

## TROUT IN RUNNING WATERS

This chapter covers management of resident trout species in the Rogue, Applegate, and Illinois rivers and all associated tributary streams (running waters) of the Rogue River basin. A later chapter covers trout and warmwater fishes in standing waters.

Resident rainbow and resident, fluvial, and anadromous cutthroat trout are native to the Rogue River basin. Non-native stocks of rainbow, cutthroat, brook, and brown trout have been stocked in the basin (Table 1 and Appendix Table A-1.). The distribution of the various trout species in the Rogue River basin is given in Appendix Table A-2. The values in this table have not been verified by district personnel (Jerry MacLeod or Tim Unterwegner) as of 5 May 1993.

Angling for trout in the Rogue River basin did not become popular until the 1930s. At this time, cutthroat and downstream migrating steelhead were abundant and easily caught from streams in settled areas of the Rogue basin. Mining roads provided easy access to the headwaters of the Applegate and Illinois rivers, Jumpoff Joe Creek, and Grave Creek where trout fishing was most popular. The California-Oregon Power Company developed roads that provided access to trout fishing waters in the Prospect area in 1912 and the upper Rogue River and its tributaries became accessible in 1927 when the Crater Lake Highway was completed. The Civil Conservation Corps developed foot paths and roads into remote parts of the basin in the 1930s.

Trout fishing in high pressure areas in the Rogue basin is maintained by stocking. A list of species and numbers of hatchery fish stocked in running waters of the Rogue River basin is presented in Appendix Table A-4.

Streams above barriers to anadromous salmonids are stocked with trout when they flow through a campground or near a road with good access potential. Streams accessible to anadromous salmonids are not stocked in order to protect native salmon and steelhead stocks. Exceptions to this practice are: the mainstem Applegate and Rogue rivers, and Big Butte Creek. These streams are stocked with legals at locations where access is good and trout fishing is popular through the summer months.

Table 1. Trout liberations in the Rogue River basin from 1907 through 1940 recorded by the U. S. Bureau of Fisheries (Rivers in press).

Year	Rainbow	Cutthroat	Eastern Brook	Distribution
1907		900		Upper Rogue
1908		34,670		Upper Rogue
1909		21,705		Upper Rogue
1913	197,134			Elk Creek
		17,950		Upper Rogue
1914		17,630		Upper Rogue
1915		40,000		Upper Rogue
1918		11,500		Upper Rogue
			500	Moorland Rd
1921	189,000	47,500		Upper Rogue
1923		15,500		Upper Rogue
1924		18,000		Upper Rogue
1926			24,100	Upper Rogue <sup>1</sup>
1933		20,400		Big Butte Cr
1934		320,000		Butte Falls
1935		447,240		Big Butte, Elk Cr, and Upper Rogue <sup>2</sup>
1936	202,320	125,000		Upper Rogue, Big Butte, and Elk Creek
1937	6,590			Big Butte Cr
1939	140,000			Big Butte, Upper Rogue
1940	463,945			Big Butte, Elk Cr, and Upper Rogue

<sup>1</sup> Forest Service records indicate that this was the initial introduction of Eastern Brook into the North Fork of the Rogue.

<sup>2</sup> U. S. Bureau of Fisheries supplied the Forest Service with Eastern brook for stocking the North Fork Rogue and tributaries from 1935 through 1939, but Bureau records do not contain figures.

## Brook Trout

### Background and Status

Eastern brook trout (*Salvelinus fontinalis*) are not native to the Rogue River basin. They were initially introduced into tributaries of the North Fork of the Rogue above Union Creek by the U.S. Bureau of Fisheries in 1918. The U.S. Park Service planted into tributaries originating within Crater Lake National Park. Brook trout were introduced to waters throughout the Rogue basin from 1918 to 1939 and became established in cold water streams and lakes located at higher elevations. Currently, ODFW stocks "brookies" in the primitive lakes of the Rogue River basin.

Today, the largest populations of eastern brook are found in the primitive lakes and tributaries of the North Fork of the Rogue River, particularly those that originate on the western slopes of Mount Mazama (Crater Lake). Populations are most abundant in those tributaries to which angler access is difficult. Headwater portions of the Middle and South Forks of the Rogue and the South Fork of Little Butte Creek also retain small populations. Brook trout have been found in streams leading out of Bolan, Tannen, East Tannen, and Miller lakes in the Siskiyou and undocumented stocking may have established brook trout in the headwater sections of Sucker Creek.

Brook trout spawn in the Rogue basin during October and November. They mature at 5.5 to 7.0 inches at the head of the Rogue River and 9.0 to 11.0 inches in the North Fork area.

### Management Concerns

Non-native brook trout planted in primitive lakes may impact indigenous cutthroat, rainbow, and anadromous populations downstream. Inflow and outflow streams from primitive lakes should be sampled to insure that indigenous populations in running waters are not impacted by stocking practices in the primitive lakes.

## Cutthroat Trout

### Background and Status

Cutthroat trout (*Oncorhynchus clarki*) are native to the Rogue River basin. They are present in three life history types; anadromous coastal cutthroat (sea-run), migratory resident cutthroat (fluvial), and non-migratory resident cutthroat (resident).

**Sea-run Cutthroat:** Anadromous cutthroat were found primarily in the Applegate and Illinois drainages through the late 1950s (Rivers in press). Less than 5 per year have been captured in annual seining surveys conducted by ODFW at Huntley

Park since 1974. Since 1978, distribution of sea-run cutthroat has been thought limited to the lower 30 miles of the Rogue River and its estuary (Tomasson 1978).

Anadromous cutthroat may now be in extremely low numbers because of changes made in their spawning and rearing habitat (ODFW, 1991). Little is known about the migratory habits of sea-run cutthroat in the Rogue River though it is unlikely they migrate beyond the estuary. Based on observations made elsewhere in Oregon, it is thought that they migrate downstream to the estuary from April to May, feed on abundant estuarine prey species during the summer, and migrate back upstream in October and November.

Since the saltwater portion of the searun's life history is confined to the estuary, and the Rogue estuary is small, mortality from fishing and other sources is probably high. Most of the population (75%) migrates first at age 2, while 20% migrate at age 1, and only 4.6% migrate first at age 3. Only 50% of those individuals spending their second summer in the estuary have spawned (Tomasson, 1978).

Cutthroat do not spawn every year after maturing. Because cutthroat spawn in small tributaries, age-class strength is probably limited by spring flows. Spawning is confined to small gravelly streams, and juveniles rear in summer flows of less than 5 cfs.

The anadromous cutthroat is near its southern distribution boundary in the Rogue basin. Because of this, Rogue Basin cutthroat may have adopted "specific life history traits" in order to survive and maintain a population in the Rogue River. These adaptations must be understood before a sound management plan can be implemented (Tomasson 1978). Since Tomasson completed his thesis in 1978, the city of Gold Beach has built a boat basin that now encompasses a large part of the estuary. More studies are needed to determine the effects of the boat basin construction and operation on this fragile population.

**Fluvial Cutthroat:** Cutthroat that migrate between tributaries and the mainstem Rogue, Applegate, and Illinois rivers are called "fluvial" cutthroat. This life history type is found in all major drainage areas, but their most concentrated spawning areas are in the Applegate and Illinois drainages. Only a few migrate to the upper Rogue above Gold Ray Dam. Most spawning specimens have been found in April.

**Resident Cutthroat:** Resident (non-migrant) cutthroat are located in nearly all undisturbed headwater areas of the basin. Greatest abundance occurs in streams originating in the Siskiyou Range and the Umpqua Divide. These cutthroat are more abundant than any of the migratory strains, although their numbers have been greatly reduced by logging damage to small headwater streams. Good populations exist in undisturbed feeder streams

characterized by heavy overstory and cover. Depending on elevation and water temperatures, spawning extends from mid-March to late April.

### **Introduced Cutthroat**

The Montana blackspotted cutthroat was obtained by the Oregon Game Commission from Yellowstone National Park in 1922 and packed into Squaw Lake. The original form has become rare because of crossbreeding with the native *O. clarki* (Rivers, in press). Other non-native forms of cutthroat that have been stocked in Squaw Lakes include; the Twin Lakes stock, a stock of blackspotted cutthroat from Washington, and the Long Tom cutthroat, a coastal cutthroat from the Willamette Valley in Oregon (Oregon Department of Fish and Wildlife, Fish Division, Portland, Oregon). The migratory habits of these forms in the Rogue basin are unknown.

### **Management Concerns**

Because of destruction and degradation of spawning, rearing, and estuarine habitat since Thomasson completed his work in 1978, anadromous cutthroat populations in the basin have declined in numbers. The increase in the human rural population, and the demands placed upon watersheds by agriculture, mining, and forestry activities in the last hundred years (documented in the Habitat section of this plan) have resulted in decreased habitat for fluvial and resident cutthroat in the Rogue River basin.

## **Brown Trout**

### **Background and Status**

Brown trout (*Salmo trutta*) are not native to the Rogue River basin. There are no records of the brown trout's introduction into the Rogue River, however, it is rumored that a group of people intending to stock Crater Lake around 1900 were forced by deep snow to liberate brown trout in upper Rogue waters above Prospect. Other sources indicate that brown trout were introduced into the North Fork of the upper Rogue from fish used to stock the North Umpqua River in 1936. Brown trout are occasionally caught (less than 5 per year) in Lost Creek Lake near the inflow of the North Fork of the Rogue River.

## **Rainbow Trout**

### **Background and Status**

Resident rainbow trout (*Oncorhynchus mykiss*) are prevalent throughout the upper reaches of the Rogue River basin. No statistically valid estimates of trout abundance have been made in the Rogue River basin by ODFW. There are, however, some

educated guesses of trout distribution in selected streams in the ODFW stream planning forms (Appendix Table A-2).

Few stocking records are available to distinguish wild from hatchery stocks, however, rainbow are the dominant native trout of the basin (Rivers in press). Their range overlaps that of steelhead in most streams, with resident rainbow predominating towards the headwaters. The steelhead, (*Oncorhynchus mykiss*), is a sea-run form of the rainbow trout. Resident rainbow are also present in tributaries of the lower Rogue River.

Rainbow trout also share streams with resident cutthroat trout, particularly in higher elevation streams of the Siskiyou. In these tributaries, cutthroat typically dominate extreme headwater portions of streams with only cutthroat found above barriers and only rainbow below. Where no barriers exist, a more gradual decrease in rainbow numbers is encountered upstream. The downstream range of resident rainbow varies with each tributary system and is usually associated with the upstream distribution of steelhead.

Hatchery rainbow (Cape Cod stock) are planted in a few of the running waters of the Rogue River basin. These areas include the main Rogue and Applegate rivers, and Big Butte Creek. They are known to establish residency when planted in cold, clear waters of the higher elevations. Rainbow planted lower in the drainage may drift downstream from the point of release. Cape Cod rainbow (planted since the mid-1970s), do not migrate as readily from the stocking site as other strains.

Rainbow trout grow in direct proportion to the seasonal temperature strata to which they are exposed. Growth is slowest in the high elevation tributaries of the Cascade Range where four year old fish have been found to grow to only 4 to 5 inches in length.

Most rainbow trout in the Rogue River basin mature by the end of their third year. Spawning occurs from March through May, and as late as July at the higher elevations (Rivers in press).

### **Management Concerns**

Howard Prairie, Hyatt, Little Hyatt, and Keene reservoirs historically drain into Jenny Creek, a tributary to the Klamath basin which contains a genetically unique population of rainbow trout. The Talent and Medford irrigation districts presently keep these reservoirs at less than full levels through irrigation water withdrawals. However, these reservoirs could, when full, overflow into Jenny Creek and endanger the genetic integrity of the Jenny Creek trout which is closely related to the redband trout of Eastern Oregon and has been listed as a sensitive species by state and federal agencies. Steps need to be taken to insure that hatchery rainbow planted in these reservoirs do not breed with this unique stock.

Hatchery trout stocked into lakes, reservoirs, and ponds of the basin may escape downstream and hybridize with the wild rainbow, steelhead, and cutthroat trout present in the running waters of the basin. Wherever a reservoir, lake, or pond is fed by or drains into a stream with wild salmonids, compliance with the Wild Fish Management Policy needs to be evaluated, and if needed, preventive measures taken to assure protection of wild populations.

#### **Management Considerations**

Inventories are needed to assess the status of Rogue basin trout populations with respect to the Wild Fish Management Policy. Resident rainbow share waters with steelhead (sea-run rainbow) and cutthroat of varying life histories, in the upper Rogue, Applegate, and Illinois river basins and the tributaries of the Rogue below Agness.

Natural production of all indigenous species below Savage Rapids Dam may be impacted by the presence of the protozoan parasite *Ceratomyxa shasta*. Both resistant carrier and infected trout may release spores that cause native fish to become infested and may cause death. Because of these concerns, ODFW pathologists suggest that no highly susceptible species be stocked below Savage Rapids Dam in the Rogue River (memorandum dated 25 March 1992 from Rich Holt, Oregon Department of Fish and Wildlife, Research and Development Section, Corvallis, Oregon).

## MANAGEMENT ALTERNATIVES

Two alternatives for the management of trout in the running waters of the Rogue River basin have been developed. These alternatives are both compatible with the Wild Fish Management Policy (WFMP).

### Alternative 1

**Policy 1.** Native rainbow and cutthroat trout and introduced brown and brook trout shall be managed for natural production consistent with the wild fish alternative for trout (ODFW 1987b).

**Policy 2.** Introductions of salmonids above barriers, barrier removal projects, and ladder construction projects shall follow the guidelines in the Stocking Policy Review Process of ODFW.

**Objective 1.** Maintain the genetic diversity and abundance of native trout populations in the running waters of the Rogue River basin.

### Assumptions and Rationale

1. The Rogue basin supports naturally reproducing populations of rainbow, cutthroat, brown, and brook trout.
2. Anadromous cutthroat trout have been identified as a stock of concern by ODFW.
3. Monitoring the distribution and abundance of populations of trout provides an indication of their health and adaptability as well as providing information on unique wild trout populations.
4. Rainbow and cutthroat trout abundance in the Illinois River basin is depressed because of past habitat degradation.
5. Releases of hatchery trout near areas where wild trout rear and spawn may decrease genetic fitness in wild trout populations.
6. Trout are infected with the protozoan *Ceratomyxa shasta* in all areas below Savage Rapids Dam (RM 107).

### Actions

**Action 1.1.** Establish indices of trout distribution and abundance in streams in the Rogue River and tributaries.



- Action 1.2. Verify and document the distribution of anadromous cutthroat trout in the Rogue River basin.
- Action 1.3. Verify and document the distribution and abundance of all naturally-producing trout species in the Rogue River basin.
- Action 1.4. If necessary, modify the hatchery steelhead program to minimize effects on unique wild trout populations in the Rogue River basin.
- Action 1.5. Using morphological and biochemical parameters, establish baseline data sets on genetic characteristics of indigenous rainbow and cutthroat trout.
- Action 1.6. Conduct studies on the relative resistance of indigenous rainbow and cutthroat trout to *Ceratomyxa shasta* in the Rogue system.

**Objective 2. Provide diverse angling opportunities for trout in the rivers, streams, and creeks of the Rogue River basin.**

#### Assumptions and Rationale

1. Currently, fisheries in these waters are of a general consumptive nature.
2. In some areas of the basin such as the Applegate, access to running waters is limited.

#### Actions

- Action 2.1. Evaluate angling pressure and harvest rates of trout through creel studies on key streams in order to determine consumptive use and impacts on wild trout populations.
- Action 2.2. In cooperation with the Oregon State Police, formulate angling regulations to protect trout populations.
- Action 2.3. Identify angler access problems and improve access where possible.

**Objective 3. Provide a nonconsumptive fishery for trout in the Illinois River basin.**

### Assumptions and Rationale

1. No hatchery trout are currently released into the waters of the Illinois River basin, with the exception of a few lakes.
2. Private parties are allowed to stock private ponds with hatchery fish from approved sources.
3. All stocked ponds must be screened to prevent escape of the hatchery fish and their offspring.
4. Impacts of stocking hatchery trout in private lakes and ponds are not known.
5. Habitat problems limit the distribution and abundance of trout in the Illinois River basin.

### Actions

- Action 3.1. Conduct periodic creel surveys and trout population inventories in selected index reaches of the Illinois River basin.
- Action 3.2. Determine whether trout stocked in Illinois basin lakes and ponds could become established in running waters.
- Action 3.3. Conduct surveys to determine if private pond owners are maintaining screens and other acceptable mechanisms to prevent hatchery fish from escaping into the wild.
- Action 3.4. Evaluate the current stocking policy to determine if wild fish are being adequately protected in the Illinois basin and modify if needed.
- Action 3.5. Develop and implement a program to protect, enhance, and restore trout habitat in running waters of the Illinois River basin.
- Action 3.6. Monitor angling pressure and determine mortality rates of fish caught and released in the running waters of the Illinois River basin.

**Objective 4. Maintain, restore, and improve the quality of trout habitat in running waters of the Rogue River basin.**

### Assumptions and Rationale

1. Habitat management is the basis for wild fish management.

2. Protection and enhancement of wild trout populations can be achieved principally through habitat protection and improvement.

#### **Actions**

- Action 4.1. Inventory all trout habitat in the running waters of the Rogue basin.
- Action 4.2. Develop a habitat improvement plan for the running waters of the Rogue River basin.

#### **Alternative 2**

- Policy 1.** Native cutthroat and rainbow trout of the Illinois River subbasin shall be managed for natural production consistent with the wild fish management alternative for trout. (1987b).
  - Policy 2.** Native rainbow and cutthroat trout, and introduced brown and brook trout in all other Rogue River subbasins, shall be managed for natural production consistent with the basic yield management alternative for trout (1987b).
  - Policy 3.** Introductions of salmonids above barriers, barrier removal projects, and ladder construction projects must follow ODFW Stocking Policy Review Process guidelines.
- Objective 1.** Maintain the genetic diversity and abundance of native trout populations in the running waters of the Rogue River basin.

#### **Assumptions and Rationale**

1. The Rogue basin supports naturally reproducing populations of rainbow, cutthroat, brown, and brook trout.
2. Anadromous cutthroat trout have been identified as a stock of concern by ODFW.

3. Monitoring the distribution and abundance of populations of trout provides an indication of their health and adaptability.
4. Rainbow and cutthroat trout abundance in the Illinois River basin is depressed because of past habitat degradation.
6. Releases of hatchery trout near areas where wild trout rear and spawn may decrease genetic fitness in wild trout populations.
7. Trout are infected with the protozoan *Ceratomyxa shasta* in areas below Savage Rapids Dam (RM 107). The presence of this parasite limits the distribution of trout in the Rogue River.

#### **Actions**

- Action 1.1. Establish indexes of trout distribution and abundance in streams of the Rogue River and tributaries.
- Action 1.2. Verify and document distribution of anadromous cutthroat trout in the Rogue River basin.
- Action 1.3. Verify and document the distribution and abundance of all naturally reproducing trout in the Rogue basin.
- Action 1.4. If necessary, modify the hatchery steelhead program to minimize effects on unique wild trout populations in the Rogue River and tributaries.
- Action 1.5. Establish baseline data sets on the genetic characteristics of indigenous rainbow and cutthroat trout, using morphological and biochemical parameters.
- Action 1.6. Conduct studies on the relative resistance of indigenous rainbow and cutthroat trout to *Ceratomyxa shasta* in the Rogue system.

**Objective 2. Provide diverse angling opportunities for trout in the rivers, streams, and creeks of the Rogue River basin.**

#### **Assumptions and Rationale**

1. Fisheries in these waters are currently of a general consumptive nature.

2. In some areas of the basin access to running waters is limited.

#### **Actions**

- Action 2.1. Evaluate angling pressure and harvest rates of trout through creel studies on key streams in order to determine consumptive use and impacts on wild trout populations.
- Action 2.2. In cooperation with the Oregon State Police, formulate angling regulations to protect trout populations.
- Action 2.3. Identify angler access problems and improve access where possible.

**Objective 3. Provide a nonconsumptive fishery for trout in the Illinois River basin.**

#### **Assumptions and Rationale**

1. No hatchery trout are currently released into the waters of the Illinois River basin, with the exception of a few lakes.
2. Private parties are allowed to stock private ponds with hatchery fish from approved sources.
3. All stocked ponds must be screened to prevent escape of the hatchery fish and their offspring.
4. The impacts of stocking hatchery trout in private lakes and ponds are not known.
5. Habitat problems limit the distribution and abundance of trout in the Illinois River basin.

#### **Actions**

- Action 3.1. Conduct periodic creel surveys and trout population inventories in selected index reaches of the Illinois River basin.
- Action 3.2. Determine whether trout stocked in the Illinois basin lakes and ponds could become established in running waters.
- Action 3.3. Conduct surveys to determine if private pond owners are maintaining screens and other acceptable mechanisms to prevent hatchery fish from escaping into the wild.

Action 3.4. Evaluate the current stocking policy to determine if wild fish are being adequately protected in the Illinois basin and modify if needed.

Action 3.5. Develop and implement a program to protect, enhance, and restore the trout habitat in the running waters of the Illinois River basin.

Action 3.6. Monitor angling pressure and mortality rates of fish caught and released in the running waters of the Illinois River basin.

**Objective 4. Provide angler opportunities and recreation by stocking legal sized rainbow trout in the streams and reaches listed in Table .**

#### Assumptions and Rationale

1. The consumptive demand for trout is greater than natural production can provide.
2. Additional angling opportunities can be provided through the release of hatchery rainbow where native trout populations are insufficient to support a fishery.

#### Actions

Action 4.1. Conduct periodic creel surveys on key streams to determine consumptive use and impacts on wild trout populations.

Table . Legal-sized rainbow stocking program for the Rogue River basin.

Stream	River miles	Current release
Big Butte Creek	RM 0-20	9,000
Applegate River	RM 32-50	3,000
Middle Fork Applegate River	RM 0-2	2,500
North Fork Rogue River	RM 165-205	21,000
Crater Creek	RM 0-5	2,100
Mill Creek	RM 0-10	4,200
Union Creek	RM 0-5	5,600
Minnehaha Creek	RM 0-2	2,100
Rogue River	RN 107-157	37,000

**Objective 5. Minimize the impacts of hatchery rainbow on the production and genetic integrity of native trout and salmon.**

#### Assumptions and Rationale

1. Hatchery fish are released in streams and rivers used by native trout and wild anadromous salmonids.
2. Hatchery trout compete with native fish for food and habitat.
3. The increased angling effort resulting from releases of hatchery trout also increases the harvest of native trout and salmon.
4. Less than 1% of Cape Cod legal rainbow released into the Rogue River and tributaries survive to the next year.
5. Cape Cod stock contribute less than 10% to rainbow trout natural production in the Rogue River and tributaries.

#### Actions

- Action 5.1. Mark all hatchery trout.
- Action 5.2. Post signs at popular angling sites to inform anglers about differences between salmon/steelhead and wild and hatchery trout.
- Action 5.3. Estimate harvest rates for legal-sized trout.
- Action 5.4. Harvest a minimum of 40% of stocked hatchery trout.

Action 5.5. Continue to release Cape Cod hatchery rainbow unless it is determined that they are contributing more than 10% to wild trout or steelhead production.

Action 5.6. Document holdover of hatchery rainbow from creel surveys and inventory data and estimate the contribution of hatchery rainbow to natural production.

**Objective 6. Maximize the harvest of hatchery rainbow trout.**

**Assumptions and Rationale**

1. Angler catch rate of hatchery rainbow trout can be increased without increasing release numbers.
2. Increased harvest would minimize the impacts of hatchery rainbow on native fish.

**Actions**

Action 6.1. Maintain a harvest rate on catchable rainbow trout of at least 40% of the number released.

Action 6.2. Continue to use a hatchery stock that demonstrates a minimum of migratory behavior.

**Objective 7. Maintain, restore, and improve the quality of habitat in the running waters of the Rogue River basin.**

**Assumptions and Rationale**

1. Habitat management is the basis for wild fish management.
2. Protection and enhancement of wild trout populations can be achieved principally through habitat protection and improvement.

**Actions**

Action 7.1. Inventory all trout habitat in running waters of the Rogue basin.

Action 7.2. Develop a habitat improvement plan for the Rogue River basin.



**APPENDIX A**

Tables of data related to trout in running waters  
in the Rogue River basin.

Appendix Table A-1. Trout introductions into the running waters of the Rogue River basin compiled by ODFW personnel (personal communication dated 1 August 1990 with Jim Griggs, Fish Division, Oregon Department of Fish and Wildlife, Portland, Oregon).

Water	County	Year	Species	Number	Source
SUCKER CREEK	JOSEPHINE	1926	BT <sup>1</sup>	9,000	OGC <sup>2</sup>
SUCKER CREEK	JOSEPHINE	1927	BT	9,000	OGC
SUCKER CREEK	JOSEPHINE	1928	RB <sup>3</sup>	30,000	OGC
ROGUE RIVER	JOSEPHINE	1931	ST <sup>4</sup>	320,000	OGC
ROGUE RIVER	JOSEPHINE	1932	ST	219,900	OGC
ROGUE RIVER	JOSEPHINE	1933	ST	580,000	OGC
ROGUE RIVER	JOSEPHINE	1934	ST	325,000	OGC
IKE'S CREEK GULCH	JOSEPHINE	1931	BT	1,200	OGC
WILLOW CREEK	JACKSON	1934	CT <sup>5</sup>	20,000	OGC
UNION CREEK	JACKSON	1926	BT	13,440	OGC
UNION CREEK	JACKSON	1928	BT	19,800	OGC
UNION CREEK	JACKSON	1929	BT	54,870	OGC
UNION CREEK	JACKSON	1932	BT	30,000	OGC
UNION CREEK	JACKSON	1932	RB	20,000	OGC
UNION CREEK	JACKSON	1933	RB	30,000	OGC
RANCHAREA CR	JACKSON	1934	CT	22,500	OGC
REESE CR	JACKSON	1929	ST	55,000	OGC
ROGUE R	JACKSON	1928	BT	17,640	OGC
ROGUE R	JACKSON	1929	ST	45,000	OGC
ROGUE (PAYTON BR)	JACKSON	1930	ST	40,000	OGC
ROGUE R	JACKSON	1930	RB	95,000	OGC
ROGUE (SAVAGE)	JACKSON	1930	ST	360,975	OGC
ROGUE R	JACKSON	1930	CO <sup>6</sup>	28,500	OGC
ROGUE R	JACKSON	1931	ST	1,290,000	OGC
ROGUE R	JACKSON	1932	ST	450,000	OGC
ROGUE R	JACKSON	1933	ST	45,000	OGC
ROGUE R UPPER R	JACKSON	1933	ST	50,000	OGC
ROGUE R	JACKSON	1933	RB	48,500	OGC

<sup>1</sup> BT = Brook Trout

<sup>2</sup> OGC = Oregon Game Commission (now Oregon Department of Fish and Wildlife).

<sup>3</sup> RB = Rainbow trout

<sup>4</sup> ST = Steelhead trout

<sup>5</sup> CT = Cutthroat trout

<sup>6</sup> CO = Coho salmon

Appendix Table A-1 (continued)

Water	County	Year	Species	Number	Source
ROGUE R	JACKSON	1934	ST	279,000	OGC
ROGUE R	JACKSON	1934	CT	25,000	OGC
ROGUE R UPPER R	JACKSON	1934	CT	12,500	OGC
ROGUE R S FORK	JACKSON	1926	CO	20,000	OGC
BIG BUTTE CR SF	JACKSON	1925	BT	10,000	OGC
BIG BUTTE CR SF	JACKSON	1925	ST	770,000	OGC
NATIONAL CR	JACKSON	1932	RB	25,000	OGC
NATIONAL CR	JACKSON	1933	RB	25,000	OGC
NATIONAL CR	JACKSON	1934	CT	5,000	OGC
ROGUE R N FORK	JACKSON	1926	BT	10,500	OGC
ROGUE R N FORK	JACKSON	1934	BT	50,000	OGC
ROGUE R MID FK	JACKSON	1926	BT	23,940	OGC
HURRY ON CR	JACKSON	1930	RB	90,000	OGC
HURRY ON CR	JACKSON	1934	CT	10,000	OGC
FOUR BIT CR	JACKSON	1934	CT	32,500	OGC
ELK CR	JACKSON	1933	CT	15,000	OGC
CRATER CR	JACKSON	1928	BT	19,800	OGC
CRATER CR	JACKSON	1932	RB	25,000	OGC
CRATER CR	JACKSON	1933	RB	25,000	OGC
CRATER CR	JACKSON	1934	CT	10,000	OGC
CASTLE CR	JACKSON	1929	BT	55,770	OGC
COPELAND CR	JACKSON	1928	BT	15,500	OGC
COPELAND CR	JACKSON	1929	BT	10,800	OGC
COPELAND CR	JACKSON	1932	RB	25,000	OGC
COPELAND CR	JACKSON	1933	RB	60,000	OGC
COPELAND CR	JACKSON	1934	CT	5,000	OGC
LITTLE BUTTE CR	JACKSON	1927	RB	429,315	OGC
LITTLE BUTTE CR	JACKSON	1932	RB	2,700	OGC
LITTLE BUTTE CR	JACKSON	1932	ST	74,400	OGC
LITTLE BUTTE CR	JACKSON	1934	RB	80,000	OGC
LITTLE BUTTE CR	JACKSON	1934	ST	65,000	OGC
BUCK CR	JACKSON	1930	BT	1,260	OGC

Appendix Table A-1 (concluded)

Water	County	Year	Species	Number	Source
BYBEE CR	JACKSON	1926	BT	27,650	OGC
BYBEE CR	JACKSON	1928	BT	16,500	OGC
BYBEE CR	JACKSON	1929	BT	55,180	OGC
BIG BUTTE CR	JACKSON	1925	RB	150,000	OGC
BIG BUTTE CR	JACKSON	1925	BT	20,000	OGC
BIG BUTTE CR	JACKSON	1925	ST	251,010	OGC
BIG BUTTE CR	JACKSON	1925	CO	40,000	OGC
BIG BUTTE CR	JACKSON	1925	CH	2,780	OGC
BIG BUTTE CR	JACKSON	1926	CO	78,689	OGC
BIG BUTTE CR	JACKSON	1927	BT	32,000	OGC
BIG BUTTE CR	JACKSON	1927	ST	340,511	OGC
BIG BUTTE CR	JACKSON	1928	ST	821,179	OGC
BIG BUTTE CR	JACKSON	1928	RB	412,119	OGC
BIG BUTTE CR	JACKSON	1929	ST	630,000	OGC
BIG BUTTE CR	JACKSON	1930	ST	265,000	OGC
BIG BUTTE CR	JACKSON	1930	RB	133,000	OGC
BIG BUTTE CR	JACKSON	1930	CO	49,000	OGC
BIG BUTTE CR	JACKSON	1931	ST	312,800	OGC
BIG BUTTE CR	JACKSON	1932	ST	150,000	OGC
BIG BUTTE CR	JACKSON	1933	CT	12,400	OGC
BIG BUTTE CR	JACKSON	1934	ST	39,900	OGC
APPLEGATE R	JOSEPHINE	1934	ST	15,000	OGC
APPLEGATE R	JACKSON	1926	BT	15,000	OGC
APPLEGATE R	JACKSON	1928	BT	15,060	OGC
APPLEGATE R	JACKSON	1934	ST	30,000	OGC
LITTLE APPLEGATE	JACKSON	1932	ST	160,000	OGC
LITTLE APPLEGATE	JACKSON	1933	ST	170,000	OGC
LITTLE APPLEGATE	JACKSON	1934	ST	175,000	OGC
LITTLE APPLEGATE	JACKSON	1933	CT	15,000	OGC

Appendix Table A-2. Table of trout distribution in the Rogue River basin.

Creek Cutthroat	Miles Brook	Tributary 1		Tributary 2		Rainbow				
		Brown	WFMP	Compliance		Survey	resident	hatchery	resident	fluvial
sea-run trout	trout	Yes	No	Yes	No	resident				
ILLINOIS RIVER ?	6.0	ROGUE RIVER X			X	X			X	X
ILLINOIS RIVER ?	7.0	ROGUE RIVER X			X	X			X	X
ILLINOIS RIVER X	43.5	ROGUE RIVER X				X			X	X
ILLINOIS R, W FK X	15.3	ROGUE RIVER X				X			X	X
ILLINOIS R, E FK X	14.0	ROGUE RIVER X				X			X	X
FOX CR X	1.0	ILLINOIS R X		ROGUE R		X			X	
LAWSON CR X	8.0	ILLINOIS R X		ROGUE R		X			X	
HORSE SIGN CR X	6.2	ILLINOIS R X		ROGUE R		X			X	
INDIGO CR X	6.2	ILLINOIS R X		ROGUE R		X			X	
INDIGO CR, E FK X	7.2	INDIGO CR X		ILL R		X			X	
INDIGO CR, W FK X	6.5	INDIGO CR X		ILL R		X			X	

INDIGO CR, N FK	3.0	INDIGO CR	ILL R	X	X
X	X				
SILVER CR	6.3	ILLINOIS R		X	X
X	X				
SILVER CR, S FK	10.3	SILVER CR	ILL R	X	X
X	X				
SILVER CR, N FK	12.0	SILVER CR	ILL R	X	X
X	X				
COLLIER CR	6.5	ILLINOIS R		X	X
X	X				
COLLIER CR, N FK	1.0	COLLIER CR	ILL R	X	X
X	X				
KLONDIKE CR	7.0	ILLINOIS R		X	X
X	X				
YUKON CR	2.8	KLONDIKE CR	ILL R	X	X
X	X				
PINE CR	1.8	ILLINOIS R		X	X
X	X				
CLEAR CR	1.5	ILLINOIS R		X	X
X	X				
NOME CR	2.0	ILLINOIS R		X	X
X	X				
LABRADOR CR	2.0	ILLINOIS R		X	X
X	X				
PANTHER CR	2.5	ILLINOIS R		X	X
X	X				
BRIGGS CR	14.0	ILLINOIS R		X	X
X	X				

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Appendix Table A-2. (continued).

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Creek Cutthroat	Miles Brook	Tributary 1		Tributary 2		Rainbow					
		Brook	Brown	WFMP	Compliance	Survey	resident	hatchery	resident	fluvial	
sea-run	trout	trout	Yes	No	Yes	No					
SOLDIER CR X	2.0 X	BRIGGS CR			ILL R			X			X
HORSE CR X	3.0 X	BRIGGS CR			ILL R			X			X
MYERS CR X	2.5 X	BRIGGS CR			ILL R			X			X
DAILEY CR X	3.3 X	ILLINOIS R						X			X
RANCHERIA CR X	6.5 X	ILLINOIS R						X			X
FALL CR X	4.0 X	ILLINOIS R						X			X
SIXMILE CR X	4.0 X	ILLINOIS R						X			X
DEER CR X	13.0 X	ILLINOIS R						X			X
DEER CR, N FK X	3.0 X	DEER CR			ILL R			X			X
DEER CR, S FK X	6.0 X	DEER CR			ILL R			X			X
CLEAR CR X	6.0 X	DEER CR			ILL R			X			X
ANDERSON CR X	5.0 X	DEER CR			ILL R			X			X
DRAPER CR X	5.5 X	DEER CR			ILL R			X			X
MCMULLIN CR X	7.0 X	DEER CR			ILL R			X			X
THOMPSON CR	7.0	MCMULLIN CR			DEER CR						

CROOKS CR	6.0	DEER CR	ILL R	X	X
X	X				
WHITE CR	1.2	DEER CR	ILL R	X	X
X	X				
JOSEPHINE CR	11.0	ILLINOIS R		X	X
X	X				
CANYON CR	5.0	JOSEPHINE CR	ILL R	X	X
X	X				
REEVES CR	3.5	ILLINOIS R		X	X
X	X				
HOLTON CR	3.0	ILLINOIS R		X	X
X	X				
WOODCOCK CR	2.5	ILL R, W FK	ILL R	X	X
X	X				
MENDENHALL CR	4.0	ILL R, W FK	ILL R		
PARKER CR	3.5	ILL R, W FK	ILL R		
ROUGH & READY CR	5.0	ILL R, W FK	ILL R		

Appendix Table A-2. (continued).

Creek Cutthroat	Miles Brook	Tributary 1		Tributary 2		Rainbow				
		Brown	WFMP	Compliance		Survey	resident	hatchery	resident	fluvial
sea-run trout	trout	Yes	No	Yes	No					
R & R CR, N FK	7.0	ILL R, W FK		ILL R						
R & R CR, S FK	6.0	ILL R, W FK								
WOOD CR	4.5	ILL R, W FK				X			X	
X	X									
FRY GULCH CR	2.5	WOOD CR		ILL R						



WHISKEY CR	3.3	ILLINOIS R		X	X
X	X				
ELK CR	3.5	ILL R, W FK	ILL R	X	X
X	X				
DWIGHT CR	1.0	ELK CR	ILL R W	X	X
X	X				
TRAPPER GULCH CR	2.0	ELK CR	ILL R W	X	X
X	X				
CHAPMAN CR	4.0	ILL R, E FK	ILL R	X	X
X	X				
SUCKER CR	26.0	ILL R, E FK	ILL R	X	X
X	X				
BEAR CR	3.2	SUCKER CR	ILL R E	X	X
X	X				
LITTLE GRAYBACK	3.5	SUCKER CR	ILL R E	X	X
X	X				
GRAYBACK CR	7.5	SUCKER CR	ILL R E	X	X
X	X				
CAVE CR	3.8	SUCKER CR	ILL R E	X	X
X	X				
BOLAN CR	3.3	SUCKER CR	ILL R E	X	X
X	X				
ALTHOUSE CR	16.8	ILL R, E FK	ILL R	X	X
X	X				
ELDER CR	3.5	ILL R, E FK	ILL R	X	X
X	X				
PAGE CR	3.0	ILL R, E FK	ILL R	X	X
X	X				
GRAVES CR		MAINSTEM	ROGUE R	X	X
X	X				
GRAVES CR		WOLF CR		X	X
X	X				
GRAVES CR		TRIBS		X	X
X	X				

TAYLOR CR		MAINSTEM			X			X
X	X							
TAYLOR CR		TRIBS			X			X
X	X							
HOG CR					X			X
X	X							
JUMPOFF JOE CR		MAINSTEM			X			X
X	X							

Appendix Table A-2. (continued).

Creek <u>Cutthroat</u>	Miles Brook	Tributary 1		Tributary 2		<u>Rainbow</u>					
		Brook	Brown	WFMP	Compliance	<u>Survey</u>	resident	hatchery	resident	fluvial	
sea-run trout	trout		Yes	No	Yes	No					
JUMPOFF JOE CR		TRIBS			ROGUE R			X			X
X	X										
GALICE CR		MAINSTEM						X			X
X	X										
GALICE CR		TRIBS						X			X
X	X										
PICKETT CR								X			X
X	X										
SHAN CR								X			X
X	X										
LIMPY CR					ROGUE R			X			X
X	X										
APPLEGATE R		MAINSTEM						X			X
X	X										

APPLEGATE R		TRIBS		X		X		X
X	X							
APPLEGATE R		SLATE CR	MAINSTEM	X		X		
X	X							
APPLEGATE R		SLATE CR	TRIBS	X		X		
X	X							
APPLEGATE R		CHENEY CR	MAINSTEM	X		X		
X	X							
APPLEGATE R		CHENEY CR	TRIBS	X		X		
X	X							
APPLEGATE R		JACKSON CR		X		X		
X	X							
APPLEGATE R		MURPHY CR		X		X		
X	X							
APPLEGATE R		GREYS CR		X		X		
X	X							
APPLEGATE R		BOARD SHANTY CR		X		X		
X	X							
APPLEGATE R		CARIS CR		X		X		
X	X							
APPLEGATE R		WILLIAMS CR	MAINSTEM	X		X		X
X	X							
APPLEGATE R		WILLIAMS CR	TRIBS	X		X		
X	X							
APPLEGATE R		SLAGLE CR		X		X		
X	X							
APPLEGATE R		THOMPSON CR	MAINSTEM	X		X		
X	X							
APPLEGATE R		THOMPSON CR	TRIBS	X		X		
X	X							
APPLEGATE R		HUMBUG CR		X		X		
X	X							
APPLEGATE R		FOREST CR		X		X		
X	X							
APPLEGATE R		LITTLE APPELATE	MAINSTEM	X		X		
X	X							

Appendix Table A-2. (continued).

Creek Cutthroat	Miles Brook	Tributary 1		Tributary 2		Rainbow				
		Brook	Brown	WFMP	Compliance	Survey	resident	hatchery	resident	fluvial
sea-run	trout	trout	Yes	No	Yes	No				
APPLEGATE R X								X		X
APPLEGATE R X								X		X
APPLEGATE R X								X		X
APPLEGATE R X								X		X
APPLEGATE R X								X		X
SAND CR X								X		X
GILBERT CR X								X		X
FRUITDALE CR X								X		X
JONES CR X								X		X
SAVAGE CR X								X		X

EVANS CR		MAINSTEM	ROGUE R	X	X
X	X				
EVANS CR		TRIBS		X	X
X	X				
EVANS CR		MAPLE CR		X	X
X	X				
EVANS CR		FIELDER CR		X	X
X	X				
EVANS CR		BEAR BRANCH CR		X	X
X	X				
EVANS CR		MAY CR		X	X
X	X				
EVANS CR		PLEASANT CR	MAINSTEM	X	X
X	X				
EVANS CR		PLEASANT CR	TRIBS	X	X
X	X				
EVANS CR		SYKES CR		X	X
X	X				
EVANS CR		W FK	MAINSTEM	X	X
X	X				
EVANS CR		W FK	TRIBS	X	X
X	X				
EVANS CR		E FK	MAINSTEM	X	X
X	X				
EVANS CR		E FK	TRIBS	X	X
X	X				
WARDS CR		ROGUE RIVER		X	X
X	X				
BIRDSEYE CR				X	X
X	X				

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Appendix Table A-2. (continued).

Creek Cutthroat	Miles Brook	Tributary 1		Tributary 2		Rainbow		resident	fluvial
		Brown	WFMP	Compliance	Compliance	Survey	hatchery		
sea-run trout	trout	Yes	No	Yes	No				
FOOTS CR		MAINSTEM		ROGUE R		X		X	
X	X								
FOOTS CR		TRIBS				X		X	
X	X								
SARDINE CR						X		X	
X	X								
GALLS CR						X		X	
X	X								
SAMS CR		MAINSTEM				X		X	
X	X								
SAMS CR		TRIBS				X		X	
X	X								
KANE CR						X		X	
X	X								
ROGUE R		MAINSTEM				X		X	
X	X								
BEAR CR						X		X	
X	X								
BEAR CREEK TRIBS						X		X	
X	X								
SNIDER CR						X		X	
X	X								
LITTLE BUTTE CR						X		X	
X	X								
N. FORK L. BUTTE						X		X	
X	X								

S. FORK L. BUTTE				X		X
X	X					
LITTLE BUTTE CR				X		X
X	X					
REESE CR				X		X
X	X					
DRY CR				X		X
X	X					
LONG BRANCH				X		X
X	X					
INDIAN CR				X		X
X	X					
TRAIL CR				X		X
X	X					
W. FORK TRAIL CR				X		X
X	X					
TRAIL CR. TRIBS.				X		X
X	X					
LEWIS CR				X		X
X	X					
ELK CR				X		X
X	X					
ELK CR., W. BRAN				X		X
X	X					

Appendix Table A-2. (continued).

Creek	Miles	Tributary 1		Tributary 2		Rainbow				
		Brook	Brown	WFMP	Compliance	Survey	resident	hatchery	resident	fluvial
Cutthroat										
sea-run trout	trout	Yes	No	Yes	No					

ELK CREEK TRIBS		ROGUE RIVER		X		X	
X							
BIG BUTTE CR				X		X	X
X							
BIG BUTTE CR. N.				X		X	
X							
BIG BUTTE CR. S.				X		X	
X							
BIG BUTTE CR. TR				X		X	
X							
ROGUE R GR TO CRH				X		X	
X							
ROGUE R, S FK				X		X	
X							
ROGUE R, N FK				X		X	
X							
ROGUE R, M FK				X		X	
X							
ROGUE RIVER	52.0			X		X	
X							
INDIAN CR	2.3	ROGUE RIVER		X		X	X
X			X				
TRIB-1	2.5	ROGUE RIVER		X		X	X
X			X				
SAUNDERS CR	3.0	ROGUE RIVER		X		X	X
X			X				
EDSON CR	2.5	ROGUE RIVER		X		X	X
X			X				
SQUAW CR	1.0	ROGUE RIVER		X		X	X
X			X				
JIM HUNT	1.5	ROGUE RIVER		X		X	X
X			X				



KIMBALL CR	2.0	ROGUE RIVER			X		X	X
X		?		X				
LOBSTER	11.5	ROGUE RIVER			X		X	X
X		?		X				
LOBSTER NF	4.5	ROGUE RIVER			X		X	X
X		?		X				
LOBSTER SF	5.0	ROGUE RIVER			X		X	X
X		?		X				
IRON CR	1.0	LOBSTER CR	ROGUE R		X		X	X
X		?	X					
TRIB A (S FK)	1.5	LOBSTER CR, RT FK	ROGUE R		X		X	X
X		?	X					
QUOSATANA	8.0	ROGUE RIVER			X		X	X
X		?	X					
SILVER CR	3.0	ROGUE RIVER			X		X	X
X		?	X					
BILL MOORE	1.5	ROGUE RIVER			X		X	X
X		?	X					

Appendix Table A-2. (continued).

Creek	Miles	Tributary 1		Tributary 2		Rainbow				
		Brook	Brown	WFMP	Compliance	Survey	resident	hatchery	resident	fluvial
Cutthroat	trout	trout	Yes	No	Yes	No				
sea-run	trout	trout	Yes	No	Yes	No				
WAKE UP RILEA CR	2.5	ROGUE RIVER								
NAIL KEG CR	2.8	ROGUE RIVER								
PAINTED ROCK CR	0.5	ROGUE RIVER					X		X	X
X		?			X					

SHASTA COSTA CR	17.0	ROGUE RIVER		X		X	X
X		?	X				
FOSTER CR	3.5	ROGUE RIVER		X		X	X
X		?	X				
BILLINGS CR	1.5	ROGUE RIVER					
WATSON CR	2.3	ROGUE RIVER					
FLORA DELL CR	2.2	ROGUE RIVER					
CLAY HILL CR	2.0	ROGUE RIVER					
CLAY HILL, W FK	1.0	CLAY HILL CR	ROGUE R				
TATE CR	1.3	ROGUE RIVER					
BRUSHY BAR CR	1.2	ROGUE RIVER					
EAST CR	0.0	ROGUE RIVER			X	X	X
X		?	X				
JOHNSON CR	0.5	ROGUE RIVER					
PARADISE CR	0.0	ROGUE RIVER					
BLOSSOM BAR CR	2.3	ROGUE RIVER					
BURNS CR	1.4	ROGUE RIVER					
STAIR CR	0.0	ROGUE RIVER					
DOSTLER CR	0.6	ROGUE RIVER					
MULE CR	7.0	ROGUE RIVER			X	X	
?		X					
MULE CR, W FK	3.0	MULE CR	ROGUE R		X	X	
?		X					
LONG GULCH CR	2.0	ROGUE RIVER			X	X	
?		X					
MISSOURI CR	2.0	ROGUE RIVER			X	X	
?		X					
HEWITT CR	2.0	ROGUE RIVER			X	X	
?		X					
SLIDE CR	0.8	ROGUE RIVER			X	X	
?		X					

Appendix Table A-2. (continued).

Creek Cutthroat	Miles Brook	Tributary 1		Tributary 2		Rainbow			
		Brown	WFMP	Compliance	Compliance	Survey	resident	hatchery	resident
sea-run trout	trout	Yes	No	Yes	No	resident	hatchery	resident	fluvial
DITCH CR	2.0	ROGUE RIVER				X			X
?	X								
KELSEY CR	5.5	ROGUE RIVER				X			X
?	X								
KELSEY CR	4.0	ROGUE RIVER				X			X
?	X								
MEADOW CR	3.5	ROGUE RIVER				X			X
?	X								
JENNY CR	4.3	ROGUE RIVER				X			X
?	X								
LITTLE WINDY CR	2.0	ROGUE RIVER				X			X
?	X								
BIG WINDY CR	5.0	ROGUE RIVER				X			X
?	X								
BUNKER CR	5.5	ROGUE RIVER				X			X
?	X								
BRONCO CR	2.0	ROGUE RIVER				X			X
?	X								
HOWARD CR	6.0	ROGUE RIVER				X			X
?	X								
RUSSIAN CR	2.0	ROGUE RIVER				X			X
?	X								
RUM CR	3.5	ROGUE RIVER				X			X
?	X								

WHISKEY CR	2.0	ROGUE RIVER		X	X
?	X				
WHISKEY CR, E FK	3.0	WHISKEY CR	ROGUE R	X	X
?	X				
WHISKEY CR, W FK	4.0	WHISKEY CR	ROGUE R	X	X
?	X				

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Appendix A-3. Management alternatives for trout (ODFW 1987).

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1. Wild fish
    - a. These waters are managed exclusively for wild fish.
    - b. No hatchery trout are released. However, introductions are allowed if they are in a management plan, evaluated to determine impacts on wild trout stocks, and they are approved by the commission.
    - c. Habitat protection and enhancement forms the basis for this management approach.
    - d. Unique native populations may require additional recognition for protection.
  2. Featured species and waters
    - a. This management approach emphasizes species, stocks, and habitats that are uncommon or unique.
    - b. Habitat protection and enhancement form basis for this management approach.
    - c. Special regulations may be necessary to protect the species or its habitat. Both introduced and wild populations can qualify for this option.
  3. Trophy fish
    - a. Waters that are capable of producing large "bragging sized" trout qualify.
    - b. Habitat must be protected, restored, or enhanced to produce large trout.
    - c. Nonconsumptive fisheries are encouraged, and special regulations may be necessary.
  4. Intensive use
    - a. These waters are generally near large population centers, or get a lot of angling pressure.
    - b. Generally a high level of stocking is required.
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Appendix Table A-4. Current annual stocking plan for the running waters of the Rogue River basin<sup>1</sup>.

Water Purpose	Species <sup>2</sup>	Size	Number	Hatchery <sup>2</sup>
APPLEGATE RIVER TROUT	RB	LEGAL	4,568	CRH
APPLEGATE RIVER MITIGATION	STW	SMOLT	149,134	CRH
BIG BUTTE CREEK TROUT	RB	LEGAL	8,655	CRH
ROGUE RIVER TROUT	RB	LEGAL	77,384	CRH
ROGUE RIVER MITIGATION	STS	SMOLT	150,000	CRH
ROGUE RIVER SUPPLEMENTATION	STS	SMOLT	70,000	CRH
ROGUE RIVER RECYCLE EXCESS	STS	ADULTS	598	CRH
SPAWNERS				
ROGUE RIVER MITIGATION	CO	SMOLT	177,308	CRH
ROGUE RIVER MITIGATION	CHS	SMOLT	1,591,900	CRH
ROGUE RIVER MITIGATION	STW	SMOLT	141,694	CRH
ROGUE BASIN STEP	STS	EGG	335,000	CRH
ROGUE BASIN STEP	STW	EGG	45,000	CRH
ROGUE BASIN STEP	CO	EGG	20,000	CRH

<sup>1</sup> Based on 1991 stocking rates.

<sup>2</sup> Species and hatchery codes are: STW = Winter Steelhead, RB = Rainbow Trout, STS = Summer Steelhead, CHS = Spring Chinook Salmon, CO = Coho Salmon, and CRH = Cole M. Rivers Hatchery.



#### REFERENCES

- Currens, K.P. 1990. Genetic Variation of Rainbow Trout (*Oncorhynchus mykiss*) in Jenny Creek, Oregon. Oregon Cooperative Fisheries Research Unit. Oregon State University. Corvallis, Oregon and U.S. Department of the Interior, Bureau of Land Management, Medford, Oregon.