

Chapter 3

Existing Land Use and Management

3.1 Project Facilities and General Operations

Prineville Reservoir is the major storage reservoir facility of the Crooked River Project and has a total storage capacity of 150,216 af and a water surface area of 3,030 acres at normal full pool elevation. The dam facilities are operated by the Ochoco Irrigation District (OID) under the general supervision of the Area Manager of Reclamation's Lower Columbia Area Office in Portland, Oregon. Reclamation's Bend Field Office provides the day-to-day contact/coordination with OID on operational and maintenance issues associated with the project.

Except for flood control operations and fish and wildlife releases, all inflow is stored in the reservoir and released as required for irrigation The OID manager coordinates purposes. reservoir releases to meet the water supply needs of the irrigation district and individual water users. A Congressionally mandated minimum flow of 10 cfs downstream of Bowman Dam is required when releases are not being made for irrigation or flood control, for the benefit of fish and wildlife (Photo 3-1). In recognition of the Crooked River's regionally outstanding natural and recreational resources under the Federal Wild and Scenic Rivers Act, Reclamation has administratively increased the minimum reservoir release to 75 cfs to further protect and improve the river's attributes. The 75 cfs target streamflow is met provided sufficient water

supplies are available and contractual obligations are met. This 75 cfs is passed after the irrigation season, which usually extends from April 16 through October 15. These changes in reservoir operations were initiated in February 1990 and will continue unless modified by the PRRS recommendations.

Table 3.1-1 lists some specifications of Prineville Reservoir. The Crooked River Project generally experiences two peaks in irrigation use, one in late May and the other in mid-July. Irrigation releases from Prineville Reservoir vary with storage capacity, rainfall, temperature, and crop needs. Flood control storage governs filling the reservoir and requires that 60,000 af of vacant space be available each year from November 15 to February 15. The minimum requirement of vacant space is reduced to 10,000 af on March 15, with full pool reached on about March 31. The



Photo 3-1. Bowman Dam spillway.

Table 3.1-1: Project specifications.

Normal Maximum Water Surface							
Elevation	3,234.8 ft						
Storage	150,216 af						
Surface Area	3,030 ac						
Shoreline	43 miles						
Inactive (Minimum) Pool							
Elevation	3,114 ft						
Storage	260 af						
Surface Area	124 ac						
Allocation of Capacity							
Total Storage	150,216 af (100%)						
Active Storage	148,633 af (99%)						
Dead Pool & Inactive Storage	1,583 af (1%)						
Total Contracted Space	68,273 af (45%)						
Total Uncontracted Space	80,360 af (53%)						
Joint Use Storage (Flood Control)	60,021 af						
Bowman Dam							
Structural Height	245 ft						
Crest Elevation	3,264 ft						
Crest Length	800 ft						
Spillway Crest Elevation	3,234.8 ft						
Spillway Capacity at Elevation 3257.9 ft	8,120 cfs						

Source: Reclamation 1999

goal of the flood control operation is to limit outflow from the reservoir to below 3,000 cfs. Release from Prineville Reservoir, as measured at the gaging station approximately 0.4 mile downstream from the dam, is reduced to 1,000 cfs whenever runoff would result in excessive or damaging overbank flows downstream from the mouth of Ochoco Creek. At all other times, a release of 3,000 cfs is not exceeded if flood control storage is available.

A Reclamation study on the sedimentation rate of the reservoir (Reclamation 1999) indicates that the difference in volume between the original (1960) survey and the 1998 measured reservoir capacity for Prineville Reservoir was 4,586 af below spillway crest elevation at 3,234.8 feet. The estimated average annual rate of lost capacity from sedimentation was 122.3 af/year.

Congress authorized the Crooked River Project in 1956 to provide irrigation, flood control, basic minimum health and safety facilities, and fish and wildlife enhancement, requiring a minimum 10 cfs release from the dam when releases for irrigation or flood control are not occurring. Prineville Reservoir has an active storage

capacity of 148,633 af; of this amount, 80,360 af remains uncontracted.

Reclamation received requests in the 1970s for formal reassignment of uncontracted space for reservoir recreation, fish, wildlife, and domestic, and industrial municipal, supplies. Reclamation also received requests for additional irrigation contracts. Reclamation placed a moratorium on the sale of the uncontracted storage space to conduct comprehensive analyses of alternative uses of uncontracted space. Irrigation is the only use of uncontracted storage that is within the intent of the original Act; other uses require Congressional reauthorization.

Public meetings and Reclamation studies resulted in a 1980 Special Report recommending a reallocation plan to include irrigation, fish, reservoir recreation, and domestic, municipal, and industrial uses. Irrigators' concerns about their share of safety of dam costs at Bowman Dam rekindled the PRRS in the late 1980s. Reclamation attempted to negotiate a consensus solution among interested parties based on the information in the 1980 report, but it was unsuccessful in obtaining consensus on a reallocation plan. Because hearings on reauthorization proved contentious, Reclamation did not pursue reauthorization, and the moratorium remains in effect

Additional contract requests in the mid-1990s prompted Reclamation to pursue the most recent investigation in 1997. Cooperating agencies were convened and scoping meetings were conducted. Potential uses of uncontracted space identified included irrigation, reservoir recreation, instream flows, and domestic, municipal, and industrial uses. Reclamation has suspended further study because of funding constraints. When funding

becomes available, Reclamation intends to pursue analyses and resolution of the issue.

3.2 Land Status and Management

The 1992 RMP addressed Reclamation lands at Prineville Reservoir in terms of the following management categories, which have been retained in development of alternatives for the updated RMP: Recreation, Prineville Reservoir Resort, and State Wildlife Area (SWA). Reclamation retains primary jurisdiction for all project lands and is responsible to ensure that Reclamation, the managing partners, and the lease holder(s), abide by Federal land management and resource protection law.

3.2.1 Recreation and Prineville Reservoir Resort

After the completion of Bowman Dam, Reclamation issued two 50-year license agreements for administration and management of Reclamation lands. The first agreement gave Crook County the responsibility to manage recreation outside the SWA. In December 1985, Crook County terminated their license agreement with Reclamation. In 1987, Reclamation entered into a 20-year agreement with OPRD to manage recreation at Prineville State Park. In 1995, this agreement was amended to include all land and water at Prineville Reservoir with a 50-year lease to expire in 2037. Developed recreation facilities are located at Prineville State Park and at Jasper Point, located on the north shore of the reservoir.

Reclamation currently has a concession agreement with a private party to operate the 190-acre Prineville Reservoir Resort. The resort includes facilities for camping with water and electrical hookups, a 7-unit hotel, a convenience store and café, moorage, and a boat launch. This agreement expires in 2005 and will be renewed if desired by both parties and if the terms and conditions are mutually acceptable.

3.2.2 State Wildlife Area (SWA)

An important responsibility for Reclamation as a managing agency is to protect wildlife and enhance habitat where necessary. At Prineville Reservoir, this is an important function because the reservoir and adjacent Reclamation lands provide habitat for many wildlife species, particularly in, but not limited to, the SWA.

In 1962, ODFW entered into a license with Reclamation to manage the upper end of the reservoir as the SWA. ODFW manages this 3,160-acre (2,230 acres of land and 930 acres of water) area for wildlife habitat protection and enhancement purposes. Outside of the SWA, Reclamation (in cooperation with ODFW) manages habitat on Reclamation lands. ODFW regulates hunting and fishing according to Oregon regulations. Recreation is permitted in the SWA and is managed by OPRD. To protect wildlife resources, the south shore of the SWA from Roberts Bay to Long Hollow Creek is a boat-in day use area only. In addition, the Primitive North Side Road that extends through the SWA is closed between Jasper Point and Old Field from November 15 through April 15, and between Old Field and the Paulina Highway from December 15 through March 15 (Reclamation 1992). ODFW identified the following objectives for wildlife management at Prineville Reservoir as part of the 1992 RMP:

- Protect and enhance mule deer winter range
- Protect and enhance riparian vegetation for wildlife and bass fishery
- Improve waterfowl nesting habitat
- Protect winter feeding grounds for bald eagles
- Improve the availability and quality of wetland habitat
- Protect and enhance habitat for nongame wildlife



- Promote and create opportunities for wildlife viewing/enjoyment
- Promote a wildlife ethic/stewardship for the SWA

A Wildlife Management Plan for the SWA lands was identified as an action item in the 1992 RMP. The plan was to have been a collaborative effort among ODFW, Reclamation, BLM, and adjacent landowners but was never completed.

3.2.3 Easements and Leases

Reclamation property at Prineville Reservoir is encumbered by right-of-way and utility easements, and grazing leases, as discussed below.

3.2.3.1 Rights-of-Way

Over the years, Reclamation has issued a number of access easements to adjoining property owners. Most of these authorize pre-existing accesses to individual property owners and subdivisions. The most significant access allowance occurred October 23, 1958 in anticipation of the dam's construction. To accommodate construction of Bowman Dam and Prineville Reservoir. Reclamation deeded an 82.74-acre strip of land to the State of Oregon Highway Commission for the relocation of Oregon State Highways No. 14 and No. 380 (Contract No. 14-06-100-1616). Reclamation also provided a perpetual road easement across the top of the dam. Reclamation had previously acquired State highway rights-ofway and compensated the State of Oregon for interference with existing County roads by Contract No. 14-06-100-1509 dated June 20. 1958. Prior to these agreements, SR 27 followed the Crooked River valley east until veering south up the Bear Creek canyon. Several other roads intersected with this highway within the area of the present reservoir including Alfalfa Road and a road that continued up the Crooked River valley, connecting with the North Side Primitive Road. The Juniper Canyon Road originally connected the City of Prineville with the Village of Roberts,

but the section between County Boat Ramp and Roberts Bay was inundated with the creation of the reservoir.

Use of existing roads across Reclamation land to access several private cabins on the south side of Prineville Reservoir has been authorized by similar documents. Standard language common to all these documents limited the government's responsibility for road maintenance and prohibited construction of fences or gates to restrict access by easement holders. One relatively recent easement has been authorized to provide access to the Lakeview Cove Estates (June 23, 1999) subdivision over Reclamation land to South Juniper Canyon Road.

3.2.3.2 Telephone Easement

Reclamation provided for relocation of telephone facilities per Contract No. 14-06-100-1783 dated September 25, 1959. This agreement between Reclamation and the Bear Creek Telephone Company provided for Reclamation to relocate a portion of the telephone line from the County boat ramp to Roberts Bay. The old line followed the County Road through the Crooked River valley. The new route follows the north shore of the reservoir before crossing the water in a buried cable and re-emerging near Roberts Bay West.

3.2.3.3 Power Line Easement

A contract between Reclamation and the Central Electric Cooperative (Contract No. 14-06-100-2105) dated March 13, 1961, provided for relocation of a power line. Reclamation provided Central Electric Cooperative a cash settlement for the construction, relocation, adjustment, and abandonment of the power line in areas inundated by the Prineville Reservoir itself and other parts of the study area closer to the City of Prineville. This work included removal of an existing 14.4 kilovolt (kV) power line located within the Crooked River valley and construction of a new section of 14.4 kV/24.9 kV line to serve two customers north of the County boat ramp.

3.3 General Land Use Patterns

Reclamation acquired a total of approximately 8,700 acres of the Crooked River valley to construct the Arthur R. Bowman Dam in 1961, creating Prineville Reservoir. This property was withdrawn from BLM holdings or purchased primarily from Joseph Bottero, a local landowner. Reclamation's holdings include 8,489 acres of land and water surface within the reservoir area, 280 acres within the Reclamation Zone located in the vicinity of Bowman Dam, and 340 acres of flowage easement lands along the Crooked River immediately above the reservoir. At full pool, the reservoir surface of 3,030 acres provides 43 miles of shoreline at Prineville Reservoir

As shown on Figure 3.3-1, the upper end of the reservoir consisting of 3,160 acres of land and water has been designated an SWA, managed by ODFW primarily to provide for big game winter habitat as well as habitat for a variety of other wildlife. Recreation uses dominate the lower end of the reservoir, which is the site of two State Park facilities, a leased privately run resort, and several other scattered recreation sites. OPRD manages recreation resources at Prineville Reservoir (including the SWA) on behalf of Reclamation

3.3.1 Lower Reservoir

On March 16, 1961, shortly after the completion of Bowman Dam, Reclamation transferred recreation management responsibility to Crook County for most of the land surrounding the lower reservoir. Shortly thereafter, Crook County subleased 365 acres to the State of Oregon for what is now Prineville State Park. Under this license agreement (Contract 14-06-100-2124, dated June 27, 1961) between Crook County and the State of Oregon, the County agreed to license to the State a portion of the western portion of the land surrounding Prineville Reservoir for the purpose of developing and maintaining a park. The agreement also required Crook County to

construct a road to access the State Park. A follow-up license agreement dated June 27, 1961 between Crook County and the State of Oregon extended the above agreement for a 50-year term to expire March 16, 2011. This license required Crook County to construct a road from Combs Flat Road south to the State Park (North Side Primitive Road).

Crook County entered into a second license agreement on April 17, 1964 to further the development of recreational facilities at Prineville Reservoir. This 20-year agreement (with a 20year renewal option) was with a private concessionaire to develop and operate the 190acre Prineville Reservoir Resort. This license required resort facilities to be open daily for a minimum of 6 months per year. Minimum standards and structures permitted under the license included six 200 square foot cabins with running water and indoor sanitary facilities; a 1,200 square foot store; a commercial dock large enough for 20 boats; car and boat trailer parking; boat rental for at least twelve 14-foot boats; well and water filtration and storage; and a 20-unit trailer park with expansion for 20 additional trailers (specific recreation facilities are discussed in further detail in Section 3.5, Recreation). The resort was acquired by a second owner, who entered into a 20-year concession agreement with Reclamation on October 21, 1986. The resort concession was assigned a third time to the current owners on September 8, 1992. concession agreement was amended Reclamation most recently on May 27, 1994 and will expire on December 31, 2005. Due to a number of physical site constraints, only a relatively small portion of the 190-acre resort area has been developed for recreation (pers. comm., Hawes, 2001).

In December 1985, Crook County terminated its license agreement with Reclamation. OPRD, which was previously a tenant of Crook County, renewed its lease directly with Reclamation for a 20-year term beginning May 5, 1987. This

agreement recognized the State's ownership of existing recreation facilities built by the State. It also required the State to "make and enforce rules and regulations to protect plants, fish, and wildlife; to preserve the scenic, scientific, aesthetic, historic, and archeological resources of the area; and for the preservation of law and order in the interest of public safety" within the boundaries of the State Park.

OPRD's role was defined by the 1992 RMP to an on-site managing partner in conjunction with ODFW. Management of recreation at Prineville resulted in numerous facility improvements which are listed in Section 3.5 (Recreation) of this document

On May 25, 1995, OPRD's lease at Prineville Reservoir was extended from the original 20-year term to a 50-year term starting from the date of the original agreement on May 5, 1987 and expiring on May 5, 2037. This lease also increased the area of OPRD management to include a large section of the Reservoir's north shore, extending from the County boat ramp to north of Jasper Point.

The current lease has been amended twice since 1995. The first amendment (Amendment No. 1, dated February 4, 1999), rectified a minor property boundary conflict between the Prineville State Park and the Prineville Reservoir Resort near Jasper Point. This amendment adjusted the boundary to include the parking lot for the Jasper Point boat ramp entirely within the State Park's area.

The second amendment (Amendment No. 2, dated May 4, 1999) provided for the continuing management, protection, and administration of all Reclamation land and water resources at Prineville Reservoir, except for those areas leased to the Prineville Reservoir Resort. Specific responsibilities include recreation management, protection, administration, and maintenance on lands under a wildlife management agreement with ODFW including managing garbage

collection, sanitation, law enforcement, repairs, and similar services. This amendment provided up to 50% reimbursement funding from Reclamation to assist OPRD with operation and maintenance costs. (Specific service responsibilities are addressed in Section 3.4, Public Services and Utilities.)

Reclamation reserved administrative jurisdiction over a 280-acre portion of the reservoir in the vicinity of Bowman Dam referred to as "the Reclamation Zone." This area includes the dam itself, as well as the area immediately upstream and downstream of the dam.

3.3.2 Upper Reservoir

On March 14, 1962, Reclamation transferred management of the upper reservoir area to the Oregon Game Commission (now ODFW) to administer for fish and wildlife management. This 3,160-acre area referenced on the license agreement as "the State Zone" became the Prineville Reservoir SWA. This 50-year agreement required the State to "make and enforce rules and regulations for the use of the area to protect the health and safety of persons using the area, to protect plants, fish and wildlife; to preserve the scenic, scientific, aesthetic, historic, and archeological resources of the area; and for the preservation of law and order in the interest of public safety" within the boundaries of the State zone. Within this zone, the State also had authority to issue grazing permits where consistent with wildlife management needs and with Reclamation approval.

On March 4, 1976, the license agreement between ODFW and Reclamation was amended to adjust the boundary between the State and County zones to accommodate the development of a County park.

Figure 3.3-1. Existing Land Use

Back of Figure 3.3-1

ODFW continues to manage wildlife resources in the SWA. Recreational use is permitted in this area, but ODFW's primary management objective for the SWA is wildlife habitat protection and enhancement, primarily for waterfowl, upland game, and big game populations. Land management in this area has focused on increasing habitat for these game species.

3.3.3 Grazing

Reclamation has authorized BLM to manage grazing on

Reclamation lands where compatible with Reclamation's current or planned use of any land area, and where not required for fish and wildlife management purposes or related uses. ODFW has the option of issuing grazing permits with approval from Reclamation when consistent with SWA management goals and objectives.

On Reclamation withdrawn or acquired land, permits issued by BLM shall be issued for BLM's normal permit or lease period, which has been 10 years, but shall include special stipulations as determined necessary for Reclamation to protect the land or facilities for Reclamation project purposes. When Reclamation determines that within 2 years its needs and uses will no longer be compatible with grazing, Reclamation will so notify BLM, enabling it to notify the lessees and permitees and terminate the portions of the leases and/or permits on Reclamation lands in accordance with section 402 of the Federal Land Policy Management Act (FLPMA). emergency conditions, leases and permits may be terminated with shorter notice.

There are six permits issued for portions of 10 allotments that extend onto Reclamation lands around Prineville Reservoir (see Table 3.3-1 and Figure 3.3-2). Grazing is restricted from the

Table 3.3-1: BLM grazing allotments that overlap Reclamation lands at Prineville Reservoir.

Allotment	Total AUMs ¹	Term
Sanford Creek	370	3/01/1994 to 02/28/2008
Eagle Rock	155	3/01/1994 to 02/28/2008
Deer Creek	170	2/24/1997 to 12/31/2002
Salt Creek	1364	05/01/1997 to 12/31/2006
Dunham North	184	11/15/1999 to 02/28/2009
Davis	348	03/01/1995 to 02/28/2005
Carey ²	43	03/01/1998 to 02/28/2008

Source: BLM, Prineville District.

Note: The meadows (BLM grazing unit) in these allotments can be grazed yearround, but BLM manages them according to site-specific conditions. BLM restricts grazing from early spring through late fall on those meadows that overlap Reclamation land to avoid conflicts with recreation use.

vicinity of the northern end of the reservoir by fencing to protect the SWA, though there are several openings. On the south shore, the Taylor Butte and a portion of the Salt Creek and Dunham North allotments extend to the reservoir, allowing livestock direct access to the reservoir. On the north side, the upper portion of the Davis allotment extends along the shore of Prineville Reservoir from the dam to the County boat ramp (per. comm., Swanson, 2001).

During the 1992 RMP process, grazing management was identified as an issue needing immediate attention. Public comment emphasized that without careful livestock control and management, grazing at Prineville Reservoir is incompatible with wildlife habitat, recreation, and other resource values (Reclamation 1992).

The following actions regarding grazing management were identified under the 1992 RMP:

- Grazing will be eliminated from all developed/designated recreation areas by fencing.
- Grazing use within the northeast and southeast portions of the SWA not

¹ AUM is Animal Unit Month.

The Carey Allotment is not shown in Figure 3.3-2; the geographic information system (GIS) data were not available. This allotment is located between the Eagle Rock and Davis Allotments.

administered by BLM will continue to be determined annually by ODFW and Reclamation.

- Grazing on Reclamation administered lands will be evaluated during development of the Prineville Reservoir Habitat and Wildlife Management Plan. Any changes in grazing use will be made in close coordination among Reclamation, BLM, ODFW, and affected parties. Emphasis will be placed in keeping livestock use away from reservoir shoreline, wetland, and riparian areas. Methods to accomplish this, including the development of watering locations in upland areas, will be considered.
- Reclamation will actively participate in the revision of BLM allotment management plans affecting Reclamation lands at Prineville Reservoir. Reclamation's guidelines for these efforts will be to preserve, protect, and enhance the natural resource values at Prineville Reservoir.

These actions have been met with limited success. The SWA was fenced to eliminate trespass livestock, but an SWA Wildlife Management Plan was not prepared. Public scoping for this RMP update again identified grazing as an issue of concern.

3.3.4 Adjacent Land Uses

Most lands surrounding Reclamation's land at Prineville Reservoir are managed by BLM for multiple uses, including grazing (Figure 3.3-3). Privately held lands to the north and west of the reservoir are zoned Rural Residential by Crook County, which allows housing development at densities up to 1 dwelling unit per 5 acres (pers. comm., Moore, 2001). On the south side, the County has zoned most of the land Park Reserve, which permits agriculture, park uses, and residential development (1 dwelling unit) on parcels 20 acres and larger. Land on the northeast

end of the reservoir is zoned Exclusive Farm Use, which limits land use to agriculture, agricultural businesses, and homes at densities limited to 1 dwelling unit per 80 acres (pers. comm., Moore, 2001).

Existing development within the Prineville Reservoir drainage is located in three older subdivisions (Bottero Park, Jasper Knolls, and Lakeview Cove Estates), as well as four large plats on the south side of the reservoir and a few scattered houses. Bottero Park and Jasper Knolls have electrical and telephone service, and an overhead electric line was installed to Lakeview Cove Estates in 2000 with sufficient power capacity for approximately 31 lots (pers. comm., McDevitt, 2001). In general, all of these developments rely on wells and septic systems for water supply and sewage treatment. Factors limiting development include limited road access, strict County septic approval requirements, and lack of utility service (pers. comm., Moore, 2001).

Bottero Park is a privately owned inholding of 11 acres. This private subdivision, which was platted in 1963 by the former land owner of portions of the Prineville Reservoir site, is centrally located on a peninsula on the reservoir. Over the years, most of the 15 homes on 51 lots have gradually been converted from trailer platforms and modest vacation cabins to more substantial homes, a number of which are occupied year round (Crook County 1980).

Jasper Knolls is a 44-acre subdivision of 86 lots that overlooks the reservoir near Jasper Point. This subdivision was platted in 1964 and contains a mix of approximately 49 summer and year-round residences. In addition, three additional homesites are located behind Jasper Knolls subdivision, of which only one is developed (pers. comm., McDevitt, 2001). Access to Jasper Knolls is provided via an easement over Reclamation land to South Juniper Canyon Road.

Figure 3.3-2

BLM Grazing Allotments Adjacent to Prineville Reservoir

Back of Figure 3.3-2.

Figure 3.3.3

Land Ownership

Back of Figure 3.3.3

Lakeview Cove Estates, a 105-lot subdivision, is located on nearly 55 acres on a hillside above the County boat ramp area overlooking the reservoir. This plat was filed with Crook County in 1966, but little development activity occurred due to lack of road access (pers. comm., Seely, 2001). On June 23, 1999, the property owners acquired an access easement across Reclamation land for a road to connect these homesites to the County boat ramp access road. This access also includes overhead electric line installed by Central Electric Cooperative in 2000 for approximately 31 lots (pers. comm., McDevitt, 2001), which would facilitate limited future residential development if water and other services could be obtained

According to the County Road Map, the next closest existing subdivision is Idle Way Acres, a 134-lot subdivision about 1 mile north of Reclamation's property easily accessed by Juniper Canyon Road (Crook County Road Department 1998). Other individual homes are scattered around the area, several of which are located on the south side of the reservoir. The closest of these are three houses located on the slope above Roberts Bay.

3.4 Public Services and Utilities

This section discusses relevant public services and utilities at Prineville Reservoir and in the surrounding area.

3.4.1 Emergency Fire Suppression Services

Under the terms of its lease with Reclamation (as amended May 4, 1999), OPRD is the lead on-site agency in all emergency and fire suppression activities on Reclamation lands administered by ORPD, within the limits and responsibilities outlined in the Prineville State Park Emergency Action Plan. In practice, BLM is the first responder for wildland fires on lands owned and managed by Reclamation at Prineville Reservoir. Prineville Reservoir and the public lands in its immediate vicinity are considered by BLM to be

an area of high value to receive high priority for fire management and suppression (Reclamation 1992). OPRD maintains a small pumper truck to fight structural fires at Prineville State Park (pers. comm., Crawford, 2000). Wildland fire protection in rural areas is coordinated with BLM and the USFS.

Responsibility for fires on Prineville State Park lands, lands leased by the Prineville Reservoir Resort, or those on private property comes under the jurisdiction of the Crook County Rural Fire District #1. This District was created by a merger between the Prineville Fire Department and Crook County Rural Fire Department's Zone 2 on Following this merger, the July 1, 2001. boundaries of the Fire District were extended from Reclamation's property line to the Prineville Reservoir Resort, including Prineville State Park, Bottero Park, and Jasper Knolls. Crook County Rural Fire District #1 provides fire protection, ambulance service, and emergency medical technicians to an area covering approximately 54 square miles. Crook County Rural Fire District #1 provides fire protection service to the community from a main station located at 500 N Belknap Street in downtown Prineville. This station is equipped with four type 1 fire trucks, two tenders, three brush trucks, and three medical The department has six paid and 65 volunteer firefighters. The Crook County Rural Fire District #1 plans to build a new fire substation on land it acquired in Juniper Canyon. When completed in 2002 or 2003, this new satellite station would be equipped with a Class A fire truck, a brush truck, a tender (3,000-gallon tank truck), and a medical unit. This location, which is considerably closer to the north side of the Prineville Reservoir than the current fire station, is expected to cut response time to the north side of the reservoir by approximately 50% (pers. comm., Schnorr, 2001).

3.4.2 Emergency Medical Services

Prineville Reservoir is located within the Crook County Rural Fire District #1's Ambulance Service Area. The Crook County Rural Fire operates three ambulances. District #1 medical Emergency response time approximately 10 to 15 minutes to Prineville State Park and other destinations on the reservoir's north side. Destinations on the south side, such as Powder House Cove, are estimated to require 30 to 45 minutes to reach by ambulance and potentially longer for Roberts Bay. average, camping and water-skiing accidents result in approximately one or two visits to the reservoir by the ambulance per month during the summer season (pers. comm., Schnorr, 2001). The nearest hospital is Pioneer Memorial Hospital, a non-profit, 35-bed, acute care medical facility providing full medical services to the Prineville-Crook County area (Oregon Economic and Community Development Department website). Emergency air transport is available from LifeFlight in Bend, Oregon.

3.4.3 Law Enforcement

The Crook County Sheriff's Office is the lead law enforcement agency at Prineville Reservoir, with patrol services provided on shore under contract with Reclamation. The Crook County Sheriff's Marine Patrol enforces boating regulations under contract to the Oregon State Marine Board. OPRD and Oregon State Police also provide limited enforcement services (pers. comm., Hensley, 2001).

Reclamation has contracted with the Crook County Sheriff's Department on an annual basis since 1986 to provide supplemental surveillance and law enforcement services at the reservoir. The current law enforcement contract provides for the Sheriff's Office to perform year-round response to specific complaints, along with limited preventive patrol. Law enforcement is stepped up at Prineville Reservoir from Memorial

Day through Labor Day of each year with the addition of two seasonal deputies who are each assigned to a 40-hour patrol week at Prineville Reservoir. Patrol time is determined for each seasonal contract. Sheriff's deputies patrol on flexible schedules to meet the requirements of seasonal demands.

The primary emphasis of these vehicle and foot patrols is to enforce County Ordinance No. 101, which amended County Ordinance No. 34 on April 12, 1975. Both local laws were initiated in response to complaints about ORVs, vandalism, the use of firearms, domestic disturbances, alcohol-related incidents, and other violations at Prineville Reservoir. These regulations specifically address vehicles, vehicle use, and parking; noise and quiet hours; weapons and hunting; fires; pets; protection of wood and other plant life; buildings, signs, and recreation area equipment; waste disposal; cleaning fish and dishes; and camping (the full text of County Ordinance No. 101 is included as Appendix B). The Crook County Sheriff also enforces Oregon State laws

In addition, the County's marine deputies patrol the reservoir by boat from April to September, with greatest intensity between Memorial Day and Labor Day. Two boats patrol the reservoir, especially on weekends and holidays. Watercraft safety is a major concern of the marine patrols who enforce speed and other regulations on behalf of the Oregon State Marine Board. Currently, the only areas of the reservoir posted for 5 mile per hour (mph) boating are Powder House Cove, the straits between the big island and Juniper Point, Roberts Bay, and the portion of the reservoir north of Owl Creek. Boat speed is also restricted to 5 mph within 200 feet from the shore and in front of the State Park, where 3 mph is the preferred speed limit. Boat speed is limited to 10 mph within 100 feet of another vessel (pers. comm., Hensley, 2001).

OPRD has citation authority to enforce the Oregon Administrative Rules within Reclamation's property. In addition to hunting and fishing enforcement by the Crook County Sheriff's Office, the Oregon State Police Department's game officers enforce hunting and fishing regulations on and around the reservoir, as well as in the back country (pers. comm., Hensley, 2001). Oregon State Police also provide random patrols throughout the year to assist in unauthorized ORV use enforcement and trespass issues.

During the summer season, Prineville Reservoir is a major law enforcement focus by Crook County. Specific "hot spots" include less-regulated sites such as Roberts Bay and areas accessed by the North Side Primitive Road. The Powder House Cove area has also become an area of increased law enforcement due to unsafe parking on Highway 27, watercraft crowding near the makeshift boat ramp, and other conflicts resulting from increased use by visitors from the Bend area (pers. comm., Hensley, 2001).

3.4.4 Water Supply

Prineville State Park draws groundwater from three wells for domestic and irrigation uses. One well serves as the primary water source with the remaining two providing backup. Groundwater is pumped to a 20,000 gallon concrete storage tank that supplies restrooms, spigots, and campsite hookups with gravity-fed potable water. This tank is scheduled to be replaced in 2003 with a 100,000 gallon steel storage tank. Capacity of this system is estimated at 23,500 gallons per day. Park facilities at Jasper Point are served by a separate well (pers. comm., Skavlan, 2001). Jasper Point also depends on groundwater for domestic purposes and fire protection. campsite is supplied by one well and a 20,000 gallon water tank that supplies all campsites with water through gravity-fed lines, capable of processing 500 gallons per day (pers. comm., Crawford, 2001). This system was upgraded in 2001 with the addition of a pressure regulating pump.

Prineville Reservoir Resort operates three wells in rotation that pump water to a 9,000 gallon storage cistern. Stored water is fed by gravity to water users, including the motel, two private homes, the store/café, and spigots at the campsites and marina. Resort owners installed a new well in 2000 and replaced a pump motor the following year. This system does not provide adequate water flow during the peak season in dry years. At these times, the resort re-fills the cistern with fresh water trucked in from Prineville. Water conservation measures in the works or planned include low-flow showerheads and card showers to prevent unauthorized use. Bottero Park and Jasper Knolls also depend on well-supplied groundwater (pers. comm., Hawes, 2001).

3.4.5 Wastewater Treatment

Sewage generated by campground restrooms and campground hookups at Prineville State Park is treated by septic tank and leaching field systems. Sewage treatment at Jasper Point is limited to a vault toilet. ORPD installed a dump station for RV use in June 2002. Recreation sites such as Owl Creek, Cattle Guard, Old Field, Roberts Bay, and Big Bend—as well as the County boat ramp and Powder House Cove—have portable or vault toilets maintained by a private vendor under contract to ORPD (pers. comm., Skavlan, 2001). The Prineville Reservoir Resort has separate septic systems to treat wastewater generated by two private houses, the store/café, motel, and two restrooms. Wastes discharged at the RV dump station are stored in a large holding tank emptied by a commercial hauler one to two times each season (pers. comm., Hawes, 2001). A floating restroom was put in place in Juniper Bay for seasonal use by boaters during the 2001 and 2002 recreation season (August-October 2001 and April-October 15, 2002).

3.4.6 Solid Waste

ORPD maintenance crews at Prineville State Park collect trash from receptacles throughout the park and Jasper Point on an as-needed basis. During peak activity periods, this can be up to several times per day. The trash truck is emptied on a weekly basis, or more frequently if necessary, at the local landfill near Prineville. Trash receptacles at recreation sites such as Owl Creek, Cattle Guard, Old Field, Roberts Bay, and Big Bend—as well as the County boat ramp, Powder House Cove, and Bear Creek—are emptied by private vendor under contract to ORPD (pers. comm., Skavlan, 2001).

3.4.7 Gas

There is no natural gas service available in the vicinity of Prineville Reservoir. Both bottled propane and gasoline are stored and sold at the Prineville Reservoir Resort

3.4.8 Electrical

Central Electric Cooperative provides 30 amp service to most campsites at Prineville State Park and Jasper Point. Campsites at Prineville Reservoir Resort have 20 amp service. Electrical service is also provided to facilities at Bowman Dam. Electricity is measured by seven meters in the State Park and three meters in Jasper Point. Bottero Park and Prineville Reservoir Resort have a combined total of 29 electric meters (pers. comm., McDevitt, 2001).

3.4.9 Telecommunications

Prineville State Park and Jasper Point each has one payphone, with service provided by Qwest. Administration facilities at Prineville State Park are served by nine lines. Mobile telephone service is limited at Prineville State Park for some service providers, especially digital phones. Most cellular phone customers report better coverage at

Jasper Point (pers. comm., Skavlan, 2001). Two Qwest pay phones are located at the Prineville Reservoir Resort, which also maintains two business lines and two personal lines (pers. comm., Hawes, 2001). A repeater tower has been proposed to assist emergency, law enforcement, and operations communications. A tentative site for this tower is the south shore of the reservoir between Powder House Cove and the Bear Creek Arm

3.5 Recreation

Recreation activities in the study area include both land- and water-based activities. Most of the recreational users of this area are from either the Central Oregon counties of Crook, Jefferson, and Deschutes, or the Portland metropolitan area counties of Multnomah, Washington, and Clackamas. The number of visitors approaching from south of Prineville Reservoir has increased markedly due to the improvements and paving of the Alfalfa Market Highway, which provides a connection to Bend, Oregon (pers. comm., Crawford, 2002).

Prineville Reservoir is located in Region 7 of the Oregon Statewide Comprehensive Outdoor Recreation Plan (SCORP). Region 7 includes Jefferson, Wheeler, Crook, and Deschutes Counties. Within or nearby Region 7 there are five reservoirs offering similar recreation opportunities to those found at Prineville Reservoir. These include: Haystack Reservoir, Ochoco Reservoir, Crane Prairie Reservoir, Wickiup Reservoir, and Lake Billy Chinook. There are four State Parks within 50 miles of Prineville Reservoir, including The Cove Palisades, Tumalo, Smith Rock, and La Pine State Parks. In addition, there are nearly 50 campgrounds provided by other land managers, such as USFS and BLM, within 50 miles of Prineville Reservoir Given the demand for recreation and continuing population growth in central Oregon, all of these facilities will need to play a role in satisfying future recreation needs.

3.5.1 Recreation Activities and Use Levels

Recreation use at Prineville Reservoir includes many land- and water-based activities typical of the lakes and reservoirs in Central Oregon. Prineville Reservoir is a popular water body that is experiencing increasing levels of use (Photo 3-2). According to studies by the Oregon State Marine Board (OSMB), Prineville Reservoir is ranked 17th in Oregon in boater activity days, with 41,170 in 1998 (OSMB 1999). represents nearly an 8% increase over the number of activity days in 1995 (OSMB 1996). Camping activity at Prineville Reservoir has also steadily increased (Photo 3-3). Table 3.5-1 shows the number of campsites sold as well as traffic counts at campgrounds for the period between 1993 and 2000. There were a total of 5,794 campsites sold in 1993 compared to 7,161 in 2000. While the 2000 figure does not reflect normal use due to extreme low water conditions, there was still a 19% increase in the number of campsites sold during this period. Overall visitation at the reservoir was estimated to be 422,788 in 1999, and has been steadily increasing for several years. Table 3.5-2 provides visitation figures for the period between September 1999 through August 2000. Table 3.5-3 provides visitation figures for several of the recreation facilities for the period between May 2000 and August 2000. These figures do not provide total visitation for Prineville Reservoir; however, the table provides the percent of total use each of these sites represents of all developed recreation sites.



Photo 3-2. Pleasure boating on Prineville Reservoir.



Photo 3-3. Campers relaxing at Prineville State Park.

3.5.2 Recreation Facilities

Developed recreation facilities are provided at numerous locations around Prineville Reservoir by OPRD and a private concessionaire. Both developed and undeveloped dispersed sites provide areas for visitors to engage in various recreation activities. The type and location of recreation facilities provided at Prineville Reservoir are listed in Table 3.5-4 and shown on Figure 3.5-1.

Table 3.5-1: Prineville Reservoir visitation, 1993-2000.

	1993	1994	1995	1996	1997	1998	1999	2000
Campground Sites Sold	5,794	5,550	6,731	6,716	7,174	7,842	8,599	7,161
Traffic Count	124,815	119,942	122,775	121,196	122,620	129,275	144,629	91,891

Source: OPRD 2002.

Note: OPRD uses a multiplier statewide of 4 occupants per vehicle and 3.3 persons per campsite. No multiplier has been used on above actual count numbers.

Table 3.5-2: Prineville Reservoir visitation, September 1999 to August 2000.

	Prineville	laenor	Powder House	Roberts	County Boat	Prineville Reservoir	SE Prineville Lake Access	SE Prineville Lake Access	
	State Park	Jasper Point	Cove	Bay	Ramp	Resort	RD E	RD W	Totals
SEP	31,326	na	na	na	na	na	na	na	31,326
OCT	10,012	na	na	na	na	na	na	na	10,012
NOV	3,444	na	na	na	na	na	na	na	3,444
DEC	2,332	na	na	na	na	na	na	na	2,332
JAN	2,101	na	na	na	na	na	na	na	2,101
FEB	1,753	na	2,072	624	604	na	na	na	5,053
MAR	3,654	2,492	4,292	1,392	na	na	na	na	11,830
APR	5,982	5,098	5,296	1,820	1,456	na	na	na	19,652
MAY	13,181	10,066	13,408	2,452	3,012	na	1,964	1,264	45,347
JUN	21,270	17,656	10,624	3,628	3,656	na	4,146	3,244	64,224
JUL	29,442	24,660	15,576	5,972	6,028	na	10,178	8,220	100,076
AUG	26,987	16,648	na	9,516	8,204	na	16,272	14,764	92,391
TOTAL	151,484	76,620	51,268	25,404	22,960	35,000	32,560	27,492	422,788

Source: OPRD 2002. na = Not Available.

Table 3.5-3: Prineville Reservoir visitation, May 2000 to August 2000.

	Prineville State Park	Jasper Point	Powder House Cove	Prineville Resort	Roberts Bay	County Boat Ramp
MAY	13,181	10,066	13,408	8,750*	2,452	3,012
JUN	21,270	17,656	10,624	8,750*	3,628	3,656
JUL	29,442	24,660	15,576	8,750*	5,972	6,028
AUG	26,987	16,648	13,203*	8,750*	9,516	8,204
TOTAL	90,880	69,030	52,811	35,000	21,568	20,900
Percent of Total Use of All Developed Rec. Sites	31%	24%	18%	12%	7%	7%

Source: OPRD 2002.

*Estimated from total use numbers.

Note: Number total will not equal 100 due to rounding. Does not include boat-in sites.



Photo 3-4. State Park boat ramp.

Prineville State Park is the main public park development at Prineville Reservoir and is also the most popular use area on the reservoir. It is located on the northern shoreline of the reservoir at the end of the Juniper Canyon Road that leads to the City of Prineville. This site contains two distinct areas, the campground and a large day use area with a boat ramp and moorage (Photos 3-4 and 3-5). The campground contains 70 campsites with varying levels of amenities, including one accessible site. "Accessibility" is defined as providing participation in programs and use of Figure 3.5-1

Back of Figure

facilities to persons with a disability. "Disability" is defined with respect to an individual as a physical or mental impairment that substantially limits one or more of the major life activities of such individual; a record of such an impairment; or being regarded as having such an impairment (Americans with Disabilities Act of 1990). Twenty-two of the sites have full hookups (water, sewer, and electricity), 23 sites have electricity and water, and 25 sites are designed for tent campers and have water faucets nearby. Most of the sites are shaded and have ample grassy areas. The campground also has a modern restroom facility with flush toilets and hot showers. In addition to these facilities, the campground also has 5 cabins available for visitor use (Photo 3-6). Three of these are larger deluxe cabins that sleep 6 and have kitchen and restroom facilities. The remaining two cabins are one-room rustic cabins that sleep 4 and do not have kitchen or restroom facilities. All of the cabins and campsites are able to be reserved in advance through Reservations



Photo 3-5. Boat moorage at the State Park.

Northwest, who administers reservations for OPRD. There is also a boat moorage facility with 32 spaces for use by visitors staying in the park. The cabins and a portion of the campsites are open year-round. A 1.75-mile shoreline trail leads from the campground to Jasper Point. An amphitheater is also located nearby that is used for educational programs.

Table 3.5-4: Facility locations at Prineville Reservoir.

	Boat			Developed	Dispersed	Swimming		Fishing
	Ramp	Area	Cabins	Camping	Camping	Area	Trails	Access
Prineville State Park	x	Х	X	X		X	X	Х
County Boat Ramp	Х							
Big Bend				Х				Х
Powder House Cove	х							
Roberts Bay West	X	x			X			
Roberts Bay East		Х			X			
Prineville Reservoir Resort	х		Х	Х				X
Jasper Point	Х			X				
Owl Creek		Х			Х			
Juniper Bass					Х			
Old Field					Х			Х
Cattle Guard					Х			
Bear Creek					X			X
Antelope Creek								X
Combs Flat					X			Х

Source: Provided by EDAW.



Photo 3-6. State Park cabin.

The day use area and boat launch are located directly adjacent to the campground on the shoreline of Prineville Reservoir. The day use area facilities include picnic tables, BBQs, playground, picnic shelter/kitchen, large shaded grassy areas, a beach with a designated swimming area, concession stand, restrooms, showers, fish cleaning station, volleyball net, and a large parking area (shared with the boat launch). Facilities at the boat launch include 2 ramp lanes, a boarding float, and a parking area (shared with the day use area). In total, the site has 45 single vehicle parking spaces and 60 boat trailer parking spaces. The boat launch is the deepest on the reservoir, and it is the only ramp that can be used as pool levels are lowered in the Recent renovations included the off-season. creation of additional boat trailer parking spaces. Both the boat launch and the day use area are popular with campers and other visitors to the reservoir.

Prineville Reservoir Resort is located on the northern shoreline of the reservoir at the tip of a peninsula. The resort is run as a concession through an agreement with Reclamation and is the only privately managed recreation facility on The resort consists of a the reservoir. campground, motel, and boat launch, all of which are popular and heavily utilized during the peak use season. The campground consists of 69 campsites, all of which have hookups for water and electricity, many of which are directly on the water. In addition, the campground also features restrooms/showers, a volleyball court, horseshoe pits, an RV dump station, and a rustic cabin available for nightly rental. The boat launch is adjacent to the campground and features boat ramp lanes, boat moorage, a gas dock, and boat rentals (Photo 3-7). Other facilities at the resort include a 7-unit motel, fish cleaning station, convenience store, and small restaurant. Enhancements or improvements for recreation facilities at Prineville Resort will be considered. subject to an economic feasibility study. Recreation enhancements or improvements would not be developed and/or funded by Reclamation, but would be negotiated as part of a lease renewal at any new business opportunity at the existing location of the resort. Social Security Beach is a reservoir shoreline area just south of the Bottero Subdivision that is a popular spot for elderly people to drive in the drawdown zone to gain access for fishing.

Jasper Point Campground is a relatively new facility developed by OPRD and is located on the



Photo 3-7. Resort boat moorage.

northern shoreline of the reservoir. As recently as 1995, this was the most heavily used dispersed camping area on the reservoir and frequently would contain as many as 200 campsites. The current site consists of a small developed campground and a new boat launch facility. The 30-site campground is designed to be more primitive and rustic than the main State Park campground, thus offering a range of settings for visitors to the area (Photo 3-8). Water and electricity are provided at each site. facilities include two vault toilets and parking for 10 boat trailers. A boat launch adjacent to the campground features a 2-lane concrete boat ramp, a paved parking area with spaces for 22 vehicles and 40 vehicles with trailers, a vault toilet, and a dump station.

There are four designated dispersed recreation sites along the North Side Primitive Road within the SWA: Owl Creek (Photo 3-9), Juniper Bass, Cattle Guard, and Old Field (Photo 3-10). The North Side Primitive Road runs from Jasper Point to the Paulina Highway and is mostly rough gravel, although it can be used by most passenger vehicles.

Owl Creek is managed as a walk-in/boat-in use area and has parking for about 10 vehicles. Features at this site include 3 picnic tables, 2 portable toilets, and about 10 dispersed campsites, several of which appear to be heavily used. Most of these sites are spread throughout an area of junipers along the shoreline of the reservoir. Road access to this site is closed from November 15 to April 15.

Juniper Bass is a designated dispersed use area located along a spur road about ½ mile south of the North Side Primitive Road. The ability for vehicles to access the shoreline at this site has created a long narrow area of about 10 scattered dispersed campsites. Day use appears to be more common at this site than overnight use, as the site



Photo 3-8. Jasper Point campsite.



Photo 3-9. Owl Creek recreation site.



Photo 3-10. Old Field recreation site.

is barren and lacks shade. At low pool levels, vehicle access along the shoreline extends far to the east and west of the site. Road access to this site is closed from November 15 to April 15.



Photo 3-11. Roberts Bay East recreation area.

Cattle Guard is a moderate-sized designated dispersed site just south of the North Side Primitive Road along the shoreline of the reservoir. Features at this site include one primary site with a picnic table and five smaller use areas nearby, each with a user-constructed fire ring. The main site is located on a small bluff overlooking the reservoir. Road access to this site is closed from November 15 to April 15.

Old Field is a large designated dispersed area consisting of three separate areas, all of which are heavily used by visitors. This site is the farthest east of the sites on the North Side Primitive Road and is nearest to the Paulina Highway. The three primary areas at this site include a forested area just west of the main entrance (6 dispersed sites and 1 portable toilet), a large barren area just east of the main entrance (1 dispersed site), and a long, wide area along the shoreline with a network of dirt roads that is primarily a fishing access point (5 dispersed sites). During peak season weekends, each of these areas contains many more camps than indicated. Road access to this site is closed from December 15 to March 15.

Roberts Bay East is the most heavily used recreation area on the south shore and is the most popular dispersed recreation area on the reservoir (Photo 3-11). Features of this site include 12 picnic tables, 4 vault toilets—as well as additional portable toilets during the peak use season—and as many as 50 distinct dispersed

campsites with user-constructed fire rings. Trash cans are also provided during the peak use season. Twenty of the dispersed sites are on a small peninsula and have gravel parking spurs and some shade. The remaining sites are scattered throughout the main use area along the western shoreline of Roberts Bay which is interspersed with some juniper trees that provide limited shade. However, much of the use of this site occurs directly on the shoreline and in the areas below the full pool level that are exposed as the summer progresses. Although the area lacks a formal boat launch, the gentle slope of the shoreline and lack of rocks or trees allows visitors to launch from many portions of the site.

Roberts Bay West is a small designated dispersed site at the western end of the Roberts Bay area. Features of this site include an informal gravel/rock boat ramp, three picnic tables, and approximately ten dispersed campsites. Portable toilets are also provided at this site during the peak season and are highly visible from the water, resulting in heavy use from boaters in the area. The primary focus of users to this site is the boat launch, which is comparable to the facility at Powder House Cove in terms of the condition of the "ramp" (i.e., as it is long and straight). One picnic table and as many as eight dispersed campsites are located near the wetland area between this site and Roberts Bay East.

Juniper Point is a designated dispersed site located on a small bay on the southern shoreline of the reservoir. This designated dispersed site is more primitive and lightly used than the adjacent areas of Roberts Bay. Current access to the site is via the Salt Creek Road followed by a rough and unimproved gravel road also known as the Roberts Bay Road. There are an estimated 20 dispersed campsites at Juniper Point, most of which do not receive much use except on peak season weekends. There are three picnic tables at this site, and portable toilets and trash cans are provided during the peak use season.

Powder House Cove is a physically small day use area with high use at the western end of the local reservoir just south of Bowman Dam, near the old powder house used to store explosives during dam construction. Situated along Highway 27 that runs directly into Bend, this area is becoming increasingly popular among visitors from the south as it is the closest boat launch on Prineville Reservoir for most residents of Deschutes County and other points south, and the highway was recently paved. Features of this site include a one-lane boat launch, two gravel parking areas, and two vault toilets. Portable toilets and trash cans are installed at the site during the peak use The existing boat launch is best characterized as primitive as it has a gravel surface only on the uppermost portions before becoming mostly dirt on the lower portions. Given the popularity of this site, overflow parking commonly occurs on the shoulder of Highway 27, creating a traffic hazard. Boats also launch from numerous locations along the shoreline in the cove (Photo 3-12).



Photo 3-12. Powder House Cove boat ramp.

Big Bend is a large Reclamation-owned site just below Bowman Dam along the banks of the Crooked River. Big Bend is cooperatively managed for Reclamation by BLM through agreement with OPRD. For many years, this site has been managed to allow for dispersed day use and camping and has typically represented an optional use area for visitors to the reservoir when



Photo 3-13. Camping at Big Bend campground.

conditions become too crowded at Powder House Cove. This area is also popular among anglers who use this site as an easy access point to the tailrace of the dam as well as other areas downstream. As many as 40 distinct dispersed sites have been identified at this site in recent years, many of which were located in sensitive riparian areas along the river. Site improvements completed in 2001 were undertaken to formalize use at this site. Fifteen distinct campsites have been designated, all of which are located above the riparian zone of the river (Photo 3-13). Vehicle access to the shoreline and upstream areas below the dam has been blocked to reduce impacts and ensure visitor and dam safety. A self-service fee station, two toilets, and other tent camping and day use picnic areas have been added to the site.

The County boat ramp is one of five developed boat ramps on the reservoir, located on the northern shoreline a few miles west of the State Park. Due to its proximity to the city of Prineville, this is a popular boat launch for visitors arriving from the north. There are few facilities at this site, including a one-lane asphalt ramp, a gravel parking area, and portable toilets (Photo 3-14).

Aside from the designated dispersed sites around the reservoir, there are many other areas that visitors use for day use or overnight camping that are accessible by vehicle. Many of these areas can also be accessed by boat. One of these sites is Bear Creek, on the southern shore of the reservoir east of Powder House Cove. This area has approximately 5 dispersed campsites and is also a walk-in access point for anglers. It is only popular in the early season as this shallow arm of the reservoir dries up quickly as pool levels fall. Another popular dispersed area is Antelope Creek. This area is near the spot where the road to Jasper Point branches off from the main road. A small gravel parking area (7 vehicles) is located just off the main road. A large beach area in the western portion of the Prineville Reservoir Resort area, commonly known as Social Security Beach, is a popular day use area for visitors where vehicles have been gaining access to a 0.25-mile stretch of shoreline (Photo 3-15).



Photo 3-14. County Boat Ramp.



Photo 3-15. Social Security Beach with Bottero Park in the background.

Another popular dispersed area is near the intersection of North Side Primitive Road and Paulina Highway. This relatively flat area is in a location where the reservoir becomes braided and more riverine. The flat, open terrain sees more extensive ORV use than other areas around the reservoir and is also a popular area for camping and shoreline fishing.

In addition to the sites mentioned above, as many as 40 boat-in dispersed sites have been identified along the shoreline of the reservoir. Most of these sites are located at the western end of the reservoir and have user-constructed fire rings. Many sites have small beach areas, which make these the most popular sites.

Overall, Prineville Reservoir is popular among many types of boaters who visit the area and had more boater activity days in 1998 than all but two reservoirs in Crook, Jefferson, and Deschutes counties. Estimates of this use indicate that 43% of these activity days were anglers, 33% waterskiers, 20% general boat use (cruising), and 4% PWC riding. Although not included in this estimate, there is some sailboat use of the reservoir as well as a limited amount of nonmotorized boating use such as canoeing and kayaking. Due to the popularity of the boat launch at Powder House Cove, much of the boating use occurs in the western sections of the reservoir. Eastern sections of the reservoir have a boat speed limit of 5 mph, making angling popular in these areas. The Marine Patrol enforces the speed limit and other boating regulations during patrols in the peak season.

3.6 Transportation and Access

This section addresses vehicular access to destinations at the Prineville Reservoir from local and regional population centers. Information on local airports and bus service is also included.

3.6.1 Road Access

Primary road access from the City of Prineville to the Prineville Reservoir area, including Prineville State Park, Prineville Reservoir Resort, Jasper Point, and the County boat ramp, is provided via Juniper Canyon Road. State Route 27 provides access from the City of Prineville to Bowman Dam and Powder House Cove with connections to other destinations on the reservoir's south side. The north end of the reservoir is accessed from the City of Prineville by a 15-mile section of the Combs Flat Road (Paulina Highway, State Route 380). From the City of Bend, most visitors travel to the south side via Alfalfa Road, which connects with State Route 27.

Juniper Canyon Road is the primary road leading to the most heavily used recreation sites on the reservoir's north shore. The 17-mile-long, 2-lane asphalt and oil mat-surfaced road is well maintained by Crook County and was resurfaced most recently in 1998. The asphalt paved portions of the road are 24 feet wide with 2-foot gravel shoulders on either side. Most of this road has a posted speed limit of 55 mph, which is reduced closer to the reservoir due to numerous curves in this part of the road. Peak traffic volumes on the Juniper Canyon Road approach 4,000 trips per day (pers. comm., Thompson, 2001). State Route 27 (also known as the Crooked River Highway) parallels the river below the dam through the winding, scenic Crooked River Canyon. This road is also a wellmaintained 2-lane asphalt road but is a little longer, and speeds are slower as a result of the numerous curves (Photo 3-16).

Between Jasper Point and the upper end of the reservoir within the Prineville Reservoir SWA, access to primitive shoreline campsites at Owl Creek, Juniper Bass, Cattle Guard, and Old Field is provided via the 6.3-mile-long North Side Primitive Road (Photo 3-17). The Combs Flat Road (Paulina Highway) intersects the primitive road at the northeast end of the reservoir. The



Photo 3-16. South Juniper Canyon Road looking toward Jasper Knolls.



Photo 3-17. North Side Primitive Road near Old Field.

primitive road is unsurfaced and seldom wide enough for two vehicles to pass. Numerous curves, substandard gradients, and limited drainage and maintenance render the road virtually unsuitable for safe or sustained public travel, particularly following precipitation when the road is wet and slippery. The western twothirds of the road is located on steep slopes with many curves. The eastern one-third is located on more gently sloping topography with fewer curves and abrupt changes in elevation. The road currently does not meet the minimum standards for rural roads. Traffic control, road directional, and information signs are lacking in most areas. The North Side Primitive Road is open on a seasonal basis only—generally from April 15 to November 15 from Jasper Point to Old Field, and March 15 to December 15 from Old Field to Combs Flat Road to accommodate wintering deer and other wildlife

Road access to the reservoir's south shore is extremely limited. Road access to destinations on the reservoir's south side (including Roberts Bay, Bear Creek, Powder House Cove, Bowman Dam, and the lower Crooked River) is via the Crooked River Highway, State Route 27, which originates in the City of Prineville and links U.S. Route 26 with U.S. Route 20 to the south. Between Prineville and Powder House Cove south of Bowman Dam, State Route 27 is a 2-lane asphalt-surfaced road.

Farther south toward U.S. Route 20, Route 27 becomes a wide and well-maintained graveled road. Traffic volumes on SR 27 range from 1,100 average daily trips south of the City of Prineville to 90 near the junction with Alfalfa Road (ODOT website 2001).

The most direct route from Bend follows SW Willard Road, which connects to SW Reservoir Road and SE Reservoir Road before intersecting with State Route 27. Collectively, this route, which was paved with an oil-mat surface from 1988 to 1998, is known as Alfalfa Road. This smooth road surface has substantially reduced driving time from Bend to only 30 to 45 minutes, making Prineville Reservoir an increasingly popular destination for visitors from the Bend area.

State Route 27 leads directly to the Powder House Cove recreation site, with access to the Bear Creek Arm of Prineville Reservoir requiring travel on a single lane primitive road (SE



Photo 3-18. Road between Roberts Bay and Juniper Point.

Lakeview Road) adjacent to Bear Creek. Access to the Roberts Bay area requires traveling on a 2-lane graveled County road called S. Salt Creek Road to the old stage stop know as Roberts. The section from Roberts to the Reclamation boundary, known as the Roberts Bay Road, is seldom maintained and in poor condition (Photo 3-18). If legal access can be determined or acquired, Reclamation, in cooperation with OPRD, will take responsibility for maintaining the road to Roberts Bay commensurate with the level of facility development. See Appendix F for communications with Crook County regarding the Roberts Bay Road. County and State road data are summarized in Table 3.6-1.

Executive Orders 11644 and 11989 (February 1972 and May 1977, respectively) established policies and procedures to ensure that the use of ORVs on public lands will be controlled and directed to protect resources, promote user safety, minimize user conflict, and ensure that any

Table 3.6-1: County and State roads in vicinity of Prineville Reservoir.

Road Name	#	Classification	Surface	Condition
S Juniper Canyon	214	Major Collector	Asphalt/oil mat	Good
SW Willard	351	Minor Rural	Oil-mat	Good
SW Reservoir	332	Minor Rural	Oil-mat	Good
SE Reservoir	332A	Minor Rural	Oil-mat	Good
SE Lakeview	355	Minor	Gravel	Fair
S Salt Creek	134	Minor	Gravel	Good
Crooked River Hwy	SR 27	Highway	Paved	Good
Combs Flat Road	SR 380	Highway	Paved	Good

Source: Crook County Road Department 1998

August 2003

permitted uses will not result in significant adverse environmental impact or cause irreversible damage to existing resources. Pursuant to these Orders, policy and criteria relating to the use of ORVs on Reclamation lands were established on August 23, 1974 (see 43 CFR Part 420). Specifically, all Reclamation lands are closed to motorized travel except for areas, roads, or trails specifically open for such use (Photo 3-19).

At Prineville Reservoir, this policy is enforced by the Crook County Sheriff's Department and is based on Crook County Ordinance No. 34 as Amended by Ordinance 101 and Federal Regulation 43 CFR, Part 420 restricting licensed vehicle use to designated roads only (as identified and mapped in the original legislation).



Photo 3-19. Dispersed camping near Cattle Guard, and illegal use of vehicle adjacent to the reservoir.