

Upper Rogue Watershed Assessment

Chapter 1 Introduction and Watershed Overview



Upper Rogue Watershed Association

- Bringing people and natural resources together since 1994 -

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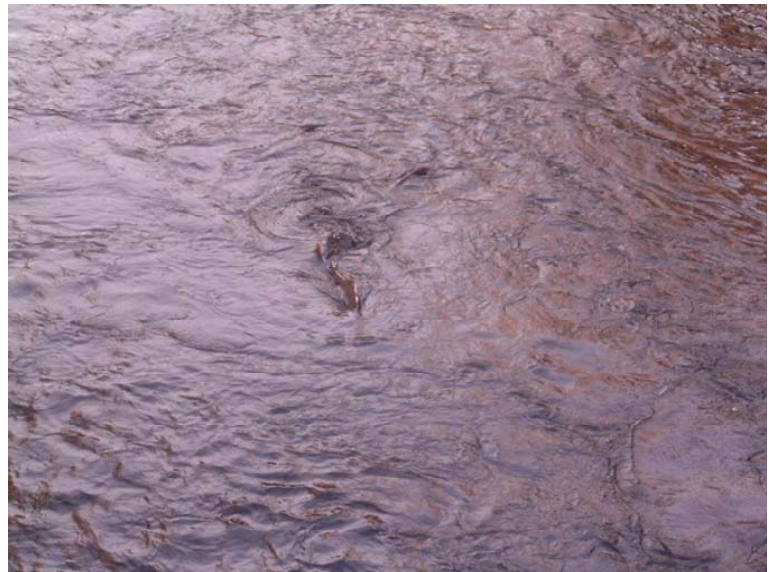
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1 INTRODUCTION AND WATERSHED OVERVIEW

1.1 Introduction

*The Wild Rogue River...
...offering some of the finest
habitat for migrating fish in the
country...*

The Rogue River stretches 217 miles from the headwaters along the northern flanks of Crater Lake to the mouth along the rugged coastline of the Pacific Northwest near the city of Gold Beach in Southern Oregon (Map 1). The Rogue River is well known as a principal artery along the western coastline for migrating fish, including salmon (anadromous fish), which seek its cold, fresh waters to spawn and restart their life cycle. The total area of the land that contributes water to the Rogue River (the watershed, or basin) is approximately 3,304,984 acres (5,164 square miles), about 5 percent of the State of Oregon. The Rogue Basin is the home to abundant and diverse wildlife, as well as numerous communities and cities along the banks of the mainstem and its tributaries.



Chinook salmon seeking spawning habitat in the gravels of Big Butte Creek, one of the tributaries of the Rogue River. 10-15-05.

To better understand the condition of an ecological system, it is helpful to divide it into smaller parts. The Rogue Basin is divided into seven watersheds. In this report, we focus specifically on the upper portion of the Rogue Basin called the Upper Rogue Watershed. It is the easternmost watershed in the Rogue Basin, including the headwaters of the Rogue River near Crater Lake down to the Dodge Bridge south of the city of Shady Cove.

1.2 The Players

The Upper Rogue Watershed Association (URWA) is comprised of individuals with a great interest in their watershed. The URWA has been bringing people and resources together to understand the Upper Rogue Watershed and its resources since 1994. Most members live or work directly in the Upper Rogue Watershed, and monthly meetings are held in the Community Center in the City of Shady Cove. The URWA received a grant from the Oregon Watershed Enhancement Board (OWEB) to complete a watershed assessment. The OWEB administers a grant program funded from the Oregon Lottery to support voluntary efforts of groups like the URWA seeking to create and maintain healthy watersheds. The OWEB's programs support Oregon's efforts to restore salmon runs, improve water quality, and strengthen ecosystems that are critical to healthy watersheds and sustainable communities. The URWA retained a consultant team to assist them in performing the watershed assessment.

Looking after the Upper Rogue Watershed



Members of the URWA work to deepen the approach to a fish ladder on Big Butte Creek.



URWA member Sue Mazzini signing up for work at the SOLV Volunteer Cleanup Day.

1.3 Approach

The primary emphasis of this assessment is on understanding the natural and human factors that affect fish habitat, water availability, and water quality. While most of our emphasis is on the aquatic and riparian system, some background information regarding wildlife populations and habitat and land use issues is also provided. This watershed assessment provides a framework for the URWA to identify and prioritize the issues affecting their watershed. The URWA will use recommendations from this assessment to plan and implement watershed restoration and improvement actions.

This assessment is guided by the *Oregon Watershed Assessment Manual* (OWEB 1999).¹ The manual provides a straightforward, step-by-step approach to assessing the historical and current conditions that shape a watershed and affect fish populations and water quality. In addition, OWEB provided feedback to the URWA to assist them in the assessment. Because of the size of the Upper Rogue Watershed relative to the amount of funding allocated, OWEB suggested that this assessment focus on the non-federal lands below Lost Creek Dam. Natural resource management agencies (e.g., US Department of Agriculture Forest Service) overseeing federal lands within the watershed have already completed other assessment work. The OWEB also highlighted the importance of public outreach and increasing public awareness.

This report is the culmination of an eighteen-month-long assessment process, which has included meetings with the URWA; collaboration with many stakeholders; field trips; creation of a website; and generation of maps, posters and other outreach materials. Chapter 2 presents an assessment of water quality and sediment. Chapter 3 presents flow and hydrologic conditions. Chapter 4 discusses fish population and aquatic habitat. Chapter 5 reviews riparian and wetland conditions. Chapter 6 presents an evaluation of the current watershed condition and recommendations to improve conditions in the Upper Rogue Watershed. We begin with a basic history and general overview of the Upper Rogue Watershed.

1.4 Historical Background

Natural and human events over time have affected the Upper Rogue Watershed. Geology and climate set the stage. Then, natural disturbances such as fire and floods shape the river, streams and surrounding vegetation. Land use patterns and natural resource management activities have modified the river and the landscape. For example, dams along the Rogue River have changed the river's flow patterns and hindered fish passage. The following is a brief overview of some of the natural events and human actions that have shaped the Upper Rogue Watershed. Additional historical information is incorporated into each chapter. For example, the development over time of irrigation diversions and intra-basin water transfers is covered in our discussion of flow and hydrology in Chapter 3, while changes in vegetation cover over time are covered in the review of riparian and wetland conditions (Chapter 5). Therefore, this section is limited to an introduction of the topics.

People have inhabited the Upper Rogue basin for at least 8,000 years (RRNF 1995). Native tribes included the Upland Takilma, and Southern Mollala, as well as the Cow Creek Tribe from the Umpqua River basin and Klamath peoples migrating into and perhaps living in the area. (Lalande 2005). These upland tribes were dependent primarily on wild game such as mule deer and Roosevelt elk as well as smaller animals such as grouse and gray squirrel for meat. Salmon were of poor quality and abundance by the time they made their way from the ocean into the waters of the Upper Rogue.

¹ Several members of the CES Team assisted OWEB in the creation of the watershed assessment manual.

Salmon fisheries were more profitable at the mouths of Big Butte and Elk Creeks but upland peoples may have been more dependent on the native trout fisheries. Acorns were a dietary staple of people living at the lower altitudes of the basin where these were available, such as the Big Butte sub-basin, and the inner bark of the sugar pine provided a starchy food source in the far-ranging sugar pine forests of that day. Berries were plentiful too, serviceberry and blackberry among them, but the berry fields of Huckleberry Mountain and Huckleberry Gap brought tribesmen and women to those regions each fall for collecting and preserving. These bountiful regions were valued and protected by the native people of the Upper Rogue and were cultivated by burning to protect the berry fields from the encroaching forest (LaLande 1980).

Farming and ranching in the fertile Rogue Valley brought the first Euro-American settlers in the 1840s. The agricultural base was expanded ten years later to provide for the needs of miners once gold was discovered near Jacksonville. Indian wars in the mid-1800s brought in the military. In fact, the town of Shady Cove was established at a military ferry crossing on the Rogue. In the 1890s ranching and agriculture continued to expand, along with the marketing of another natural resource in the area – timber. Discovery of the region's immense, old-growth sugar pine forests brought developers to the Prospect area. New harvesting equipment and methods, coupled with the completion of the Oregon and California Railroad in 1887, helped to spur the development of the timber industry. The rail system provided access to markets for both lumber and agricultural products.

The area continued to boom under burgeoning economic interests in the early 1900s with the introduction of hydroelectric power to the region. The Rogue River Electrical Company, which later was absorbed by the California-Oregon Power Company, set up a powerhouse near Prospect to harness the waters of the Upper Rogue. The Elk Creek (Buzzard) Mine saw a few years operation producing gold, silver and lead but closed in 1918 only to reopen during the Depression when gold prices rose. Improvements were made to the road system and tourists poured into the region to enjoy the natural beauty and recreation of the scenic Upper Rogue. Tourism to Crater Lake boomed and Huckleberry Mountain nearly swarmed with visitors during the harvest season (Lalande 1980).

The newly formed US Department of Agriculture Forest Service (USFS) took over the administration of the area in 1907 and applied themselves to the implementation of grazing regulations. Fire, timber theft, and the white pine blister rust infecting valuable sugar pine stands in the district created additional management problems. The post-Depression era introduced the trend toward greater timber demand in the face of growing concern for forest sustainability. This continues to be an issue today.

Though the Upper Rogue Watershed is predominantly rural, there are several towns in the area. The largest city is Shady Cove, which was settled in the late 1800s². Other communities include Prospect, Butte Falls, and Trail. The population of the watershed increased significantly during the 1970s. The estimated 1970 population was 4,100, increasing by 62% to 6,657 in 1980 (URWC, 1995). Significant growth has been occurring since the 1990s.

² Shady Cove was not incorporated as a City until 1972.

1.5 General Overview

The Upper Rogue Watershed lies predominantly within the Western Cascade physiographic province in three counties: principally in Jackson County, and overlying in Klamath and Douglas Counties. The total area of the Upper Rogue Watershed is approximately 783,800 acres (1,218 square miles), or about a quarter of the entire Rogue Basin. The Upper Rogue Watershed is comprised of seven subwatersheds, which are simply smaller watersheds within a bigger watershed. Each subwatershed is given a 5th Field Hydrologic Unit Code (or HUC). The HUCs are not used in this assessment; however, they are often used to identify subwatersheds, so they are listed in Table 1-1 below. These subwatersheds are the primary focus of this assessment. Map 2 shows the location of the seven subwatersheds. While reading this report it will be helpful to refer to this map to gain an understanding of the locations of relevant features. The total acreage and land ownership allocations for each of the seven subwatersheds are shown in Table 1-1, which starts with the Trail Creek subwatershed and continues clockwise through the Upper Rogue watershed. A basic breakdown of land ownership allocations is also shown on Map 2.

Table 1-1. Subwatershed Acreage and Land Ownership

Subwatershed Name	HUC	Land Area (in Acres)					Square Miles
		Local Gov	Federal	Private	State	Total	
Trail Creek	1710030706		19,059	16,208	79	35,346	55.2
Elk Creek	1710030705		50,897	34,379	233	85,509	133.6
Upper Rogue River	1710030701		230,173	15,365	103	245,641	383.8
South Fork Rogue River	1710030702		126,765	32,408		159,173	248.7
Big Butte Creek	1710030704	2,329	87,162	68,865	40	158,396	247.5
Lost Creek Lake	1710030703		12,953	23,330	46	36,329	56.8
Shady Cove	1710030707		21,993	36,363	80	58,436	91.3
Total Upper Rogue Watershed		2,329	549,002	226,918	581	778,832	1,216.9

HUC = Hydrologic Unit Code.

An introductory overview of each of the seven subwatersheds is provided below. The specific details and issues pertaining to each of these areas are the focus of the remainder of this report.

Geology plays an important role in shaping watershed conditions, including the formation of stream habitat. The geology of the Upper Rogue Watershed is shown on Map 3. As shown on the map, there are significant differences in the geology of the western subwatersheds, such as Trail Creek, compared to the eastern ones, such as Big Butte Creek. Geology is discussed in greater detail in Chapter 3.

The type and condition of vegetation also plays a very important role in watershed health. The historical vegetation pattern in the Upper Rogue Watershed is shown on Map 4.

Much of the three westernmost subwatersheds (Elk Creek, Trail, and Shady Cove) are comprised of volcanic tuffs and ash flows, whereas the three easternmost subwatersheds (Upper Rogue, South Fork, and Big Butte Creek) are comprised of layers of basalt flows. These rocks weather (erode) very differently and also vary greatly in their ability to transport groundwater

(permeability). As discussed later in the assessment, this provides large differences in water quantity and streambeds between the eastern and western portions of the Upper Rogue Watershed.

1.5.1 Trail Creek Subwatershed

The Trail Creek subwatershed is approximately 55 square miles in size and is the westernmost subwatershed in the Upper Rogue Watershed. Principal access is by State Road 227, which joins Highway 62 (Crater Lake Highway) to the south and Interstate 5 at Canyonville, Oregon to the northwest. The overall elevation of a watershed helps to define its condition by influencing climate, temperature, and vegetation. The minimum, maximum, and mean³ elevations of the land in each subwatershed are shown in Table 1-2.

Table 1-2. Subwatershed Land Elevations

Subwatershed	Elevation (feet above mean sea level)		
	Minimum	Maximum	Mean
Trail Creek	1,440	4,700	2,716
Elk Creek	1,459	5,804	3,093
Upper Rogue River	1,878	8,139	4,655
South Fork Rogue River	1,879	7,699	4,698
Big Butte Creek	1,534	9,495	3,528
Lost Creek Lake	1,547	5,055	2,833
Shady Cove	1,280	3,904	1,986
Entire Upper Rogue Assessment Area	1,280	9,495	3,890

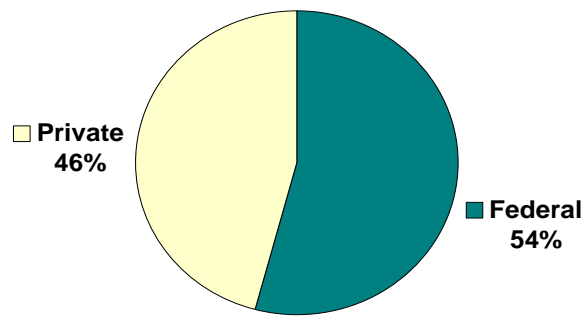
The Trail Creek subwatershed is at a relatively lower elevation than most of the other subwatersheds. Trail community (population range 1,500-1,800⁴) and the city of Shady Cove (population 2,336⁵) are located near the mouth of Trail Creek. The Trail Creek subwatershed is within the Butte Falls Resource Area of the Bureau of Land Management (BLM), and the Tiller District of the Umpqua National Forest. A significant portion of the Trail Creek subwatershed is privately owned (Figure 1-1).

³ The mean elevation is based on averaging the digital elevation model (DEMs) reported by the United States Geologic Service.

⁴ The source for the Trail population is the Southern Oregon Visitors Association.

⁵ Source is www.epodunk.com 2003.

Figure 1-1. Trail Creek Subwatershed Land Ownership



The availability of water (water quantity) has been identified as a prime issue of concern for the Trail Creek subwatershed (BLM, 1999; Fleetwood, 2005; URWA, 2005). Various conditions affecting water quantity, such as irrigation usage, precipitation, the shape of the watershed (geomorphology), and hydrologic and riparian conditions, are discussed in the appropriate chapters.

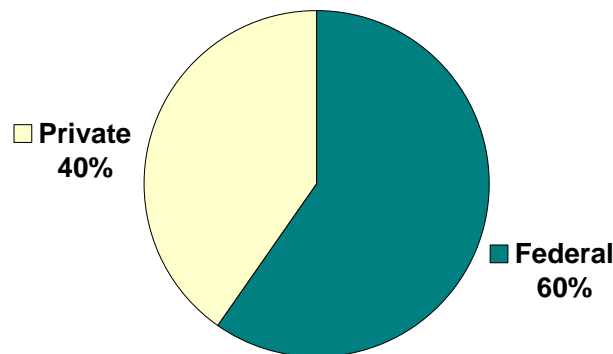
1.5.2 Elk Creek Subwatershed

The Elk Creek subwatershed is approximately 134 square miles and is located between the Trail Creek subwatershed to the west and the Upper Rogue subwatershed to the east. It is mid-range in elevation relative to the other subwatersheds (Table 1-2).

Principal access is by Elk Creek Road, which joins Highway 62 to the south, and follows Elk Creek northward through the subwatershed. A small village called Rogue Elk is located at the confluence of Elk Creek and the Rogue mainstem along highway 62. More than one-half of the land in the Elk Creek subwatershed is under federal management (Figure 1-2), primarily distributed in the upper portions of the subwatershed and tributary streams. The USFS manages lands in the northern third of the subwatershed, while the BLM manages the southern two-thirds of the subwatershed in a patchwork interspersed with private lands (Map 2). There are also approximately 233 acres of State Land located east of Elk Creek near Tatouche Peak.

The US Army Corps of Engineers' (Corps) partially completed Elk Creek Dam is located near

Figure 1-2. Elk Creek Subwatershed Land Ownership



the mouth of Elk Creek (Map 2). This project was proposed as one of three dams comprising the Rogue Basin Project. The other two dams, which have been completed, are the Lost Creek Dam (in the assessment area) and the Applegate Dam (not in the assessment area). The partially completed Elk Creek Dam blocks fish migration to the upper portion of the Elk Creek subwatershed. The Corps plans to build a new fish trap to help capture and haul salmon past the partially built dam for the next several decades. At this time, it is not known what the final outcome of the Elk Creek Dam Project will be.



Elk Creek Dam from above (date unknown). Photo Source: http://www.oregonwild.org/rivers_clean_water/elk_creek_dam/index_html

The USFS Rogue River-Siskiyou National Forest, Prospect Ranger District, and the BLM Medford District Butte Falls Resource Area performed a watershed analysis for the Elk Creek subwatershed in 1999. The watershed analysis includes a wealth of useful information, which is referred to in this assessment. A number of restoration projects, such as the Sugarpine Creek restoration project, have been completed in the Elk Creek subwatershed.

Long-term efficacy of stream restoration projects is important

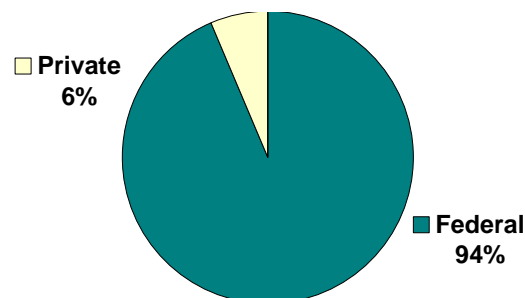


URWA members and assessment authors stand atop a natural looking rock weir discussing improvements to sediment and flow regime in Sugarpine Creek in the Elk Creek subwatershed.

1.5.3 Upper Rogue River Subwatershed

The Upper Rogue River subwatershed is located in the northeast portion of the assessment area along the western flanks of Crater Lake. This subwatershed is the largest (approximately 384 square miles) in the Upper Rogue Watershed. Principal access is by Highway 62, which follows the mainstem of the Rogue through much of the watershed before turning eastward climbing to Crater Lake, and on State Highway 230, which continues northward from the Highway 62 turnoff to Crater Lake. This is one of the highest subwatersheds in the basin, with a mean elevation of 4,655 feet above mean sea level (msl) (Table 1-2). The town of Prospect (population 650⁶) is located in the southern portion of the subwatershed near the backwaters of Lost Creek Lake. Almost all of the land in the Upper Rogue is federally owned, either within the Rogue River-Siskiyou National Forest, or within the Crater Lake National Park to the east. Most of the rest is privately owned, and is located in the lower reaches near Prospect (Map 2).

Figure 1-3. Upper Rogue River Subwatershed Land Ownership



⁶ Source: www.southernoregon.com-Prospect.

The headwaters of the Rogue River are located in the Upper Rogue subwatershed at Boundary Creek Springs. This significant spring system is located along the northern flanks of Crater Lake. Large quantities of groundwater flow from fractures in basalt bedrock at several cubic feet per second. Groundwater emanating as springs, such as Boundary Creek Springs, is a significant source of cold, consistent high quality water. These springs are an important source of baseflow water in the eastern portions of the Upper Rogue Watershed. Shading and woody debris is provided by the Subalpine fir stands as shown on Map 4.



Groundwater from several high-flowing springs, such as Boundary Creek Springs at the headwaters of the Rogue, provides much of the baseflow in the Upper Rogue Watershed. This photograph shows the flow about 150 feet downstream from the source.

Significant monitoring and data collection have been performed in the Upper Rogue subwatershed by the USFS and others. In addition, PacifiCorp, a public utility company with hydroelectric power plants in the Upper Rogue and South Fork subwatersheds has collected a great deal of watershed data as part of their relicensing under the Federal Energy Regulation Commission. Most of the emphasis in this assessment is on the private lands in the lower portions of the Upper Rogue Watershed. Therefore, less emphasis will be placed on describing conditions within the Upper Rogue subwatershed.



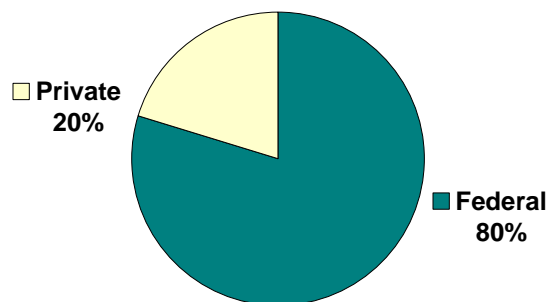
PacifiCorp has collected a great deal of data in the Upper Rogue and South Fork subwatersheds as part of their Federal Energy Regulation Commission relicensing.

This photograph shows the installation of an automated stream gage measuring device on the mainstem of the Rogue River near Prospect.

1.5.4 South Fork Rogue River Subwatershed

The South Fork Rogue River subwatershed encompasses approximately 249 square miles and is located along the eastern edge of the Upper Rogue Watershed. Principal access is by the Butte Falls-Prospect Road (County Road 992), which connects Highway 62 to the north and the city of Butte Falls to the south. Based on the mean elevation, this is the highest subwatershed in the Rogue Basin. There are no towns located in the area. Almost all of the land in the South Fork Rogue River is federally owned, either within the Rogue River-Siskiyou National Forest, or within the Crater Lake National Park to the north. There is also some federal BLM land near Round Mountain to the west. The remainder of the subwatershed is privately owned.

Figure 1-4. South Fork Rogue River Subwatershed Land Ownership



Access to the South Fork Rogue River subwatershed is more limited towards the headwaters in the east, though there are some roads maintained by PacifiCorp to serve the diversion canals and other infrastructure associated with their hydroelectric power generation (Map 2). Access is limited to foot traffic in the higher elevations in the Sky Lakes Wilderness Area, which is located on the divide between Upper Rogue Watershed to the west, and the Klamath Watershed to the east.

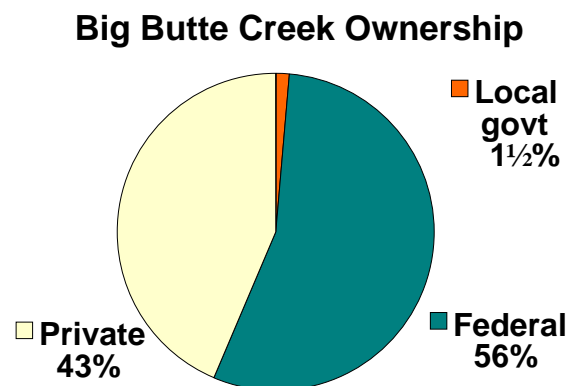
As with the Upper Rogue River subwatershed, significant monitoring and data collection have been performed in the South Fork Rogue River subwatershed by the USFS and PacifiCorp. Therefore, in the spirit of the OWEB's suggestion to focus on the non-federal lands below Lost Creek Dam, less emphasis is placed on the South Fork Rogue River subwatershed than on the lower subwatersheds.

1.5.5 Big Butte Creek Subwatershed

The Big Butte Creek subwatershed encompasses approximately 247 square miles and is located in the southeast portion of the Upper Rogue Watershed. There are several principal access roads into this subwatershed, which intersect at the city of Butte Falls (population 437⁷). County Road 992 (Butte Falls-Prospect Road) connects to Highway 62 at Prospect to the north. County Road 821 (Butte Falls Road) connects to Highway 62 near Shady Cove to the west, and to Highway 140 near Fish Lake to the southeast. Crowfoot Road connects to Highway 62 at the confluence of Big Butte Creek and the Rogue River to the northwest.

The minimum elevation of land in the Big Butte Creek subwatershed is 1,534 feet above msl, the maximum elevation is 9,495 feet above msl (the highest elevation in the Upper Rogue Watershed at Mount McLoughlin), and the mean elevation is 3,528 feet above msl. The city of Butte Falls is located in the center of the subwatershed along Big Butte Creek. Just over half of the land is federally owned. The upper elevations of the subwatershed to the east are almost entirely comprised of USFS land. The rest of the federally owned land is BLM, which is spread in patchwork fashion with private and other government lands through the rest of the subwatershed (Map 2). Nearly half of the land is privately owned with the county and state owning the remainder.

Figure 1-5. Big Butte Creek Subwatershed Land Ownership



Several significant springs provide groundwater as baseflow in the Big Butte Springs subwatershed. The Big Butte Springs system (identified as the local government-owned land about seven miles southeast of Butte Falls on Map 2) is of particular importance because it has been the source for most of the drinking water provided to citizens by the Medford Water Commission since 1915. The Medford Water Commission has water rights for 30 to 60 cubic

⁷ Source: www.epodunk.com.- Butte Falls

feet per second of water in the Big Butte Creek subwatershed, and typically transfers 40 cubic feet per second from the Big Butte Springs system via the Medford Aquaduct for communities in the Bear Creek Watershed. These communities include Medford, Talent, Phoenix, Jacksonville, Central Point, White City, and Eagle Point.

Because of its importance as a drinking water source, a great deal of information exists for this spring system and this portion of the watershed in general, and is discussed in the appropriate chapters.



Fresh, cold, spring water comes directly from the source at the Medford Water Commission Big Butte Springs system in the Big Butte Creek subwatershed.

Water is also transferred from the Big Butte Creek subwatershed for irrigation purposes and for the generation of hydroelectric power. The Eagle Point Irrigation District has a 1915 water right to transfer 100 cubic feet per second via the Eagle Point Irrigation Canal for irrigation use in the Little Butte Creek Watershed, south of the Upper Rogue Watershed. The Eagle Point Irrigation District also diverts water in the non-irrigation season (the remainder of the year) to generate power at their hydroelectric power plant. Upgrades to the diversion and fish passage infrastructure along Big Butte Creek have recently been made and are discussed in Chapter 2.



Water from Big Butte Creek is diverted through this fish screen (top photograph) for irrigation and power generation in the adjacent watershed (Little Butte Creek) to the south. However, there are concerns with fish passage over the structure (bottom photograph).

1.5.6 Lost Creek Lake Subwatershed

The Lost Creek Lake subwatershed is approximately 57 square miles and is located in the center of the Upper Rogue Watershed. Principal access is by Highway 62, which runs east/west through the area along the edge of Lost Creek Lake. The Lost Creek Lake subwatershed receives water from the Upper Rogue subwatershed via the mainstem of the Rogue River, and from the South Fork subwatershed via the South Fork Rogue River. The Lost Creek Lake subwatershed discharges to the Shady Cove subwatershed below Lost Creek Dam just above the confluence with Big Butte Creek (Map 2). There are no towns located in the area. However, the lake is a significant recreation area for the surrounding communities.

Lost Creek Lake, created by the construction of Lost Creek Dam by the Corps and completed in 1977, occupies approximately 3,400 acres, a significant portion of the watershed. It receives drainage from 674 square miles (Corps, 2006). Though it was initially built for storage and flood control (with usable storage of 315,000 acre-feet⁸), other uses include recreation, hydroelectric power generation, irrigation, and fish hatchery (Corps, 2006).



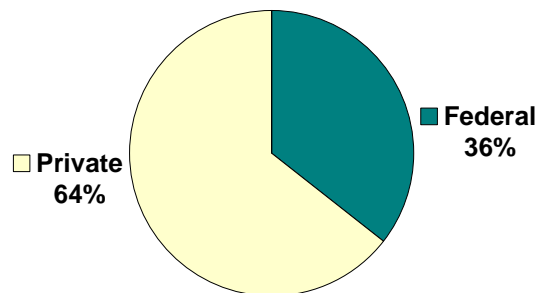
Looking northeast at Lost Creek Lake and the upper watersheds to the east. The Cole M. Rivers Fish Hatchery is below the dam (foreground). Lost Creek flows in from the left and the Rogue flows in from the center back.

The Cole M. Rivers Fish Hatchery is located at the base of Lost Creek Dam. The Oregon Department of Fish and Wildlife operates the hatchery and raises rainbow trout; Coho, spring and fall Chinook salmon; and summer and winter steelhead (ODFW, 2005). The hatchery is also a well-known recreational area.

Almost two thirds of the land in the Lost Creek Lake subwatershed is privately owned. The rest is owned by BLM, with the exception of approximately 46 acres of state land at the Joseph Stewart State Park along the southern edge of the lake.

1.5.7 Shady Cove Subwatershed

Figure 1-6. Lost Creek Lake Subwatershed Land Ownership

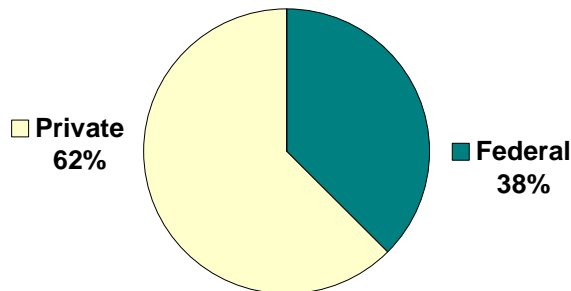


⁸ An acre-foot is a volume of water that would cover one acre one foot deep.

The Shady Cove subwatershed encompasses approximately 91 square miles, and is the lowest elevation subwatershed in the Upper Rogue Watershed (Table 1-2). There are several access routes, including Highway 62, State Road 227, and State Road 234. The Shady Cove subwatershed receives water via the mainstem of the Rogue from the Lost Creek Lake subwatershed, as well as from local tributaries including Indian Creek (east), Reese Creek (south), Dry Creek (southwest), and Long Branch (west). It discharges to the Rogue River at Dodge Bridge on State Road 234 below the confluence of Reese Creek. This is also the terminus of the Upper Rogue Watershed.

Almost two thirds of the land in the Shady Cove subwatershed is privately owned. The rest is owned by BLM, with the exception of approximately 80 acres of state land to the north near Trail (Map 2). The city of Shady Cove is located in the center of the subwatershed and is the largest town in the entire Upper Rogue Watershed. In addition, there is significant rural residential development along the Highway 62 corridor between Shady Cove and southward to the town of Eagle Point.

Figure 1-7. Shady Cove Subwatershed Land Ownership



The Rogue River is the source for a multitude of recreational activities near Shady Cove.

However, runoff from new development, and potential erosion from construction activities are a concern.



The Shady Cove subwatershed provides many recreational activities for the community including fishing, rafting, walkways, and parks. It is also undergoing significant growth and development, in tandem with development throughout the Rogue Valley. Stormwater runoff from development, and erosion during construction have been identified as issues of concern.

REFERENCES

Note: the name of the Upper Rogue Watershed Association (URWA) used to be the Upper Rogue Watershed Council (URWC) in the past. Therefore, citations referring to the URWA and URWC (depending on the name at the time the cited report was prepared) reference the same organization.

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