ANNUAL PROGRESS REPORT FOR 2009
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 is document is the third annual report to be completed. A copy of the conservation plan is available on the ODFW website at:
http://www.dfw.state.or.us/fish/CRP/rogue_spring_chinook_conservation_plan.asp

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	2009 Estimate
Abundance (at Gold Ray Dam)	**≥15,000**	**7,553 (2000-2009)**	**5,234**
Migration Timing[a] (% passage by 15 June)	**≥60%**	**46% (2003-2009)**	**45%**
Age Structure (% jacks)	**≤10%**	**14% (2003-2009)**	**12%**
Sept. Spawner Distribution[b] (% above Shady Cove)	**≥40%**	**61% (2004-2009)**	**54%**
Spawner Composition (% hatchery)	**≤15%**	**14% (2004-2009)**	**8%**

[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	Conservation Status
Abundance[a] (at Gold Ray Dam)	<3,500	5,234 (2009)
Abundance (at Gold Ray Dam)	<5,000	4,223 (2007-2009)
Migration Timing[b] (% passage by 15 June)	<30%	47% (2006-2009)
Age Structure (% jacks)	>25%	20% (2007-2009)
Sept. Spawner Distribution[c] (% above Shady Cove)	<30%	64% (2007-2009)
Spawner Composition[d] (% hatchery)	>25%	13% (2008-2009)

[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 2009, and the results are presented in Table 1 and Table 2. Monitoring results that most differed in 2009, as compared to the previous ten years, included (1) a low return of wild (and hatchery) adults and (2) hatchery fish composed a lower percentage of 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 2009, and are listed below. A tabulated progress summary related to management actions described in the conservation plan can be found at the end of this document in Appendix Table 1.

Management Strategy 9.1

1. Most of the action items within this management strategy relate to seasonal operations of Lost Creek Lake by the United States Army Corps of Engineers (USACE). ODFW worked cooperatively with the USACE to identify and implement reservoir release strategies designed to enhance naturally produced spring Chinook salmon. Both agencies completed a report that

described USACE progress in relation to helping with implementation of the conservation plan. A copy of the report was posted, in conjunction with this report, on the ODFW website.

2. ODFW provided technical support to the Bureau of Reclamation in relation to fishery issues associated with the removal of Savage Rapids Dam (Action 1.13 in the conservation plan). This support included (1) development of interim actions to reduce the risk of fish injury or mortality during passage, (2) development of protocols to identify potential delays in passage during construction, and (3) work with construction crews to implement actions designed to protect fish.

3. ODFW provided technical support to Jackson County in relation to fishery issues associated with the possible removal of Gold Ray Dam (Action 1.13 in the conservation plan). Removal of the dam will allow for unobstructed fish upstream passage and may result in some eventual restoration of spawning habitat for spring Chinook salmon.

4. In relation to a proposed natural gas pipeline that would cross the Rogue River in the middle of spawning habitat for spring Chinook salmon, ODFW developed and submitted an array of comments to the Federal Energy Regulatory Commission and to the USACE; the federal agencies involved with the permitting process (Action 1.14 in the conservation plan). This proposed project has the potential to negatively impact spring Chinook salmon, as well as other native fish.

5. ODFW continued to promote good stewardship by landowners (Action 1.15 in the conservation plan); primarily through the Small Stream, Urban Stream, and Intermittent Stream project. This project is conducted by volunteers in association with ODFW's Salmon Trout Enhancement Program. In addition, the importance of cool and clean water for native fishes, and the benefits of healthy riparian zones continued to be emphasized during discussions of fishery issues with the media.

Management Strategy 9.2

1. ODFW summarized existing conditions and passage observations of spring Chinook salmon fish at the fish ladder at Crowfoot Falls on lower Big Butte Creek. The information was sent to ODFW engineering staff for review in relation to potential improvements to the fish ladder (Action 2.1 in the conservation plan).

2. ODFW requested earlier maintenance at an irrigation diversion on Big Butte Creek in order to increase stream flow. Increased flow during the critical period of upstream migration would improve passage for spring Chinook salmon fish at Crowfoot Falls (Action 2.2 in the conservation plan). However, the irrigation district was unable to accommodate the request.

Management Strategy 9.3

During 2009, ODFW did not complete any work related to the specific action called for in the conservation plan. However, the agency designed a project intended to help preclude illegal introductions of non-native predatory fish in the Rogue River Basin. Project implementation during 2009 centered on signage installation, enforcement, and outreach. In addition, removal of Savage Rapids Dam and Gold Ray Dam (*see above* Management Strategy 9.1) will decrease the amount of backwater habitat preferred by non-native predatory fishes such as Umpqua pikeminnow and largemouth bass.

Management Strategy 9.4

When it became apparent that the 2009 return of wild spring Chinook salmon was going to result in the SMU falling below conservation status (Action 4.3 in the conservation plan), ODFW adopted regulations to close the 2009 fishery for wild fish. 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 river fisheries to the harvest of wild fish.

Management Strategy 9.5

ODFW installed a temporary barrier weir at the primary outflow channel at Cole Rivers Hatchery on May 20 and removed the weir on August 17 (Action 5.1 in the conservation plan). The weir is designed to preclude spring Chinook salmon entry into the outfall channel. Keeping fish from entering the outflow channel should increase contribution rate of hatchery fish to the recreational fishery and should decrease the proportion of hatchery fish among natural spawners.

OTHER

No new research or evaluation projects began in 2009. However, some work was completed during the year to lay the groundwork for the initiation of formal research or habitat improvement projects in future years. Discussion of completed work follows.

1. ODFW collected scales from naturally spawning hatchery fish marked with coded-wire tags. 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. The number of scale samples collected from CWT-marked fish is now sufficient to build the reference collection. In addition, ODFW collected representative scale samples and lengths from about 220 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).

3. ODFW completed extended spawning surveys in the mainstem of the Rogue River between Cole M. Rivers Hatchery and Touvelle State Park (Research Need 3. in the conservation plan) with funds allocated by the Restoration and Enhancement Board. Data resulting from these extended surveys will be needed in the event that Gold Ray Dam is removed, with a resultant loss of the allied fish counting station. In order to appropriately interpret results of the extended spawning surveys, a telemetry project outlined in the conservation plan (see Research Needs 4. and 5.) needs to be completed in order to determine whether fall Chinook salmon are also spawning in this area.

4. ODFW completed an additional year of spawning surveys in Big Butte Creek with funds allocated by the Restoration and Enhancement Board. These surveys were designed to determine how to optimize upstream passage and spawner distribution (Actions 2.21 and 2.22 in the conservation plan) and to provide guidance in relation to enhancement of spawning habitat (Action 2.23 in the conservation plan). A report of project findings will be completed in 2010.

Appendix Table 1. Summary of progress related to management actions described in the Rogue Spring Chinook Salmon Conservation Plan, which was adopted by the Oregon Fish and Wildlife Commission in September 2007. The "X" symbol means that ODFW completed work on an action that requires annual attention. The "Y" symbol means that ODFW completed the action and that no further work is needed. The "Z" symbol means that ODFW completed work on an allied topic that complemented the action item included in the conservation plan. The "--" symbol means that no additional work is needed on the action item.

Action	Year of completion for action item								
Item	2007	2008	2009	2010	2011	2012	2013	2014	2015
			MANAGEMENT STRATEGY 9.1						
1.1	X	X	X						
1.2	Y	--	--	--	--	--	--	--	--
1.3	X	X	X						
1.4	Y	--	--	--	--	--	--	--	--
1.5	X	X	X						
1.6	X	X	X						
1.7	X	X	X						
1.8	Y	--	--	--	--	--	--	--	--
1.9	X	X	X						
1.10	Y	--	--	--	--	--	--	--	--
1.11	Y	--	--	--	--	--	--	--	--
1.12	X	X	X						
1.13	X	X	X						
1.14	X	X	X						
1.15		X	X						
			MANAGEMENT STRATEGY 9.2						
2.1		X	X						
2.2		X	X						
2.3									
2.4	--	--	--						
			MANAGEMENT STRATEGY 9.3						
3.1			Z						
			MANAGEMENT STRATEGY 9.4						
4.1		Y	--	--	--	--	--	--	--
4.2	--	--	--						
4.3	X	X	X						
4.4		X							
4.5									
4.6	Y	--	--	--	--	--	--	--	--
4.7	--	--	--						
			MANAGEMENT STRATEGY 9.5						
5.1		X	X						
5.2	Y	--	--	--	--	--	--	--	--
5.3	--	--	--						
5.4		Y	--	--	--	--	--	--	--