

5.3.6 Recreation and Socioeconomics Resources

a. Affected Environment:

General Description of the Recreational Resources

Regional Recreation Opportunities

Tourism and recreation are important to the local economics in the Project area. The reservoirs formed by Wells Hydroelectric Project, Rocky Reach Hydroelectric Project, and Rock Island Hydroelectric Project dams, as well as numerous public parks in the Project area, are popular sites for recreational activities including boating, camping, swimming, hiking, fishing, soccer, softball, and football.

The four tributary rivers (Okanogan, Methow, Entiat, and Wenatchee) are popular for a variety of recreational activities. Active recreation on these rivers include kayaking, rafting (private and commercial), other boating, fishing, and swimming. The rivers are indirectly related to camping, hiking, bird watching, and similar outdoor activities that benefit from a waterfront setting.

The Entiat River above the USFS boundary is proposed wild and scenic.

Chelan County includes large areas of federally managed lands used for recreation and other purposes. These include the Wenatchee National Forest, North Cascades National Park, Lake Chelan National Recreation Area, and several wilderness areas. The county has trails for hiking, horseback riding, and off-road vehicle riding. The Wenatchee River is popular for recreation. Fishing is currently closed except for whitefish in the winter. Kayaking and commercial whitewater rafting are popular from Leavenworth downstream. Lake Wenatchee and Wenatchee State Park are popular locations for swimming and boating. Both public (USFS) and private campgrounds are located along the entire Wenatchee River. Also in Chelan County, the Entiat River provides a setting for several USFS campgrounds.

In contrast to Chelan County, Douglas County, located to the east of the Columbia River, does not have a large area of land under public ownership. Most of the camping and day use facilities are provided by the private sector. Chelan PUD owns Beebe Bridge, Daroga, Lincoln Rock and Orondo parks all located in Douglas County along the Columbia River. As would be expected from the low number of recreational facilities available, travel and recreation have a relatively small impact on the local economy in Douglas County.

Similar to Chelan County, Okanogan County, located north of Chelan County, has large areas of federally managed lands used for recreation and other purposes. These

include Okanogan and Colville National Forests and Pasayten and Lake Chelan-Sawtooth wilderness areas. Travel and recreation have a large effect on the economy in Okanogan County. On the Methow River and below Mazama, most recreational sites are privately operated. Above Mazama, the USFS provides camping and access. The river is used for fishing, rafting, and kayaking. The Okanogan River provides fishing and boating. Most camping facilities on the river are privately operated.

Washington state fishing regulations for 2002 indicate that some recreational fishing occurs in the four tributaries to the Project area. However, the entire area is generally closed to salmon and steelhead fishing. Washington state regulations prohibit or limit fishing in the mainstem Columbia River due to the recent listing of threatened and endangered species. The Entiat River, from its mouth to Entiat Falls, is open for whitefish only from December 1 through March 31. The rest of the year, this section of the Entiat River is closed to recreational fishing.

Regional Recreation Comprehensive Plans

The Interagency Committee for Outdoor Recreation (IAC) has statewide responsibility for assisting local, state, and federal agencies in planning, acquiring, and developing recreational resources. The IAC published the Washington State Comprehensive Outdoor Recreation Planning Document (SCORP) 2002-2005 in October 2002. The SCORP document contained information related to a participant survey, *An Assessment of Outdoor Recreation in Washington State*, to inform decision-makers about issues and opportunities associated with outdoor recreation.

The participant surveys completed in 1999 and 2000 revealed that 53 percent participated in walking and hiking, 44 percent in outdoor team or individual sports, and 43 percent in nature activities. Sightseeing, bicycle riding, indoor activities, picnicking and water activities were also among the popular activities.

According to the assessment, there is a need for lands and facilities supporting virtually all outdoor recreation categories. In particular, provisions for walking, sightseeing, and bicycling were among those listed. Other activities expected to exhibit growth are non-consumptive human activity interaction with fish and wildlife, such as for photographing the outdoors, especially wildlife, as well as continued participation in the established nature-dependent activities of hunting and fishing.

In the assessment, IAC identifies that there is a need to find acceptable means to pay for maintenance and operation, including improved on-the-ground management presence, of public lands and facilities. There is also a need for improved data on public recreation behavior and preferences, as well as the inventory of available facilities, in order to ensure that public resources are more effectively utilized in meeting public needs.

IAC recommends that non-federal hydropower project operators enhance inventory with trails and paths for walking and bicycling, manage dispersed shoreline camping, improve access for on-water recreation, and improve opportunities for non-consumptive interaction with nature including fish and wildlife (IAC SCORP 2002-2005).

The Douglas County Recreation and Open Space Plan (Douglas County Parks and Recreation Department 2000) lists proposals for development of parks, recreation and open space systems within the Wenatchee Valley for the next 20 years. Included in their list of proposals is the development of almost 100 miles of multi-use trails south the Rocky Reach Hydroelectric Project area. The proposals include extending the trail system north to connect to Lincoln Rock State Park and adding a trailhead at Lincoln Rock State Park.

The Master Plan for Entiat Park (Chelan PUD, 1992) lists goals related to parks and recreation services that have been recommended under the plan. The plan includes providing for future connection to expand a trail system including a new trailhead commencing at the southern most end of the park for accessing other lands along the Entiat River to the west.

The Rocky Reach Recreation Inventory (Chelan PUD, 2001b) identified plans developed by Washington State Parks and Recreation Commission for a trail extending from Lincoln Rock State Park to the Wenatchee Loop Trail system. The inventory also identified the potential for a trail connecting Chelan Falls Park and Powerhouse Park.

Recreation Resources Within the Rocky Reach Hydroelectric Project Area

Public access to Rocky Reach Hydroelectric Project lands and waters is widely available. Since its construction, the Rocky Reach Hydroelectric Project has provided the region a variety of developed recreation opportunities, including camping, picnicking, swimming, fishing, boating, water skiing, among other recreational activities.

Seven developed public parks and recreation facilities are located in the Project study area. All seven of these sites were constructed by Chelan PUD. These facilities are shown in Figure 1 and include:

- (1) Rocky Reach Hydroelectric Project dam day-use recreation facilities and Visitors Center (owned and operated by Chelan PUD)
- (2) Lincoln Rock State Park (owned by Chelan PUD, maintained and operated by Washington State Parks)
- (3) Orondo River Park (owned by Chelan PUD and Port of Douglas County, maintained and operated by Port of Douglas County)

- (4) Entiat Park (owned by Chelan PUD and City of Entiat, maintained and operated by City of Entiat)
- (5) Daroga State Park (owned by Chelan PUD, maintained and operated by Washington State Parks)
- (6) Chelan Falls and Powerhouse Parks (owned and operated by Chelan PUD)
- (7) Beebe Bridge Park (owned and operated by Chelan PUD)

Combined, the seven recreation facilities occupy 397 acres of public land along the reservoir and provide widely available public access to Rocky Reach Hydroelectric Project lands and waters. The facilities all have restrooms with showers, and a variety of amenities such as RV and tent camp sites, RV dump stations, boat launches and docks, picnic shelters with power, amphitheaters, landscaping and lawns, swimming beaches, athletic fields, and concession buildings. Table 9 summarizes the existing facilities at the recreation sites in the Project study area.

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 two group sites.

Six out of the seven parks in the Rocky Reach Hydroelectric Project study area have boating facilities including a total of 11 launch lanes, 17 boat tie-up docks and 250 boat trailer parking spaces. Orondo River Park also has a marina with marine gas available. Rocky Reach Hydroelectric Project dam and Visitor Center is the only recreation site that does not have boating facilities.

All seven public recreation sites in the study area have day-use facilities. Currently 942 day-use parking spaces, around 438 picnic tables, a total of 1,975 linear feet of swimming beaches, and approximately five miles of developed trails/walkways are provided at project recreation sites.

Six of the seven Project recreation sites currently provide playground equipment. Orondo Park playground equipment was removed during recent park renovations. Additional facilities such as horseshoe pits, baseball fields, volleyball courts, tennis courts, basketball courts, and open court areas are also provided at all sites, although available facilities vary from site to site.

The Rocky Reach Hydroelectric Project dam site has a visitor center and museum and provides concessions, tours of the dam and fish viewing. A museum is located at the north end of Entiat Park.

Americans with Disabilities Act (ADA)

ADA accessible facilities currently exist at all Rocky Reach Hydroelectric Project recreation sites. Upgrades and improvements for ADA accessibility have occurred at Orondo, Beebe Bridge and Chelan Falls parks. ADA accessible facilities are provided at all project recreation sites as existing facilities are improved or replaced.

Table 9. 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 Hydroelectric Project 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, baseball field 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	Yes
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 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

Site	Acres	Camping	Picnic & Day-Use Facilities	Boating Facilities	Swimming Beach	Trails/Walkways	Interpretation Facilities	ADA Facilities
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 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
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 liner feet	0.6 mile	No	Yes

Existing Recreation Plan

Chelan PUD owns, operates and maintains the Rocky Reach Hydroelectric Project dam facilities, Beebe Bridge Park, and Chelan Falls and Powerhouse Parks. Chelan PUD owns Daroga and Lincoln Rock State Parks and has lease operating agreements with Washington State Parks and Recreation Commission for the operation and maintenance of these facilities. Chelan PUD own parts of Entiat Park and Orondo Park and have lease agreements for the operation and maintenance of these facilities with the City of Entiat and the Douglas County Port District, respectively. Table 10 shows the dates that Chelan PUD constructed recreation parks were completed and other major recreation improvements made by Chelan PUD since construction of the Rocky Reach Hydroelectric Project.

In April 1963, the Federal Power Commission (now FERC) issued new regulations (Article 44) requiring development of Exhibit R plans aimed at full public utilization of project lands and water. The regulations became effective for all project licenses submitted after June 1963. Article 44 was added to the Rocky Reach Hydroelectric Project license on May 1968 in a FERC Order approving a project expansion proposal to add four additional units (License Amendment No. 5). The Rocky Reach Hydroelectric Project recreation plan is one of the first developed under the new guidelines for Exhibit R plans. There is a long history surrounding the successful development of the recreation plan. The following summarizes the history.

Table 10. Historical overview of Rocky Reach Hydroelectric Project recreation developments

Date	Chelan PUD Actions
1963	Developed visitor center, interpretive displays, and day-use area at Rocky Reach Hydroelectric Project dam.
1978	Developed Entiat Park - joined together two existing community parks: Silico Saska (the main city park prior to establishment of the dam) and Will Risk Memorial Park. Provided improvement and expansion of recreational facilities including picnic area, restroom facilities, parking lot area, boat launch and boat handling facilities along with overnight camping. Signed lease and operating agreement with City of Entiat.
1980	Completed expansion of Orondo River Park, which was originally developed by the Port District in 1974. Expansion included swimming and other day-use facilities.
1981	Developed Lincoln Rock Park - boating, swimming, other day-use, and camping facilities; signed lease and operating agreement with State Parks.
1987	Completed expansion at Lincoln Rock Park - increased area and campsites.

Table 10. Historical overview of Rocky Reach Hydroelectric Project recreation developments

Date	Chelan PUD Actions
1990	Expansion and development of Daroga Park which was originally developed by a private owner when Rocky Reach Hydroelectric Project dam reservoir was created. Developed boating, swimming, other day-use, and camping facilities. Signed lease and operating agreement with State Parks.
1992	Completed Entiat Park Master Plan.
1993	Developed Chelan Falls Park - boating, swimming, and other day-use facilities. Developed Beebe Bridge Park - boating, swimming, other day-use, and camping facilities. Completed expansion at Rocky Reach Hydroelectric Project dam - day-use facilities.
1994	Completed expansion at Daroga State Park - group camping facilities. Completed entrance reconfiguration at Entiat Park.
1995	Completed expansion at Beebe Bridge Park - camping facilities.
1996	Completed expansion at Daroga State Park - camping and day-use facilities.
1997	Replaced playground and installed interpretive display at Rocky Reach Hydroelectric Project dam.
1998	New concrete boat ramp at Entiat Park
2001	ADA accessible facilities at OrondoPark. Entiat Park comfort station added to main entrance.
2002	ADA accessible facilities at Chelan Falls and Beebe Bridge parks, including access to playground equipment and fall protection, access to tennis courts and picnic tables.

Existing Recreation Use in the Project Area

Existing recreation use is based on the 1999 and 2000 data collection and monitoring efforts presented in the Recreation Use Assessment Report (Chelan PUD, 2001a). Based on the 1999/2000 monitoring, the seven Project recreation sites accommodated an estimated average of almost 3,500 people per day during the peak-season (Memorial Day through Labor Day). In the off-seasons, Project recreation sites accommodated an estimated average of 1,500 people per day during in the fall and an average of approximately 1,135 people per day in the spring. During the peak-season, camping facilities received the most visitor use followed by picnicking. Boating was the third most popular activity on peak-season weekends. In the off-seasons, camping had the highest average use in the fall, whereas picnicking had the highest average visitor use followed by camping in the spring.

Table11 shows the estimated visitor use Rocky Reach Hydroelectric 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.

Visitor Use by Activity

Table 12 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 of Table 12, during the peak-season, 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 activity then visiting the dam/visitor center. On fall weekdays, other activity had the highest use followed by camping, whereas on weekends camping had the highest use followed by other activity.

Picnicking had the highest average visitor use followed by camping, then visiting the dam/visitor center during spring-season monitoring. On spring weekdays other activity 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.

Table 11. Estimated average daily use of Rocky Reach Hydroelectric Project recreation sites¹

SITE	Peak-Season (1999)			Fall (1999)			Spring (2000)		
	Average # People/Day			Average # People/Day			Average # People/Day		
	Avg. Peak	Week-day	Weekend ²	Avg. Peak	Week-day	Weekend ²	Avg. Peak	Week-day	Weekend 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

¹ Refer to Recreation Use Assessment Report (Chelan PUD, 2001a)

² Weekend refers to Friday and Saturday nights for camping/overnight and Saturday and Sunday for day-use.

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.

Table 12. Estimated average daily use by activity of Rocky Reach Hydroelectric Project recreation sites

Activity	Peak-Season (1999)			Fall (1999)			Spring (2000)		
	Average # People/Day			Average # People/Day			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)

Fishing Activities

Angling activity specific to the Rocky Reach Hydroelectric Project reservoir was documented in the 1999/2000 Recreational Use Assessment Study Report (DES 2001). Boat runs, car runs, and on-site interviews were conducted during mid-day and early afternoons, and creel surveys were conducted in the early morning and late afternoon/early evening. In summary, relatively few anglers were observed in Rocky Reach Hydroelectric Project reservoir or along undeveloped shorelines. During the peak season, an average of less than two people per day were observed shore angling at public recreation sites, with most of the people observed during weekday observations. During peak-season boat runs, people in about 5 percent of the boats were observed angling. An average of approximately 1.5 boats per weekday and an average of 6 boats per weekend day were observed being used for angling. During fall season boat runs, approximately 40 percent of the boats observed were used for angling. An average of almost five anglers per day were observed along undeveloped shorelines during peak-season weekends. No anglers were observed along undeveloped shorelines during weekday boat runs. The most angling activity that was observed during monitoring efforts was during late summer, when summer/fall chinook salmon fishing was open on the Columbia River (opened August 10 and closed October 21, 2000).

A major limiting factor to the study was that Washington state regulations prohibited fishing for or retaining salmonids (salmon, trout, or char) in both 1999 and 2000. Salmon fishing was only allowed in the Rocky Reach Hydroelectric Project tailrace in the late fall to early winter. However, fishing was prohibited within 400 feet of the downstream end of the fish ladders at the dam. As a result, very little fishing effort was observed on Rocky Reach Hydroelectric Project reservoir. Fishermen were targeting walleye and smallmouth bass, although a large percentage of anglers were also seeking northern pikeminnow.

Watercraft Use

Information from the Rocky Reach Recreation Needs Forecast and Analysis (Chelan 2001) indicates that the standard recommended by the state Organization of Boating Access (SOBA) is based on a typical 8,000-acre lake. For this size of a lake, the SOBA recommends that the lake will support 240 boats at one time, or approximately 33 acres per boat (NRPA, 1970). The surface area in the Rocky Reach Hydroelectric Project reservoir is approximately 8,235 acres. Using the SOBA standards, the recommended number of watercraft the area can support at one time is about 250. Based on 2000 observations during the peak-season, an average of 42.5 watercraft were on Rocky Reach Hydroelectric Project reservoir at one time on weekdays, and an average of 101.5 watercraft were on the Rocky Reach Hydroelectric Project reservoir at one time on weekends. The current (2000) average number of peak-season watercraft on Rocky Reach Hydroelectric Project reservoir is well below the recommended standard. Future

projections of peak-season watercraft use within Rocky Reach Hydroelectric Project reservoir indicate that in 2020 an average of 57 weekday and almost 137 weekend watercraft can be expected in Rocky Reach Hydroelectric Project reservoir at one time. The projected average watercraft use on Rocky Reach Hydroelectric Project reservoir would equal approximately 21 percent utilization on weekdays and 50 percent utilization on weekends based on SOBA recommended capacity. Boat counts made during a holiday weekend observation, however, exceeded recommended standards on Rocky Reach Hydroelectric Project reservoir in the reach between Daroga State Park and Beebe Bridge. It is expected that some peak-season weekends in July and August and holidays will exceed recommended capacity standards in the future. Current and future increases in residential growth consisting of new homes with boat docks along the Rocky Reach Hydroelectric Project reservoir will further add to the increase in watercraft use in the reservoir.

During the peak-season, motorboats made up nearly 70 percent of the watercraft use, personal watercraft (jetskis) made up 29 percent, non-motorboats made up one percent, and airplanes and windsurfers made up less than one percent of the watercraft use. During the fall-season, all watercraft observed were motorboats and during the spring-season 80 percent were motorboats, 14 percent were jetskis and 6 percent were nonmotorized.

Based on recommended standards for a waterbody the size of the Rocky Reach Hydroelectric Project reservoir, there is adequate public vehicle/trailer parking spaces.

Dispersed Use

The greatest number of people observed along undeveloped shorelines (dispersed use), was during peak-season weekends with an average of 65 people per day observed. An average of only 34 people per day were observed along undeveloped shorelines on peak-season weekdays and little to no activity was observed along undeveloped shorelines during the off-season. Most dispersed shoreline use was observed at a beach on Chelan PUD owned Turtle Rock Island, Chelan PUD and BLM owned undeveloped shorelines between Daroga State Park and Beebe Bridge, and on private lands. A few people were observed on the Entiat River sandbar and undeveloped shoreline areas owned by Chelan PUD and managed by WDFW between Beebe Bridge and Wells Dam. Few people were observed along undeveloped shorelines during the off-season.

Visitor Demographics

Recreation facilities along the Rocky Reach Hydroelectric Project reservoir are of local and statewide significance providing water access, camping and picnicking facilities, and athletic fields. Most visitors to recreation sites in the Rocky Reach Hydroelectric Project area are from the Seattle metropolitan area. During peak-season

monitoring, over 60 percent of visitors were from the Seattle metropolitan area and 21 percent were from the local area (Chelan and Douglas counties). Approximately 40 percent of fall-season visitors were from the Seattle metropolitan area and 25 percent of park visitors were from the local area. Approximately 40 percent of spring-season visitors were from the Seattle metropolitan area, while 31 percent of spring visitors were from the local area.

Seasonal Distribution of Recreation Use

Based on 1999/2000 monitoring, the month of August received the most visitor use. Summer months received over two times more visitors per day at recreation sites in the study area than the fall months and the fall months received more use than the spring months. For all seasons, average weekend use was about one and one-half times greater than weekday use.

Site Specific Distribution of Recreation Use

Of all seven recreation sites in the study area, Lincoln Rock State Park received the greatest number of average visitors per day during the peak-season followed by Rocky Reach Hydroelectric Project dam day use area, Daroga State Park, Beebe Bridge Park, Entiat Park, Chelan Falls/Powerhouse parks and Orondo River Park, respectively. During the fall-season, Lincoln Rock State Park received the greatest number of visitors per day that the park was open, followed by Rocky Reach Hydroelectric Project dam day use area, Beebe Bridge Park, Daroga State Park, Entiat Park, Chelan Falls/Powerhouse parks and Orondo River Park, respectively. During the spring-season Rocky Reach Hydroelectric Project dam day use area received the greatest number of visitors followed by Lincoln Rock State Park, Daroga State Park, Beebe Bridge Park, Chelan Falls/Powerhouse parks, Entiat Park and Orondo River Park, respectively.

Estimated Use Versus Estimated Physical Capacity at Existing Developed Sites

During average peak-season weekends, Lincoln Rock State Park campground is near 100 percent of its capacity, Beebe Bridge campground is over 90 percent of its capacity, and Daroga State Park is over 80 percent of its capacity. The capacity of the Entiat Park day-use area is exceeded during peak-season weekends, due to the number of tent campsites allowed in the day-use area. The estimated number of visitors participating in day-use activities exceeds the parking capacity at Orondo River Park during peak-season weekends. Peak-season visitor use is generally below estimated site capacities at other sites, except on some holidays and busy weekends. Visitor use at all recreation sites monitored is generally well below site capacities on peak-season weekdays and during fall and spring seasons.

Visitor Satisfaction with Existing Developed Sites

Visitors are generally satisfied with the recreation sites in the Project area. During on-site interviews, visitors were asked to rate the site they were visiting on a scale of 1 to 10, with 10 being the highest. Figure 15 summarizes the average rating given for recreation sites. Numbers in parentheses next to the site names indicate the number of interview responses.

All seven of the recreation sites were given high ratings. Orondo River Park and Entiat Park were given the lowest ratings of 8.7 and 8.5, respectively. The other five parks were given average ratings of 9 or above.

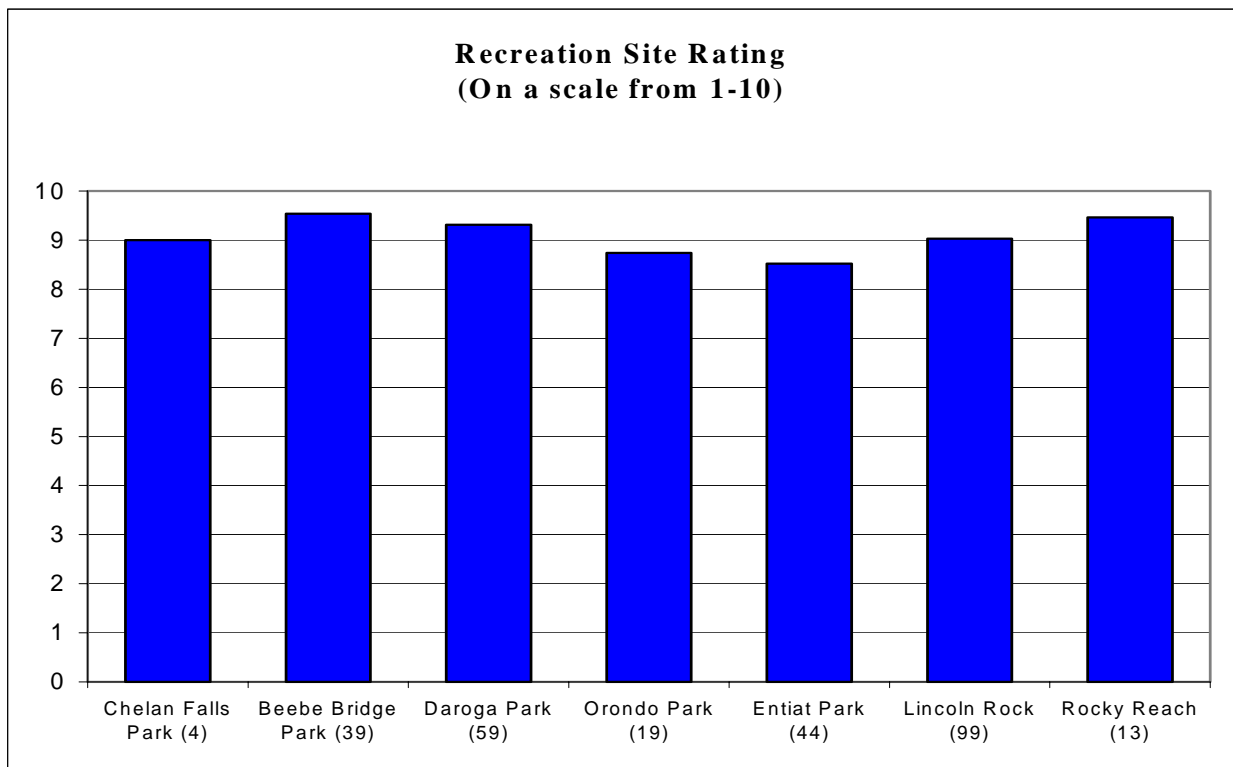


Figure 15. Recreation site rating

During on-site interviews, visitors were asked to choose from a list of items that could make the site better. Figure 16 summarizes the results of responses received. Most visitors picked “something else.” Of items that were on the list, cleaner facilities and more docks received the most responses. Comments that were reported most frequently under “something else” included cleaner, better maintained, more, closer and free bathrooms/showers; taller and more trees; more sewer hookups, power, water, facilities; more privacy, larger campsites and more camp sites; more moorage, fix docks, open both sides of some docks; more, less and reposition sprinklers; more dumpsters, garbage cans, recycling bins; better beaches, swimming areas and less seaweed; less geese and smell;

concession stands and convenient store, less bees, allow dogs; and more phones. See Section 5.1.2 for more information regarding comments for each recreation sites.

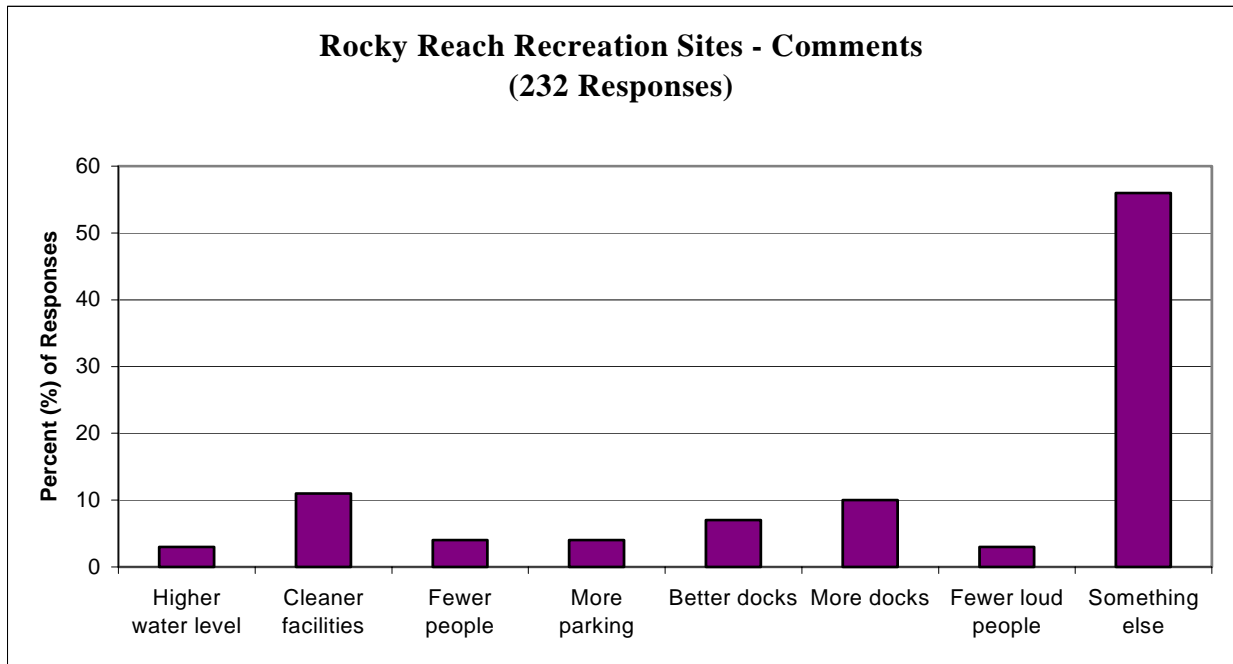


Figure 16. Rocky Reach Hydroelectric Project recreation sites - comments

b. Environmental Impacts and Recommendations:

Planning associated with the development of proposals for a Recreation Resources Management Plan (RRMP) involved a three-year planning process that included identification of recreation issues, studies, baseline recreation use monitoring, recreation needs analysis, and identification of recreation enhancement options. Agency and public involvement has been an integral part of this process. Early in the relicensing process, a Social Sciences Working Group was formed to develop, review and complete recreation studies, as well as develop recreation protection, mitigation and enhancement measures. The Social Sciences Working Group is comprised of representatives from the USFS, NPS, BLM, IAC, City of Entiat, Entiat Focus Group (Entiat community members), and other interested parties. Nearly 25 working group meetings have occurred since 1999.

The Social Sciences Working Group proposes that a Recreation Resources Management Plan be developed by Chelan PUD for the Rocky Reach Hydroelectric Project. The Recreation Resources Management Plan would include the following measures:

Management and Operation of Existing Recreation Facilities Within the Rocky Reach Hydroelectric Project Reservoir

The Social Sciences Working Group proposes that Chelan PUD continue to own and operate Beebe Bridge Park, Chelan Falls Park, Powerhouse Park, and Rocky Reach Hydroelectric Project Visitor Center and Park.

For Lincoln Rock State Park and Daroga State Park, the Social Sciences Working Group proposes that Chelan PUD continue to own and be responsible for the oversight of related operation and maintenance agreements with Washington State Parks.

The Social Sciences Working Group proposes that Entiat Park continues to be owned in part by Chelan PUD and the City of Entiat and that Chelan PUD continues to be responsible for the oversight of related operation and maintenance agreement with the City of Entiat. The Social Sciences Working Group also proposes that Chelan PUD develop and implement an updated master plan for Entiat Park.

The Social Sciences Working Group proposes that Orondo Park continue to be owned in part by Chelan PUD and the Port of Douglas County with operation and maintenance performed by the Port of Douglas County.

The Social Sciences Working Group has reviewed the Recreation Use Assessment and Recreation Needs Analysis reports and proposes that Chelan PUD provide the following improvements, replacement and/or renovation to the existing parks:

- (1) Provide for additional camping spaces at Daroga and Lincoln Rock State parks.
- (2) Provide modification of the camping area and/or additional facilities that support additional camping spaces at Entiat Park.
- (3) Provide additional short-term docks (moorage floats) at Beebe Bridge, Lincoln Rock and Daroga State parks.
- (4) Develop a land-use plan for property adjacent to Daroga Park, owned by Chelan PUD.

Entiat Community Waterfront Plan

The Social Sciences Working Group proposes that Chelan PUD work collaboratively with the City of Entiat and community to develop and implement a land-use plan for shoreline property in Entiat owned by Chelan PUD that incorporates current and future development plans of the City of Entiat. The Social Sciences Working Group

proposes that Chelan PUD contribute \$XX to implement the Entiat Waterfront Master Plan, which includes [per concept plans developed by Tom Atkins by mid-Nov 2002]. Figure xx [conceptual drawings].

Nature Trails

The Social Sciences Working Group proposes that Chelan PUD work closely with federal, state and local agencies to provide land use designations that allow public access through nature trails and activities, such as for photography and wildlife viewing. The Social Sciences Working Group proposes that Chelan PUD contribute \$xx to develop and implement the trails.

Community-oriented Trails

The Social Sciences Working Group proposes that Chelan PUD contribute \$xx to develop and implement a paved multi-use trail from Lincoln Rock State Park to an area just below the Rocky Reach Hydroelectric Project dam. The Social Sciences Working Group proposes that Chelan PUD provide for operation and maintenance of the trail.

The Social Sciences Working Group proposes that Chelan PUD include in the Entiat Waterfront Master Planning process, a paved trail that links the Entiatqua Outdoor Learning Center, Entiat Park, Entiat museum, Chelan PUD-owned shoreline property, the Columbia Break Fire Interpretive Center, and other areas. The Social Sciences Working Group proposes that Chelan PUD contribute \$xx to develop and implement the trail.

Community Recreation Fund

The Social Sciences Working Group proposes that Chelan PUD establish and maintain a Community Recreation Fund whereby Chelan PUD would contribute an annual amount not to exceed \$xx. The Community Recreation Fund would be available for projects through an application process. The fund would be used for recreational facilities and recreational and/or environmental education programs in communities adjacent to Project waters along the Columbia River and its tributaries between Rock Island and Wells Hydroelectric Project dams.

Recreation Resources Monitoring and Evaluation Program

The Social Sciences Working Group proposes Chelan PUD establish a Recreation Resources Advisory Committee to review and evaluate recreation practices, needs, trends and dispersed recreation within the Rocky Reach Hydroelectric Project area. The Recreation Resources Advisory Committee would be composed of representatives of federal, state, and local agencies, Chelan PUD, and other interested parties. Chelan PUD would be responsible for convening meetings of the group, including providing adequate

notice of schedule meetings and funding basic administrative services (e.g., copying and meeting room costs). The Recreation Resources Advisory Committee would meet every six years, within six months of Chelan PUD's submittal to FERC of the Licensed Hydropower Development Recreation Report (Form 80).

Alternatives Considered by the Social Sciences Working Group

Washington State Parks proposes Chelan PUD provide funds for a five-mile riverfront trail along the Douglas County shoreline of the Columbia River between Odabashian Bridge (located below Rocky Reach Hydroelectric Project dam) and Lincoln Rock State Park.

Members of the Entiat Columbia Breaks Fire Interpretive Center Foundation propose Chelan PUD extend utilities (electricity and water) and provide a portion of funding to construct a visitor's building near the Columbia Breaks Fire Interpretive Center located at the north end of the City of Entiat.

Our Analysis

The proposed Recreation Resources Management Plan has the support of the Social Sciences Working Group and provides for the continuation and/or development of recreational opportunities within the Project boundary. Currently, existing recreation facilities within the Project area include seven park facilities that occupy nearly 400 acres of public land along the reservoir and provide widely available public access to Project lands and waters. Federal, state and local studies, as well as studies conducted through the relicensing process indicate increased future demands for trails, boating access, natural areas, water viewpoints and sports fields. The Recreation Resources Management Plan would address recreation management goals and recreation enhancements as identified throughout the relicensing process by the Social Sciences Working Group.

ADA accessible facilities exist at all Rocky Reach Hydroelectric Project recreation sites. The Recreation Resources Management Plan proposes that upgrades and improvements for ADA accessibility is provided as project recreation sites are improved or replaced.

Chelan PUD has demonstrated a strong commitment to public access through the development of the seven park facilities within the Project area. Chelan PUD has proposed to continue that commitment through the following:

- (1) continuing ownership and/or operation of existing Chelan PUD recreation facilities at Rocky Reach Hydroelectric Project Park, Beebe Bridge Park, Chelan Falls Hydro Park, Powerhouse Park, Entiat Park, Lincoln Rock and Daroga State parks, and Orondo Park;

- (2) developing and implementing an updated master plan for Entiat park and implementing a land-use plan for shoreline property in Entiat owned by Chelan PUD;
- (3) collaboratively working with federal, state and local agencies to provide land use designations that allow public access through nature trails and activities, such as for photography and wildlife viewing;
- (4) developing and implementing a paved multi-use trail from Lincoln Rock State Park to an area just below the Rocky Reach Hydroelectric Project dam;
- (5) establishing and maintaining a Community Recreation Fund for recreational facilities and recreational and/or environmental education programs in communities adjacent to Project waters along the Columbia River and its tributaries between Rock Island and Wells Hydroelectric Project dams; and
- (6) establishing a Recreation Resources Advisory Committee to review and evaluate recreation practices, needs, trends and dispersed recreation within the Project area.

The Social Sciences Working Group proposals for improvements, replacement and/or renovation to the existing Chelan PUD parks within the Project boundary will protect the existing recreation assets and ensure public access to the Columbia River well into the future. The Recreation Resources Management Plan provides for additional camping spaces at Daroga and Lincoln Rock State parks, modification of the camping area and/or additional facilities that support additional camping spaces at Entiat Park, additional short-term docks (moorage floats) at Beebe Bridge, Lincoln Rock and Daroga State parks, and a land-use plan for property adjacent to Daroga Park, owned by Chelan PUD.

The City of Entiat is located adjacent to the Rocky Reach Hydroelectric Project reservoir at the confluence of the Entiat River and the Columbia River. Within the City of Entiat, Chelan PUD owns approximately ___ acres of shoreline, portions of Entiat Park and a ball field. The Social Sciences Working Group proposal for Chelan PUD to develop a land-use plan that incorporates Entiat Park, Chelan PUD-owned shoreline and ball field property, and current and future development plans of the City of Entiat would provide a benefit to the City of Entiat and address land-use issues for Chelan PUD.

According to an assessment of outdoor recreation in Washington state completed by the Interagency Committee for Outdoor Recreation (IAC, 2002), recreation activities exhibiting growth include walking, sightseeing, and bicycling, as well as are non-

consumptive human activities with fish and wildlife, such as nature walks and photographing the outdoors. The proposal by the Social Sciences Working Group for Chelan PUD to work with federal, state and local agencies to provide land use designations that allow public access through nature trails and activities addresses the identified needs of the IAC study.

The Social Sciences Working Group proposal for a trail from Lincoln Rock State Park to the Rocky Reach Hydroelectric Project dam, as well as the integration of trails into land use and park planning at Entiat would address the identified IAC recommendations for non-federal hydropower project operators to enhance their inventory with trails and paths for walking and bicycling.

c. Unavoidable Adverse Impacts:

None.

5.3.7 Socioeconomics