | Trails/Walkways | Interpretation Facilities | ADA Facilities* |
|--|-------|---|---|--|-----------------|-----------------|---------------------------|-----------------|
| Entiat Park | 40 | 31 RV sites 50 tent sites allowed (1991) in day-use area (25 tents allowed in 2001) | 108 picnic tables, 1 shelter playground equipment 1 volleyball court 2 horseshoe pits 3 restrooms/12 toilets/4 showers 43 day-use parking spaces | 1 launch lane 2 tie up docks 17 boat trailer parking spaces | 250 linear feet | No | Museum | Yes |
| Daroga State Park | 140 | 28 RV/tent campsites + 17 boat/walk-in tent sites 2 group camping areas (capacity 100 people) RV dump station | 75 picnic tables, 3 shelters playground equipment 1 baseball field 1 soccer field tennis courts 2 basketball courts 1 open court area 4 restrooms/38 toilets/12 showers 114 day-use parking spaces | 2 launch lanes 3 tie up docks 76 boat trailer parking spaces | 475 linear feet | 2.5 miles | No | Yes |
| Chelan Falls and Powerhouse Parks | 53 | No | 11 picnic tables + 16 in 2 shelters playground equipment 2 softball fields 1 soccer field 2 volleyball courts 1 tennis court 1 basketball court 2 horseshoe pits 2 open court areas 3 restrooms/24 toilets/4 showers 178 parking spaces | 2 launch lanes 2 tie up docks 25 boat trailer parking spaces | 375 linear feet | 0.2 mile | No | Yes |

Table 1: Existing Facilities at Public Recreation Sites in Project Study Area

| Site | Acres | Camping | Picnic & Day-Use Facilities | Boating Facilities | Swimming Beach | Trails/Walkways | Interpretation Facilities | ADA Facilities* |
|--------------------------|-------|------------------|--|--|-----------------|-----------------|---------------------------|-----------------|
| Beebe Bridge Park | 56 | 46 RV/tent sites | 14 picnic tables + 14 in 1 shelter playground equipment 1 baseball field 1 soccer field 1 volleyball court 2 tennis courts 1 open court area 3 restrooms/24 toilets/6 showers 196 day-use parking spaces | 2 launch lanes 3 tie up docks 16 boat trailer parking spaces | 475 linear feet | 0.6 mile | No | Yes |

* Additional ADA facilities information is available through Chelan PUD Parks Department and Washington State Parks.

Table 2: Estimated Average Daily Use by Activity at Public Recreation Sites

| Activity | Peak-Season May 30 – Sept 9 (Avg. # People/Day) | Fall-Season Sept 10 – Oct 31 (Avg. # People/Day) | Spring-Season April 1 – May 26 (Avg. # People/Day) |
|-----------------------------|--|---|---|
| Camping | 863 | 371 | 186 |
| Boating | 298 | 34 | 14 |
| Visiting Dam/Visitor Center | 245 | 231 | 180 |
| Shore Fishing | 2 | 0 | 3 |
| Visiting Beach/Sunbathing | 117 | 0 | 23 |
| Swimming/Wading | 99 | 0 | 10 |
| Nature Study Photo | 3 | 0 | 14 |
| Gathering/Collecting | 0 | 0 | 0 |
| Hang gliding | 8 | 0 | 8 |
| Walking | 336 | 227 | 117 |
| Hiking | 0 | 0 | 0 |
| Backpacking | 0 | 0 | 0 |
| Skating | 5 | 0 | 14 |
| Jogging | 50 | 0 | 0 |
| Picnicking | 598 | 183 | 261 |
| Off-road vehicle riding | 0 | 11 | 0 |
| Bicycling on-road | 8 | 5 | 29 |
| Bicycling off-road | 98 | 40 | 0 |
| Sightseeing | 185 | 30 | 13 |
| Using playgrounds | 210 | 13 | 50 |
| Group Activity | 213 | 0 | 84 |
| Other Activity | 159 | 356 | 129 |
| Total: | 3497 | 1501 | 1135 |

SECTION 3: RECREATION DEMAND, FACILITY NEEDS AND RESOURCE CAPACITY

This section provides information regarding existing and projected future recreation use and demands based on field monitoring, population projections, and existing recreation-related studies and planning documents. Demand for recreation facilities in the Project Area is assessed by projecting recreation visitation based on existing conditions and future growth rates. Recreation planning documents and surveys conducted in the Project Area also provide information regarding recreation-related activity demands and trends.

3.1 Existing Recreation Use at Public Recreation Sites

As discussed in the Recreation Use Assessment Report (Chelan PUD, 2001a), estimated visitor use for Project Area recreation sites was calculated using several types of data. The following represents visitor use data based on 1999 and 2000 data collection and monitoring efforts. Refer to the Recreation Use Assessment Report (Chelan PUD, 2001a) and the Recreation Needs Forecast and Analysis, September 21, 2001 for further information.

Visitor Use at Recreation Sites

Table 3 shows the estimated visitor use at Project recreation sites based on 1999/2000 monitoring efforts (Chelan PUD, 2001a). Estimated visitor use at each recreation sites is broken out into camping, boating and non-boating activities.

Seven developed public recreation sites were monitored during the summer and fall of 1999 and the spring of 2000. Based on field monitoring and data collection efforts an average of almost 3,500 people per day visited developed recreation sites in the Project Area during the peak-season. An estimated average of 1,500 people per day visited developed recreation sites in the Project Area during the fall-season, and an estimated average of 1,135 people per day visited developed public recreation sites in the Project Area during the spring-season.

Visitor Use by Activity

Table 4 provides a summary of the estimated average number of people per day that participate in different activity categories at the seven developed public recreation sites in the Project Area.

As shown in Table 4, during the peak-season (July and August had the highest use), camping facilities received the most visitor use followed by picnicking. Boating was the third most popular activity on weekends, whereas, on weekdays walking was third and boating had the fourth highest use.

During the fall-season, camping had the highest average use followed by other activities then visiting the dam/visitor center. On fall weekdays, other activities had the highest use followed by camping, whereas on weekends camping had the highest use followed by other activities.

During spring-season monitoring, picnicking had the highest average visitor use followed by camping, then visiting the dam/visitor center. On spring weekdays other activities had the

highest use followed by visiting the dam/visitor center and then picnicking, whereas on weekends picnicking had the highest use followed by camping then visiting the dam/visitor center.

3.2 Existing Watercraft Activity and Dispersed Use

Watercraft activity and shoreline activity or dispersed use is described in Section 5.2.1 of the Rocky Reach Project Recreation Use Assessment Report (Chelan PUD, 2001a).

Watercraft Activity

Table 5, summarizes the average number of watercraft observed during boat runs on the Project. As can be expected, most of the watercraft use occurs during peak season weekends and the majority of watercraft observed during all seasons were motorized.

Based on peak-season observations, an average of 42.5 watercraft were observed per day during weekday boat runs and an average of 101.5 watercraft were observed per day during weekend boat runs. Most watercraft activity was spread out between the north end of Turtle Rock Island and Beebe Bridge. Motorized boats made up nearly 70 percent of the peak-season watercraft use in the Project. Personal watercraft (jet skis) made up 29 percent, non-motorboats made up one percent, and airplanes and windsurfers made up less than one percent of the watercraft use.

No watercraft were observed during fall-season weekday boat runs and only five watercraft were observed during the weekend boat run. Watercraft observed on the weekend boat run were between Orondo Park and Beebe Bridge. All watercraft observed were motorboats.

During the spring-season weekday boat run, only two watercraft were observed, one between the north end of Turtle Rock Island and Orondo River Park and the other between Daroga State Park and Beebe Bridge. During the spring-season weekend boat run, a total of 12 watercraft were observed. These included three motorized watercraft between Rocky Reach Dam and Turtle Rock Island, eight motorized watercraft, between Orondo River Park and Beebe Bridge, and one non-motorized watercraft between Rocky Reach Dam and the north end of Turtle Rock island. Two out of the 11 motorized watercraft observed were jet skis.

Dispersed Shoreline Use

Table 6 summarizes the average number of people observed on undeveloped shorelines of the Project. Almost all dispersed shoreline activity occurred during the peak season with most activity on weekends.

During peak-season boat runs, an average of 34 people were observed on weekdays and an average of 64.5 people were observed on weekends at undeveloped shorelines along the Project. Activities observed during peak-season boat runs were mostly swimming/visiting the beach, and some shore angling and other shore activity. Most dispersed shoreline use was observed at a beach on Chelan PUD owned Turtle Rock Island and on mostly private and some state, Chelan PUD and BLM owned undeveloped shorelines between Daroga State Park and Beebe Bridge. A few people were observed on the Entiat River Sandbar, located at the mouth of the Entiat River, and along undeveloped shorelines. Undeveloped shorelines include those privately owned and owned by Chelan PUD and managed by WDFW between Beebe Bridge and Wells Dam.

No people were observed along undeveloped shorelines during 1999 fall-season weekend and weekday boat runs.

During the spring-season, only one person was observed shore angling along undeveloped shorelines between Rocky Reach Dam and the north end of Turtle Rock Island. No people were observed along undeveloped shorelines during spring-season weekend boat runs.

3.3 Estimated Growth

National and state studies indicate that as populations grow, demand for recreation opportunities will also grow. Estimated growth in Project Area recreation, based on this premise, can be determined from population forecasts and growth rates for the location of visitors to Project recreation sites. The location of visitors was determined based on the 1999 and 2000 surveys and documentation of vehicle license plate numbers. During surveys at recreation sites, people were asked where they were from. During car runs, observers documented license plate numbers of vehicles at recreation sites and Washington State Department of Licensing provided county of origin for each vehicle license plate number. The percentages of peak-, fall- and spring- season visitors who came from different areas are shown, respectively, on Table 7, Table 8 and Table 9. The annual population growth rates for each area, weighted average based on the percentage of people and the growth rate for each area are also shown.

The following sections provide demand projections for recreation sites and activity based on population growth. In actuality, a number of other factors can influence recreation demand such as demographics and age of populations, economics, technology, etc. For instance, over the last ten years the Hispanic population in the Project Area has more than doubled with an increase from 1990 to 1999 of almost 118 percent and 107 percent for Chelan and Douglas counties, respectively. In comparison, Washington State Hispanic population has increased by 66 percent over the same period of time. These increases in the Project Area can affect different use patterns. For example, according to a study done by USDA-FA research staff member Dr. Deborah Chavez, Hispanics recreate with their immediate and extended families, which require additional group facilities. In addition, Spanish-speaking staff and Spanish signs allow Hispanic visitors to feel more welcome and may contribute to increasing use of facilities. Aging baby boomers can result in needs for different facilities, such as ADA facilities. Trends toward larger motor homes and boats can have an impact on facility needs. Increases in fuel prices can also impact different types of recreation activity demands. Results of these other factors are not always easy to predict especially for many years out into the future.

3.4 Growth Projections for Recreation Sites and Activity in Project Area

During the twenty-year period from 2000 to 2020, the following types of growth have been projected for recreation sites and activities in the Project Area:

- Total average number of people per day during the peak-season is estimated to grow by almost 1,325 additional visits (see Table 10 for a breakdown by site and Table 11 for a breakdown by activity);
- Total average number of people per day during the fall-season is estimated to grow by almost 545 additional visits (see Table 12 for a breakdown by site and Table 13 for a breakdown by activity);

- Total average number of people per day during the spring-season is estimated to grow by almost 420 additional visits (see Table 14 for a breakdown by site and Table 15 for a breakdown by activity);
- Estimated physical capacities of recreation sites, based on the number of campsites and parking spaces, are also shown on Table 10, Table 12 and Table 14 for comparison with estimated current and future use.
- The average number of peak-season watercraft is estimated to grow by an average of 15 additional watercraft on weekdays and 35 additional watercraft on weekends (See Table 16);
- The average number of fall-season watercraft is estimated to grow by an average of almost two additional watercraft on weekends (See Table 17);
- The average number of spring-season watercraft is estimated to grow by an average of less than 1 additional watercraft on weekdays and almost 4.5 additional watercraft on weekends (See Table 18);
- The average number of peak season dispersed activity along Project shorelines is estimated to grow by an average of 12 additional people on weekdays and just over 23 additional people on weekends (See Table 19);
- The average number of spring-season dispersed activity along Project shorelines is estimated to grow by an average of less than one person (See Table 20).

Growth projections were calculated using annual weighted averages of the population growth rates for the various locations from which visitors come during each season. (See Tables 7, 8, and 9). The projections were also based on the premise that as populations grow, demands for recreation opportunities grow correspondingly, assuming demand can be met, but that emphasis may change by activity. For example, according to Interagency Committee for Outdoor Recreation (IAC), there is a current decrease in camping, fishing and hunting and an increase in walking activities.

Existing planning documents and studies have identified potential recreation development opportunities that can accommodate additional facilities to satisfy the projected increases in demand. Comments were also received during development of the Needs Report related to potential recreation development opportunities in the Project Area. Potential recreation development and expansion opportunities identified in the Project Area include the following: campground expansion opportunities, Entiat Park revitalization, trail expansions and/or additions and educational and interpretive sign development.

Table 3: Estimated Average Daily Use Rocky Reach Recreation Sites¹

| SITE | Peak-Season (1999) May 30 – Sept 9 Average # People/Day | | | Fall (1999) Sept 10 – Oct 31 Average # People/Day | | | Spring (2000) April 1 – May 26 Average # People/Day | | |
|---|---|------------------|-----------------------|---|-------------|-----------------------|---|------------|-----------------------|
| | Avg. Peak | Week-day | Week-end ² | Avg. Peak | Week-day | Week-end ² | Avg. Peak | Week-day | Week-end ² |
| Rocky Reach Dam Recreation Facilities and Visitor Center (Day-Use): | 568 | 530 | 660 | 331 | 305 | 390 | 359 | 335 | 425 |
| Lincoln Rock State Park: | | | | | | | | | |
| Camping/Overnight: | 337 | 285 | 455 | 215 | 185 | 285 | 124 | 100 | 170 |
| Boating: | 89 | 72 | 132 | 15 | 0 | 54 | 7 | 0 | 24 |
| Non-Boating Day-Use: | 552 | 458 | 773 | 256 | 255 | 256 | 172 | 165 | 196 |
| Orondo River Park: | | | | | | | | | |
| Camping/Overnight: | 63 | 50 | 90 | 8 | 5 | 15 | 14 | 10 | 20 |
| Boating: | 20 | 19 | 25 | 2 | 0 | 12 | 0 | 0 | 0 |
| Non-Boating Day-Use: | 131 | 101 | 205 | 23 | 10 | 53 | 17 | 15 | 30 |
| Entiat Park: | | | | | | | | | |
| Camping/Overnight ³ : | RV 59 Tent 56 | RV 43 Tent 42 | RV 92 Tent 88 | All 40 | All 25 | All 80 | All 2 | All 0 | All 5 |
| Boating: | 55 | 42 | 90 | 4 | 0 | 12 | 3 | 0 | 12 |
| Non-Boating Day-Use: | 244 | 183 | 390 | 107 | 80 | 163 | 50 | 10 | 153 |
| Daroga State Park: | | | | | | | | | |
| Camping/Overnight (Group): | 69 | 55 | 97 | 12 | 0 | 38 | 0 | 0 | 0 |
| Camping/Overnight (Other): | 120 | 97 | 175 | 58 | 40 | 95 | 34 | 25 | 49 |
| Boating: | 60 | 54 | 78 | 8 | 6 | 15 | 2 | 0 | 6 |
| Non-Boating Day-Use: | 285 | 256 | 352 | 83 | 69 | 110 | 101 | 85 | 149 |
| Chelan Falls/Powerhouse Parks: | | | | | | | | | |
| Boating: | 6 | 5 | 8 | 0 | 0 | 0 | 1 | 0 | 2 |
| Non-Boating Day-Use: | 281 | 250 | 352 | 115 | 100 | 145 | 122 | 115 | 148 |
| Beebe Bridge Park: | | | | | | | | | |
| Camping/Overnight: | 159 | 135 | 210 | 38 | 25 | 75 | 12 | 8 | 20 |
| Boating: | 68 | 60 | 90 | 5 | 0 | 21 | 1 | 0 | 2 |
| Non-Boating Day-Use: | 275 | 220 | 405 | 181 | 180 | 179 | 114 | 110 | 128 |
| TOTAL | 3497 | 2957 | 4767 | 1501 | 1285 | 1998 | 1135 | 978 | 1539 |
| <p>1 Refer to Recreation Use Assessment Report (Chelan PUD, 2001a)</p> <p>2 Weekend refers to Friday and Saturday nights for camping/overnight and Saturday and Sunday for day-use.</p> <p>3 Differentiation between RV and tent camping at Entiat Park during peak-season based on on-site surveys. No data available to separate fall- and spring-season RV and tent camping.</p> | | | | | | | | | |

Table 4: Rocky Reach Project Recreation Sites - Estimated Average Daily Use By Activity

| Activity | Peak-Season (1999) May 30 – Sept 9 Average # People/Day | | | Fall (1999) Sept 10 – Oct 31 Average # People/Day | | | Spring (2000) April 1 – May 26 Average # People/Day | | |
|-----------------------------|---|-------------|-------------|---|-------------|-------------|---|------------|-------------|
| | All Days* | Weekday | Weekend | All Days* | Week-day | Week-end | All Days* | Week-day | Week-end |
| Camping | 863 | 707 | 1207 | 371 | 280 | 588 | 186 | 143 | 264 |
| Boating | 298 | 252 | 423 | 34 | 6 | 114 | 14 | 0 | 46 |
| Visiting Dam/Visitor Center | 245 | 220 | 302 | 231 | 214 | 273 | 180 | 161 | 234 |
| Shore Fishing | 2 | 3 | 1 | 0 | 0 | 0 | 3 | 2 | 6 |
| Visiting Beach/Sunbathing | 117 | 90 | 176 | 0 | 0 | 0 | 23 | 10 | 50 |
| Swimming/Wading | 99 | 67 | 174 | 0 | 0 | 0 | 10 | 4 | 20 |
| Nature Study/Photography | 3 | 4 | 0 | 0 | 0 | 0 | 14 | 24 | 0 |
| Hang Gliding | 8 | 4 | 14 | 0 | 0 | 0 | 8 | 0 | 16 |
| Walking | 336 | 338 | 330 | 227 | 259 | 162 | 117 | 97 | 159 |
| Skating | 5 | 2 | 10 | 0 | 0 | 0 | 14 | 17 | 10 |
| Jogging | 50 | 58 | 34 | 0 | 0 | 0 | 0 | 0 | 0 |
| Picnicking | 598 | 450 | 945 | 183 | 131 | 260 | 261 | 160 | 498 |
| Off-road vehicle riding | 0 | 0 | 0 | 11 | 15 | 6 | 0 | 0 | 0 |
| Bicycling on-road | 8 | 8 | 7 | 5 | 2 | 8 | 29 | 17 | 40 |
| Bicycling off-road | 98 | 94 | 108 | 40 | 34 | 56 | 0 | 0 | 0 |
| Sightseeing | 185 | 180 | 200 | 30 | 8 | 76 | 13 | 6 | 20 |
| Using Playgrounds | 210 | 225 | 175 | 13 | 0 | 44 | 50 | 82 | 30 |
| Group Activity | 213 | 127 | 415 | 0 | 0 | 0 | 84 | 84 | 83 |
| Other activity | 159 | 128 | 246 | 356 | 336 | 411 | 129 | 171 | 63 |
| Total: | 3497 | 2957 | 4767 | 1501 | 1285 | 1998 | 1135 | 978 | 1539 |

*Based on 1999/2000 data collection and field monitoring. Refer to Recreation Use Assessment Report (Chelan PUD, 2001a)

Table 5: Average # Watercraft Observed

| Type of Watercraft | Peak-Season (2000) May 30 – Sept 9 Average # Watercraft Observed per Day | | Fall (1999) Sept 10 – Oct 31 # Watercraft Observed per Day | | Spring (2000) April 1 – May 26 # Watercraft Observed per Day | |
|------------------------------|---|---------|---|---------|---|---------|
| | Weekday | Weekend | Weekday | Weekend | Weekday | Weekend |
| Motorboat angling | 1.5 | 6 | 0 | 2 | 0 | 0 |
| Motorboat skiing/tubing | 11.5 | 34 | 0 | 2 | 0 | 6 |
| Motorboat other/unidentified | 15 | 32 | 0 | 1 | 2 | 3 |
| Jetskis | 13.5 | 28 | 0 | 0 | 0 | 2 |
| Airplanes | 0.5 | 0 | 0 | 0 | 0 | 0 |
| Non-motorboat angling | 0 | 0 | 0 | 0 | 0 | 0 |
| Non-motorboat other | 0.5 | 1 | 0 | 0 | 0 | 1 |
| Windsurfers | 0 | 0.5 | 0 | 0 | 0 | 0 |
| Total: | 42.5 | 101.5 | 0 | 5 | 2 | 12 |

Based on 1999/2000 instantaneous counts by boat. Refer to Recreation Use Assessment Report (Chelan PUD, 2001a)

Table 6: Average Dispersed Shoreline Activity Observed

| Activity | Peak-Season (2000) May 30 – Sept 9 Average # People Observed per Day | | Fall (1999) Sept 10 – Oct 31 # People Observed per Day | | Spring (2000) April 1 – May 26 # People Observed per Day | |
|-------------------------|---|---------|---|---------|---|---------|
| | Weekday | Weekend | Weekday | Weekend | Weekday | Weekend |
| Angling | 0 | 4.5 | 0 | 0 | 1 | 0 |
| Swimming/Visiting Beach | 34 | 59.5 | 0 | 0 | 0 | 0 |
| Other Shore Activity | 0 | 0.5 | 0 | 0 | 0 | 0 |
| Total: | 34 | 64.5 | 0 | 0 | 1 | 0 |

Based on 1999/2000 instantaneous counts by boat. Refer to Recreation Use Assessment Report (Chelan PUD, 2001a)

Table 7: Population Weighting Factors for Estimating Recreation-Use Projections (Peak-Season)

| Area | % of People from each area (column a) | Annual Growth Rate of Population ¹ (column b)* | Weighted Annual Average (a) x (b) |
|---------------------------------|---------------------------------------|---|-----------------------------------|
| Chelan/Douglas Counties | 21% | 1.62 | 0.34% |
| Seattle Metro Area ² | 61% | 1.49 | 0.91% |
| Other Washington Counties | 17% | 1.64 | 0.27% |
| Other U.S. States | 1% | 0.89 | 0.01% |
| British Columbia, Canada | 0% | 1.09 | 0.00% |
| Weighted Average | | | 1.54% |

¹ Based on 1999-2020 projections provided by Washington OFM
² Includes King, Snohomish, Kitsap, Pierce, and Thurston counties
 * Annual population growth rates for each area are based on a weighted average: percentage of people vs the growth rate for each area show.

Table 8: Population Weighting Factors for Estimating Recreation-Use Projections (Fall-Season)

| Area | % of People from each area (column a) | Annual Growth Rate of Population ¹ (column b)* | Weighted Annual Average (a) x (b) |
|---------------------------------|---------------------------------------|---|-----------------------------------|
| Chelan/Douglas Counties | 26% | 1.69 | 0.44% |
| Seattle Metro Area ² | 45% | 1.4 | 0.63% |
| Other Washington Counties | 21% | 1.58 | 0.33% |
| Other U.S. States | 6% | 0.89 | 0.05% |
| British Columbia, Canada | 2% | 1.09 | 0.02% |
| Weighted Average | | | 1.48% |

¹ Based on 1999-2020 projections provided by Washington OFM
² Includes King, Snohomish, Kitsap, Pierce, and Thurston counties
 * Annual population growth rates for each area are based on a weighted average: percentage of people vs the growth rate for each area show.

Table 9: Population Weighting Factors for Estimating Recreation-Use Projections (Spring-Season)

| Area | % of People from each area (column a) | Annual Growth Rate of Population¹ (column b)* | Weighted Annual Average (a) x (b) |
|---|--|---|--|
| Chelan/Douglas Counties | 30% | 1.73 | 0.52% |
| Seattle Metro Area ² | 40% | 1.55 | 0.62% |
| Other Washington Counties | 21% | 1.71 | 0.36% |
| Other U.S. States | 5% | 0.89 | 0.04% |
| British Columbia, Canada | 4% | 1.09 | 0.04% |
| Weighted Average | | | 1.58% |
| ¹ Based on 1999-2020 projections provided by Washington OFM ² Includes King, Snohomish, Kitsap, Pierce, and Thurston counties * Annual population growth rates for each area are based on a weighted average: percentage of people vs the growth rate for each area show. | | | |

Table 10: Projected Peak-Season Visitation at Rocky Reach Project Recreation Sites¹

| RECREATION SITES | Est. ² Daily Capacity | Average 1999 # People/Day | | | Average 2000 # People/Day | | | Average 2010 # People/Day | | | Average 2020 # People/Day | | |
|---|--|------------------------------|-------------|-------------|------------------------------|-------------|-------------|------------------------------|-------------|-------------|------------------------------|-------------|-------------|
| | | AD | WD | WE | AD | WD | WE | AD | WD | WE | AD | WD | WE |
| Rocky Reach Dam Recreation Facilities and Visitor Center (Day-Use): | 1,190 | 568 | 530 | 660 | 577 | 538 | 670 | 672 | 627 | 780 | 782 | 731 | 910 |
| Lincoln Rock State Park: | | | | | | | | | | | | | |
| Camping/Overnight: | 470 | 337 | 285 | 455 | 342 | 289 | 462 | 399 | 337 | 538 | 465 | 393 | 627 |
| Boating: | 612 | 89 | 72 | 132 | 90 | 73 | 134 | 105 | 85 | 156 | 123 | 99 | 182 |
| Non-Boating Day-Use: | 888 | 552 | 458 | 773 | 561 | 465 | 785 | 653 | 542 | 915 | 761 | 631 | 1066 |
| Orondo River Park: | | | | | | | | | | | | | |
| Camping/Overnight: | 130 | 63 | 50 | 90 | 64 | 51 | 91 | 75 | 59 | 106 | 87 | 69 | 124 |
| Boating: | 84 | 20 | 19 | 25 | 20 | 19 | 25 | 24 | 22 | 30 | 28 | 26 | 34 |
| Non-Boating Day-Use: | 132 | 131 | 101 | 205 | 133 | 103 | 208 | 155 | 119 | 243 | 181 | 139 | 283 |
| Entiat Park: | | | | | | | | | | | | | |
| Camping/Overnight RV: | 155 | 59 | 43 | 92 | 60 | 44 | 94 | 70 | 51 | 109 | 81 | 59 | 127 |
| 1999 Tent ³ : | 250 | 56 | 42 | 88 | 57 | 43 | 89 | 66 | 50 | 104 | 77 | 58 | 121 |
| 2001 Tent ³ : | 125 | | | | | | | | | | | | |
| Boating: | 102 | 55 | 42 | 90 | 56 | 43 | 91 | 65 | 50 | 106 | 76 | 58 | 124 |
| Non-Boating Day-Use: | 258 | 244 | 183 | 390 | 248 | 186 | 396 | 289 | 217 | 461 | 336 | 252 | 538 |
| Daroga State Park: | | | | | | | | | | | | | |
| Camping/Overnight (Group): | 100 | 69 | 55 | 97 | 70 | 56 | 99 | 82 | 65 | 115 | 95 | 76 | 134 |
| Camping/Overnight (Other): | 225 | 120 | 97 | 175 | 122 | 98 | 178 | 142 | 115 | 207 | 165 | 134 | 241 |
| Boating: | 456 | 60 | 54 | 78 | 61 | 55 | 79 | 71 | 64 | 92 | 83 | 74 | 108 |
| Non-Boating Day-Use: | 684 | 285 | 256 | 352 | 289 | 260 | 358 | 337 | 303 | 416 | 393 | 353 | 485 |
| Chelan Falls/Powerhouse Parks: | | | | | | | | | | | | | |
| Boating: | 150 | 6 | 5 | 8 | 6 | 5 | 8 | 7 | 6 | 9 | 8 | 7 | 11 |
| Non-Boating Day-Use: | 1,068 | 281 | 250 | 352 | 285 | 254 | 358 | 332 | 296 | 416 | 387 | 345 | 485 |
| Beebe Bridge Park: | | | | | | | | | | | | | |
| Camping/Overnight: | 230 | 159 | 135 | 210 | 161 | 137 | 213 | 188 | 160 | 248 | 219 | 186 | 289 |
| Boating: | 96 | 68 | 60 | 90 | 69 | 61 | 91 | 80 | 71 | 106 | 94 | 83 | 124 |
| Non-Boating Day-Use: | 1176 | 275 | 220 | 405 | 279 | 223 | 411 | 325 | 260 | 479 | 379 | 303 | 558 |
| TOTAL | 8,581 | 3497 | 2957 | 4767 | 3550 | 3003 | 4840 | 4137 | 3499 | 5636 | 4820 | 4076 | 6571 |

1 Based on 1999 Monitoring. Refer to Recreation Use Assessment Report (Chelan PUD, 2001a)

2 Estimated capacity is measure of physical capacity based on number of campsites & parking spaces.

3 During 1999 monitoring, 50 tent sites in the day-use area were allowed. The number of tent sites allowed has been reduced to 25 in the day-use area in 2001.

Legend: AD = All-Days; WD = Weekdays; WE = Weekends

Table 11: Projected Peak-Season Visitation by Activity at Rocky Reach Project Recreation Sites

| ACTIVITY | Average 1999 # People/Day | | | Average 2000 # People/Day | | | Average 2010 # People/Day | | | Average 2020 # People/Day | | |
|--------------------------------|------------------------------|-------------|-------------|------------------------------|-------------|-------------|------------------------------|-------------|-------------|------------------------------|-------------|-------------|
| | AD | WD | WE | AD | WD | WE | AD | WD | WE | AD | WD | WE |
| Camping | 863 | 707 | 1207 | 876 | 718 | 1226 | 1021 | 836 | 1428 | 1190 | 975 | 1664 |
| Boating | 298 | 252 | 423 | 303 | 256 | 430 | 353 | 298 | 500 | 411 | 347 | 583 |
| Visiting Dam/Visitor Center | 245 | 220 | 302 | 249 | 223 | 307 | 290 | 260 | 357 | 338 | 303 | 416 |
| Shore Fishing | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 4 | 1 | 3 | 4 | 1 |
| Visiting Beach/Sunbathing | 117 | 90 | 176 | 119 | 91 | 179 | 138 | 106 | 208 | 161 | 124 | 243 |
| Swimming/Wading | 99 | 67 | 174 | 100 | 68 | 177 | 117 | 79 | 206 | 136 | 92 | 240 |
| Nature Study/Photography | 3 | 4 | 0 | 3 | 4 | 0 | 4 | 5 | 0 | 4 | 6 | 0 |
| Hang Gliding | 8 | 4 | 14 | 8 | 4 | 14 | 9 | 5 | 17 | 11 | 6 | 19 |
| Walking | 336 | 338 | 330 | 341 | 343 | 335 | 398 | 400 | 390 | 463 | 466 | 455 |
| Skating | 5 | 2 | 10 | 5 | 2 | 10 | 6 | 2 | 12 | 7 | 3 | 14 |
| Jogging | 50 | 58 | 34 | 51 | 59 | 34 | 59 | 69 | 40 | 69 | 80 | 47 |
| Picnicking | 598 | 450 | 945 | 607 | 457 | 959 | 707 | 532 | 1118 | 824 | 620 | 1303 |
| Off-road vehicle riding | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bicycling on-road | 8 | 8 | 7 | 8 | 8 | 7 | 9 | 9 | 8 | 11 | 11 | 10 |
| Bicycling off-road | 98 | 94 | 108 | 100 | 95 | 110 | 116 | 111 | 128 | 135 | 130 | 149 |
| Sightseeing | 185 | 180 | 200 | 187 | 183 | 203 | 219 | 213 | 237 | 255 | 248 | 276 |
| Using Playgrounds | 210 | 225 | 175 | 213 | 228 | 178 | 248 | 266 | 207 | 289 | 310 | 241 |
| Group Activity | 213 | 127 | 415 | 216 | 129 | 421 | 252 | 150 | 491 | 294 | 175 | 572 |
| Other activity | 159 | 128 | 246 | 161 | 130 | 250 | 188 | 151 | 291 | 219 | 176 | 339 |
| Total of All Activities | 3497 | 2957 | 4767 | 3549 | 3001 | 4841 | 4136 | 3496 | 5639 | 4820 | 4076 | 6572 |

Based on 1999 Monitoring. Refer to Recreation Use Assessment Report (Chelan PUD, 2001a)

Legend: AD = All-Days; WD = Weekdays; WE = Weekends

Table 12: Projected Fall-Season Visitation at Rocky Reach Project Recreation Sites¹

| RECREATION SITES | Est. ² Daily Capacity | Average 1999 # People/Day | | | Average 2000 # People/Day | | | Average 2010 # People/Day | | | Average 2020 # People/Day | | |
|--|--|------------------------------|-------------|-------------|------------------------------|-------------|-------------|------------------------------|-------------|-------------|------------------------------|-------------|-------------|
| | | AD | WD | WE | AD | WD | WE | AD | WD | WE | AD | WD | WE |
| Rocky Reach Dam Recreation Facilities & Visitor Center (Day-Use): | 1,190 | 331 | 305 | 390 | 336 | 310 | 396 | 389 | 358 | 458 | 451 | 415 | 531 |
| Lincoln Rock State Park: Camping/Overnight: | 470 | 215 | 185 | 285 | 218 | 188 | 289 | 253 | 217 | 335 | 293 | 252 | 388 |
| Boating: | 612 | 15 | 0 | 54 | 15 | 0 | 55 | 18 | 0 | 63 | 20 | 0 | 74 |
| Non-Boating Day-Use: | 888 | 256 | 255 | 256 | 260 | 259 | 260 | 301 | 300 | 301 | 349 | 347 | 349 |
| Orondo River Park: Camping/Overnight: | 130 | 8 | 5 | 15 | 8 | 5 | 15 | 9 | 6 | 18 | 11 | 7 | 20 |
| Boating: | 84 | 2 | 0 | 12 | 2 | 0 | 12 | 2 | 0 | 14 | 3 | 0 | 16 |
| Non-Boating Day-Use: | 132 | 23 | 10 | 53 | 23 | 10 | 54 | 27 | 12 | 62 | 31 | 14 | 72 |
| Entiat Park: Camping/Overnight 1999 ³ : | 405 | 40 | 25 | 80 | 41 | 25 | 81 | 47 | 29 | 94 | 54 | 34 | 109 |
| Camping/Overnight 2001 ³ : | 280 | | | | | | | | | | | | |
| Boating: | 102 | 4 | 0 | 12 | 4 | 0 | 12 | 5 | 0 | 14 | 5 | 0 | 16 |
| Non-Boating Day-Use: | 258 | 107 | 80 | 163 | 109 | 81 | 165 | 126 | 94 | 192 | 146 | 109 | 222 |
| Daroga State Park: Camping/Overnight (Group): | 100 | 12 | 0 | 38 | 12 | 0 | 39 | 14 | 0 | 45 | 16 | 0 | 52 |
| Camping/Overnight (Other): | 225 | 58 | 40 | 95 | 59 | 41 | 96 | 68 | 47 | 112 | 79 | 54 | 129 |
| Boating: | 456 | 8 | 6 | 15 | 8 | 6 | 15 | 9 | 7 | 18 | 11 | 8 | 20 |
| Non-Boating Day-Use: | 684 | 83 | 69 | 110 | 84 | 70 | 112 | 98 | 81 | 129 | 113 | 94 | 150 |
| Chelan Falls/Powerhouse Parks: Boating: | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Non-Boating Day-Use: | 1,068 | 115 | 100 | 145 | 117 | 101 | 147 | 135 | 118 | 170 | 157 | 136 | 197 |
| Beebe Bridge Park: Camping/Overnight: | 230 | 38 | 25 | 75 | 39 | 25 | 76 | 45 | 29 | 88 | 52 | 34 | 102 |
| Boating: | 96 | 5 | 0 | 21 | 5 | 0 | 21 | 6 | 0 | 25 | 7 | 0 | 29 |
| Non-Boating Day-Use: | 1176 | 181 | 180 | 179 | 184 | 183 | 182 | 213 | 212 | 210 | 246 | 245 | 244 |
| TOTAL | 8,736 | 1501 | 1285 | 1998 | 1524 | 1304 | 2027 | 1765 | 1510 | 2348 | 2044 | 1749 | 2720 |

1 Based on 1999 Monitoring. Refer to Recreation Use Assessment Report (Chelan PUD, 2001a)
 2 Estimated capacity is measure of physical capacity based on number of campsites & parking spaces.
 3 During 1999 monitoring, 50 tent sites in the day-use area were allowed. The number of tent sites allowed has been reduced to 25 in the day-use area in 2001.
Legend: AD = All-Days; WD = Weekdays; WE = Weekends

Table 13: Projected Fall-Season Visitation by Activity at Rocky Reach Project Recreation Sites

| ACTIVITY | Average 1999 # People/Day | | | Average 2000 # People/Day | | | Average 2010 # People/Day | | | Average 2020 # People/Day | | |
|--------------------------------|------------------------------|-------------|-------------|------------------------------|-------------|-------------|------------------------------|-------------|-------------|------------------------------|-------------|-------------|
| | AD | WD | WE | AD | WD | WE | AD | WD | WE | AD | WD | WE |
| Camping | 371 | 280 | 588 | 376 | 284 | 597 | 436 | 329 | 690 | 505 | 381 | 801 |
| Boating | 34 | 6 | 114 | 35 | 6 | 116 | 40 | 7 | 134 | 46 | 8 | 155 |
| Visiting Dam/Visitor Center | 231 | 214 | 273 | 234 | 217 | 277 | 272 | 252 | 321 | 314 | 291 | 372 |
| Shore Fishing | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Visiting Beach/Sunbathing | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Swimming/Wading | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nature Study/Photography | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hang Gliding | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walking | 227 | 259 | 162 | 230 | 263 | 164 | 267 | 304 | 190 | 309 | 353 | 221 |
| Skating | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Jogging | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Picnicking | 183 | 131 | 260 | 186 | 133 | 264 | 215 | 154 | 306 | 249 | 178 | 354 |
| Off-road vehicle riding | 11 | 15 | 6 | 11 | 15 | 6 | 13 | 18 | 7 | 15 | 20 | 8 |
| Bicycling on-road | 5 | 2 | 8 | 5 | 2 | 8 | 6 | 2 | 9 | 7 | 3 | 11 |
| Bicycling off-road | 40 | 34 | 56 | 41 | 35 | 57 | 47 | 40 | 66 | 54 | 46 | 76 |
| Sightseeing | 30 | 8 | 76 | 30 | 8 | 77 | 35 | 9 | 89 | 41 | 11 | 103 |
| Using Playgrounds | 13 | 0 | 44 | 13 | 0 | 45 | 15 | 0 | 52 | 18 | 0 | 60 |
| Group Activity | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other activity | 356 | 336 | 411 | 361 | 341 | 417 | 418 | 395 | 483 | 485 | 457 | 560 |
| Total of All Activities | 1501 | 1285 | 1998 | 1522 | 1304 | 2028 | 1764 | 1510 | 2347 | 2043 | 1748 | 2721 |

Based on 1999 Monitoring. Refer to Recreation Use Assessment Report (Chelan PUD, 2001a)

Legend: AD = All-Days; WD = Weekdays; WE = Weekends

Table 14: Projected Spring-Season Visitation at Rocky Reach Project Recreation Sites

| RECREATION SITES | Est. ² Daily Capacity | Average 2000 # People/Day | | | Average 2010 # People/Day | | | Average 2020 # People/Day | | |
|---|--|------------------------------|------------|-------------|------------------------------|-------------|-------------|------------------------------|-------------|-------------|
| | | AD | WD | WE | AD | WD | WE | AD | WD | WE |
| Rocky Reach Dam Recreation Facilities & Visitor Center (Day-Use): | 1,190 | 359 | 335 | 425 | 420 | 392 | 497 | 491 | 458 | 582 |
| Lincoln Rock State Park: | | | | | | | | | | |
| Camping/Overnight: | 470 | 124 | 100 | 170 | 145 | 117 | 199 | 170 | 137 | 233 |
| Boating: | 612 | 7 | 0 | 24 | 8 | 0 | 28 | 10 | 0 | 33 |
| Non-Boating Day-Use: | 888 | 172 | 165 | 196 | 201 | 193 | 229 | 235 | 226 | 268 |
| Orondo River Park: | | | | | | | | | | |
| Camping/Overnight: | 130 | 14 | 10 | 20 | 16 | 12 | 23 | 19 | 14 | 27 |
| Boating: | 84 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Non-Boating Day-Use: | 132 | 17 | 15 | 30 | 20 | 18 | 35 | 23 | 21 | 41 |
| Entiat Park: | | | | | | | | | | |
| Camping/Overnight 1999 ³ : | 405 | 2 | 0 | 5 | 2 | 0 | 6 | 3 | 0 | 7 |
| Camping/Overnight 2001 ³ : | 280 | | | | | | | | | |
| Boating: | 102 | 3 | 0 | 12 | 4 | 0 | 14 | 4 | 0 | 16 |
| Non-Boating Day-Use: | 258 | 50 | 10 | 153 | 58 | 12 | 179 | 68 | 14 | 209 |
| Daroga State Park: | | | | | | | | | | |
| Camping/Overnight (Group): | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Camping/Overnight (Other): | 225 | 34 | 25 | 49 | 40 | 29 | 57 | 47 | 34 | 67 |
| Boating: | 456 | 2 | 0 | 6 | 2 | 0 | 7 | 3 | 0 | 8 |
| Non-Boating Day-Use: | 684 | 101 | 85 | 149 | 118 | 99 | 174 | 138 | 116 | 204 |
| Chelan Falls/Powerhouse Parks: | | | | | | | | | | |
| Boating: | 150 | 1 | 0 | 2 | 1 | 0 | 2 | 1 | 0 | 3 |
| Non-Boating Day-Use: | 1,068 | 122 | 115 | 148 | 143 | 135 | 173 | 167 | 157 | 203 |
| Beebe Bridge Park: | | | | | | | | | | |
| Camping/Overnight: | 230 | 12 | 8 | 20 | 14 | 9 | 23 | 16 | 11 | 27 |
| Boating: | 96 | 1 | 0 | 2 | 1 | 0 | 2 | 1 | 0 | 3 |
| Non-Boating Day-Use: | 1176 | 114 | 110 | 128 | 133 | 129 | 150 | 156 | 151 | 175 |
| TOTAL | 8,736 | 1135 | 978 | 1539 | 1326 | 1145 | 1798 | 1552 | 1339 | 2106 |
| <p>1 Based on 2000 Monitoring. Refer to Recreation Use Assessment Report (Chelan PUD, 2001a)</p> <p>2 Estimated capacity is measure of physical capacity based on number of campsites & parking spaces.</p> <p>3 During 1999 monitoring, 50 tent sites in the day-use area were allowed. The number of tent sites allowed has been reduced to 25 in the day-use area in 2001.</p> <p>Legend: AD = All-Days; WD = Weekdays; WE = Weekends</p> | | | | | | | | | | |

Table 15: Projected Spring-Season Visitation by Activity Rocky Reach Project Recreation Sites

| ACTIVITY | Average 2000 # People/Day | | | Average 2010 # People/Day | | | Average 2020 # People/Day | | |
|---|------------------------------|------------|-------------|------------------------------|-------------|-------------|------------------------------|-------------|-------------|
| | AD | WD | WE | AD | WD | WE | AD | WD | WE |
| Camping | 186 | 143 | 264 | 218 | 167 | 309 | 254 | 196 | 361 |
| Boating | 14 | 0 | 46 | 16 | 0 | 54 | 19 | 0 | 63 |
| Visiting Dam/Visitor Center | 180 | 161 | 234 | 211 | 188 | 274 | 246 | 220 | 320 |
| Shore Fishing | 3 | 2 | 6 | 4 | 2 | 7 | 4 | 3 | 8 |
| Visiting Beach/Sunbathing | 23 | 10 | 50 | 27 | 12 | 58 | 31 | 14 | 68 |
| Swimming/Wading | 10 | 4 | 20 | 12 | 5 | 23 | 14 | 5 | 27 |
| Nature Study/Photography | 14 | 24 | 0 | 16 | 28 | 0 | 19 | 33 | 0 |
| Hang Gliding | 8 | 0 | 16 | 9 | 0 | 19 | 11 | 0 | 22 |
| Walking | 117 | 97 | 159 | 137 | 113 | 186 | 160 | 133 | 218 |
| Skating | 14 | 17 | 10 | 16 | 20 | 12 | 19 | 23 | 14 |
| Jogging | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Picnicking | 261 | 160 | 498 | 305 | 187 | 583 | 357 | 219 | 681 |
| Off-road vehicle riding | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bicycling on-road | 29 | 17 | 40 | 34 | 20 | 47 | 40 | 23 | 55 |
| Bicycling off-road | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sightseeing | 13 | 6 | 20 | 15 | 7 | 23 | 18 | 8 | 27 |
| Using Playgrounds | 50 | 82 | 30 | 58 | 96 | 35 | 68 | 112 | 41 |
| Group Activity | 84 | 84 | 83 | 98 | 98 | 97 | 115 | 115 | 114 |
| Other activity | 129 | 171 | 63 | 151 | 200 | 74 | 177 | 234 | 86 |
| Total of All Activities | 1135 | 978 | 1539 | 1327 | 1143 | 1801 | 1552 | 1338 | 2105 |
| Based on 2000 Monitoring. Refer to Recreation Use Assessment Report (Chelan PUD, 2001a) | | | | | | | | | |
| Legend: AD = All-Days; WD = Weekdays; WE = Weekends | | | | | | | | | |

Table 16: Projected Peak-Season Watercraft Activity

| ACTIVITY | Average 2000 # Watercraft/Day | | Average 2010 # Watercraft/Day | | Average 2020 # Watercraft/Day | |
|--|----------------------------------|--------------|----------------------------------|--------------|----------------------------------|--------------|
| | WD | WE | WD | WE | WD | WE |
| Motorboat angling | 1.5 | 6 | 2 | 7 | 2 | 8 |
| Motorboat skiing/tubing | 11.5 | 34 | 13 | 40 | 16 | 46 |
| Motorboat other/unidentified | 15 | 32 | 17 | 37 | 20 | 43 |
| Personal water craft (jetskis) | 13.5 | 28 | 16 | 33 | 18 | 38 |
| Airplanes | 0.5 | 0 | 0.6 | 0 | 0.7 | 0 |
| Non-motorboat angling | 0 | 0 | 0 | 0 | 0 | 0 |
| Non-motorboat other | 0.5 | 1 | 0.6 | 1 | 0.7 | 1 |
| Windsurfers | 0 | 0.5 | 0 | 0.6 | 0 | 0.7 |
| Total of All Activities | 42.5 | 101.5 | 49.2 | 118.6 | 57.4 | 136.7 |
| Based on 2000 boat run observations. Refer to Recreation Use Assessment Report (Chelan PUD, 2001a) | | | | | | |
| Legend: WD = Weekdays; WE = Weekends | | | | | | |

Table 17: Projected Fall-Season Watercraft Activity

| ACTIVITY | Average 1999 # Watercraft/Day | | Average 2000 # Watercraft/Day | | Average 2010 # Watercraft/Day | | Average 2020 # Watercraft/Day | |
|--|----------------------------------|----------|----------------------------------|----------|----------------------------------|----------|----------------------------------|------------|
| | WD | WE | WD | WE | WD | WE | WD | WE |
| Motorboat angling | 0 | 2 | 0 | 2 | 0 | 2.4 | 0 | 2.7 |
| Motorboat skiing/tubing | 0 | 2 | 0 | 2 | 0 | 2.4 | 0 | 2.7 |
| Motorboat other/unidentified | 0 | 1 | 0 | 1 | 0 | 1.2 | 0 | 1.4 |
| Personal water craft (jetskis) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Airplanes | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Non-motorboat angling | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Non-motorboat other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Windsurfers | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total of All Activities | 0 | 5 | 0 | 5 | 0 | 6 | 0 | 6.8 |
| Based on 1999 boat run observations. Refer to Recreation Use Assessment Report (Chelan PUD, 2001a) | | | | | | | | |
| Legend: WD = Weekdays; WE = Weekends | | | | | | | | |

Table 18: Projected Spring-Season Watercraft Activity

| ACTIVITY | 2000 Average # Watercraft/Day | | 2010 Average # Watercraft/Day | | 2020 Average # Watercraft/Day | |
|--------------------------------|----------------------------------|----|----------------------------------|------|----------------------------------|------|
| | WD | WE | WD | WE | WD | WE |
| Motorboat angling | 0 | 0 | 0 | 0 | 0 | 0 |
| Motorboat skiing/tubing | 0 | 6 | 0 | 7 | 0 | 8 |
| Motorboat other/unidentified | 2 | 3 | 2.3 | 4 | 2.7 | 4 |
| Personal water craft (jetskis) | 0 | 2 | 0 | 2 | 0 | 3 |
| Airplanes | 0 | 0 | 0 | 0 | 0 | 0 |
| Non-motorboat angling | 0 | 0 | 0 | 0 | 0 | 0 |
| Non-motorboat other | 0 | 1 | 0 | 1.2 | 0 | 1.4 |
| Windsurfers | 0 | 0 | 0 | 0 | 0 | 0 |
| Total of All Activities | 2 | 12 | 2.3 | 14.2 | 2.7 | 16.4 |

Based on 2000 boat run observations. Refer to Recreation Use Assessment Report (Chelan PUD, 2001a)
Legend: WD = Weekdays; WE = Weekends

Table 19: Projected Peak-Season Dispersed Shoreline Activity

| ACTIVITY | Average 2000 # People/Day | | Average 2010 # People/Day | | Average 2020 # People/Day | |
|--------------------------------|------------------------------|------|------------------------------|------|------------------------------|------|
| | WD | WE | WD | WE | WD | WE |
| Angling | 0 | 4.5 | 0 | 5 | 0 | 6 |
| Swimming/Visiting Beach | 34 | 59.5 | 40 | 69 | 46 | 81 |
| Other Shore Activity | 0 | 0.5 | 0 | 0.6 | 0 | 0.7 |
| Total of All Activities | 34 | 64.5 | 40 | 74.6 | 46 | 87.7 |

Dispersed shoreline activity includes activities along undeveloped shorelines.
 Based on 2000 boat run observations. Refer to Recreation Use Assessment Report (Chelan PUD, 2001a)
Legend: WD = Weekdays; WE = Weekends

Table 20: Projected Spring-Season Dispersed Shoreline Activity

| ACTIVITY | Average 2000 # People/Day | | Average 2010 # People/Day | | Average 2020 # People/Day | |
|--------------------------------|------------------------------|----|------------------------------|----|------------------------------|----|
| | WD | WE | WD | WE | WD | WE |
| Angling | 1 | 0 | 1.2 | 0 | 1.4 | 0 |
| Swimming/Visiting Beach | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Shore Activity | 0 | 0 | 0 | 0 | 0 | 0 |
| Total of All Activities | 1 | 0 | 1.2 | 0 | 1.4 | 0 |

Dispersed shoreline activity includes activities along undeveloped shorelines.
 Based on 2000 boat run observations. Refer to Recreation Use Assessment Report (Chelan PUD, 2001a)
Legend: WD = Weekdays; WE = Weekends

SECTION 4: DEVELOPMENT PLAN AND IMPLEMENTATION SCHEDULE

Chelan PUD owns and operates three of the seven parks in the Project Area. Two parks are owned by Chelan PUD and operated by Washington State Parks, one is owned in part by the Chelan PUD and Douglas County Port and is operated and maintained by the Port, and one of the parks is owned in part by Chelan PUD and the City of Entiat. This park is maintained by the City of Entiat. Chelan PUD, Douglas County Port, the City of Entiat and Washington State Parks provide plans that include policies and guidelines for recreation management and development in the Project Area. Further information regarding recreation needs and demands outlined in recreation plans, studies and surveys is provided in the Recreation Needs Forecast and Analysis Report (DES and Howe Consulting, Inc, 2001)

Based on the efforts of the Social Sciences Working Group (SSWG), this section provides for operation and maintenance of existing recreation facilities in the Project Area to ensure public access and recreational use of Project lands and waters, as well as additional facilities and access to Project lands. The following describes the proposed recreation development/enhancement actions, and provides costs and a schedule for the implementation of such actions.

4.1 Development of Recreation Enhancement Options

Based on the studies conducted, the SSWG identified project impacts and recreation enhancement measures. The identified recreation measures were prioritized based on five primary considerations:

1. Ongoing Project impacts
2. Consistency with study results
3. Effectiveness of proposed measure
4. Costs (including cost-sharing opportunities)
5. Existence of mandatory conditioning authority

4.2 Recreation Measures and Implementation Schedules

The following are recreational measures to be implemented through this Plan:

1. Continued operation and maintenance of Rocky Reach Visitor Center and Park, Entiat Park, Chelan Falls/Powerhouse Parks, Beebe Bridge Park, Daroga State Park, and Lincoln Rock State Park.
2. Renovations and enhancements at Lincoln Rock State Park and Daroga State Park
3. Completion of a paved one mile trail from Lincoln Rock State Park to a fish by-pass viewing station 300 feet downstream of Rocky Reach Dam.
4. Design and implementation of an irrigation system throughout Orondo Park
5. Revitalization of Entiat Park, including:
 - wastewater treatment plant upgrade
 - ball field development
 - trade-lease/purchase of 17.85 shoreline acres currently owned by Chelan PUD to city of Entiat
 - partnership agreement for O&M at Entiat Park

- construction of Entiatqua Trail
- 6. Creation of a Recreation Enhancement Fund
- 7. Completion of a Recreation Use Study
- 8. Development and implementation of Recreation Resources Monitoring and Evaluation Program

1. Ownership, Operation and Maintenance of Existing Parks

Conceptual drawings for each of the seven parks are provided in Appendix A.

Between 1963 and 1995, Chelan PUD developed seven parks along the Columbia River within the Project Area including Rocky Reach Visitor Center and Park, Entiat Park, Chelan Falls/Powerhouse Parks, Beebe Bridge Park, Daroga State Park, and Lincoln Rock State Park. Orondo Park was also developed by Chelan PUD; but is owned in part by Chelan PUD and Douglas County Port, and is operated and maintained by Douglas County Port.

Chelan PUD will continue to ensure operation and maintenance of all of these facilities to provide public access and recreational use of lands and waters within the Project Area.

Specific Action

For the term of the New License and any subsequent annual licenses, Chelan PUD will continue to own, operate, and maintain Rocky Reach Park and Visitor Center, Beebe Bridge Park, Lincoln Rock State Park, Daroga State Park, Entiat Park, Chelan Falls Park, and Powerhouse Park.

2. Renovation and Enhancement of Lincoln Rock State Park and Daroga State Park

Within one year of the effective date of the New License, Chelan PUD shall begin implementation of the renovation and enhancement of Lincoln Rock State Park and Daroga State Park that shall include feasibility, finalization of design, development of a schedule, and determination of costs based on conceptual plans outlined in Appendices B and C. Chelan PUD commits to spend an amount not to exceed \$6 million for major renovation of, and minor improvements to, existing facilities and enhancements in either or both of these parks, which could include, but are not limited to, group camping (an area of the park set aside for groups to camp together in tents, RVs) and convenience camping (small cabins with windows, a door, sleeping bunks, and electricity, but no water or sewer).

Renovation and enhancements to the parks shall include a phased approach, with a timeline for completion of each phase. Some renovation and enhancement components shall occur based on the level of use of existing facilities. The first phase of renovation and enhancement projects shall be accomplished within five (5) years of the effective date of the New License.

Chelan PUD shall obtain concurrence from the Washington State Parks and/or other operator(s) of Lincoln Rock State Park and Daroga State Park in the development of the renovation and enhancement plan and prior to any revisions to the plan.

If at any time changing recreation demands reflected in use levels of existing facilities should cause a need to reduce the level of development enhancements in the plan established for Lincoln Rock State Park and Daroga State Park, Chelan PUD shall make other enhancements to these parks and/or other PUD parks on the Rocky Reach Reservoir based on a renovation and enhancement plan that would be created taking into consideration recommendations from the Recreation Forum, the SCORP documents, the Recreation Use Assessment Study Report, and Recreation Needs Forecast and Analysis Report for an amount not to exceed \$6 million.

Specific Action

Within one year of the effective date of the New License, Chelan PUD shall begin implementation of the renovation and construction of facilities at Lincoln Rock State Park and Daroga State Park that includes feasibility, finalization of design, development of a schedule and determination of costs for an amount not to exceed \$6 million.

3. Trail Link from Lincoln Rock State Park to a Fish Bypass Viewing Station

Washington State Parks has worked with Chelan PUD on the development of a five mile recreational/educational/interpretive trail that will extend from Odabashian Bridge (three miles south of the Project) to Lincoln Rock State Park. State Parks recommended that Chelan PUD provide funds to construct the last mile of the trail. It will be a paved one mile trail on land owned by Chelan PUD, from Lincoln Rock State Park to a fish bypass viewing station located approximately 300 feet downstream of Rocky Reach Dam and constructed by Washington State Parks.

Specific Action

Within 180 days of the effective date of the New License or upon notification from State Parks that all necessary permits, whichever comes later, the Licensee shall make available to Washington State Parks \$500,000 to construct a paved one mile trail on land owned by Chelan PUD, from Lincoln Rock State Park to a fish by-pass viewing station located approximately 300 feet downstream of Rocky Reach Dam. Trail construction includes interpretive signs, benches, and other trail amenities. If trail construction **cannot be completed due to permit issues** or is completed for less than \$500,000, Chelan PUD shall make the remaining money available to Washington State Parks for the renovation and/or construction of other interpretive trails within Lincoln Rock State Park or Daroga State Park.

4. Design and Construction of an Upgraded Irrigation System throughout Orondo Park

Chelan PUD will design and construct an upgraded irrigation system throughout Orondo Park.

Specific Action

Within 180 days of the effective date of the New License, Chelan PUD will begin design and construction of an upgraded irrigation system in Orondo Park for an amount not to exceed \$25,000. Chelan PUD will not be responsible for the operation and maintenance of the

irrigation system. Upon completion, the upgraded irrigation system shall be owned, operated, and maintained by the Port of Douglas County.

5. Revitalization of Entiat Park

Chelan PUD met with the City of Entiat along with other stakeholder representatives within the Rocky Reach Relicensing Social Science Working Group (SSWG) from August of 1999 to October 2003.

In the spring of 2002, conversations began with the City of Entiat regarding protection, mitigation, and enhancement issues relating directly to the City of Entiat and its surrounding area. These meetings were held with PUD staff and the City of Entiat steering committee which included city officials, chamber and school district representatives and community members.

In October 2002 the first of four public meetings was held. The purpose of those meetings was to gather input from the community on the creation of a master plan for the City of Entiat, recommendations for park enhancements and for PUD staff to better understand the impacts of the Project on the City of Entiat.

Working with the community, a suggested Entiat Park Revitalization Plan was created.

Upon acceptance by Chelan PUD of the new license for the Project, Chelan PUD will gather community input regarding the suggested Revitalization Plan, make revisions to the Revitalization Plan, and develop an implementation schedule for the overall restoration of Entiat Park (see Appendix D).

Specific Action

Chelan PUD's responsibilities under the Entiat Park Revitalization Plan will include the following measures, to be initiated within one year of the effective date of the New License:

- (1) Design and implement the Entiat Park upgrades identified in the Revitalization Plan at a cost not to exceed \$6 million.
- (2) Make available up to \$1.3 million for upgrades to the Entiat wastewater treatment plant to serve the needs of the park.
- (3) Make available to Entiat School District up to \$700,000 for the development of ball fields on publicly-owned lands (ballfields cannot be put on Chelan PUD owned lands in Entiat Park due to size limitations).
- (4) Design and construct a trail linking the Entiat River Outdoor Learning Center (Entiatqua) at the confluence of the Entiat and Columbia Rivers to Entiat Park at a cost not to exceed \$1.2 million.
- (5) Trade 8.53 acres of shoreland within Entiat Park, currently owned by Chelan PUD, for 8.53 acres of upland within Entiat Park, currently owned by the City of Entiat. The remaining shoreline land owned by Chelan PUD will be leased to the City of Entiat with an option to purchase said land in 2012 (9.32 acres.)

- (6) Enter into a partnership agreement with the City of Entiat for the operation and maintenance of Entiat Park for the term of the license.

If one or more of the activities in subsections (1) through (4) of this Section is completed using less than the full amount of funding designated for such activity, the remaining money shall be made available for another activity designated in subsections (1) through (4) of this Section.

6. Chelan PUD Recreation Enhancement Fund

A Chelan PUD Recreation Enhancement Fund (REF) was developed by Chelan PUD for the purpose of providing public access and recreational enhancements associated with the Project. Research associated with the REF's development included legal analysis, internal review, and public outreach efforts to gather ideas and comments and to assure community support.

The REF will be used for recreation facilities and recreational and/or environmental education programs in communities adjacent to waters within the Project Area along the Columbia River and its tributaries between Rock Island and Wells dams. The REF will be funded, governed, managed, and evaluated by the Chelan PUD as described more fully in Appendix G.

The goals of the REF include the following:

- To encourage new and/or improved public recreational and educational opportunities in the Project Area.
- To provide public access to the Project waters along the Columbia River and its tributaries between Rock Island and Wells dams.
- To partner with the people in the communities in Chelan County and/or those communities adjacent to Project waters to enhance the quality of life for individuals and communities.
- To provide education and communication about the public utility district, stewardship, the environment, and recreation resources.

The REF will be governed by an Advisory Committee appointed by the Commissioners of Chelan PUD (Commissioners).

The first year of the new license, Chelan PUD will deposit \$1 million into the fund for distribution. Every year thereafter during the term of the license, a variable amount will be deposited into the fund based on run-off at Grand Coulee Dam into the Project, with an annual minimum of \$150,000 guaranteed and a maximum of \$350,000 each year. Distributions from the fund will be available in year 1, and every three years thereafter.

The funding and distribution levels, and application criteria for the REF will be evaluated every three years throughout the term of the license, by the Chelan PUD Commissioners.

The fund will be divided into four equal parts: one part each for use in Commissioner Districts 1, 2 and 3, and one part for use at the discretion of the Advisory Committee throughout Chelan and Douglas Counties. Funding will be available to qualifying non-profit community service organizations; and to federal, state or local governments, including Chelan PUD. Funds must be used to provide public access to the Columbia River/ Project Area and be adjacent to waters in the Project Area that lie within the following boundaries:

The Columbia River from Rock Island Dam to Wells Dam including:

- a. the Wenatchee River from its entry into the Columbia River to the Tumwater Dam;
- b. the Icicle River from its entry into the Columbia River to the Fish Hatchery;
- c. the Chelan River to and including all of Lake Chelan; and
- d. the Entiat River from its entry into the Columbia River to Entiat Falls.

Specific Action

Within one year of the effective date of the New License, Chelan PUD shall create a REF and deposit \$1 million to such fund. By January 31st in the first year after the effective date of the New License, and by January 31st of each year thereafter through 2011, Chelan PUD shall deposit between \$150,000 and \$350,000 to the fund. By January 31st of 2012, and by January 31st of each year thereafter of the new license and any subsequent annual licenses, Chelan PUD shall deposit between \$200,000 and \$350,000 to the fund. The annual amounts deposited will vary depending on the amount of water run-off from Grand Coulee Dam and will be calculated in accordance with section 1.3 of Appendix G to this Chapter. . Distributions from the fund will be made available in year 1, and every three years thereafter, in amounts determined in accordance with section 1.4 of Appendix G to this Chapter. The funding and distribution levels for the REF, and the selection criteria for eligible projects, shall be evaluated by the Commissioners every three.

7. Recreation Use Study

Beginning in the 20th year of the effective date of the New License, and finishing in the 23rd year, Chelan PUD shall conduct a study and prepare a report assessing recreational use and needs on the lands around, and in the waters of, the Project Reservoir, at an estimated budget of \$100,000. The scope of work will be similar to the scope contained in the 2002 Recreation Use Assessment.

The purpose of the Recreation Use Study is to update information about the level of existing recreational use in the Project Reservoir in more detail than is possible to predict 20 years in advance, including the number of visits, recreational activity types, high use locations, and temporal trends. Results from the study will aid agencies with responsibility for public recreation in coordinating development concepts and utilization of the Reservoir's recreational resources.

As part of the Recreation Use Study, data will be collected in years 21 and 22 of the New License on recreation use in the Project Area, and a Recreation Use Assessment report will be completed in year 23. The study area will include all public recreational resources within

the Project boundary. The Recreation Use Study methodology may include, but is not limited to:

- Review of existing recreation resources assessment work
- Summary of current management plans and policies of agencies
- Inventory of existing public and private recreation resources
- Analysis of recreational activities and demand for facilities
- Analysis of recreational resource capacity for recreation development
- Recreation resource mapping

Specific Action

No later than the 23rd year of the New License, Chelan PUD shall complete a study and report assessing recreational use and needs within the Reservoir, at a cost not to exceed \$100,000.

8. Recreation Resources Monitoring and Evaluation Program

Chelan PUD, in consultation with the Rocky Reach Recreation Forum (RRRF), will review and evaluate recreation practices, needs, trends and dispersed recreation within the Project Area over the term of the new license.

Specific Action

Consistent with FERC Form 80 requirements, Chelan PUD shall establish the RRRF to review and evaluate recreation practices, needs, trends, including dispersed recreation, within the Reservoir every six years throughout the New License term and any subsequent annual licenses.

Table 21. Recreation Resources Management Plan for the Rocky Reach Hydroelectric Project

| Project | Description | Estimated PUD Costs | Implementation Schedule |
|---|--|------------------------|---|
| (1) Chelan PUD is responsible for management and operation of its seven existing facilities within the Rocky Reach reservoir including capital improvements and enhancements. | Ongoing O&M and capital improvements and enhancements for Rocky Reach Hydroelectric Project Visitor Center and Park, Beebe Bridge Park, and Chelan Falls/ Powerhouse Park. The remaining facilities (Orondo Park, Lincoln Rock and Daroga State Parks and Entiat Park) are managed under contract with state, port and city management agreements. | \$1.4 million per year | Ongoing operations and maintenance for existing facilities within the RR Reservoir would occur throughout the life of the license. |
| (2) Lincoln Rock State Park and Daroga State Park Renovation and Enhancement Plan | Renovation and construction of facilities at Lincoln Rock State Park and Daroga State Park that includes feasibility, finalization of design, development of a schedule and determination of costs based on concept plans outlined in Appendices B and C. | \$6 million | Implementation to begin within 1 year of the effective date of the new license. |
| (3) Completion of a paved one mile trail from Lincoln Rock State Park to a fish by-pass viewing station. | This trail link is being done in partnership with Washington State Parks and is on Chelan PUD lands. It will be a paved one mile trail from Lincoln Rick State Park to a fish by-pass viewing station located approximately 300 feet downstream of Rocky Reach Dam. | \$500,000 | Within 180 days of the effective date of the new license, and when Washington State Parks has completed their planning and permitting process and all appeals are resolved, money would be made available to Washington State Parks for development of the 1 mile of trail on Chelan PUD lands. |
| (4) Irrigation system at Orondo Park | Chelan PUD would design and implement an irrigation system throughout Orondo Park. | \$25,000 | Within 180 days of the effective date of the new license, Chelan PUD would design and implement an irrigation system at Orondo Park for an amount not to exceed \$25,000. |

Table 21. Recreation Resources Management Plan for the Rocky Reach Hydroelectric Project

| Project | Description | Estimated PUD Costs | Implementation Schedule |
|--|--|---------------------------|---|
| <p>(5) Revitalization of Entiat Park</p> | <ul style="list-style-type: none"> Through community input, a revitalized master plan has been developed including park enhancements and capital improvements | <p>\$6 million</p> | <p>Upon the effective date of the new license, implementation of the revitalization of Entiat Park would occur in phases to be determined by Chelan PUD in cooperation with the Entiat community.</p> |
| | <ul style="list-style-type: none"> Wastewater treatment plant upgrade. | <p>\$1.3 million</p> | <p>Upon the effective date of the new license, money would be made available to the City of Entiat for expansion and up-grades to the existing wastewater treatment plant.</p> |
| | <ul style="list-style-type: none"> Ball field development | <p>\$700,000</p> | <p>Upon the effective date of the new license, money would be made available to the Entiat School District for the development of ball fields.</p> |
| | <ul style="list-style-type: none"> Trade – lease/purchase of 17.85 Entiat shoreline acres currently owned by Chelan PUD | <p>\$0</p> | <p>Upon the effective date of the new license, a trade of 8.53 acres of park land currently owned by the City of Entiat would be traded for 8.53 acres of the southern portion of 17.85 Entiat shoreline acres currently owned by Chelan PUD. The remainder of the land (9.32 acres) would be leased to the City of Entiat with the option to purchase said land in 2011.</p> |
| | <ul style="list-style-type: none"> Partnership agreement between Chelan PUD and the City of Entiat for O & M on Entiat Park | <p>\$257,000 per year</p> | <p>Upon the effective date of the new license, Chelan PUD would enter into a partnership agreement with the City of Entiat for O & M on Entiat Park.</p> |

Table 21. Recreation Resources Management Plan for the Rocky Reach Hydroelectric Project

| Project | Description | Estimated PUD Costs | Implementation Schedule |
|---------------------------------------|--|---|--|
| | <ul style="list-style-type: none"> Entiatqua trail - interpretive/nature trail at confluence of the Entiat and Columbia rivers | \$1.2 million | Upon the effective date of the new license, Entiatqua Trail would be designed and constructed at the same time as the revitalization of Entiat Park. |
| (6) Recreation Enhancement Fund (REF) | The purpose of the REF is to make funds available for community projects that provide public access and recreational and educational enhancements on lands adjacent to the Rocky Reach Hydroelectric Project and its tributaries. | <p>\$1 million – year 1.</p> <p>Up to and including 2011 \$150,000 to \$350,000 (average \$178,933) per year</p> <p>Beginning in 2012 \$200,000 to \$350,000 (average \$217,080) per year</p> <p>Throughout term of license unless adjusted upward by PUD Commissioners (amount is based on “above” or “below” average water release from Grand Coulee Dam)</p> | Upon the effective date of the new license, an amount would be placed in the REF based on run-off from Grand Coulee Dam beginning in year 1 with \$1 million dollars. The amount placed in the fund every year would be evaluated by the Chelan PUD Commissioners every 3 years for fund amount and appropriateness of criteria. |
| (7) Recreation Use Study | Chelan PUD would establish a Rocky Reach Recreation Forum to review and evaluate recreation practices, needs, trends and dispersed recreation within the Rocky Reach Hydroelectric Project area for the term of the new license. This study could then be used by resource agencies and organizations in developing continued concepts for the coordinated development and utilization of the lake’s recreational resources. | \$100,000 | Beginning in the 20 th year of the effective date of the new license, and finishing in the 23 rd year, Chelan PUD would conduct this study. |

Table 21. Recreation Resources Management Plan for the Rocky Reach Hydroelectric Project

| Project | Description | Estimated PUD Costs | Implementation Schedule |
|---------------------------------------|--|---------------------|--|
| (8) Ongoing monitoring and evaluation | Chelan PUD would establish a Rocky Reach Recreation Forum to review and evaluate recreation practices, needs, trends and dispersed recreation within the Rocky Reach Hydroelectric Project area for the term of the new license. | \$0 | Following the effective date of the new license, the Rocky Reach Recreation Forum would meet within six months of Chelan PUD’s submittal to FERC of the Licensed Hydropower Development Recreation Report (Form 80). |

SECTION 5: LITERATURE CITED

- Chelan PUD, 2000. Shoreline Erosion Study Plan - final, Rocky Reach Hydroelectric Project, FERC Project No. 2145. Chelan PUD. January 15, 2000. 13 pp.
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- Chelan PUD, 2001. Recreation Needs Forecast and Analysis – final, Rocky Reach Hydroelectric Project, FERC Project No. 2145. Chelan PUD, Wenatchee, Washington. September 21, 2001.
- Chelan PUD, 2001. 1999/2000 Recreational Use Assessment Study Report – final, Rocky Reach Hydroelectric Project, FERC Project No. 2145. Chelan PUD, Wenatchee, Washington. March 2, 2001.
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- Interagency Committee for Outdoor Recreation, 2002. An Assessment of Outdoor Recreation in Washington State, public review draft, Interagency Committee for Outdoor Recreation, Olympia, Washington. March, 2002.

