
RECREATION RESOURCES INVENTORY SUMMARY REPORT

Preliminary Discussion Draft

ROCKY REACH HYDROELECTRIC PROJECT
FERC Project No. 2145

March 20, 2001



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SECTION 1: INTRODUCTION

1.1 Background

The Public Utility District No. 1 of Chelan County (Chelan PUD) owns and operates the Rocky Reach Hydroelectric Project (Project). Chelan PUD is permitted to operate the Project according to terms and conditions contained in an existing Federal Energy Regulatory Commission (FERC) license, No. 2145, that was issued on July 12, 1956. On September 1, 1966, the Chelan PUD filed an application with the Federal Power Commission (FPC) to amend the Project license for the addition of four generating units. The FPC, later FERC, issued the license amendment on May 23, 1968. The existing license expires on June 30, 2006.

Chelan PUD intends to seek a new federal license to operate the Rocky Reach Project and has begun preparation for the process referred to as “relicensing.” The FERC relicensing process is based on laws and regulations that require years of extensive planning, including environmental studies, agency consensus and public involvement. The process to obtain a new license has changed considerably since the existing licensee was issued in 1956. The Federal Power Act (FPA) was amended in 1986 by the Electric Consumers Protection Act (ECPA). The amendment requires the FERC, in addition to power and development purposes, to give equal consideration to the purposes of enhancement of fish and wildlife, the protection of recreational opportunities, and the preservation of other aspects of environmental quality. This Recreation Resources Inventory is one of the many studies being conducted as part of the relicensing efforts.

A Recreation Use Assessment was conducted in 1999 and 2000 to assess recreation occurring at existing developed recreation sites and dispersed uses within the project boundary (Chelan PUD 2001). This Recreation Resources Inventory assesses developed and undeveloped recreational sites located on public and private lands, mitigation lands, lands owned and/or managed by federal, state and local agencies, and lands owned by non-governmental organizations. In addition, the study assesses the adequacy of access to the project reservoir from adjacent lands. The fishery and wildlife working groups' aquatic habitat survey and wildlife surveys are also reviewed to interpret impacts associated with recreation resources. Ultimately information from the Recreation use Assessment and this Recreation Resources Inventory will be used as input to develop a Comprehensive Recreation Plan for the Rocky Reach Project.

1.2 Project Location

The Rocky Reach Dam is located approximately seven miles north of the city of Wenatchee on the Columbia River in mid-Washington State. The dam is 215 river miles below the Canadian border and 473 river miles above the mouth of the Columbia River at Astoria, Oregon (Figure 1-1).

Figure 1-1: Project Location Map

The Rocky Reach Project Reservoir, also known as Lake Entiat, extends upriver 43 miles (to Wells Dam) and has a surface area of approximately 9,100 acres. The reservoir contains 36,400 acre-feet of usable storage. The mid-line of the reservoir forms the boundary between Chelan County on the west and Douglas County on the east. The drainage area of the project at the dam is about 90,000 square miles. The watershed lies east of the Cascade Mountains and West of the Rocky Mountains, consisting of parts of Washington, Idaho, Montana, and British Columbia. The normal headwater elevation is 707 feet above sea level. The normal tailwater elevation is 614.7 feet above sea level. The average annual minimum water temperature of 34 degrees Fahrenheit normally occurs during the month of February. The average annual maximum water temperature of 65°F occurs during the months of August and September.

1.3 The Columbia River

The Columbia River begins in icefields of the Arrow Lakes region of British Columbia and enters Washington in the northeast corner of the state, flowing south and west 145 miles through Lake Roosevelt to Grand Coulee Dam. The river continues west through Chief Joseph Dam into the Wells Reservoir where it again turns south and enters Rocky Reach Reservoir (Lake Entiat). The river continues on through a series of other dams, eventually flowing west to the Pacific Ocean. There are 11 dams on the main stem of the Columbia River in the United States. The Rocky Reach Project is the eighth dam upstream from the Pacific Ocean, located in what is known as the mid-Columbia reach (the river reach from Chief Joseph Dam to Priest Rapids Dam). The Rocky Reach Dam lies between the Douglas County Public Utility District's Wells Dam (upstream) and Chelan County PUD's Rock Island Dam (downstream).

1.4 Physical Setting

The state of Washington encompasses a wide range of geographic diversity, from the marine influenced ocean shores and the Puget Sound, over the rugged Cascade Mountain Range to the rolling hills of central Washington, to the ancient mountain ranges of north central and eastern Washington. The Rocky Reach Project is located on the Columbia River between two significantly different physiographic areas. In the Cascade Mountains to the west, a metamorphosed sedimentary, volcanic, and granitic rock predominates. On the Columbia River Plateau to the east, vast, thick layers of basalt cover bedrock. The vegetation ranges from forest and alpine meadows in the Cascades, down to the fertile, irrigated valleys near the Columbia and back up to sparsely vegetated arid plateaus to the east.

1.2 Climate

The climate in the vicinity of the Rocky Reach Project is the semi-arid type, which is typical of eastern Washington. There is a seasonal range of temperatures in the area with winter averaging about 25°F and summer about 75°F. Spring and Fall temperatures average 50°F. Extreme temperatures can approach -30°F in winter and 110°F in summer. The precipitation is generally low with an annual average of about 10 inches, the bulk of which falls between October and March. There are usually no more than 8 to 15 inches of snow on the ground.

1.3 Regional Economy

The economy of the north central Washington region encompassing Chelan and Douglas Counties is based primarily on agriculture. Chelan County provides 80 percent of the jobs in the two-county area and contains 75 percent of the total number of employers. Apples, pears, cherries, and other fruits are important crops in the Columbia River basin. The region's economy is also supported by other types of agriculture (wheat, hay, potatoes), retail trades, services, manufacturing, recreation and tourism.

1.4 Regional Population

The region is sparsely populated. In 1999, the population of Chelan County was 63,000 people; Douglas County, 31,700 people; and the population of the entire state of Washington, 5.7 million people. The largest community on the Rocky Reach Reservoir is the city of Entiat, with a 1999 estimated population of 935. The cities of Wenatchee (1999 population estimate of 25,620) and East Wenatchee (1999 population estimate of 5,395) are located seven miles south of Rocky Reach Dam.

SECTION 2: STUDY AREA

The study area is the Rocky Reach Project boundary from Rocky Reach Dam to Wells Dam. The Rocky Reach boundary is defined by contour lines on each side of the reservoir beginning at elevation 707 feet MSL at the Rocky Reach Dam upstream to the Wells Project tailrace. The elevation of the boundary lines increases with distance upstream of Rocky Reach Dam to take into account the anticipated water level at high flows. The Rocky Reach Project contains a total of 1,345 acres of land, of which Chelan PUD owns approximately 100 acres, or seven percent. The seven public recreation sites within the study area include almost 400 acres of land. Chelan PUD owns all seven public recreation sites with the exception of Entiat Park and Daroga Park, which are also partially owned by the City of Entiat and the Port of Douglas County, respectively. Most of these park lands, with the exception of the shorelines, are above the 707 feet MSL boundary definition. Chelan PUD also owns other lands along the reservoir that are not all included within the 707 feet MSL boundary definition such as Turtle Rock Island and other lands set aside for fish and wildlife habitat. Specific land ownership along the Rocky Reach shoreline is currently being researched and mapped and will be provided in the Project Lands Management Study Report.

The inventory area will include areas impacted by and/or immediately adjacent to the project boundary. As part of this study, the Recreation Working Group has included the following areas located outside of the described study area in the recreation inventory: areas of lower Douglas PUD Wells Dam Reservoir (Pateros); Wenatchee Confluence State Park; and U.S. Forest Service park sites located in the Entiat River Valley.

SECTION 3: LAND OWNERSHIP AND USE IN PROJECT AREA

The Columbia River valley surrounding the Rocky Reach Reservoir is a wide canyon characterized by basalt cliffs and exposed rock outcroppings. The limited valley is generally rural in nature.

U.S. Highway 97 runs near the east bank of the reservoir from Rocky Reach Dam north and northeast to Beebe Bridge, where it crosses the river and runs along the west bank north towards the town of Pateros. Highway 97A runs near the west bank of the reservoir from Rocky Reach Dam to where it turns north towards Lake Chelan. Railway right-of-way is situated between Highway 97A and the west bank of the reservoir up to where Highway 97A turns north towards Lake Chelan. From this point the railroad right-of-way continues to run adjacent to the west bank for the entire length of the reservoir. The city of Entiat and the community of Chelan Falls are located on the west bank of the reservoir. The community of Orondo is located along the east bank of the reservoir (refer to Figure 1-1).

Project boundary encroachment includes two sanitary sewer outfalls, storm water outfalls, irrigation withdrawals, and recreational development that is part of Chelan PUD's existing recreation plan. Within the project boundary, agricultural uses, recreational sites developed by Chelan PUD and some residential lands surround approximately half the reservoir. Agricultural uses consist primarily of fruit orchards and some pasture lands. Irrigation pumps and pumphouses to withdraw water from the Columbia River are often located on agricultural lands. Recreation sites provide for swimming, boating, fishing, personal watercraft, camping, picnicking, water-skiing, and other recreational uses. Recreational use generated at these sites is intensive during the summer season, Memorial Day through Labor Day.

The remainder of the land surrounding the reservoir is generally undeveloped. These lands can be characterized as drylands. They include shrub steppe and grasslands vegetation with patches of exposed rock. Much of the undeveloped shoreline lies in areas where the reservoir is in close proximity to the railroad on the westerly side and to State Routes 97A (westerly) and 97 (easterly). Narrow strips of riparian vegetation, including wetland areas, may be present along those areas of the reservoir where the shoreline slopes are relatively gentle.

Ownership of lands outside and/or adjacent to the project boundary include State Department of Natural Resources, State Department of Fish and Wildlife, State Parks and Recreation Commission, USDA Forest Service, Bureau of Land Management, Chelan PUD, Railroad, State Department of Transportation, city of Entiat and private.

Land ownership in the Project area and developed recreation sites are shown on Figure 1-1.

SECTION 4: HISTORY OF RECREATIONAL DEVELOPMENT AND EXHIBIT R COMPLIANCE

4.1 History of Recreational Development at Rocky Reach

Seven public parks and recreation facilities on the Rocky Reach Reservoir were constructed by Chelan PUD. These facilities are shown on Figure 1-1 and include:

- Rocky Reach Dam Day-use Recreation Facilities and Visitors Center
- Lincoln Rock State Park
- Orondo River Park
- Entiat Park
- Daroga State Park
- Chelan Falls and Powerhouse Parks
- Beebe Bridge Park

Chelan PUD owns, operates and maintains the Rocky Reach Dam facilities, Beebe Bridge Park, and Chelan Falls and Powerhouse Parks. Chelan PUD owns Lincoln Rock and Daroga State Parks and have 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 town of Entiat and the Douglas County Port District, respectively.

Table 4-1 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 Project. These facilities provide widely available public access to Rocky Reach Project lands and waters. Recreation facilities along this river reach are of local and statewide significance, providing water access, camping and picnicking facilities, and athletic fields

4.2 Exhibit R Compliance

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 Project license on May 1968 in a FERC Order approving a project expansion proposal to add 4 additional units (License Amendment #5). The Rocky Reach 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 Plan. The following summarized the history.

Table 4-1: Historical Overview of Recreation Developments	
Rocky Reach Hydroelectric Project - Public Utility District No. 1 of Chelan County	
Date	Chelan PUD Actions
1963	Developed visitor center, interpretive displays, and day-use area at Rocky Reach 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.
1990	Expansion and development of Daroga Park which was originally developed by a private owner when Rocky Reach Dam reservoir was created. Developed boating, swimming, other day-use, and camping facilities. Signed lease and operating agreement with State Parks.
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 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 Dam.
2001	Orondo Park improvements - ADA accessible facilities

In November 1969, Chelan PUD first submitted an Exhibit R for the Rocky Reach Project as a requirement under License Amendment #5. Over the course of several years, FERC requested additional information on the contents of the Exhibit R and recommended changes in the plan to address regulations. Chelan PUD filed several supplements to the November 1969 filing and conducted further study, consultation and planning for development of the Exhibit R recreation plan.

In January 1975, Chelan PUD filed the Exhibit R Recreation Plan with FERC in conformance with Article 44 of the Project License (Amendment no. 5). FERC issued an order approving the Recreation Use Plan on March 2, 1976.

In the 1980's, several revisions to the 1975 Exhibit R Recreation Plan were made including:

- In January 1983, Chelan PUD requested relocation of the Weed-Hart Site swimming area, day use area and boat dock to the East Bank Site (Lincoln Rock State Park). FERC approved request in March 1983.
- In March 1986, Chelan PUD sought relocation of camping facilities proposed at the Rocky Reach Dam Site and facilities proposed at the Turtle Rock Site. Camping facilities at the Rocky Reach Dam site were shifted to the East Bank Site (Lincoln Rock State Park) Turtle Rock camping and day use facilities were deleted because of anticipated conflicts between recreationists and fish hatchery and wildlife management operations. Additional facilities were constructed at Lincoln Rock State Park in lieu of the island facilities. This request was approved by FERC in April 1986.
- In May 1987, Chelan PUD requested deletion of approximately 66 acres of excess land from the East Bank Recreation Site (Lincoln Rock State Park) from the Recreation Plan in order to make needed lands available for a fish hatchery complex. FERC approved the request in June 1987.

In 1990, during a scheduled inspection of the Rocky Reach Project, FERC requested that Chelan PUD file a revised Exhibit R and schedules for the completion of recreational facilities proposed in the original Recreation Plan. In December 1991, Chelan PUD responded to this request by filing the Report on the Status of the Rocky Reach Exhibit R Recreation Plan and Request for Revisions of the Recreation Plan. FERC approved the 1991 Revised Recreation Plan in March 1993. Revisions to the 1975 Exhibit R outlined in the 1991 Revised Recreation Plan included:

- Chelan PUD proposed construction of an additional picnic shelter, restroom and parking at the Rocky Reach Dam site in lieu of additional picnic sites shown in the 1975 recreation plan. Chelan also requested the deletion of the eastside viewing shelter and trail due to the expected low use and potential for vandalism because of its isolated location.
- Chelan PUD requested approval to develop a day-use facility on Turtle Rock Island including a destination dock, comfort station and fencing around these facilities.
- Deletion of planned facilities on the north bank of the Entiat River and the removal from within the Entiat Recreation Site boundary. The area would remain within the project boundary and be available for wildlife habitat mitigation and passive public use.
- At Daroga State Park, Chelan PUD requested a schedule change for completion of additional camping facilities and requested a revision in the mix of picnic facilities - instead of 120 picnic sites, Chelan developed 35 sites and two group picnic shelters.
- Chelan PUD requested FERC approval of the schedule for completion of the Chelan Falls and Beebe Bridge Parks.
- Chelan PUD requested deletion of the Azwell boat launch and boat dock, located on the west side of the reservoir on the forebay of Wells Dam. A boat launch, maintained by the Douglas County PUD, currently exists within the Wells Dam Project boundary, at the north end of the proposed Azwell Site,. Chelan PUD wished to delete the Azwell site because use at the existing Douglas County PUD boat launch

has remained low due to swift river currents in this portion of the reservoir. Additionally, Chelan PUD believed that boater access to the upper reservoir would be more than adequate with the Chelan Falls and Beebe Bridge boat launches.

In 1993 and 1994, several letters were sent to FERC from local residents requesting deletion of the Turtle Rock Facility from the Revised Recreation Plan due to a variety of reasons including preserving the natural state and protection of the wildlife preserve. A 1995 letter to FERC from Washington State Parks and Recreation Commission expressed support for deferment of Turtle Rock Facilities. In June 1995 Chelan PUD requested deletion of the Turtle Rock Site from the Recreation Plan. The request was granted in the FERC Order issued November 7, 1997 - Order Amending Recreation Plan and Approving Exhibit R As-Built Drawings.

The March 1993 Order approving the Revised Recreation Plan mandated 5-year updates. In response to this Order, Chelan PUD filed a Report on the Status of Exhibit R Recreation Plan in February 1998. In this Report, Chelan PUD agreed to:

- Monitor visitation and recreation use through existing license term.
- Continue to implement operation and maintenance program at the Rocky Reach Dam Site, Chelan Falls Park, and Beebe Bridge Park.
- Meet annually with park managers at Entiat Park, Daroga State Park, and Lincoln Rock State Park to review major maintenance needs and continued to make an effort to accommodate reasonable maintenance needs.

Over the years, FERC and the industry have considered Chelan PUD to be leading the industry in providing recreational facilities and public access to project resources at its hydroelectric projects. Numerous commendations and praise have been given to Chelan PUD on their efforts since the original Exhibit R was accepted by FERC.

SECTION 5: EXISTING PROJECT AREA RECREATION SITES AND RECREATION USE AREAS

5.1 Public Recreation Sites that Provide Access to the Project Reservoir

Chelan PUD constructed seven public recreation sites that provide access to the Rocky Reach Reservoir. All seven of these sites are within and adjacent to the Rocky Reach Project Boundary. Upstream of Rocky Reach Reservoir is Douglas County PUD's Wells Dam and Reservoir. Douglas County PUD operates and maintains a boat launch at the forebay of Wells Dam. This boat launch provides access to the Rocky Reach Reservoir, but is within the Wells Project boundary. Figure 5-1 shows the location of public recreation sites that provide access to the Project Reservoir. The following describes these facilities.

5.1.1 Rocky Reach Dam Recreation Facilities and Visitor Center

This 38-acre park site is owned and operated by Chelan PUD. The site is located on the southwest shoreline at the dam and includes numerous recreation facilities, a visitor's center, museum, and 241 parking spaces. Recreation facilities include two picnic shelters, 30 picnic tables, formal gardens, playground equipment, two horseshoe pits, 0.45 linear miles of trails, and interpretive displays. The four-story Public Information and Tour Center offers concessions, fish viewing rooms and an interpretive history gallery. The day-use area and three restrooms are handicapped accessible. All recreation facilities at the Rocky Reach Dam are open to the public free of charge. The facilities are open year-round.

5.1.2 Lincoln Rock State Park

Lincoln Rock State Park is a 65-acre park located on the east shore of Rocky Reach Reservoir just above Rocky Reach Dam. The site is owned by Chelan PUD and maintained and operated by the Washington State Parks and Recreation Commission (WSPRC) under a cooperative agreement. Shoreline access to the southern part of the site is restricted due to the proximity of the dam. Most of the northern portion of the site is relatively undeveloped, except for a trail system that links to the central part of the site, where most of the facilities are located.

Recreation facilities at Lincoln Rock State Park include a three-lane boat launch, six boat tie-up docks, 102 boat trailer parking spaces, swim beach, six restrooms buildings with 12 showers, 166 picnic tables, three picnic shelters, amphitheater, playground equipment, 1.3 miles of paved trails, athletic fields and courts, 148 day-use parking spaces, 94 RV and tent campsites, RV dump station, and a concession building. Facilities at the site are ADA accessible. Recreation facilities at Lincoln Rock State Park are open to the public for free, with the exception of boat launching, picnic shelter reservations and camping (including RV dump and showers). Camping reservations can be made with Washington State Parks. Lincoln Rock State Park is open from mid-March to October 23.

5.1.3 Orondo River Park

Orondo River Park is a five-acre park located on the east shore of Rocky Reach Reservoir approximately two miles north of the community of Orondo. Chelan PUD and the Port of Douglas County both own parts of Orondo River Park. The Park is maintained and operated by the Port of Douglas County under a cooperative agreement with Chelan PUD.

Figure 5-1: Public Recreation Sites and Designated Public Recreation Lands

Recreation facilities at Orondo River Park include a one-lane boat launch, marina, three boat tie-up docks, overnight moorage, 14 boat trailer parking spaces, swim beach, one restroom with four showers, 14 picnic tables and a picnic shelter, playground equipment, 22 day-use parking spaces, 14 designated tent/RV camp sites and a grassy area that can accommodate 10 - 15 tents. During monitoring effort, facilities at the site were not ADA accessible. Plans are underway to improve the park and make facilities ADA accessible. Recreation facilities are open to the public for free, with the exception of boat launching marina services and camping. Reservations for camping and picnic shelters are accepted. The Park is open from May 1 to September 30.

5.1.4 Entiat Park

Entiat Park is a 40-acre park located on the west shore of Rocky Reach Reservoir in the City of Entiat north of the Entiat River. Chelan PUD and the town of Entiat both own parts of Entiat Park. The Park is operated and maintained by the City of Entiat under a cooperative agreement. Recreation facilities at Entiat Park include a one-lane boat launch, two boat tie-up docks, 17 boat trailer parking spaces, swim beach, three restrooms with four showers, a museum, 108 picnic tables and a picnic shelter, playground equipment, 43 day-use parking spaces, 31 RV sites with hookups, and an RV dump station. Although Entiat Park was not originally planned for tent camping, it has allowed tent camping in the day-use area of the park. During 1999 monitoring, the City of Entiat allowed a maximum of 50 tent sites in the day-use area of the Park.

Facilities at the site are ADA accessible. Recreation facilities are open to the public for free, with the exception of boat launching and camping (including RV dump). Reservations are accepted for camping. The campground is open from mid-April to mid-October. Locals are given the combination to the Park gate lock so they can access the park year-round.

5.1.5 Daroga State Park

Daroga State Park is a 140-acre park located on the east shore of the Rocky Reach Reservoir seven miles north of Orondo. The park is owned by Chelan PUD, but maintained and operated by Washington State Parks and Recreation Commission under a cooperative agreement. Recreation facilities include a two-lane boat launch, three boat tie-up docks, 76 boat trailer parking spaces, swim beach, six restrooms with 12 showers, 75 picnic tables and 3 picnic shelters, playground equipment, 2.5 miles of paved trails, athletic fields and courts, 114 day-use parking spaces, 28 campsites with water and power, 17 boat/bicycle/walk-in sites, two group camping areas with capacity for up to 100 persons, and an RV dump station. Facilities at the site are ADA accessible. Recreation facilities are open to the public for free, with the exception of boat launching, picnic shelter reservations and camping (including RV dump and showers). Reservations are accepted for picnic shelters and group camping. Other campsites are available on a first come-first served basis. Daroga State Park is open from mid March to mid-October.

5.1.6 Chelan Falls and Powerhouse Parks

Chelan Falls and Powerhouse Parks include 53-acres on the west shore of the Rocky Reach Reservoir and is located in the community of Chelan Falls, just downstream from the mouth of the Chelan River. The park is owned and operated by Chelan PUD. Recreation facilities include a two-lane boat launch, two boat tie-up docks, 25 boat trailer parking spaces, two swim beaches, 11 picnic tables and two picnic shelters with 16 picnic tables, three restrooms with four showers, playground equipment, 0.2 mile of trail, athletic fields and courts, and 178 day-use parking

spaces. Facilities at the site are ADA accessible. Recreation facilities are open to the public free of charge. Reservations are accepted for picnic shelters. The park is open from early April until November 1, although Chelan Falls Park boat launch is open year-round.

5.1.7 Beebe Bridge Park

Beebe Bridge Park is a 56-acre park located on the east shore of the Rocky Reach Reservoir just south of the US Highway 97 Beebe Bridge. Beebe Bridge Park is approximately two miles east of the City of Chelan and 32 miles north of Wenatchee. The park is owned and operated by Chelan PUD. Recreation facilities include a two-lane boat launch, a boat tie-up dock, 16 boat trailer parking spaces, swim beach, 14 picnic tables and a picnic shelter with another 14 picnic tables, three restrooms with six showers, playground equipment, 0.6 mile of trail, athletic fields and courts, 196 day-use parking spaces, 46 RV and tent campsites, and an RV dump station. Facilities at the site are ADA accessible. Recreation facilities are open to the public free of charge. Camping is on a first come first served basis. Reservations are accepted for picnic shelters. The campground is open from early April until mid October, although the remainder of the site stays open until November 1.

5.1.8 Wells Dam Boat Launch

Douglas County PUD operates and maintains a boat launch at the forebay of Wells Dam. This boat launch is located within the Wells Project boundary but provides access to the Rocky Reach Reservoir. The boat launch was constructed for project operations but has been open and available for public use for many years.

The site is accessed from a dirt road, off of the Wells Dam entrance road, that runs through the Azwell Orchards towards the River. 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. The boat launch is open year round.

5.2 Private Recreation Sites that Provide Access to the Project Reservoir

Few private recreation sites are available on the Rocky Reach Reservoir and none of the private facilities that are available are open to the general public.

5.2.1 Wenatchee Boat Club

The Wenatchee Boat Club is located on the west bank of the reservoir, 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.

5.2.2 Subdivisions

Sun Cove, located on the east side of the reservoir 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 Rocky Reach Reservoir have their own private docks.

5.3 Public Recreation Sites Adjacent to the Project Reservoir

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

5.4 Public Recreation Use Areas

Washington Department of Fish and Wildlife (WDFW), Bureau of Land Management (BLM) as well as the U.S. Forest Service own lands adjacent to the Rocky Reach Reservoir that are managed for hunting, fishing and other dispersed recreation. No developed recreation facilities are located on these lands. Section 5.4.1 discusses designated wildlife recreation areas in the Project area. Chelan PUD owned lands adjacent to the Project Reservoir that are known to be used for dispersed recreation activities are discussed in Section 5.4.2. Figure 5-1 shows the location of public owned lands and recreation areas in the Project area.

5.4.1 Wildlife Recreation Areas

The Swakane, Entiat and Chelan Butte Wildlife Recreation Areas, managed by WDFW, are located in Chelan County just west and northwest of the Rocky Reach Reservoir. In 1963 Chelan PUD, as mitigation resulting from the Rocky Reach Project, provided funds for purchasing 17,502 acres of lands for inclusion in the Swakane, Entiat and Chelan Butte Wildlife areas, to be managed by WDFW for hunting and deer and upland bird game habitat. These areas are popular for hunting upland birds, deer and big horn sheep. Wildlife viewing is also possible from 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 one of the more popular hunting areas. Entiat Wildlife Area is located between the Entiat River and 25 Mile Creek Road 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. Nongame species including birds and small mammals also use the areas. The 1988 Dinkleman fire burned nearly all of the Swakane and Entiat 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 one of the more popular hunting areas. This area contains small game habitat favorable for upland birds including chukar, quail, grouse, and mourning doves. The area was burned in the 1988 Dinkleman Fire and the 1994 Tye fire.

A 160-acre parcel called Gallagher Flats was purchased by Chelan PUD, as part of the 1963 agreement to mitigate impacts resulting from the Rocky Reach Project. Gallagher Flats, located upstream of Beebe Bridge along the west bank of the reservoir, is managed by WDFW for

hunting. There is also evidence of trash dumping, 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 Reservoir but are mentioned here and shown on Figure 5-1 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 Rocky Reach Reservoir and north of Lake Chelan. Both of these sites are currently undeveloped.

5.4.2 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 (the project reservoir) 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 reservoir shoreline adjacent to the mouth of the Entiat River.

5.5 Availability of Public Boat Launches on Project Reservoir

Boat launches that provide public access to the Rocky Reach Project area are summarized on Table 5-1. The times of year that the launches are open to the public is also shown.

Table 5-1: Rocky Reach Reservoir 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

Entiat locals are given the combination to the Entiat Park gate so that they may access the boat launch year-round.

SECTION 6: SUMMARY OF 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. Table 6-1 shows designated trails that exist at public recreation sites in the project area.

Table 6-1: Trails/Walkways within and/or adjacent to Rocky Reach Project Boundary	
Recreation Site	Trail/Walkway Length
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

Numerous trails exist nearby the project area. The Apple Capital Recreation Loop Trail (also know as Wenatchee 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, described in Section 7.2 below, 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. The trails in the Entiat River Valley are described in Section 7.3 below.

Badger Mountain, located several miles east of the Project area, also has many hiking and mountain biking trails.

SECTION 7: EXISTING RECREATION USE SITES NEAR PROJECT AREA

7.1 Lower Douglas PUD Wells Dam Reservoir Recreation Sites

Upstream of Wells Dam, there are several recreation facilities that provide access to Douglas County PUD's Wells Reservoir (Lake Pateros). This section describes the recreation facilities located at the lower end of the Wells Reservoir (Public Utility District No. 1 of Douglas County, 1997).

7.1.1 Wells Dam Overlook and Visitors Center

Recreation facilities at Wells Dam include an overlook with picnic shelter, restrooms, visitors center at the dam where interpretive displays and self-guided tours are available, and a fish viewing window which allows close inspection of adult salmon migrating upstream.

7.1.2 Starr Boat Launch

Douglas County PUD constructed and maintains a boat launch at Starr, approximately two miles upstream from Dells dam. Facilities at the Starr boat launch include a concrete launching ramp and a vault toilet.

7.1.3 Highway 153 Access Area

A fishing access area and car top boat launch is located on the Methow River at its confluence with the Columbia River. Facilities at this site include vault toilets and parking for dozens of vehicles. This site is also used extensively by Methow river rafters as a take-out site during spring and early summer.

7.1.4 Peninsula Park

Peninsula Park is located on the Methow River at its confluence with the Columbia River in Pateros. Park Facilities include a swimming beach, gazebo, picnic tables, playground, and restrooms.

7.1.5 Memorial Park

Memorial Park is located on the Columbia River in Pateros. Park facilities include a paved pedestrian walkway, hydroplane launch site, ski docks, moorage docks, picnic shelters, interpretive displays, and restrooms.

7.1.6 Additional Facilities in Pateros

In addition to Peninsula and Memorial Parks, the City of Pateros also maintains two boat launches and a tennis court. One boat launch is located at the mouth of the Methow River. Facilities at this launch include a concrete launching ramp, dock, fish cleaning station, and restrooms. This boat launch area is tied-in to Memorial Park via an accessible walkway underneath Highway 97 and railroad bridges. A second boat launch (located upstream from Memorial Park) was designed to facilitate winter launching when use of the main launch becomes difficult due to ice build-up. The municipal tennis courts are located along the Methow River near Peninsula Park. A privately owned, 5-site RV park is located immediately adjacent to Memorial Park.

7.2 Wenatchee Confluence State Park

Downstream of Rocky Reach Dam is Chelan PUD's Rock Island Dam. Wenatchee Confluence State Park is located near at the upper end of Rock Island Reservoir. Wenatchee Confluence State Park is a 197-acre camping park situated at the confluence of the Wenatchee and Columbia rivers at the north end of Wenatchee.

Wenatchee Confluence State Park was developed by Chelan PUD and maintained and operated by the WSPRC under a cooperative agreement. The park has 59 tent/RV sites and a RV dump station, two-lane boat launch, boat trailer parking, swimming beach, restrooms, showers, picnic shelter, and playground equipment. The park has volleyball and tennis courts and a baseball soccer field. The Wenatchee Pier pedestrian bridge and 4.5 miles of trail as well as a wildlife area and interpretive graphics are also located in the park. The park is open year-round for camping, day-use and watercraft launching.

7.3 Entiat River Valley Recreation Sites

West of Rocky Reach Reservoir and the town of Entiat is the Entiat River Valley. Seven U.S. Forest Service (USFS) campgrounds and numerous trails are located in the Entiat River Valley. USFS campgrounds and trails can be reached via the Entiat Valley Road, which runs up the Entiat River Valley from Highway 97A. The following describes the USFS campgrounds and trails in the Entiat River Valley, beginning with sites closest to the Project area.

7.3.1 Fox Creek Campground

Fox Creek Campground is 27 miles from Entiat Park. The campground has 16 campsites with trailer sites available, two vault toilets, a garbage dumpster, and one hand pump well. The Forest Service rates the level of use at this campground as high. Primary activities at the site are camping and fishing.

7.3.2 Lake Creek Campground and Trailhead

Lake Creek Campground is 29 miles from Entiat Park. The campground has 18 campsites with trailer sites available, four pit toilets, one garbage dumpster and two hand pump wells. The Forest Service rates the level of use at this campground as moderate. Primary activities at the campground are camping and fishing. Lake Creek Trailhead is near the campground. The Lake Creek Trail is a 10.6 mile multiple use trail - two wheel motorized only. Trail use includes hikers, stock, motor bikes, and mountain bikes.

7.3.3 Silver Falls Campground and Trails

Silver Falls Campground is 31 miles from Entiat Park. The campground has 31 campsites with trailer sites available, ten vault toilets and two pit toilets, a picnic shelter, two garbage dumpsters, and two hand pump wells. A campground host is located at this campground. The Silver Falls National Recreation and Riverside Trail is across the Entiat Valley Road from the campground. The 1.4 mile trail is a barrier free easily accessible interpretive trail. Primary activities at the site are camping, fishing, hiking, and picnicking. Silver Falls complex is the most popular recreation area in the District.

7.3.4 Middle, North and South Tommy Trails

Up-road from the Silver Falls Campground site is a road off of Entiat Valley Road that leads to the Middle Tommy and North Tommy Trailheads. The Middle Tommy Trail is 8.8 miles long and ties into the 5.7 mile long South Tommy Trail. The trails provide hikers, motorbikes, and horsemen access to the Blue Creek area and ties into the Blue Creek Trail. The North Tommy Trail is 9 miles long and provides hikers, stock, motorbikes, and mountain bikes access to Blue Creek and Mad River area trails.

7.3.5 North Fork Entiat River Trail

Just before the North Fork Campground is a road off of Entiat Valley Road that leads to the North Fork Entiat River Trail. The North Fork Trail is 8.1 miles and is used by hikers, stock, mountain bikes and hunters. The trail is closed to motorbikes.

7.3.6 North Fork Campground

North Fork Campground is 33 miles from Entiat Park. The campground has 7 campsites, pit toilets, a garbage dumpster and a hand pump well. The Forest Service rates the level of use at this campground as high. Primary activities at the site are camping and fishing.

7.3.7 Duncan Ridge Trail

Just after North Fork Campground is Duncan Road, which leads to the Duncan Ridge Trailhead. The 14 mile steep, rocky Duncan Ridge Trail is used by hikers, stock, motorbikes, hunters and mountain bikes. The trail is popular during the hunting season.

7.3.8 Spruce Grove Campground

Spruce Grove Campground is 35 miles from Entiat Park. It has two campsites and is not recommended for trailers. The Forest Service rates the level of use at this campground as high. Activities at the site include camping and fishing.

7.3.9 Three Creek Campground

Three Creek Campground is 36 miles from Entiat Park. It has three campsites and is used mainly just for camping. The Forest Service rates the level of use at this campground as high.

7.3.10 Cottonwood Campground and Shetipo Trail

Cottonwood Campground is 38 miles from Entiat Park. It has 25 campsites with trailer sites available, one garbage dumpster and two hand pump wells. A campground host is located at the campground. The Forest Service rates the level of use at this campground as moderate. Primary activities at the site are camping and fishing. Shetipo Trailhead is accessed from Cottonwood Campground. The 4.7-mile long trail ties into the Garland Peak Trail and is used by hikers, stock, motorbikes, fisherman and hunters.

7.3.11 Entiat River Trail

At the end of Entiat Valley Road, is the trailhead to Entiat River Trail. The 2.1 mile trail is used by hikers, stock and hunters and is often used as access to Dole Lakes or Railroad Creek.

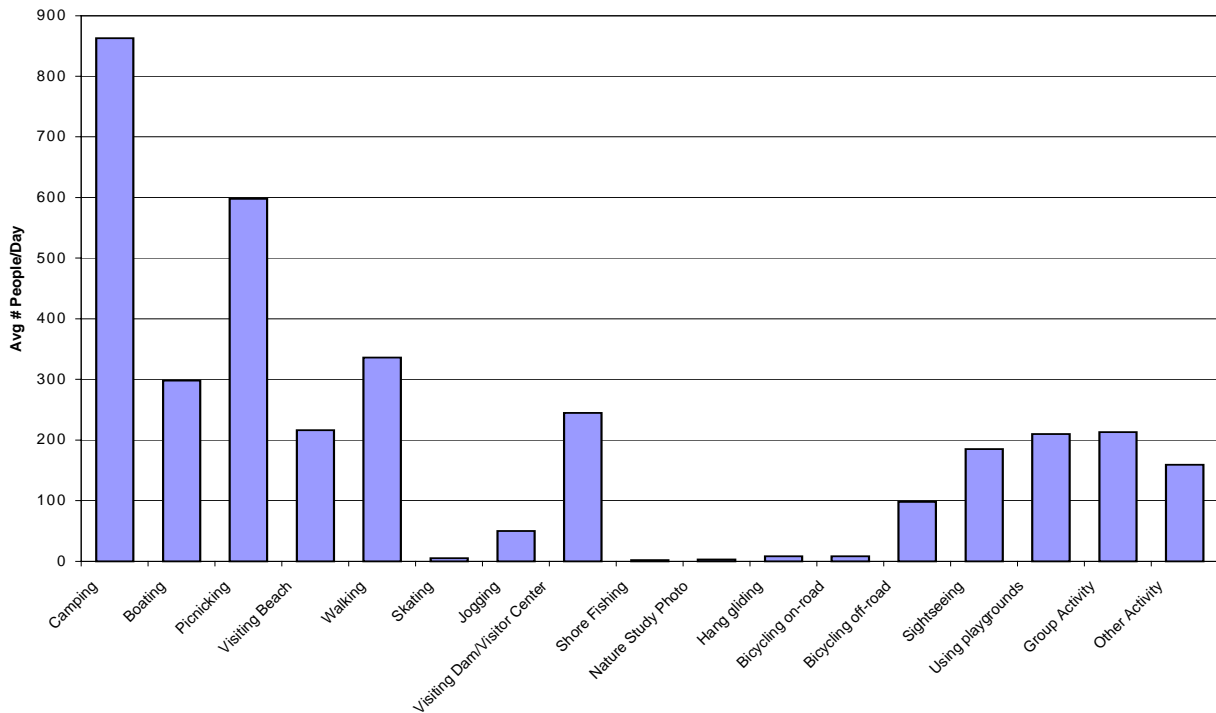
SECTION 8: ADEQUACY AND CONDITION OF EXISTING FACILITIES

8.1 Type of Use

Recreation sites along the Rocky Reach Reservoir provide facilities for a variety of recreation activities including camping, picnicking, boating, launching watercraft, walking, swimming fields 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. Figure 8-1, Figure 8-2 and Figure 8-3 summarize the estimated average daily use by activity for the peak-, fall-, and spring- seasons. Refer to the 1999/2000 Recreational Use Assessment Study Report (Chelan PUD, 2001) Table 5-4 and associated text for details regarding the methodologies used in estimating visitor use.

Figure 8-1: Peak-Season Visitor Use by Activity
(3,497 Total Estimated Average # People/Day)



During the peak-season monitoring, camping had the greatest use followed by picnicking, walking and boating (Figure 8-1). During the fall-season monitoring, camping showed the greatest use followed by other activity (Figure 8-2). Picnicking had the highest visitor use followed by camping during spring-season monitoring (Figure 8-3). As can be seen from figures 8-1 through 8-3, 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).

Figure 8-2: Fall-Season Visitor Use by Activity

(1,501 Total Estimated Average # People/Day)

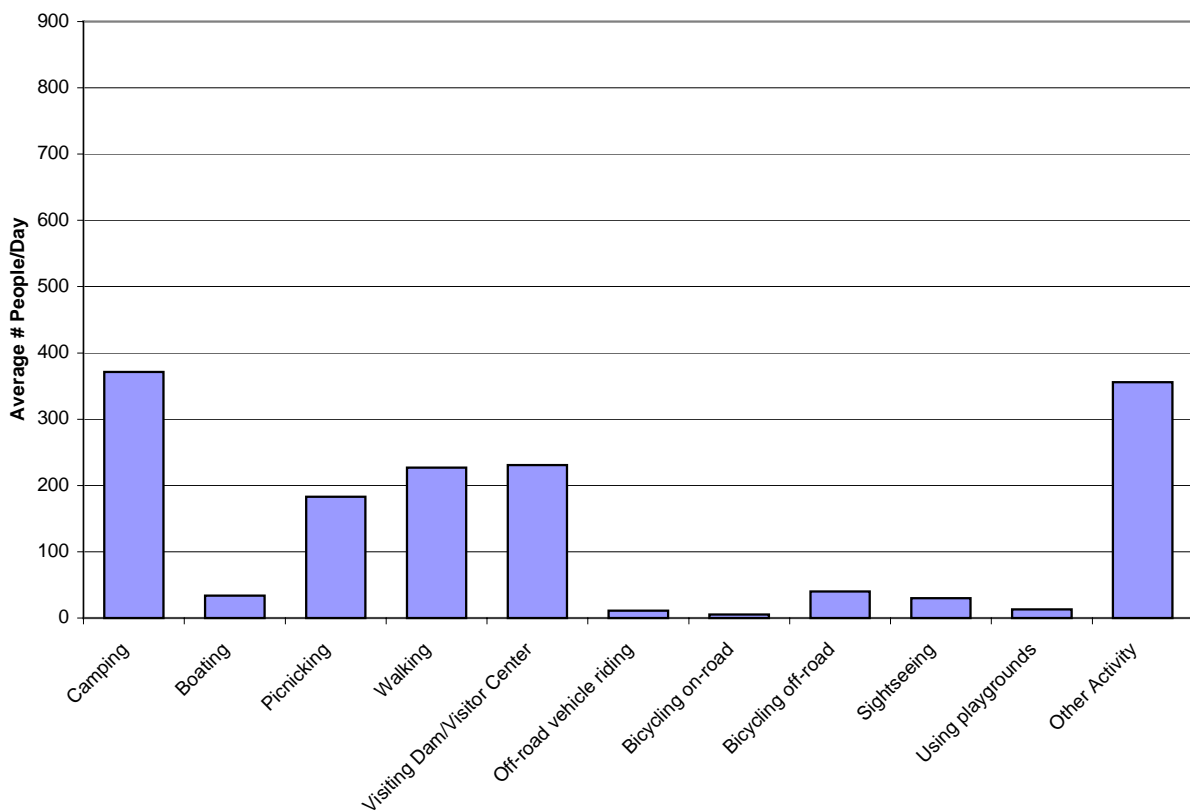
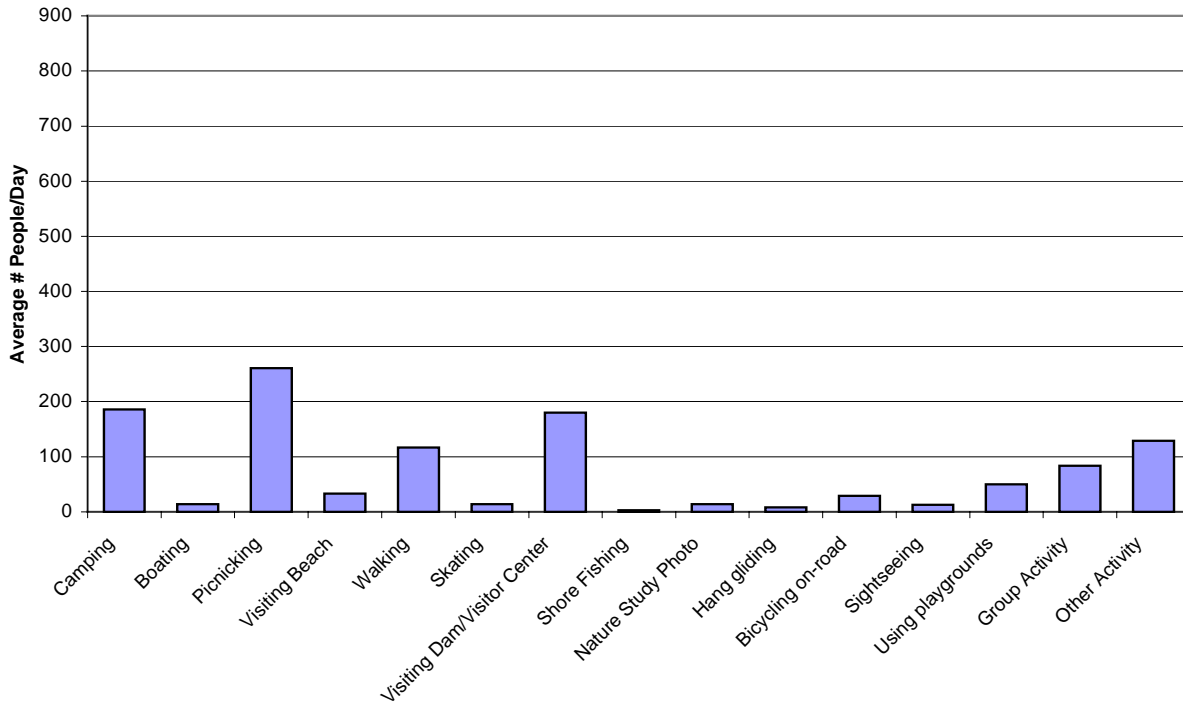


Figure 8-3: Spring-Season Visitor Use by Activity

(1,135 Total Estimated Average # People/Day)



8.2 Existing Recreation Facilities and Physical Capacity

Rocky Reach Project recreation sites occupy 397 acres of land along the reservoir. The facilities all have restrooms with showers, and a variety of amenities such as picnic shelters with power, amphitheaters, landscaping and lawns, RV and tent camp sites, RV dump stations and concession buildings. Table 8-1 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 Needs Forecast and Analysis Study.

8.2.1 Camping

Existing facilities

Five out of the seven of the 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 (see Table 8-1).

Table 8-1: 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 Compliance
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 playground equipment 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 8-1: 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 Compliance
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 8-1: 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 Compliance
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 1 tie up dock 16 boat trailer parking spaces	475 liner feet	0.6 mile	No	Yes

As explained in Section 5.1.4, 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 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 were 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.

8.2.2 Boating

Existing Facilities

Six out of the seven parks in the Rocky Reach study 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, 17 boat tie up docks, and 250 boat trailer parking spaces at the six recreation sites in the project study area. Orondo Park has a marina with marine gas available (refer to Table 8-1).

Douglas County PUD operates and maintains a boat launch at the forebay of Wells Dam. This boat launch provides access to the Rocky Reach Reservoir but is located within the Wells Project boundary; therefore it is not evaluated in detail or included on Table 8-1 in this inventory report. 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 on the Rocky Reach Reservoir, 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

Using Bureau of Reclamation (BOR) general design standards for boat launches of 40 boats per launch lane per day and 3 persons per boat, project recreation sites have the capacity to accommodate 440 boats per day or 1,320 people per day.

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.

8.2.3 Non-Boating Day-Use Activities

All seven public recreation sites in the study area have day use facilities (refer to Table 8-1). 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 estimated 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-use 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 around 438 picnic tables at project recreation sites. Using general design standards of 4 people per table and a turnover of 2, the existing picnic tables have capacity for approximately 3,504 people 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.

Using BOR general design standards of 220 people per acre and a turnover of 3 for swimming beaches, the current swimming beaches in the project area have capacity for approximately 1,584 people per day.

Trails

Currently project recreation sites have a total of over 5 miles of developed trails/walkways.

Using National Recreation and Park Administration (NRPA) general standards for trails of 90 people per day per mile, it can be assumed that the existing trails/walkways at project recreation sites have the capacity for 450 people per day.

Other Day-Use Facilities

All 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 also provided at all facilities (refer to Table 8-1).

The Rocky Reach Dam Site has a visitor center and museum and provides concessions, tours of the dam and fish viewing.

8.2.4 Park Acreage

There have been comments regarding the need to look at capacity of parks related to the parks size versus the number of visitors. City and County park planners generally use standards for planning city and regional parks. For instance, NRPA standards for regional parks is 5-10 acres per 1,000 population - but this is the population of the region that is accommodated by the park. Within Rocky Reach Project area, the majority of visitors are not from the local region and it would not be logical to plan for parks at Rocky Reach based on the population of the Seattle Metropolitan area. **Are there any standards available that provide recommendations related to number of acres/number of visitors?

8.3 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. Results of the visitor survey are provided in the 1999/2000 Recreational Use Assessment Study Report (Chelan PUD, 2001). Further evaluation of survey responses in regards to social capacity will be conducted as part of the Rocky Reach Project Recreation Needs Analysis Study.

8.4 ADA Accessibility

The Americans with Disabilities Act (ADA) was signed into law in 1990. This legislation mandated that a range of facilities be reasonably accessible to persons with disabilities. In 1991, the ADA Accessibility Guidelines for Buildings and Facilities (ADAAG) were published by the Architectural and Transportation Barriers Compliance Board, which provided guidelines on how to implement the ADA. The Guidelines 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 ADAAG Guidelines are currently being revised. Proposed rules were published in July 1999. The proposed rules amend the ADAAG 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 exist at all project recreation sites. Plans 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.

8.5 Condition and Safety Issues

**Information is being compiled by Chelan PUD

8.6 Service Life and Needed Repairs

**Information is being compiled by Chelan PUD

8.7 Estimated Maintenance and Operating Costs

**Information is being compiled by Chelan PUD

SECTION 9: FUTURE PLANS OF LANDOWNERS/MANAGING AGENCIES

Recreation plans and planning documents of project area landowners and managing agencies are described below.

9.1 U.S. Forest Service

9.1.1 U.S. Forest Service, Land and Resource Management Plan

The U.S. Forest Service, Land and Resource Management Plan (USFS, 1990) is part of the 50-year framework for long-range planning established by the Forest and Rangeland Renewable Resources Planning Act (RPA) as amended by the National Forest Management Act (NFMA). As such, it establishes general strategy for managing the Wenatchee National Forest System in an environmentally sound manner to produce goods and services in a way that maximizes long-term public benefits. The Forest Plan establishes multiple use goals, objectives and desired future conditions. The following is a summary of recreation related goals:

- Provide a well-balanced array of recreation opportunities across the breadth of the recreation opportunity spectrum (ROS) in accordance with resource capability, public demands, and expectations for outdoor recreation.
- Provide a diverse system of safe, well-maintained trails for the enjoyment of all users.
- Respond to new opportunities to develop partnerships and joint ventures with other agencies and the private sector to magnify our abilities to meet expanding public demand for outdoor recreation.
- Provide an information program to assist the public in understanding management of various resources and to assist them in their search for a variety of challenging and pleasing experiences.
- Provide for the identification, protection, interpretation, and management of cultural resources so as preserve their historical, cultural, archeological, and/or architectural values for the benefit of the public.
- Provide to the forest visitors a variety of landscape character with visually appealing scenery.
- Manage designated wilderness to perpetuate wilderness character, natural ecological processes, and to provide appropriate outdoor recreation opportunities.

Recreation Setting Forest Management Objectives include significantly upgrading and improving developed recreation sites, facilities and trailheads, and developing more interpretive sites. Objectives also include expansion of existing developed sites where overcrowding has occurred and construction of new sites where recreation area planning indicates sufficient public demand exists and where high quality opportunities are present.

9.1.2 Recreation Opportunity Spectrum

The National Forest land within the Wenatchee National Forest has been divided into management areas, each with different management goals, resource potential and limitations. The Recreation Opportunity Spectrum (ROS) essentially overlays the Forest Plan Management Areas. The ROS provides a framework for defining the types of outdoor recreation opportunities

the public might desire. It identifies a variety of recreation experience opportunities categorized into seven classes on a continuum from primitive to urban. The seven classes are (USFS, 1999):

Primitive: Area is characterized by an essentially unmodified natural environment of fairly large size. Interaction between users is very low, and evidence of other users is minimal. The area is managed to be essentially free from evidence of management restrictions and controls. Motorized use within the area is not permitted.

Semi-primitive Non-motorized: Area is characterized by a predominantly natural or natural-appearing environment of moderate to large size. Interaction between users is low, but there is often evidence of other users. The area is managed in such a way that minimum onsite controls and restrictions may be present, but subtly. Motorized recreation use is not permitted, but local roads used for other resource management activities may be present on a limited basis. Use of such roads is restricted to minimize impacts on recreational experience opportunities.

Semi-primitive Motorized: Area is characterized by a predominantly natural or natural-appearing environment of moderate to large size. Concentration of users is low, but there is often evidence of other users. The area is managed in such a way that minimum onsite controls and restrictions may be present, but subtle. Motorized recreation use of local primitive or collector roads with predominantly natural surfaces and trails suitable for motor bikes is permitted.

Roaded Natural: Area is characterized by predominantly natural-appearing environments with moderate evidence of the sights and sounds of man. Such evidence usually harmonizes with the natural environment. Interaction between users may be moderate to high, and evidence of other users prevalent. Resource modifications and utilization practices are evident but harmonize with the natural environment. Conventional motorized use is allowed and incorporated into construction standards and design of facilities.

Roaded Modified: Area is generally natural appearing, but has significant vegetation management and resource modification. Modifications generally harmonize with the natural environment. A moderate opportunity exists for isolation and undisturbed activities but some interaction with other visitors can be expected. Conventional motorized use is allowed and incorporated into construction standards and signs of facilities.

Rural: Area is characterized by natural environment that has been substantially modified by development of structures, vegetative manipulation, or pastoral agricultural development. Resource modification and utilization practices may be used to enhance specific recreation activities and to maintain vegetative cover and soil. Sights and sounds of humans are readily evident, and the interaction between users is often moderate to high. A considerable number of facilities are designed for use by a large number of people and facilities are often provided for special activities. Moderate user densities are present away from developed sites. Facilities for intensified motorized use and parking are available.

Urban: Area is characterized by a substantially urbanized environment, although the background may have natural-appearing elements. Renewable resource modification and utilization practices are often used to enhance specific recreation activities. Vegetative cover is often exotic and manicured. Sights and sounds of humans are predominant on

site and in nearby areas. Facilities for highly intensified motor use and parking are available with forms of mass transit often available to carry people throughout the site.

The Forest Service has only a small parcel of land in the project area. This parcel has been highly altered by a previous railroad grade and adjacent road development. The ROS classification for this area is Roaded Modified. The Forest Service does not have any developed recreation facilities located within the Rocky Reach Project boundary. The Entiat Ranger Station, Wenatchee National Forest, is located in the town of Entiat. Forest Service facilities are located in the vicinity of the project area in the Entiat Valley, approximately 25 miles west of the Project Reservoir. Most recreation sites in the Entiat Valley are located within the Roaded Natural and Semi Primitive Non-Motorized ROS classes

9.1.3 Existing Information Analysis for Rocky Reach Hydroelectric Project

The US Forest Service prepared the Existing Information Analysis (USFS, 1999) for use during the Rocky Reach Hydroelectric Project relicensing efforts. The analysis provides information regarding Forest Service land and facilities in the Project area. The document states that the small parcel of Forest Service land in the project area that has been highly altered by a previous railroad grade and adjacent road development is not suitable for recreation use. The analysis reviews the three Forest Service campgrounds in closest proximity to the Project area (Fox Creek, Lake Creek, and Silver Falls) and states that no expansion opportunity is available at these sites. Trailhead improvements and safety issues were identified needs at the Silver Falls complex.

9.1.4 Emerging Markets for Outdoor Recreation in the United States

The emphasis of the Emerging Markets for Outdoor Recreation in the United States (USFS et al., 1995) report is on the opportunities available to manufacturers and retailers to supply products, equipment, and services for outdoor recreation in the United States now and in the future. In 1994 and 1995 approximately 17,000 Americans over age 15 were surveyed to learn about the outdoor recreation activities of people over age 15 in the United States. The study provides some information regarding regional differences in outdoor recreation participation. It discusses the United States in terms of four major regions – the Northeast, the Midwest, the South, and the West. In the West, almost 80 percent of people participate in viewing activities (visiting a nature center, visiting a visitor center, visiting a prehistoric site, visiting a historic site, bird watching, wildlife viewing, fish viewing, other wildlife viewing, sightseeing, visiting a beach or waterside, and water-based nature study.) Of this category, the most popular activities are visiting a beach or waterside and sightseeing. Approximately 70 percent of people engage in at least one of the fitness activities (running/jogging, bicycling, and walking), with walking being the most popular. Social activities (yard games, picnicking, family gathering) are the third most popular group in the West, with 69 percent of people participating. In the West swimming activities showed almost 53 percent participation and outdoor adventure activities such as hiking, backpacking, mountain climbing, etc. showed 47 percent participation. Camping in the West had 36 percent participation and boating in the West had almost 27 percent participation.

9.2 Interagency Committee for Outdoor Recreation

9.2.1 State Comprehensive Outdoor Recreation Planning

The Interagency Committee for Outdoor Recreation (IAC) Washington State Comprehensive Outdoor Recreation Planning (SCORP) currently includes the "State of Washington Outdoor Recreation and Habitat Assessment and Policy Plan 1995 - 2001" (IAC, 1995a) as well as other planning documents described below. The SCORP Assessment and Policy Plan is currently being updated and is expected to be published sometime in 2001. Preliminary results of the 2000 statewide survey, which will be included in the updated Assessment and Policy Plan, are also summarized below.

Summary of Findings from State of Washington Outdoor Recreation and Habitat Assessment and Policy Plan 1995-2001 and Associated Documents

In preparation of the 1995 Assessment and Policy Plan (IAC, 1995a), IAC initiated a three-part public involvement process including a survey of recreation professionals, a series of 21 public focus group meetings statewide, and use of an issues identification and consensus (modified Delphi) process). The results of the three-part public involvement process were presented in "Voices of Washington: Public Opinion on Outdoor Recreation and Habitat Issues" (IAC 1995b). Previous planning efforts include "Washington Outdoors: Assessment and Policy Plan 1990 - 1995 (IAC, 1990) and "Washington State Trails Plan Policy and Action Document" (IAC, 1991). The 1990 - 1995 Assessment and Policy Plan conducted surveys of households to determine the growth of different outdoor activities. Although the 1995 - 2001 Assessment and Policy Plan conducted other forms of public participation, new household surveys were not conducted because the 1990 participation projections were determined to remain accurate. The 1991 Trails Plan is an element of the SCORP program providing statistical data and research findings and discussions surrounding trail-based recreation. Other SCORP efforts include the 1992 stewardship planning that resulted in the publication "Legacy at Risk", the 1993 "Nonhighway and Off-Road Vehicle Activities (NOVA) Plan", and the 1995 "Boating Facilities Program Plan".

SCORP documents provide information regarding recreation demand by region. The state was divided into four geographic regions. Chelan County is part of Region 3, which includes Chelan, Douglas, Okanogan, Kittitas, Yakima, Adams, Grant, Lincoln, Benton and Franklin counties. The counties that comprise Region 3 are considered by the IAC to be similar in biophysical and social criteria. The participation a region generates (origin of demand) and the recreation participation it accommodates (destination of demand) was examined. Region 3 satisfies more recreation demand than it generates for all activity categories. For example, the regions' households create approximately 14 percent of the state's demand for camping while the region is a destination for over 30 percent of the state's camping activity (IAC, 1990). The excess demand that is being satisfied in Region 3 is generated in other areas of the state. This is also demonstrated in the Recreation Use Assessment Report (Chelan PUD, 2001), which shows the majority of visitors at Project study area recreation sites originating from outside out of the area.

According to the Washington IAC, demand for most recreation opportunities is generally proportional to population growth. Therefore, it can be expected that the recreation demand will

increase at approximately the same rate as the population growth. The IAC estimated an increase in population of seven percent in Region 3 between 1989 to 2000.

Washington IAC studies indicate that the types of recreation facilities and activities demanded generally depend on the age of the population. Since "baby-boomers" are getting older, the median age of the population is also getting older. IAC predicted that Washington would have about 52 percent more residents aged 40 to 59 in the year 2000 than in 1989. It is anticipated, therefore, that the demand will increase in Washington State for opportunities such as trail activities, passive recreation, and nature appreciation (IAC 1990).

Surveys conducted by the IAC reflected a public desire for outdoor recreation settings that are safe, mostly natural or natural appearing. The surveys indicated a demand in Washington for settings that include water access more than any other type of setting. IAC surveys indicated that the most popular and most rapidly growing outdoor activities in Washington are those that take advantage of trails (IAC 1995a & b). The Washington State Trails Plan, an element of the SCORP, was developed to determine the needs of trail users. According to the Trails Plan, approximately 75 percent of all state households walk or hike for recreation and 26 percent use vehicles off-road for recreation (IAC 1991).

Activities expected to exhibit the highest growth and demand in Washington State from 1995 through 2001 are walking, bicycling, participating in field sports, golfing, camping, mountain bicycling, running/jogging, sport fishing and picnicking (Table 9-1). Survey results and public comments found that for Washington State, a strong public demand for non-motorized trails and all water access continues to be unmet, and that additional land and facilities are needed. Natural areas, trails, playgrounds, beaches, picnic areas, outdoor swimming pools, water viewpoints, boating access, and sport fields and courts were identified by IAC as the most desired facilities in parks (IAC, 1995a).

The IAC estimated 1987 recreation participation and projected year-2000 recreation participation in mid-eastern Washington state (Region 3). Recreation participation is expressed in terms of household trips. A household trip can include one or all members of a household. Some activities such as jogging will have a short duration, while others such as camping can last for several days. In the ten county Region 3, the greatest amount of recreation growth from 1987 to 2000 was anticipated in the areas of nature study, hiking/walking/climbing, sightseeing/picnicking, camping, then water activities. Specific activities expected to have the greatest amount of growth are outdoor photography, walking in neighborhood parks, visiting the beach, sailing, tent and recreational vehicle camping, and day hiking (Table 9-2). The SCORP does not take into account recreation consumption in the area by people outside of Washington State. Therefore, the increased demand for recreation in the Project vicinity may actually be even higher than was predicted by the SCORP for the region.

Table 9-1: Popular and Growing Washington State Outdoor Recreation Activities	
Source: Assessment and Policy Plan 1995 - 2001 (IAC, 1995)	
Activities Popular in 1995	Activities Expected to Exhibit High Growth 1995 - 2001
Walking for pleasure/exercise	Walking
Running/jogging	Bicycling
Visiting zoos, fairs	Participating in field sports
Bicycling	Golfing
Mountain bicycling	Camping
Tent camping (campgrounds)	Mountain bicycling
Tent camping (backcountry)	Running/jogging
RV camping	Sport fishing
Day hiking	Picnicking
Attending sports events	Participating in court sports
Golfing	Attending sports events
Power boating	Day hiking
Waterskiing/jet skiing	Attending cultural/musical events
Sailing	Swimming/swimming outdoors
Canoeing/kayaking	Bird watching, wildlife viewing
White water rafting	Driving for pleasure and Hunting (tie)
Wind surfing	Boating
Sunbathing/beach combing	Power boating
Rock climbing	Hiking and Cross-country skiing (tie)
Attending cultural/musical events	Gardening

Table 9-2: Estimated 1987 and 2000 Recreation Participation in Region 3			
RECREATION ACTIVITY	Recreation Participation in Household Trips (in 1,000's)		
	1987	2000	% Growth: Region 3
Fishing:			
Freshwater from Boat	424	480	13
Freshwater from Bank or Dock	764	858	12
Water Activities:			
Swimming/Wading in Outdoor Pool	868	1051	21
Swimming/Wading at a Beach	693	841	21
Water Skiing	188	219	16
Sailing	43	57	32
Windsurfing/Sailboarding	11	14	23
Lake Power Boating	230	270	18
River Power Boating	74	87	18
Lake Non-Motorized Boating	116	147	27
River Non-Motorized Boating	46	59	28
Visiting the Beach/Beachcombing	554	740	34
Nature Study:			
Visiting Interpretive Centers/Displays	217	282	30
Nature Study and Wildlife Observation	406	502	24
Outdoor Photography	689	948	37

Table 9-2: Estimated 1987 and 2000 Recreation Participation in Region 3			
RECREATION ACTIVITY	Recreation Participation in Household Trips (in 1,000's)		
	1987	2000	% Growth: Region 3
Hiking, Walking, Climbing:			
Day Hiking	559	730	31
Walking in Neighborhood Park	1457	1978	36
Backpacking (along trails)	185	234	26
Backpacking (no trails)	33	42	27
Climbing and Mountaineering	45	58	28
Camping:			
Organized Group Camping	77	96	25
Tent Camping with Motorized Vehicles	348	456	31
Recreation Vehicle Camping	556	729	31
Horse Camping with Pack Stock	12	14	18
Horse Camping without Pack Stock	15	18	22
Riding Motorized Vehicle Off-Road:			
Motorcycling	196	247	26
All-Terrain Vehicle Driving	136	167	23
4-Wheel Drive Vehicles	191	244	28
Dune Buggy Driving	63	72	15
Non-Motorized Riding:			
Bicycle Riding on the Road	936	1127	20
Bicycling off Road	158	198	25
Horseback Riding	97	107	10
Sightseeing, Picnicking:			
Sightseeing and Exploring	1058	1355	28
Train or Bus Touring	76	93	23
Picnicking	675	878	30
Hunting:			
Big Game	226	266	18
Upland Birds, Small Game, and Waterfowl	281	281	6
Bow Hunting	34	39	13
Sports, Games, other:			
Football, Rugby	287	294	14
Soccer	333	388	17
Baseball	747	838	12
Softball	848	965	14
Outdoor Basketball	449	504	12
Outdoor Tennis	276	317	15
Other Outdoor Court Games	170	200	18
Using park Playground Equipment	877	997	14
Jogging/Running	1283	1563	22
Golf	561	653	16
AVERAGE GROWTH			21.8
Source: IAC (1990).			
Region 3 includes Chelan, Douglas, Okanogan, Kittitas, Yakima, Adams, Grant, Lincoln, Benton and Franklin counties.			

The 1995 - 2001 IAC SCORP provides recommendations for federal, state, and local agencies and the public sector in outdoor recreation and habitat preservation activities. Examples of Washington SCORP recommendations include (IAC 1995a):

- Federal - identifying and pursuing funding for adequate maintenance and operation of USFS recreation facilities, especially campgrounds and trails.
- State Parks - expanding existing parks, camping and trail opportunities; accommodate emerging outdoor uses such as mountain bicycling; and continue to provide services for recreational boating. Undertake a statewide acquisition and development plan.
- Other State Agencies - Use the Aquatic Lands Enhancement Account to help meet public demand for water access; promote public appreciation of fish and wildlife by increasing compatible public access to wildlife recreation lands; fully implement the Bicycle Policy Plan and the Bicycle Element of the Highway System Plan; fully implement recommendations of the Heritage Corridors program to improve access to recreation sites and facilities; and place more emphasis on public access and public recreation in the management of the Shoreline Management Act.
- Local Agencies - Emphasize the development of trails and paths for walking and bicycling; provide water access sites; provide local parks that preserve natural characteristics; and be the principal public providers of swimming pools, play courts and fields.
- Private Sector - Encourage the private sector to contribute needed recreation opportunities to the public.

Summary of Preliminary Results of 2000 Statewide Survey

Preliminary observations from a statewide survey conducted by the IAC in 2000 include the following:

- Young children "play" using a mix of traditional dedicated settings (playgrounds, ball fields, and courts) and non-recreational setting such as sidewalks and streets near their homes and schools.
- Middle to older age groups participated to the highest percentage in walking and hiking, using a mix of sidewalks, streets, road shoulders, and trails in various settings.
- Activities requiring high levels of physical exertion generally show a decline in participation related to age. For example, bicycle riding engaged 42% of the 0-9 age group then gradually declined among age groups to 9% by the 65+ age group.
- Less physically active and more time-intensive activities show increases in participation rates with age. For example, nature activities increased from 39% of the 0-9 age group to 30%, then 37%, then 49%, then 50% by the 65+ age group.
- Many of the results from this survey agree with national survey results. For example, the National Survey on Recreation and the Environment (USFS et al, 1995) has found that walking is the most popular activity in the United States (roughly 67% of all adults), followed by bicycle riding. Nature activities such as bird watching are growing rapidly across the United States

9.2.2 An Assessment of Recreation on Public Land

In 1997 the State Legislature directed the IAC to collect resource information specifically focusing on federal and state-owned recreation lands. An Assessment of Recreation on Public Lands (IAC, 2000) looked at recreation trends in the state as a whole, the location and uses of public lands, the needs of different types of recreation, the role of private landowners in providing recreation opportunity and the current level of knowledge about recreation in Washington. The following summarizes some of the findings.

Nearly 90 percent of the State's households engage in some form of outdoor recreation during the year, and public demand for outdoor recreation opportunities does not appear to be diminishing.

Local recreation lands are generally located within or in close proximity to cities and towns and appear to be managing more use than any other recreation lands, public or private, especially walking, jogging and field sports. IAC estimated that local recreation lands are the destination of approximately half of all outdoor recreation-related household trips in Washington; although only about 2.2 percent of public lands are under local jurisdiction. Approximately 6.4 percent of lands reported as "Outdoor Recreation, Habitat, and Environmental Projection Lands" are state owned and over 91 percent are federal. An estimated 25 percent of all outdoor recreation takes place on state lands, which offer opportunities for camping, hiking, hunting, fishing, bicycling, ORV riding and winter recreation, and are generally not located near urban counties. An estimated 25 percent of all outdoor recreation use takes place on federal lands which are generally managed for multiple-use and are relatively undeveloped, removed from populated areas, and often difficult or time consuming to access. Federal lands generally offer the most opportunities for primitive and self-contained recreation pursuits.

9.3 Chelan County

Chelan County Comprehensive Plan (Chelan County, 2000) was developed under the Growth Management Act (GMA) which required the fastest growing counties, including Chelan County, to adopt new comprehensive land use plans in compliance with the new law. County-wide planning policies were adopted to guide the physical development of the community. These policies are used by local elected officials, planning commissions, private firms, and individuals when making decisions about land use development or changes, capital improvements programming, and the enactment of development regulations and related growth management legislation. Goals for the Open Space/Recreation component of the Land Use Element include:

- Encourage the retention of open space
- Encourage the development and maintenance of recreational facilities and opportunities to meet the needs of residents and visitors.
- Park and recreation planning and development should take into consideration impacts to surrounding land uses critical areas, and significant natural, scenic, historic, or cultural features.
- Encourage coordination of federal, state, local and private recreation planning.

9.4 Douglas County

9.4.1 Douglas County Comprehensive Plan

Douglas County Comprehensive Plan (Douglas County Board of Commissioners, 1995) was developed as part of the Growth Management Act planning program initiated by Douglas County and its communities. It was agreed by the County and Cities that the County Planning staff would be responsible for ensuring all requirements of the GMA were met for all of the communities. The following are goals and policy statements in regard to park and recreation issues:

Open space/Recreation - Encourage the retention of open space and development of recreational opportunities, conserve fish and wildlife habitat, increase access to natural resource lands and water, and develop parks.

Master Planned Resorts - To provide opportunities for Master Planned Resorts (MPRs) which will provide a mixture of recreational, commercial, lodging and resort-residential land uses that are appropriate for the site and are compatible with the traditional land uses where the MPR is proposed.

9.4.2 Douglas County Recreation Comprehensive Plan

Douglas County Recreation Comprehensive Plan (Douglas County Parks and Recreation Department, 2001)...**This plan is currently being prepared. A draft copy of the report is expected to be available in the next couple of weeks.

9.5 Shoreline Master Program, Chelan and Douglas Counties

The Shoreline Master Program designates shorelines as Urban, Rural, Conservancy, or Natural Environments. Each of these Environments represent a specific type of geographic area having common characteristics, defined boundaries, and specific regulations governing use activities; all as required by the Shoreline Management Act. The following describes each Environment:

- Urban Environment - an area of high intensity land use including residential, commercial, and industrial development in addition to open space and public uses.
- Rural Environment - an area characterized by intensive agricultural and recreational uses and those areas having a high capacity to support active agricultural practices and intensive recreational development.
- Conservancy Environment - an area characterized by a potential for diffuse outdoor recreation activities, timber harvesting on a sustained yield basis, passive agricultural uses such as pasture and range lands, and other related development.
- Natural Environment - an area containing some unique natural or cultural features considered valuable in a natural or original condition which are relatively intolerant of intensive human uses.

Shorelines along Rocky Reach Reservoir in Chelan County include a mixture of Rural and Conservancy environments, with the exception of shorelines in the town of Entiat which are designated Urban Environment (Chelan County Board of Commissioners, 1982).

Rocky Reach Reservoir shorelines within Douglas County are designated as Rural Environment (Douglas County Regional Planning Commission).

9.6 City of Entiat

9.6.1 City of Entiat Comprehensive Land Use Plan

The City of Entiat Comprehensive Land Use Plan (Entiat, 1997) was prepared by the Citizens of Entiat to address growth issues in the Entiat Planning Area. It represents their land use policy plan for growth to the year 2017. Open space/recreation objectives include encouraging the retention of open space and development of recreational opportunities; conserving fish and wildlife habitat; and increasing access to natural resource lands and water. Open space/recreation goals include meeting the parks and recreation needs of residents and tourists, and ensuring that parks and recreation development respects significant natural and cultural features and maintains the land and water environments that support fish and wildlife. Open space/recreation policies include the following:

- Orient parks and recreation facilities so that they take advantage of significant natural features.
- Significant natural, historic and archaeological resources should be preserved and protected as much as possible.
- Facilities that interpret and educate the public on nature and historic development of the area are encouraged.
- As park and recreational facilities interface with the natural environment, great care must be exercised to insure that the land and water resources that support fish and wildlife remain viable.
- Coordination with other public agencies.

9.6.2 Master Plan: Entiat Park

The Master Plan for Entiat Park (Chelan PUD, 1992) was developed by Chelan PUD in cooperation with the City of Entiat. The plan provides for the consolidation of the two ends of Entiat City Park and the reorganization and expansion of park facilities. The development program for Entiat Park is primarily limited to improving existing facilities through expansion and updating materials and layout. The general use patterns of the park are expected to remain the same with some addition of new facilities. The following is a list of goals related to parks and recreation services that have been recommended under this plan for Entiat Park.

- New Park Entry and Exit
 - ◇ Expand existing entrance at southern portion of Entiat Park and close northern park entry to provide one entry with addition of office/control booth.
 - ◇ Park exit at northern end of Park with controlled entrance for service and emergencies.
 - ◇ Two-way access connecting north and south ends of park
- Boat Ramp and Parking
 - ◇ Provide a double bay boat launch
 - ◇ Parking for 35 boat trailers (25 ft, length)
 - ◇ Parking for 14 day use trailers (50 ft. length)
 - ◇ Overflow boat trailer parking (15 spaces)

- ◇ Restroom parking (five spaces)
- Development of Silico Saska Park (Old Entiat Park - south end)
 - ◇ Picnic shelter and picnic area
 - ◇ Play areas
 - ◇ Develop existing amphitheater
 - ◇ Dedication monument for Entiat Indians
 - ◇ Parking lot for 34 cars.
- Development of southern undeveloped section of park:
 - ◇ 14 Overnight RV stations
 - ◇ 16 tent sites
 - ◇ parking for 16 cars
 - ◇ New restrooms with showers
- Development of northern end of park (Will Risk Park and Museum):
 - ◇ Reverse RV stations (31 spaces) to face the river and place park road behind RV stations away from river
 - ◇ Addition of play area
 - ◇ New group tent camping
 - ◇ New restroom with showers
 - ◇ RV dump station
 - ◇ Park dumpster and enclosure
 - ◇ Access road for museum and eight parking spaces
- Trails
 - ◇ Create pedestrian trail linking park ends
 - ◇ Add up to three new dock systems
 - ◇ Provide for future connection to expand 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.

In coordination with Chelan PUD, City of Entiat, US Forest Service, Entiat School District and others, a trails system at the south end of the Park is currently underway. The project includes trails and signage, an outdoor learning center, covered picnic area, and amphitheater. Work at the mouth of the Entiat River has started with plans to extend the trail under US 97 to the park. **The US Forest Service is sending further details regarding project.....

9.6.3 Entiat Sternwheeler

Plans by a private party are underway to bring a historic sternwheeler to Entiat to be used commercially for lake tours and group gatherings. Options for landing the sternwheeler at Entiat Park docks are being reviewed.

SECTION 10: LANDS SUITABLE FOR FUTURE RECREATIONAL DEVELOPMENT

10.1 Existing Parks

10.1.1 Entiat Park

Entiat Park Master Plan outlines goals for improvements, expansion and addition of camping, boating, picnicking and other associated facilities. A trail system is currently being developed at the south end of the Park. Refer to Section 9.6.2.

10.1.2 Daroga State Park

Potential areas to provide additional camping and other facilities.

10.1.3 Chelan Falls and Powerhouse Parks

Addition of trails connecting the two parks.

10.1.4 Beebe Bridge Park

Change from RV/tent camping to yurts at south end of park.

10.2 Other Lands

Use of Chelan PUD and private owned lands for development of a trail from Lincoln Rock State Park linking to the Wenatchee Loop Trail. **Chelan PUD is compiling a breakdown of potential PUD and private owned lands....

Chelan PUD owned Turtle Rock Island - Recreation activity is currently occurring at a small sandy beach where visitors boat-in. At one time, this site was proposed for recreational facility development and was included in the approved recreation plan. Due to hatchery safety, wildlife habitat concerns, and public opposition, Chelan PUD requested that FERC remove the Turtle Rock site from the recreation plan. The proposal to develop boat-in recreation facilities at Turtle Rock was deleted from the approved recreation plan in a FERC order issued November 7, 1997 - Order Amending Recreation Plan and Approving Exhibit R As-Built Drawings.

WDFW managed lands (Gallagher Flats) - currently non-designated camping and recreation activity occurring at site. Potential addition of facilities in this area?

The Beebe Bridge Riparian site is located upstream of the Chelan River confluence on the west bank of the reservoir at RM 503.6 to 504.3. Most of the site is downstream of Beebe Bridge with a smaller portion upstream. Evidence of disturbance from trash dumping, vehicular traffic and non-designated camping was found at this site. Potential addition of facilities in this area?

Chelan PUD lands near Sun Cove (sensitive shrub-steppe habitat) - some ATV use but has been posted to prevent more. Because of sensitive habitat would not be a likely area to add facilities and encourage recreation use.

***SECTION 11: IMPACTS OF MILFOIL ON RECREATIONAL AREAS AND
USES***

**Mapping is not complete as of 3/14/01, but is expected to be available in the next week or two.

SECTION 12: REVIEW OF WILDLIFE MAPPING AND MULE DEER STUDY

Vegetation cover-type mapping was developed and evaluated for their suitability for wildlife including RTE species. Mule deer populations in the Project area are also being monitored. The following summarizes impacts to wildlife habitat and mule deer populations from recreation activities in the Project area.

12.1 Cover-Type Mapping

Vegetation cover-type maps were developed describing the distribution, abundance, and interspersions of vegetation communities and other cover-types within the study area. Information on the structure and composition of vegetation cover-types was collected to evaluate their suitability for wildlife including RTE species. Comparisons with current conditions to conditions documented in 1991 were also made and areas affected by changes in land-use were identified. Seven sites within the study area were identified for intensive study. The following summarizes the results of this study effort in relation to recreation areas and activities in the Project area. Changes in priority habitats identified in the study are also summarized to determine if recreation development or activities have impacted these areas. Refer to the RTE Wildlife and Cover -Type Mapping Report (Chelan PUD, 2000) for more information regarding the study.

Four major categories of cover-types were mapped in the study area. These include upland cover types, riparian and wetland cover types, disturbed/developed/modified cover types, and water cover-types. The Recreational cover type included under the "disturbed/developed/modified" category of cover-types, includes all designated recreational facilities within the study area including campgrounds, picnic areas, boat launches, and day use areas. The Recreational cover type does not include informal gathering or camping areas. The seven recreational facilities in the study area are Rocky Reach Dam Recreation Site, Lincoln Rock State Park, Orondo Park, Entiat Park, Daroga State Park, Chelan Falls Park and Beebe Bridge Park. The Recreation cover type currently occupies 212.5 acres in the study area, this is an increase of 59.2 acres since 1991. Most of this change occurred with the development of Beebe Bridge Park, and the expansion of facilities at Chelan Falls Park and Daroga Park.

Recreational facilities often have habitat components that are valuable to certain wildlife species groups. The study mentions groves of shade trees that are typically present at parks that may provide suitable nesting habitat for tree and cavity nesting birds. Common tree species in recreational facilities include ponderosa pine, Douglas-fir, Lombardy poplar, black cottonwood, black locust, and Siberian elm. The Recreation cover-type typically did not exhibit well-developed shrub layers or diverse herbaceous vegetation. Recreational sites had the highest mean percent herbaceous ground cover (as compared to other categories); however, this consisted almost entirely of maintained lawns which have limited wildlife value.

Several cover-types identified in the study are considered Priority Habitats by WDFW. These include the shrub-steppe, cliff and talus habitat, and riparian and wetland habitats.

The shrub-steppe cover-type is the predominant native terrestrial habitat in the study area. Wildlife species associated with shrub-steppe habitats are diverse and include several species that are considered obligate to this unique habitat. Eleven of the 40 RTE wildlife species that are potentially occurring within the Project vicinity are closely associated with shrub-steppe habitats. The Shrub-steppe cover-type decreased more than any other cover-type from 1991 to 1999. Most of this change was due to new residential developments and expansions of existing orchards. Much of the shrub-steppe cover-type consists of small patches fragmented by orchards, residential developments, recreational facilities, and roads. Vegetation disturbance from ATV use was identified at the Sun Cove shrub-steppe study site, which is located just upstream from Sun Cove subdivision on the east side of the reservoir at RM 492.4. Most of this site is owned by Chelan PUD and they have posted the trail through the flat, sandy portion of the site to restrict ATV traffic.

The distribution and total area of cliff and talus habitat has remained essentially unchanged since 1991.

Riparian and shoreline wetland habitats observed in the study area were generally small, isolated, and distinctly linear. Collectively these habitats constitute a small portion of all habitats in the area, but contribute disproportionately to the biodiversity of the region. Collectively, riparian cover-types decreased in the project area from 1991 to 1999 by approximately 20 acres (approximately 5.6 percent). Approximately seven acres of this decrease was associated with the development of new recreational facilities. Intensive study of the Beebe Bridge riparian site found evidence of disturbance from trash dumping, vehicular traffic and non-designated camping on the site. The Beebe Bridge Riparian site is located upstream of the Chelan River confluence on the west bank of the reservoir at RM 503.6 to 504.3. Most of the site is downstream of Beebe Bridge with a smaller portion upstream. Riparian Deciduous habitats are abundant and occur throughout the Beebe Bridge Riparian site as well as riparian shrub and a large emergent wetland. Due to disturbance at the Beebe Bridge site, a high prevalence of non-native plant species is present, which typically have wildlife habitat values inferior to native plant species.

Riparian habitats comprise much of the area along the Entiat River. There are several established trails that lead to the Entiat River for fishing access, but human activity appears to be limited to an old road bed and existing trails. In this case, recreation activity appears to have had little effect on riparian vegetation within the Entiat River riparian habitats.

Another area that was found to have disturbance due to non-designated recreation activity was the Gallagher Flats study site. This site is located upstream of Beebe Bridge on the west bank of the reservoir at RM 506.7 to 507.3. The site is 160 acres and was purchased by Chelan PUD in the 1960's for WDFW as part of a mitigation package for the Rocky Reach Project. The site is managed by WDFW for public hunting. This site consists primarily of meadow-like habitat, black cottonwood and Siberian elm, black locust and western sumac, and some shrub-steppe and riparian vegetation. Disturbance from trash dumping, vehicular traffic and non-designated camping on this site is primarily within the cottonwood stand.

The wildlife and cover-type mapping report is a good tool for determining the presence of sensitive habitats and should be consulted when planning additional recreation facilities in the Project study area.

12.2 Mule Deer Population Studies

This study is still ongoing.

SECTION 13: REFERENCES