

Land Use

a. Affected environment:

General description of the existing uses of Project lands

The Rocky Reach Hydroelectric Project reservoir lies in a wide canyon with the North Cascade Mountains to the west and the Columbia River Plateau to the east. The canyon itself is characterized by basalt cliffs and exposed rock outcroppings with a series of terraces and alluvial fans along the valley sides.

Development around the reservoir is low intensity and rural in nature with the exception of the city of Entiat, and two unincorporated towns, Chelan Falls and Orondo. Approximately half the reservoir consists of fruit orchards pasture lands, and residential development. Seven parks which are part of Chelan PUD's existing recreation plan are also located along the reservoir, and include almost 400 acres of land which provide access to the river and adjacent lands for swimming, boating and personal water-craft, fishing, camping, picnicking, water-skiing, and other recreational uses. Use of these parks is most intensive during the summer season between Memorial Day and Labor Day.

Accessories to these land uses are often found within the Project Boundary. Irrigation pumps, pump houses, and fruit producing trees are often located on agricultural lands. Docks, buoys, boat ramps, boat lifts, and camping sites are often associated with residential development and parks. There are also two sewer out-falls that service the cities of Chelan and Entiat.

The remainder of the lands surrounding the reservoir is 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 a small, private railroad on the westerly side and to State Route 97A (westerly) and State Route 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 Washington Department of Natural Resources, Washington Parks and Recreation Commission, USFS, BLM, Chelan PUD, railroad, Washington Department of Transportation, city of Entiat, and private lands.

The mid-line of the Rocky Reach Hydroelectric Project reservoir forms the boundary between Douglas County to the east and Chelan County to the west.

Land use activities on non-federal lands in each county are subject to the relevant comprehensive plans (developed in accordance with the Washington State Growth Management Act 1990) and the municipal zoning that guide specific land use activities under these plans. The Act requires that specific planning elements be addressed by each jurisdiction and that implementing regulations (i.e. zoning) be consistent and concurrent with the plan.

Under the 1971 Washington State Shoreline Management Act, the Columbia River is designated as a shoreline of statewide significance. Both Douglas and Chelan counties have developed shoreline master programs consistent with the goals of the 1971 Washington State Shoreline Management Act to regulate land use of shorelines 200 feet inland from the ordinary high water mark. The programs have eight goals; economic development, public access, circulation, recreation, shoreline use, conservation, historical/cultural, and restoration. In addition, the entire shoreline within the Rocky Reach Hydroelectric Project area is designated as a shoreline of statewide significance under the Washington State Shoreline Management Act of 1971. Federal lands within the Project Boundary have very little shoreline development.

The following is a list of state, county, local and federal land management plans or implementing regulations that affect land management activities in and around the Rocky Reach Hydroelectric Project area.

Federal Land Management:	Bureau of Land Management Resource Management Plan (1987) Department of Ecology: Draft Shoreline Master Program Guidelines (1999) US Forest Service: Wenatchee National Forest Land and Resources Management Plan (1990)
State:	Growth Management Act (1990)
Chelan and Douglas counties:	Chelan County Shoreline Master Program (1980) Chelan County Comprehensive Plan (1999) Chelan-Entiat Comprehensive Plan (1977) Douglas County Shoreline Master Program (1972) Douglas County Comprehensive Plan (1995) Douglas Countywide Policy Plan Growth Management Act (1990)

Local: Greater East Wenatchee Area Comprehensive Plan (1996)
Wenatchee Urban Area Comprehensive Plan (1997)
City of East Wenatchee Comprehensive Plan (1998)
Douglas County Code Title 18 Zoning (1998), Title 14
Development Permit Procedures and Administration (1997),
and Title 19 Environment (1993)
City of Entiat Comprehensive Plan (1997)
Entiat Valley Community Action Plan (1994)
City of Entiat Community Action Plan (Updated 1999)
Growth Management Act (1990)

Shoreline development tracking system

As a part of compliance with its FERC license, Chelan PUD assesses and tracks land uses within the Project Boundary. Chelan PUD is responsible for reviewing permit applications for certain types of use and occupancy of project lands and waters in cooperation with local and state agencies on a case-by-case basis to assure compatibility with FERC license terms and conditions and other appropriate regulations. Chelan PUD's role in the permitting process is to assure consistency with Project purposes including safety, environmental concerns, and aesthetics. Chelan PUD encourages consistency with local and county management plans and zoning.

Chelan and Douglas counties and area municipalities participate in a program that has been developed to reduce the number of forms needed in complying with environmental laws that have a redundant purpose and authority. This program uses a Joint Aquatic Resource Permit Application (JARPA). The Project Lands Management Study (Chelan 2001) contains a summary of the JARPA program and an example of the JARPA form. One form can now be used to process any and all permits for:

- (1) Shoreline Substantial Development, Variance, or Conditional Use Permit issued by local government;
- (2) Temporary Modification of Water Quality Criteria issued by WDOE;
- (3) Hydraulic Project Approval issued by WDFW;
- (4) Section 401 Water Quality Certification issued by WDOE; and
- (5) U.S. Corps of Engineers Section 404 and Section 10 Permits.

All actions undertaken are subject to Washington's State Environmental Policy Act (SEPA). SEPA is similar to the National Environmental Policy Act (NEPA). The Act stipulates that compliance with NEPA will be considered adequate compliance with SEPA.

Public and specially designated lands

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 Hydroelectric Project reservoir. In 1963 Chelan PUD, as mitigation resulting from the Rocky Reach Hydroelectric 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.

A 173-acre parcel called Gallagher Flats was purchased by Chelan PUD, as part of the 1963 agreement to mitigate impacts resulting from the Rocky Reach Hydroelectric Project. Gallagher Flats, located upstream of Beebe Bridge along the west bank of the reservoir, is managed by WDFW for hunting.

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

Identification of wetlands, floodlands, federal lands

An estimated 13 acres of wetlands occur along the Rocky Reach Hydroelectric Project shoreline ([Wildlife Habitat Evaluation for the Rocky Reach Pool Raise Study, 1990](#)). Although the reservoir has limited storage capability, the Project is operated to reduce the potential for downstream flooding minimizing the potential effects on floodplain areas.

The Rocky Reach Hydroelectric Project occupies 160 acres of land owned by the United States.

Existing uses of project lands

The Project Boundary encroachment includes two sanitary sewer out-falls, storm water out-falls, irrigation withdrawals, and recreational development that is part of the Chelan PUD's existing recreation plan. Within the Project Boundary,

agriculture uses, recreational sites developed by Chelan PUD, and some residential lands, surround approximately half the reservoir. Agriculture uses consist primarily of fruit orchards and some pasture lands. Irrigation pumps and pump-houses 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.

The remainder of the land surrounding the reservoir is generally undeveloped. These lands can be characterized as dry lands. 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.

b. Environmental impacts and recommendations:

The Social Sciences Working Group identified and reviewed comprehensive plans relevant to the Project area and concluded that there are not inconsistencies between the various plans. The Social Sciences Working Group determined that Chelan PUD's role in the existing coordinated permitting approach being administered by the State of Washington adequately controls, protects, and prevents objectionable use of Project lands at the Project while meeting the needs of businesses and property owners in the Project area. The Social Sciences Working Group made no proposals that pertain directly to land uses of the Rocky Reach Hydroelectric Project area.

Our analysis

As described in the paragraphs above, development around the Rocky Reach reservoir is low intensity and rural in nature. Approximately half the reservoir consists of fruit orchards, pasture lands, and residential development. Seven parks, which are part of Chelan PUD's existing recreation plan, are also located along the reservoir, and provide 400 acres of lands allocated to public access to the Rocky Reach reservoir.

Shoreline facility development policy, piers, docks, boat landings, bulkheads and other shoreline facilities on project lands and waters are permitted to assure compliance with environmental laws. Chelan and Douglas Counties and

area municipalities responsible for permitting use a Joint Aquatic Resource Permit Application (JARPA) that has been developed to manage the permitting process.

Chelan PUD assesses and tracks land uses within the Project Boundary and reviews permit applications for types of use and occupancy of project lands and waters in cooperation with local and state agencies on a case-by-case basis to assure compatibility with license terms and conditions and other appropriate regulations.

Chelan PUD's proposal to continue this policy would provides measures to assess and track land uses within the Project Boundary throughout the new license period. Neither the Social Sciences Working Group, nor any other party, has made specific land use recommendations through the relicensing process. None of the environmental and recreation enhancements proposed through the new license would have a negative impact on land use in the Rocky Reach Hydroelectric Project area.

c. Unavoidable adverse impacts:

None.