

**ANNUAL PROGRESS REPORT FOR 2007
 ROGUE RIVER SPRING CHINOOK SALMON CONSERVATION PLAN
 ROGUE WATERSHED DISTRICT
 OREGON DEPARTMENT OF FISH AND WILDLIFE**

INTRODUCTION

In September of 2007, the Oregon Fish and Wildlife Commission formally adopted a conservation plan for spring Chinook salmon in the Rogue Species Management Unit (SMU). This plan calls for the Oregon Department of Fish and Wildlife (ODFW) to complete annual reports that will include, at least, the following elements: (1) SMU status in relation to the desired status and conservation status statements embedded in the conservation plan, (2) summaries of annual efforts to monitor SMU attributes, (3) implications of any research or evaluation projects completed during the reporting year, (4) any updated assessments of population attributes completed during the reporting year, and (5) presentation of the rationale associated with any changes in management actions made during the reporting year.

This report represents the first annual report to be completed as called for in the conservation plan. No research or evaluation projects, or updated assessments of population attributes, or changes in management actions occurred during the reporting period; other than those actions that resulted from formal adoption of the conservation plan in September.

SUMMARY OF SMU STATUS

Table 1. Comparisons of singular elements of current and desired status for naturally produced spring Chinook salmon in the Rogue Spring Chinook Salmon Species Management Unit. Desired status elements are described in the conservation plan, and the plan also called for the description of current status based on average values noted during the previous ten years (where available).

Status Element	Desired Status	Current Status	2007 Estimate
Abundance (at Gold Ray Dam)	$\geq 15,000$	7,596 (1998-2007)	3,465
Migration Timing ^a (% passage by 15 June)	$\geq 60\%$	46% (2003-2007)	47%
Age Structure (% jacks)	$\leq 10\%$	9% (2003-2007)	9%
September Spawner Distribution ^b (% above Shady Cove)	$\geq 40\%$	61% (2004-2007)	74%
Spawner Composition (% hatchery)	$\leq 15\%$	14% (2004-2007)	22%

^a For only those fish at least 24 inches in length (“adults”).

^b This element only covers September spawners because October spawners cannot be distinguished from fall Chinook salmon that spawn in overlapping areas.

Table 2. Status of the Rogue Spring Chinook Salmon Species Management Unit as compared to adopted conservation criteria. Conservation criteria are based on a three year running average, except where noted.

Status Element	Conservation Criterion	Comparative Status	2007 Estimate
Abundance ^a (at Gold Ray Dam)	<3,500	3,465 (2007)	3,465
Abundance (at Gold Ray Dam)	<5,000	4,674 (2005-2007)	3,465
Migration Timing ^b (% passage by 15 June)	<30%	46% (2005-2007)	47%
Age Structure (% jacks)	>25%	10% (2005-2007)	10%
September Spawner Distribution ^c (% above Shady Cove)	<30%	66% (2005-2007)	74%
Spawner Composition ^d (% hatchery)	>25%	17% (2006-2007)	22%

^a During any single year.

^b For only those fish at least 24 inches in length (“adults”).

^c This element only covers September spawners because October spawners cannot be distinguished from fall Chinook salmon that spawn in overlapping areas.

^d Average during two consecutive years.

MONITORING RESULTS

Monitoring of SMU attributes is designed to produce metrics that are to be used to characterize the current status of the SMU. All monitoring needed to update SMU status was completed by ODFW in 2007, and the results are included in Table 1 and Table 2. Monitoring results that most differed in 2007, as compared to previous years, included (1) a near-record low passage of wild fish at Gold Ray Dam, (2) an increased upstream distribution of those fish that spawned in September, and (3) an increased proportion of hatchery fish among the spawners. An increase in the proportion of hatchery fish among spawners occurred despite a 21 June closure of the freshwater fishery for wild fish. A similar closure occurred for hatchery fish on 1 July between Gold Ray Dam and Rogue Elk Park. The complete fishery closure on 1 July in this reach may have contributed to the increased proportion of hatchery fish among natural spawners.

COMPLETED MANAGEMENT ACTIONS

The Oregon Fish and Wildlife Commission adopted Alternative 9, outlined in the conservation plan, as the preferred suite of management strategies to be employed by ODFW. Some of the actions outlined in Alternative 9 were completed during 2007, and are listed below.

Management Strategy 9.1

1. On December 4, ODFW submitted a letter to the United States Army Corps of Engineers (USACE). The purpose of the letter was to request the USACE address certain actions designed to protect and enhance naturally produced spring Chinook salmon in areas downstream of Lost Creek Lake. Portions of the letter covered Actions 1.1 through 1.12 outlined in the conservation plan.

Management Strategy 9.4

1. On September 8, the Oregon Fish and Wildlife Commission adopted freshwater fishery regulations described in Action 4.1 of the conservation plan. As a result, new regulations for the freshwater fishery will be implemented in 2008.
2. ODFW revised broodstock collection guidelines at Cole M. Rivers Hatchery (Action 4.6). The revised guidelines are designed to increase the harvest rates on hatchery fish through changes in maturation rates.

Management Strategy 9.5

1. ODFW revised broodstock collection guidelines at Cole M. Rivers Hatchery (Action 5.2). The revised guidelines are designed to establish maturation rates of hatchery fish that are similar to those exhibited historically by that portion of the wild run blocked by Lost Creek Lake.

In addition, when it became apparent that the 2007 return of wild fish was going to result in the SMU falling below conservation status (outlined in the conservation plan), ODFW adopted regulations for an early closure of the freshwater fisheries. The purpose of the early fishery closure was to increase the numbers of naturally spawning wild fish. Relevant conservation criteria, which trigger modification of management strategies, include (1) at least 3,500 wild fish should pass Gold Ray Dam each year and (2) at least 5,000 wild fish should pass Gold Ray Dam during any three successive years. ODFW used these criteria as a management guideline to close the fisheries, even though the conservation plan had yet to be formally adopted.

OTHER

While no research projects began in 2007, some work was completed during the year to lay the groundwork for the initiation of formal research or habitat improvement projects in future years. Some discussion of this work follows.

1. During the spawning surveys completed in 2007, ODFW collected scales from naturally spawned hatchery fish that may have been marked with coded-wire tags. Representative scales from natural spawners of known ages are needed to build a reference collection so that analysts can accurately age scales taken from naturally spawning wild fish. ODFW projects that two more years of scale collections will be needed to obtain a sufficient number of scales for a training collection. In addition, ODFW collected representative scale samples and lengths from about 200 naturally spawning wild fish, and also estimated the lengths of wild fish that passed Gold Ray Dam. These data will be needed to generate pre-season forecasts of the freshwater return of wild fish (Research Need 1. in the conservation plan).

2. ODFW developed a pilot project to determine the feasibility of executing a coordinated research project (Research Needs 4. and 5. in the conservation plan). Results from the pilot study will be used to (1) estimate the number of fish that need to be tagged during the formal research project and (2) finalize methods to capture and tag fish near the mouth of the Rogue River. ODFW expects that the pilot project will begin in spring of 2008.
3. ODFW completed a spawning survey for spring Chinook salmon in Big Butte Creek between river miles one and six, and found that few fish spawned anywhere except in the lower gradient section between river miles one and two. In addition, ODFW reviewed findings of habitat surveys completed in 1995 and 1997. Results from the habitat surveys indicated that much of Big Butte Creek is in a constrained channel with low spawning potential, but that there are some localized sites that exhibit some potential for projects designed to improve spawning habitat.
4. The USACE completed a visual survey of spawning gravel in the Rogue River upstream of Gold Ray Dam. Based on the results of the visual survey, the USACE contracted for work to begin to quantify the changes in spawning habitat that resulted from construction of William Jess Dam (also known as Lost Creek Dam). Work on this assessment will begin in 2008.