Oregon Coast Coho Conservation Plan

2011-2012 Annual Report

(reporting period 7/1/11 thru 12/31/12)

Oregon Department of Fish & Wildlife
August 2013

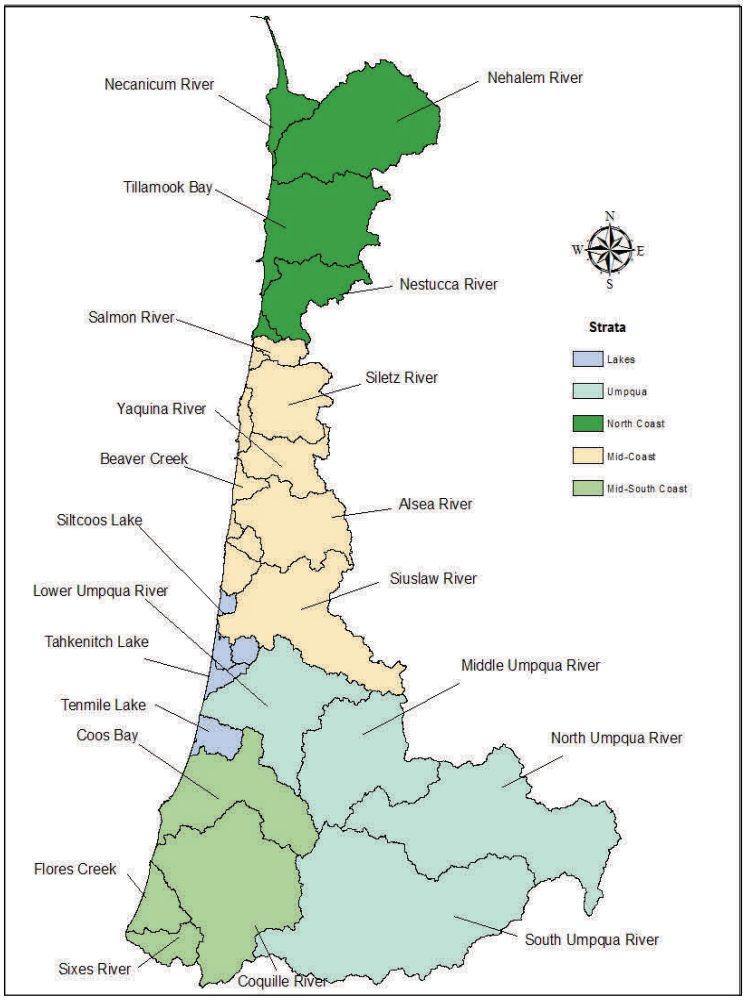
Table of Contents

Oregon Coast Coho Conservation Plan

Overall Status of Oregon Coast Coho ESU

- **Estimated number of spawning adults in 2011-12 was 356,243**
- **Estimated number of spawning adults in 2012-13 was 99,142**
- **Desired status abundance target when ocean survival is low, as it was in 2011-13, is 371,000 returning spawning adults**

The Oregon Coast Coho ESU, its 5 strata and 21 independent populations



Introduction

This is the second annual report produced by Oregon Department of Fish and Wildlife (ODFW) for the Oregon Coast Coho Conservation Plan (OCCCP). Unlike the initial annual report this report spans 18 months in order to better synchronize our reporting with the Oregon Watershed Enhancement Board (OWEB). Future reports will only cover a 12 month period.

The Oregon coast coho population is made up of 21 independent populations and 35 dependent populations that extend over approximately 6,987,468 acres (10,918 square miles). Current distribution of Oregon coast coho is about 6,978 stream miles. The OCCCP and its implementation are designed to support the existing established restoration efforts of local Watershed Councils, SWCD's and various state and federal agencies by increasing coordination, communication, strategic planning and on-the-ground implementation of restoration efforts. The Annual Report highlights this coordination and achievements by all of these groups as well as identifies adaptive management needs.

Status and Trend Overview

The OCCCP identifies the following 6 measurable conservation parameters to evaluate the status of coho and their habitats: 1) spawner abundance, 2) persistence, 3) productivity, 4) distribution, 5) diversity, and 6) habitat. Spawner abundance, distribution and habitat assessments are based on field data collected by ODFW, assessed against population conservation criteria, and reported annually. In this report these three parameters will reflect observed conditions in 2011-2012. Persistence, productivity and diversity are also based on field data, but are not assessed annually, given that they represent population conditions that should not fluctuate annually to any biologically significant degree. These are assessed every 6 years and were last assessed in 2007. They will be re-assessed in the winter of 2013. For this report, results for these three parameters are based on the 2007 results. For a detailed description of how these 6 metrics are collected and analyzed please see last years report at: http://www.dfw.state.or.us/fish/CRP/docs/coastal_coho/economic_reports/OCCCP_Annual_Report_2010_2011.pdf or visit the ODFW Recovery Tracker Web site to view the metadata for each metric. http://odfwrecoverytracker.org

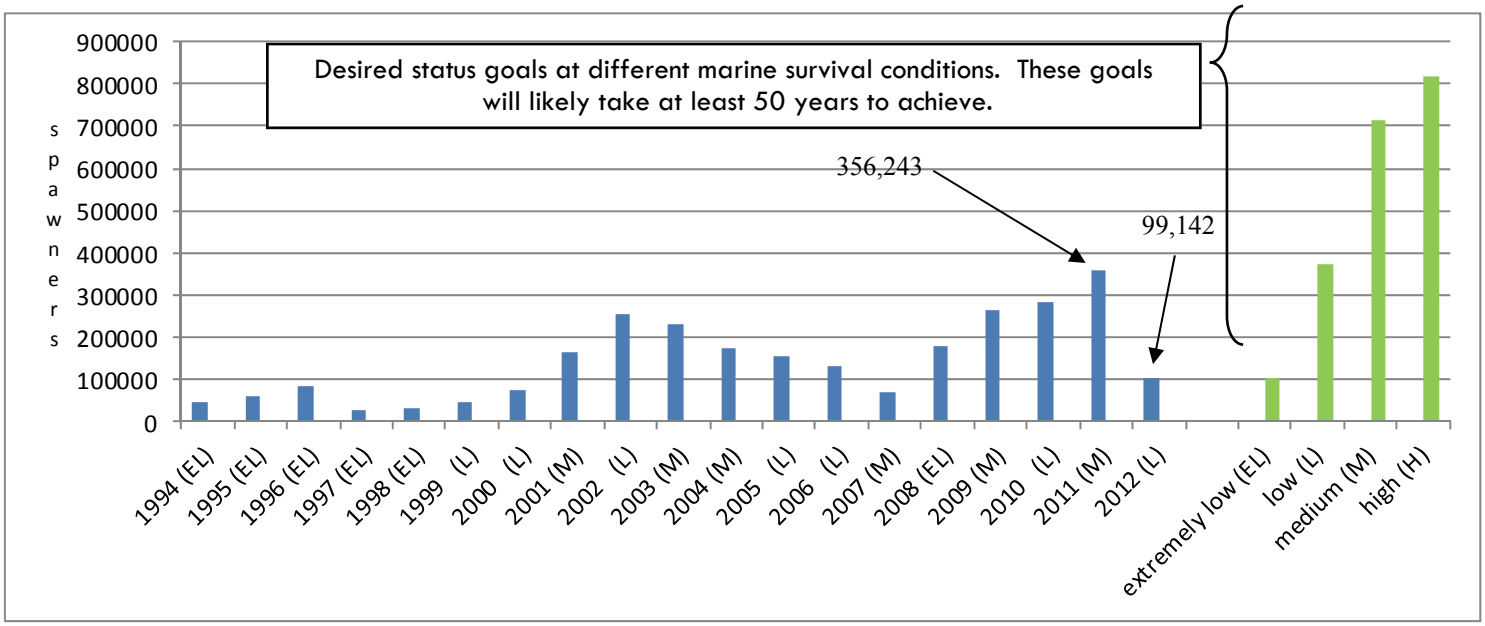
The desired status goals for abundance of Oregon Coast coho are ambitious and well beyond what may be required under a federal ESA de-listing scenario. The most likely scenario presented in the OCCCP is one where it will take at least 50 years to achieve these goals. Harvest and hatchery management changes have already been implemented by ODFW, with the remaining primary driver for meeting these desired status goals being the restoration of the ecological processes that are needed to create adequate amounts and distribution of high quality freshwater and estuarine habitats.

Abundance - number of naturally produced spawners

In 2011/ 2012 - Adult returns for the ESU in 2011 were up from 2010 and were the highest seen in the 22 years of conducting randomly selected coho spawning ground surveys (over seven coho generations). After a five year decreasing trend (2002 to 2007), adult returns to the ESU in 2011 continued the increasing trend started in 2008. Wild spawner abundance in 2011 was the highest documented in the last 22 years in 3 of 5 strata. Wild adult coho spawner abundance in the other two strata (North Coast and Lakes) was the 5th highest observed, and was well above the 22 year average. Two of five Strata (Lakes and Mid-South) and 9 of 21 Independent Populations achieved the conservation goal for spawner abundance. Although the ESU as a whole failed to meet its conservation goal it was close, actual was 356,000 the goal was 371,000 (96% of goal).

In 2012/ 2013 - The conservation goal for spawner abundance was not achieved in 2012 at any geographic scale; ESU, Stratum, or Independent Population. Adult returns for the ESU in 2012 were down substantially from 2011 and were the lowest seen since 2007. While the 99,000 wild coho spawner abundance in 2012 is higher than every year from 1990 to 2000, it is less than half the average annual return since 2000. Coho spawner abundance in the ESU has shown a somewhat cyclic nature over the last 23 years. Wild coho spawner abundance peaks occurred in 1996 (81k), 2002 (253k) and 2011 (356k). With abundance troughs in 1990 (21k), 1997 (24k), and 2007 (66k). Shifts between peaks and troughs have been both gradual and abrupt. It is not yet clear if the abrupt drop in abundance observed in 2012 is the bottom of the cycle or not.

OCN Spawner Abundance — ESU Scale —1994 to 2012

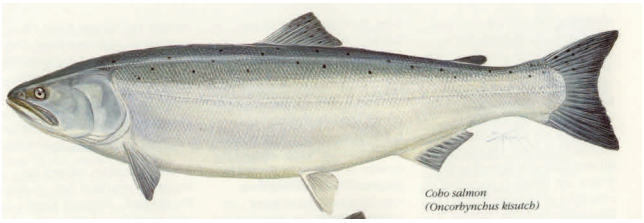


Persistence - the forecast probability of persistence for each independent population

For 2011/2012 This assessment is scheduled to occur every 6 years and the report published next year will contain new model run values. Results in this report are from 2007. Each of the 21 independent populations was evaluated and the output from the 4 models is reported in the **individual** population reports. In 2007 eleven individual populations passed and ten failed this criteria.

Productivity - annual estimates of the number of naturally produced recruits per spawner

For 2011/2012 - Methods which standardize productivity relative to marine survival and spawner density, allowing the most biologically appropriate assessment of a population's productivity, have yet to be developed, but non-standardized productivity data are available at www.odfwrecoverytracker.org. Results presented in the population summaries later in this document just represent the raw data without any standardization.



Distribution - the distribution of spawners among habitats within a population's home range

For 2010/2012 - Metric 1 is reported for each independent population in the individual population reports. In general, a high proportion of sampled sites are occupied in most years.

Diversity - within-population diversity is the result of phenotypic differences among individuals

For 2011/2012 - As mentioned earlier, these are model results from 2007. This model will be updated and re-run in late 2013.

Habitat - the amount of available high quality habitat for freshwater life stages

Habitat values are estimated by sampling a subset of the watershed or basin, identifying the amount of high quality habitat in that subset, and extrapolating that amount of high quality habitat to the entire basin. Because the sites are only sampled every 5 years, recent restoration activities may not show up in these estimates.

For 2010/2012 - There are specific goals (miles of high quality habitat existing and needed) set for independent populations. These independent population scale goals are measured every 5 years and are reported in the individual population reports that follow.

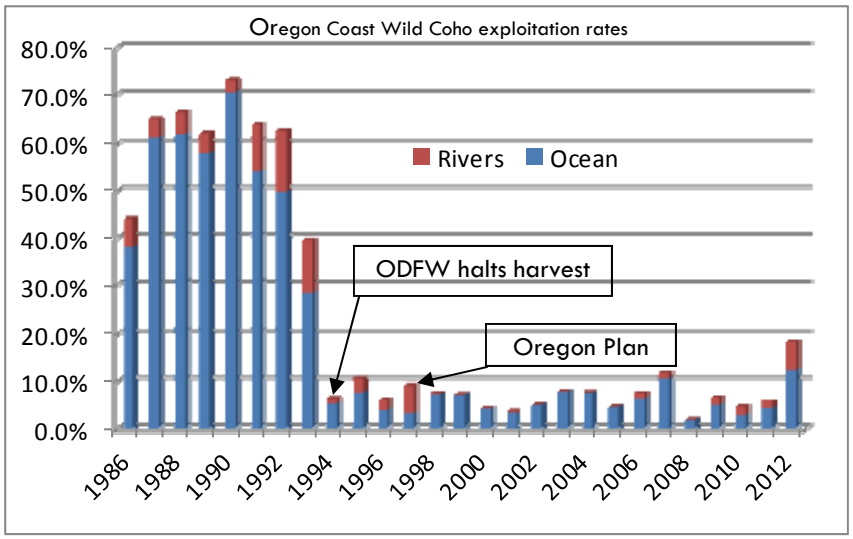
A separate ESU scale analysis, which is conducted on annual summer data and at a resolution to measure change at the strata level, shows no significant trends were detected in the Mid-Coast (Siuslaw – Siletz – Alsea – Yaquina) or Umpqua (Lower –Middle - South – North) strata for any of the identified habitat metrics. Decreasing trends in wood volume and percent sand/organics were detected in the North Coast (Nehalem – Tillamook – Necanicum – Nestucca) strata. In the Mid-South Coast strata (Coos Bay – Coquille River), an increase in habitat quality is leading to a higher potential carrying capacity in the winter months for young coho salmon (parr) over the years evaluated .

Management Actions Overview

Management objectives identified in the OCCCP are to ensure broad distribution across all 21 independent populations, eliminate adverse hatchery and harvest impacts to the ESU, improve the environmental conditions that currently limit productivity in fresh water, and provide technical support and assistance to community based groups and individuals engaged in restoration efforts in local watersheds.

Harvest - In the four decades preceding1994, harvest of coastal coho was often greater than 70%, and was almost always over 50%. ODFW ceased all commercial and recreational harvest on wild coho starting in 1994.

It was not until 2004 that limited recreational harvest of wild coho was again allowed. The first recreational fisheries were in Siltcoos and Tahkenitch Lakes.



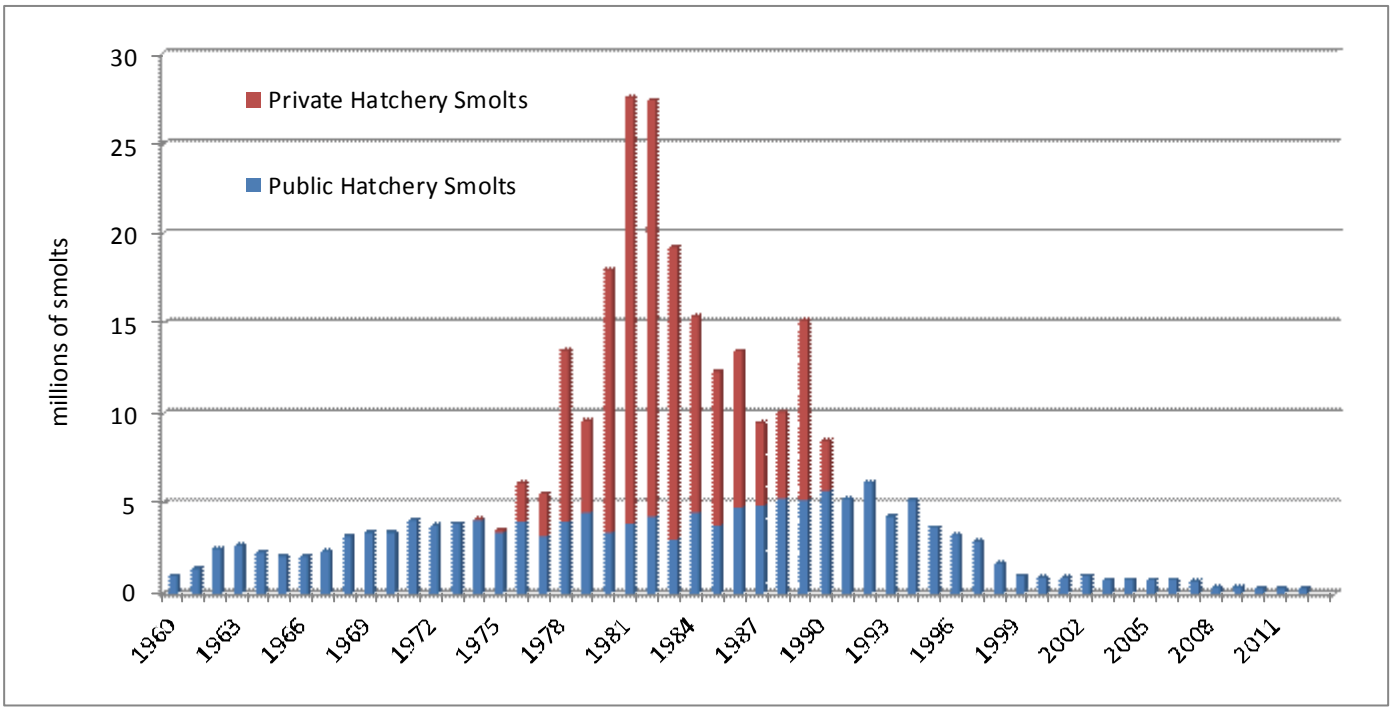
Recreational Harvest 2004—2012

Basin	Year								
	2004	***2005***	***2006***	***2007***	***2008***	***2009***	***2010***	***2011***	***2012***
Nehalem						959		961	429
Tillamook								664	90
Nestucca								184	17
Siletz							238	557	164
Yaquina						535		650	254
Alsea								864	912
Siuslaw								1,201	1,621
Siltcoos L.	538	235	220	158	469	413	770	619	359
Tahkenitch L.	137	0	56	87	112	128	298	65	156
Tenmile L.							27	27	27
Umpqua								1127	1,213
Coos						1145		1016	807
Coquille						962	1070	798	387
Total	**675**	**235**	**276**	**245**	**581**	**4141**	**2738**	**8049**	**5894**
ESU abundance	172,778	154,595	128,819	66,271	179,686	262,735	283,478	356,260	99,142

All harvest of ESA listed OCN coho is consistent with Amendment 13 of the Salmon Management Plan of the Pacific Fisheries Management Council, which has been approved by NOAA as consistent with recovery of coast coho. Also, although abundance goals are not consistently being met, these goals are based on achieving a level of high quality habitat which has not been accomplished; current habitat is assumed to be fully seeded (i.e. allowing for some level of harvest). In 2013 ODFW continued work to update the basis for the marine survival forecast used in the Amendment 13 harvest matrix from data based on hatchery coho salmon from primarily the Columbia River to one based on wild coho salmon from the Oregon coast in conjunction with multiple oceanographic indicators.

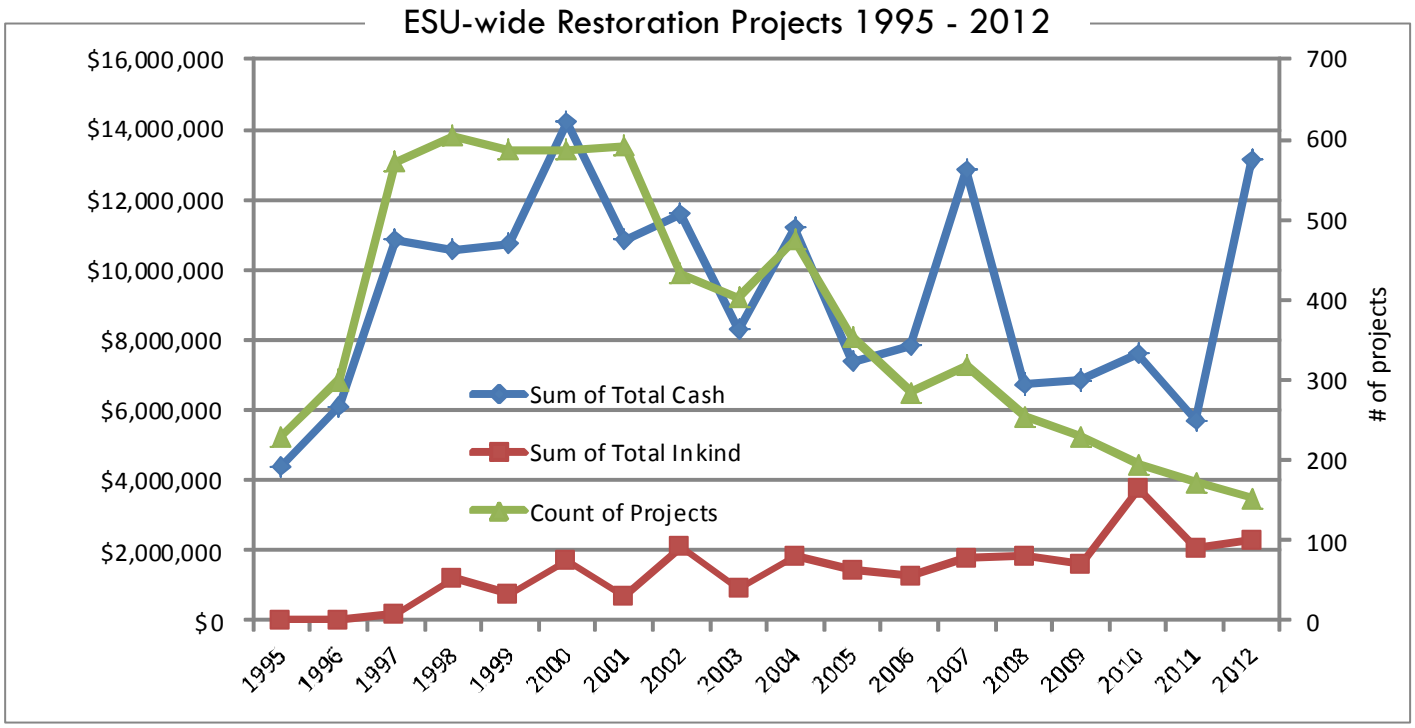
Hatcheries - ODFW reduced hatchery production of Oregon Coast Coho from a high of 35 million smolts (6.2M from public and 28.8M from private hatcheries) in1981 to 260,000 smolts and 88,000 fry in 2011 and 2012.

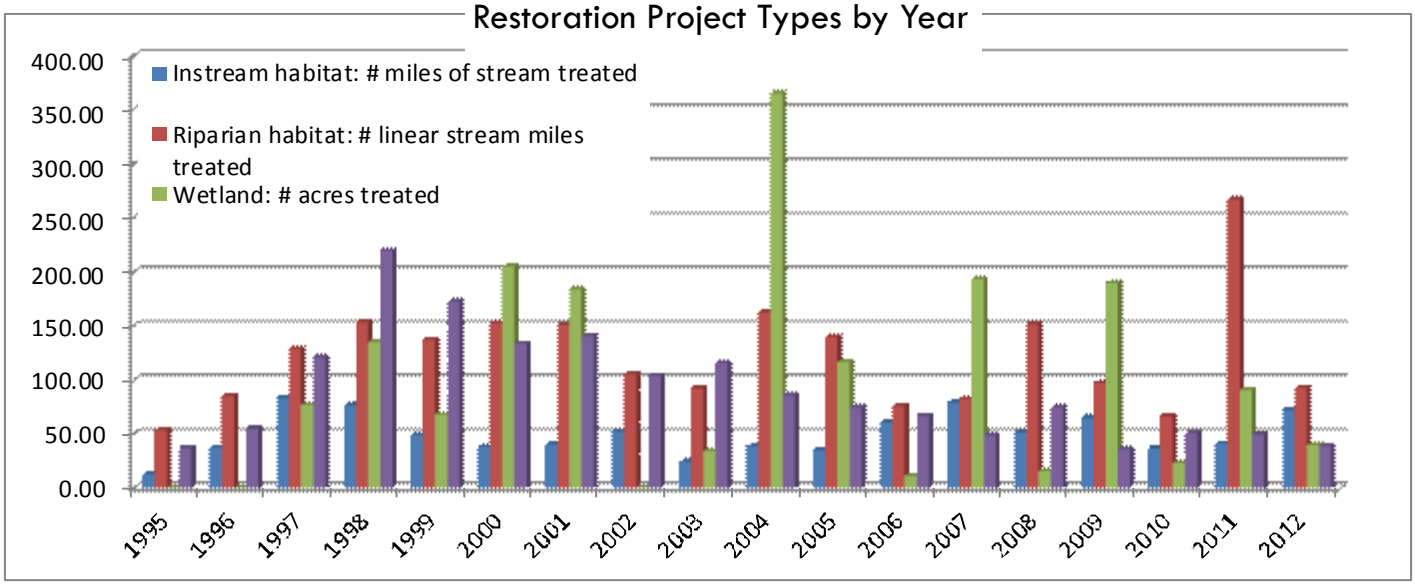
In the early1990's hatchery reared smolts, pre-smolts and fry were released in 17 of 21populations, often being released off site from the hatcheries. In 2011/12 all smolts were released directly from the hatchery or from an acclimation pond (to reduce straying of returning adults). Smolts were released in 3 populations (Nehalem, Trask and S. Umpqua) and fry were released by volunteer Salmon and Trout Enhancement Program (STEP) groups in Munsel Lake, Coos Bay tributaries and Coquille tributaries



Habitat - Historic land use practices and management strategies took their toll on OCN coho habitat over the last 150 years. Splash damming, little or no riparian protection, stream cleaning, reduction of beaver populations, tideland diking, stream channelization, and the development of roads adjacent to stream channels all contributed to the loss of stream form and the ecosystem functions needed to support abundant anadromous fish populations. ODFW has identified the cumulative impacts of the legacy activities as a loss of stream complexity. When viewed from the ESU scale the loss of stream complexity is the primary limiting factor for 13 of 21 independent populations in the ESU and the secondary limiting factor for the other 8 populations. The primary limiting factor the remaining 8 independent populations is a mix of hatchery impacts, water quantity, lack of spawning gravel, and the presence of exotic fish species.

Coast-wide habitat restoration and conservation activities by private land owners, local community based conservation/restoration groups, state and federal agencies has been under way since 1995. The Oregon Watershed Enhancement Board (OWEB) funds and tracks restoration projects and expenditures in their Oregon Watershed Restoration Inventory (OWRI) database. Data from the OWRI (graphs on next page) indicates that between 1995 and the end of 2012, approximately $164,354,795 in cash and $25,600,813 as in-kind expenditures was spent on 6,738 different restoration projects within the OCN coho ESU.





In 2011 there were 173 public and private restoration efforts completed costing $7,761,329 (cash + inkind). In 2012 public and private restoration efforts continued with voluntary efforts completing 153 projects costing $15,438,249 (cash + inkind) as reported to the OWRI database. In addition to the restoration projects 106 acres of land was acquired at the cost of $742,150 ($487,000 in OWEB grants and $255,150 in matching funds). Specific details are in each population report .

A breakout of the restoration activities in 2011and 2012 follows.

Restoration Accomplishments	**2011**	**2012**
Instream Habitat: # miles of stream treated	41.36	72.31
Riparian habitat: # linear stream miles treated	267.32	93.07
Wetland: # acres treated	90.98	39.95
Fish Passage: # stream crossings improved	50	39
Fish Passage: # miles made accessible to fish due to stream crossing improvements	51.99	40.70

Implementation status

Key work products associated with implementation of the OCCCP include creating and implementing a strategic plan to maximize restoration benefits. To do this the Implementation Coordinator has formed an advisory Implementation Team (IT) composed of members of the public currently engaged in restoration activities, SWCD's, Watershed Councils, and state and federal agencies. This advisory group is working with the Implementation Coordinator to develop a restoration prioritization process, a 3 year implementation schedule and the Annual Report.

Milestones for 2011 - 2012

- Held a 2 day internal ODFW workshop between the Research, Policy and Field Office staffs to coordinate the three different perspectives as they relate to OCCCP implementation.
- Developed second Annual Report (this document).
- 7 public presentations on the OCCCP provided to coastal watershed councils, SWCD's, Conservation groups , state Agencies and Tribal members by the Implementation Coordinator.
- Formed the Implementation Team and held 4 introductory meetings; began working with Councils and agencies to set watershed scale restoration Goals and Objectives.
- Continued development of Goals and Objectives lists for each 6th code HUC in the ESU.
- Continued coordination with NMFS on the development of their Oregon Coast Coho Recovery Plan and development of delisting criteria.

Work Targets for 2013 – 2014

- Complete project level prioritization process and apply it.
- Develop 6th HUC (sub-watershed) scale prioritization and apply it within populations.
- Complete 3 Year Implementation Schedule - target completion date is winter of 2013.
- Begin integration of Coastal Multispecies Conservation and Management Plan implementation efforts.
- Continue coordination with NMFS on the development of their Oregon Coast Coho Recovery Plan.
- Continue coordination with Oregon DEQ as they develop their IR TMDL for the mid-coast.

Adaptive Management Recommendations

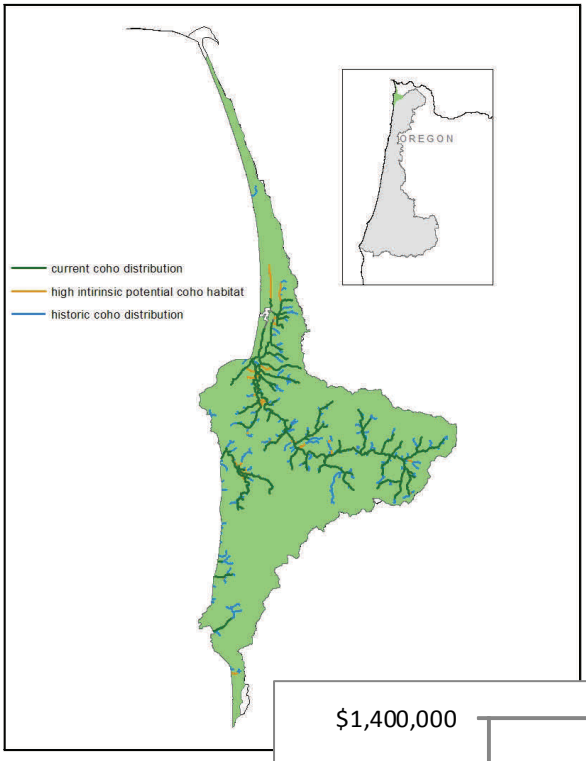
1. Facilitate strategic implementation of projects.
2. Implement better coordination between state and federal agencies, Watershed Councils and SWCD's involved in restoration.
4. Implement better coordination within ODFW on priority restoration sites.
5. Facilitate faster permitting of restoration projects.
6. Implement multispecies conservation efforts with a focus on ecosystem functions.

Independent Population Reports for 2011 – 2012

Conservation Strategy - Implement OCCCP physical habitat restoration activities, and maintain hatchery production and recreational harvest at levels identified in the 2007 Conservation Plan.

Necanicum

Limiting factors for freshwater habitat	Actions to address limiting factor
Stream complexity / winter habitat	Placement of LWD (short term), Planting of riparian zone w/ trees and shrubs (long term), create off channel rearing sites
Stream temperature /summer habitat	Planting trees, shrubs, capturing gravel via LWD and boulder placement
Habitat access	Replace culverts
Habitat Preservation	Land acquisition

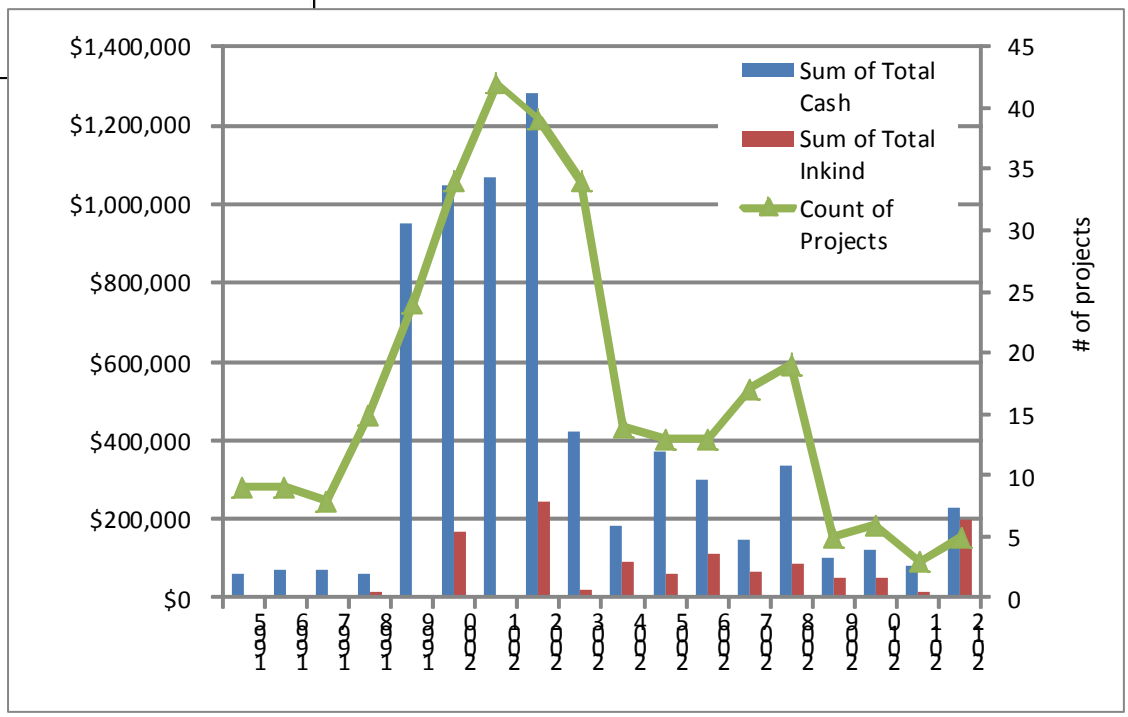


Total Restoration Expenditures in 2011- 2012

Year	Sum Cash $	Sum in-kind $	Total $	# of projects
2011	$81,227	$16,767	$97,994	3
2012	$228,820	$198,341	$427,161	5

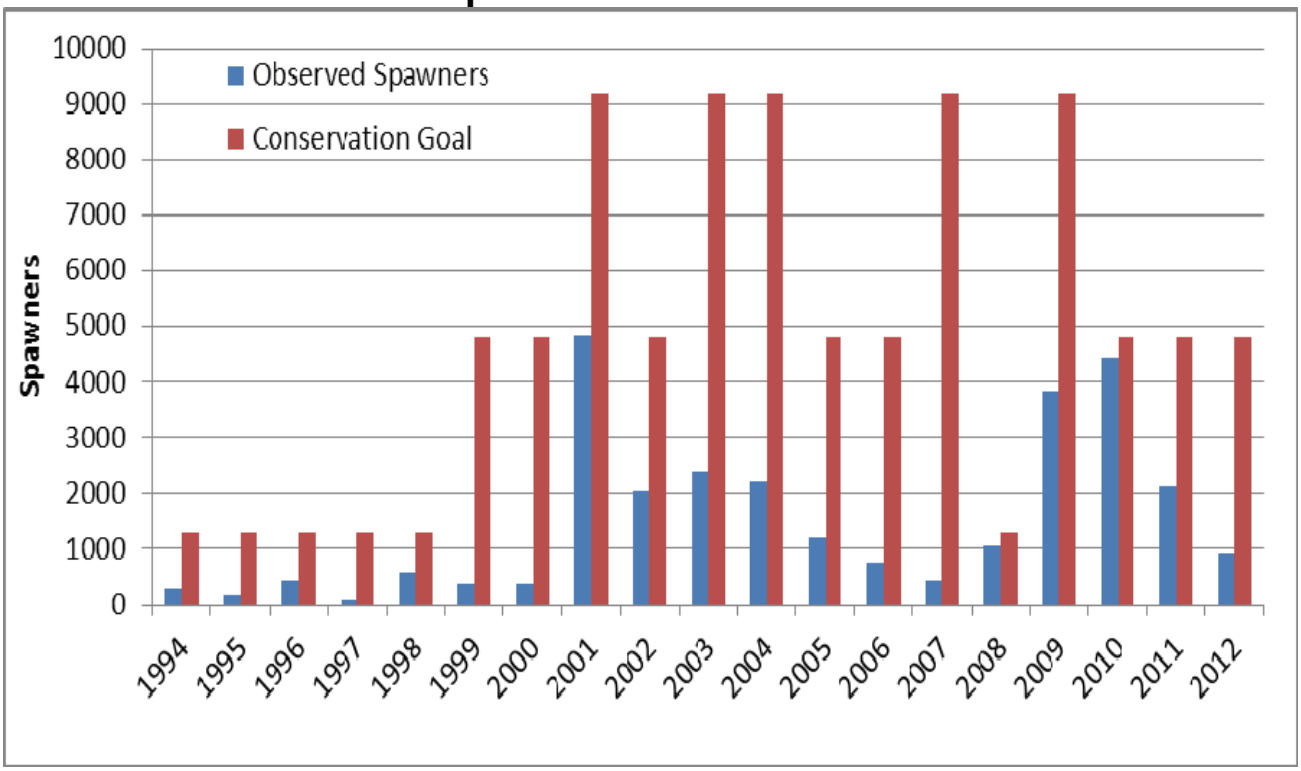
The Necanicum basin is located in Tillamook, Clatsop, Columbia and Washington counties with a basin size of approximately 135 square miles containing about 88 miles of current coho stream habitat.

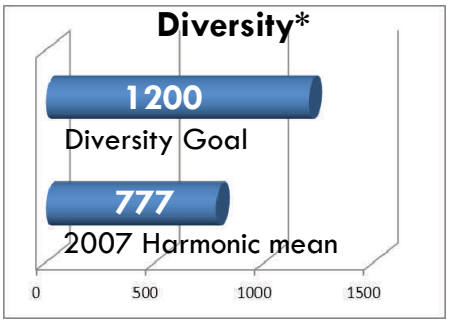
Necanicum Restoration Efforts 1994 - 2012

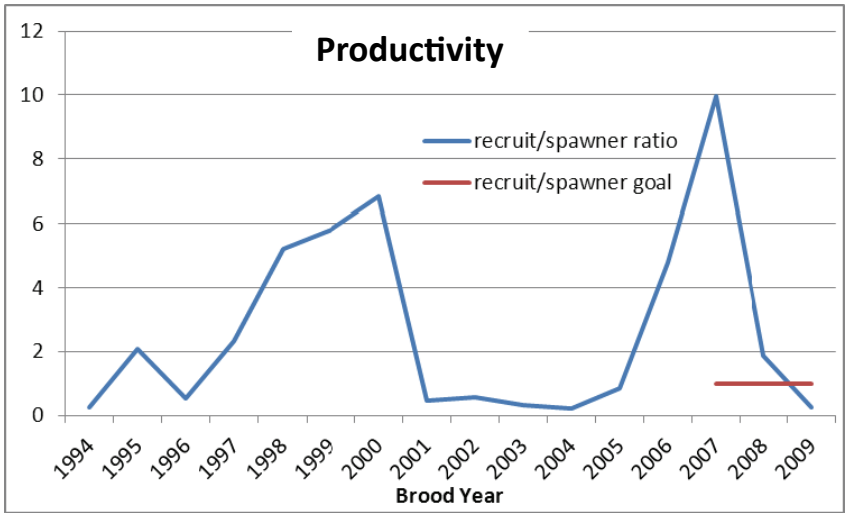


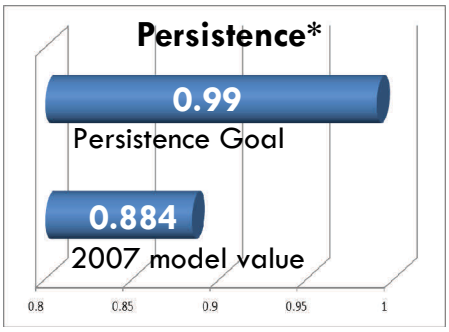
Population Status and Trends

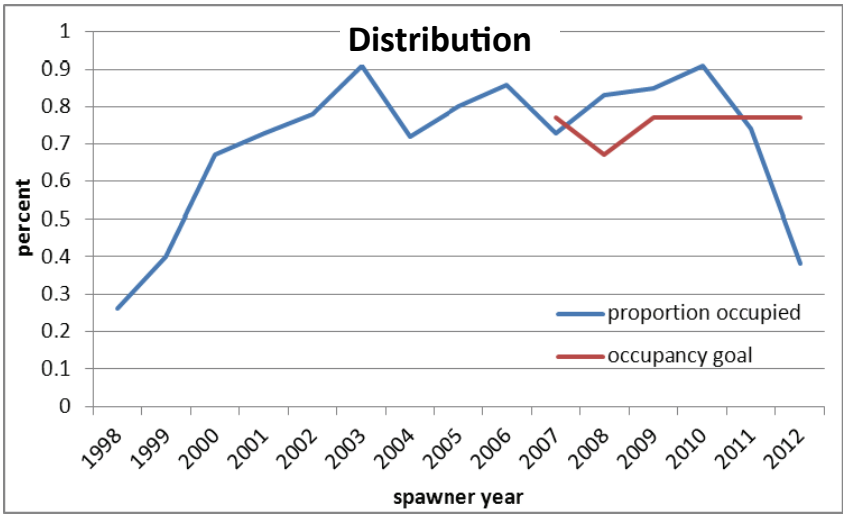
Abundance

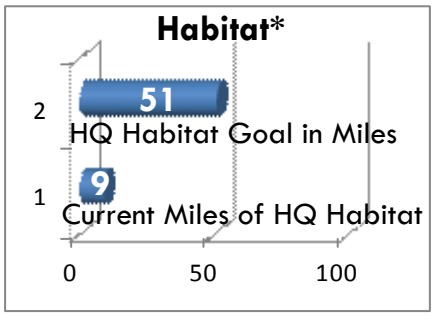












Necanicum

* See page 5 for definitions

Necanicum

Habitat Restoration Summaries for Necanicum Population Unit (Year 2011)

Location	Limiting Factor	Project Type / Action	cost	Ft/mi/ac/ treated	Detail 1	Detail 2
Joe Cr	Riparian condition	Tree planting	$5,642	0.4 miles	0.4 miles riparian tree planting	
Circle Cr	Fish Access	Culvert removal	$1,030		I culvert removed, 1 mile fish habitat open	
Ecola Cr	Wetland loss	Wetland restoration	$91,322	2.8 acres	Wetland fill removed, flooded forest wetland restored	

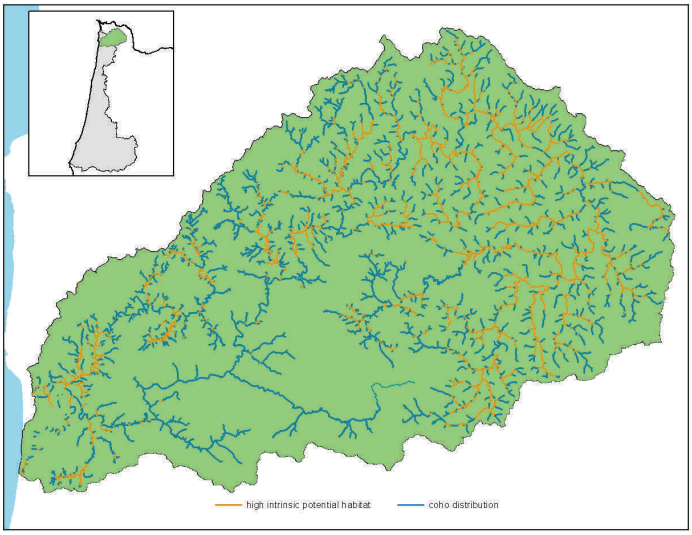
Habitat Restoration Summaries for Necanicum Population Unit (Year 2012)

Location	Limiting Factor	Project Type / Action	cost	Ft/mi/ac/ treated	Detail 1	Detail 2
Dichter Cr.	Stream complexity, Fish access	Instream structures Fish passage	$119,250	0.9 miles	LWD placement with 80 key pieces in 12 structures	Removed two culverts, added one bridge
Circle Cr.	Stream Complexity, Fish access, Off channel rearing	Instream structures, Fish acess riparian planting, wetland creation, Road removal / relocation	$210,070		LWD placement with 100 key pieces in 20 structures. Reconnect side channel, create new side channels, replace 3 culverts, plant riparian, create 4 acres wetlands,	remove 5 culverts, decommission 0.75 miles road, move 0.57 miles road
Necanicum R.	Lack of riparian zone	Tree planting, fencing, invasive plant removal	$56,399	0.5 miles	0.3 miles riparian fencing, 0.5 miles invasive plant control	0.3 miles tree planting, 0.2 miles vegetation planting
Circle Cr.	Lack of riparian zone	Nurse log placement	$8,372	0.5 miles	Place nurse logs in 45 acres of riparian	
Circle Cr.	Lack of riparian zone	Tree planting / fencing	$33,070	0.5 miles	0.5 miles riparian fencing, tree and vegetation planting	

Conservation Strategy - Implement OCCCP physical habitat restoration activities, and maintain hatchery production and recreational harvest at levels identified in the 2007 Conservation Plan.

Nehalem

Limiting Factors for freshwater and estuarine habitat	Actions to address limiting factors
Stream Complexity	Placement of LWD (short term), planting riparian zone w/trees and shrubs (long term), create off channel rearing sites
Water Quality	Planting vegetation in riparian, fencing

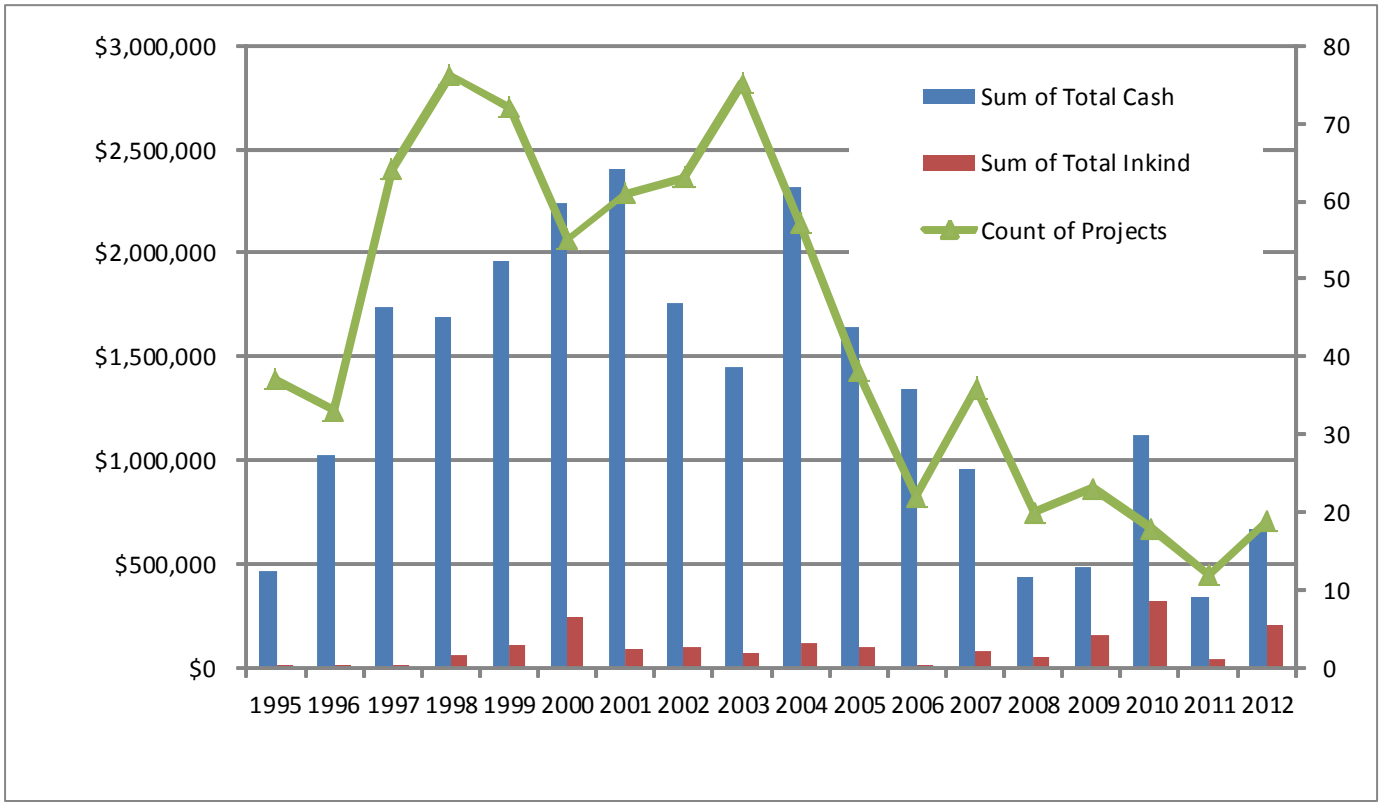


Total Restoration Expenditures
in 2011 – 2012
For the Nehalem

Year	Sum Cash $	Sum in –kind $	Total $	# of projects
2011	$336,876	$37,772	$374,648	12
2012	$672,124	$204,583	$876,707	19

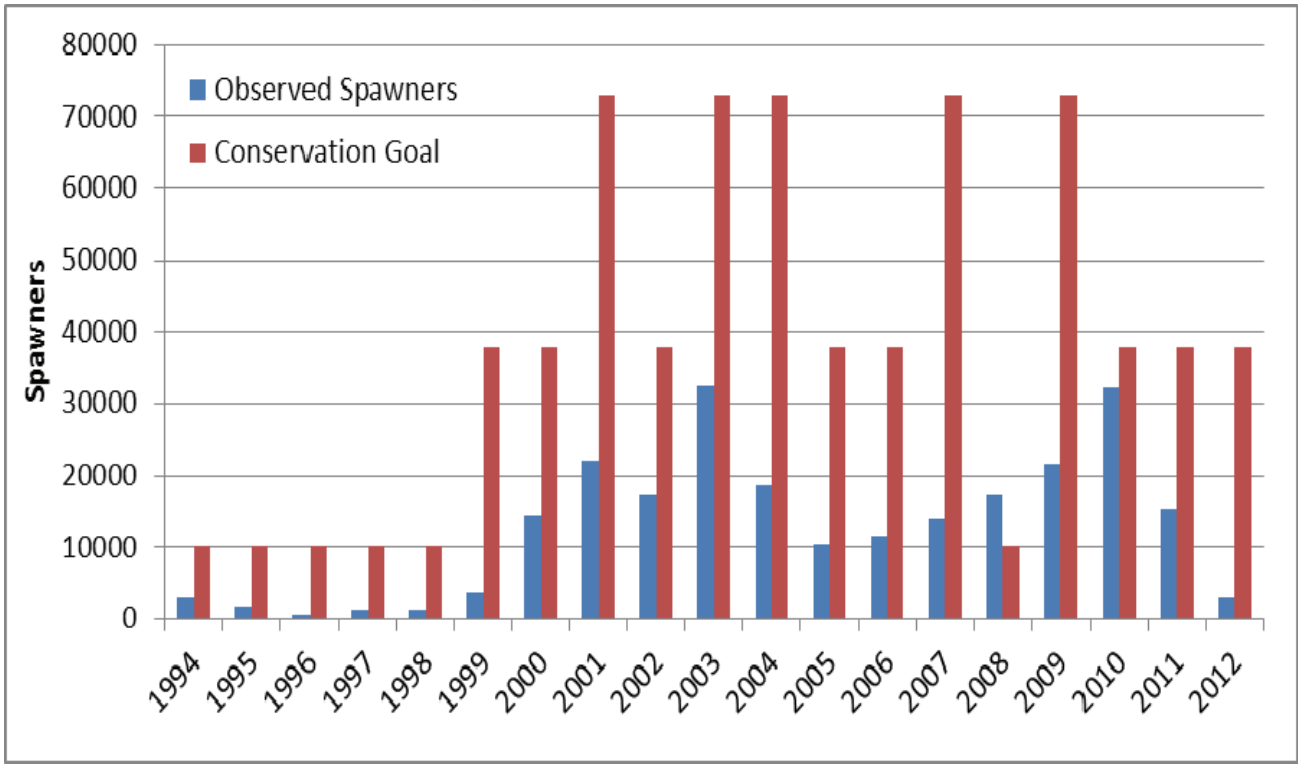
The Nehalem basin is located in Tillamook, Clatsop, Columbia and Washington counties with a basin size of approximately 857 square miles containing about 708 miles of current coho habitat.

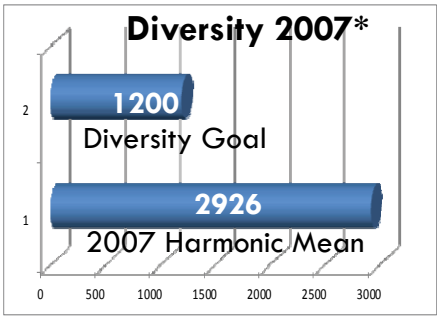
Nehalem Restoration Efforts 1994 - 2012

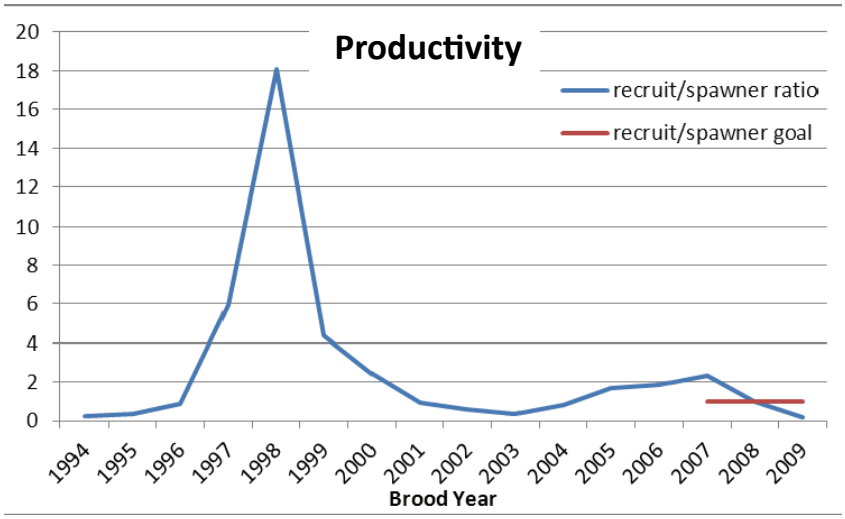


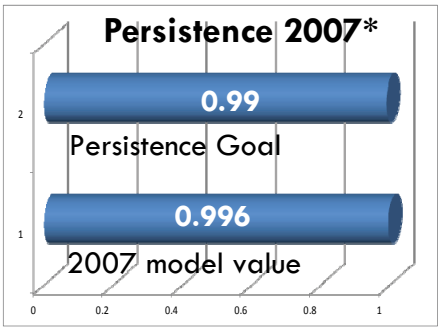
Population Status and Trends

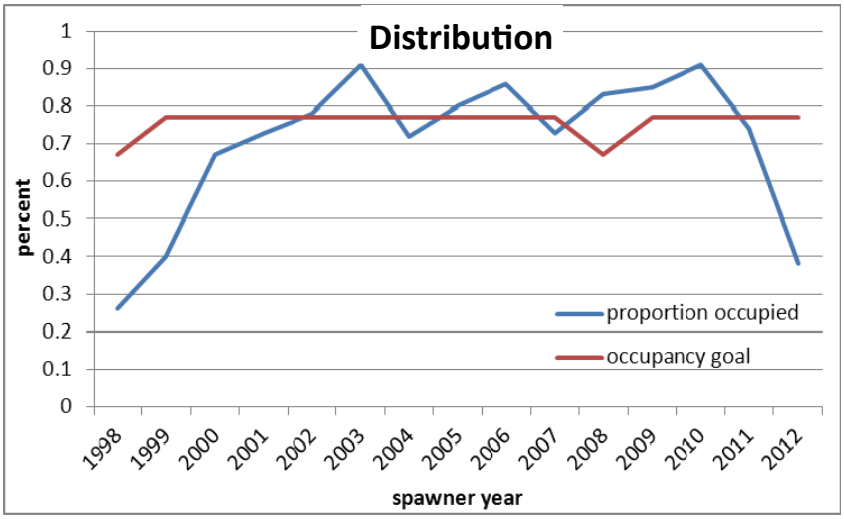
Abundance

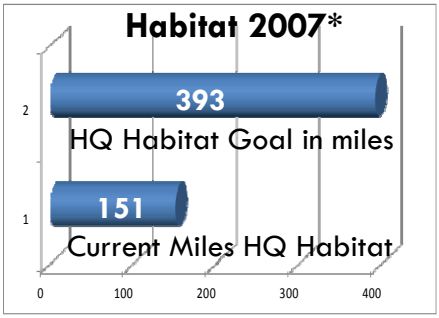












Nehalem

* See page 5 for definitions

Nehalem

Activity Type Summaries for Nehalem Population Unit (Year 2011)

Location	Limiting Factor	Project Type / Action	cost	Ft/mi/ac/ treated	Detail 1	Detail 2
Tweedle Cr	Stream complexity		$14,112	0.23 miles	60 key pieces LWD in 15 structures	
Nehalem R	Water Quality		$13,392	3 acres	Manure management, upland erosion control	
Lousigont Cr	Fish Access	Culvert removal	$26,700	3.3 miles fish habitat opened	I culvert removed	
N.F. Salmonberry R	Fish access	Culvert replacement	$24,277	0.1 mile fish habitat opened	1 culvert replaced	
N.F. Salmonberry R	Fish Access	Culvert removal	$84,512	2 miles fish habitat opened	1 culvert replaced with a bridge	
Coal Cr	Fish Access	Culvert replaced	$58,825	0.25 miles fish habitat opened	1 culvert replaced	
Coal Cr			$72,487	0.5 miles fish habitat opened	1 culvert replaced with a bridge	
Unnamed tributary of the Nehalem River			$43,512	0.3 miles fish habitat opened	1 culvert replaced with a bridge	
Punchbowl Cr			$9,484		Cross drains added, road obliterated	
Cow Cr			$20,000		Road Closed to public use	
S.F. Deep Cr			$3,371		Cross drains added	
Un-named			$3,976		Cross drains added	

2012 projects are on the next page

Nehalem

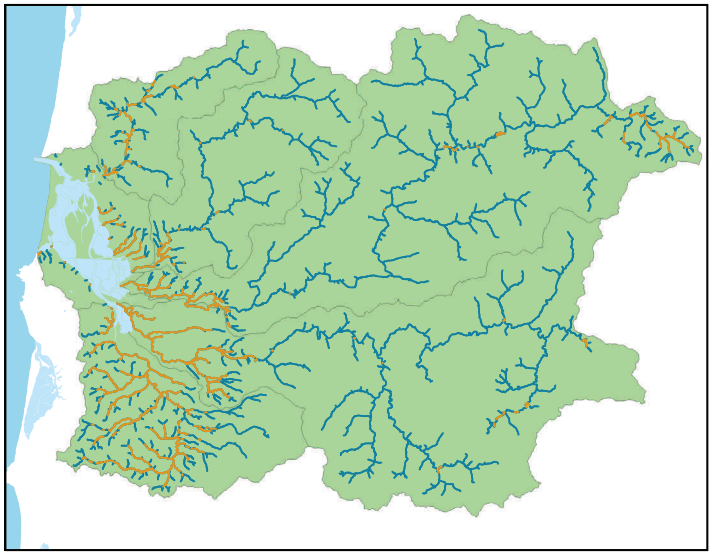
Activity Type Summaries for Nehalem Population Unit (Year 2012)

Location	Limiting Factor	Project Type / Action	cost	Ft/mi/ac/ treated	Detail 1	Detail 2
Kenusky Cr.	Instream complexity Riparian composition	Lwd placement, tree planting	$92,623	1.5 miles	LWD Placement, 124 key pieces in 34 structures	1.5 miles riparian tree planting
Cook Cr.	Lack of riparian trees	Tree planting, invasive weed control	$124,448	4 miles	4 miles vegetation management	4 miles riparian tree planting
S.F. Lousignont Cr.	Stream complexity Floodplain connectivity	Instream LWD placement, road decommissioning	$67,772	1.5 miles	LWD placement, 95 key pieces in 15 structures, remove 1 culvert	1.5 miles road decommissioned
Cow Cr.	Stream complexity	LWD placement	$18,705	0.25 miles	LWD Placement 38 key pieces in 4 structures	
Gravel Cr.	Stream complexity Riparian composition	Livestock exclusion, tree planting	$17,834	0.15 miles	0.15miles fencing, 0.3 miles tree planting	Off channel watering site developed
Nehalem R.	Riparian composition	Tree planting	$16,043	0.45 miles	0.45 miles riparian tree planting	
Boykin Cr.	Stream complexity, Riparian composition Fish passage	Instream structures, riparian tree planting	$68,275	2 miles	LWD placement, 156 key pieces in 13 structures, tree planting	1 culvert removed, 1 culvert replaced invasive plant removal
Pebble Cr.	Stream Complexity Riparian composition Fish Passage	Instream structures Tree planting Culvert removal	$321,998	3 miles (opened access to 17 miles of fish habitat)	LWD placement , 340 key pieces in 87 structures, 3. miles riparian tree planting, riparian veg management	2 culverts removed 2 culverts replaced with bridges, 1 culvert upgraded, 0.10 road decommissioned
Tweedle Cr George Cr	Riparian Condition	Fencing Riparian Tree planting	$48,682	1.1	0.32 miles riparian fencing	1.1 miles riparian tree planting
Cow Cr.	Excess fine sediment	Road surface drainage improvements	$1,588		2 non-stream crossing culverts added,	
Scratchit View Road	Excess fine sediment	Road surface drainage improvements	$936		1 non-stream crossing culvert added	
Green Giant Road	Excess fine sediment	Road surface drainage improvements	$14,037		16 non-stream crossing culverts added	
Candyflower Cr.	Excess fine sediment	Road surface drainage improvements	$8,586		12 non-stream crossing culverts added	
Trailover Cr.	Excess fine sediment	Road surface drainage improvements	$3,125		4 non-stream crossing culverts added	
Moore's Cr	Excess fine sediment	Road surface drainage improvements	$3,006		2 non-stream crossing culverts added	
Gnat Cr.	Excess fine sediment	Road surface drainage improvements	$8,245		12 non-stream crossing culverts added	
N.F. Nehalem Cr.	Excess fine sediment	Road surface drainage improvements	$30,249		8 non-stream crossing culverts added	1.25 miles road decommissioned
Northrup Cr.	Excess fine sediment	Road surface drainage improvements	$6,605		0.4 miles road decommissioned	
Platt Cr.	Fish passage		$24,000	0.54 opened miles fish habitat	1 culvert replaced	

Conservation Strategy - Implement OCCCP physical habitat restoration activities, and maintain hatchery production and recreational harvest at levels identified in the 2007 Conservation Plan.

Tillamook Bay

Limiting Factors for freshwater and estuarine habitat	Actions to address limiting factors
Stream Complexity	Placement of large woody debris (short term) planting of riparian trees and vegetation (long term).
Water Quality	Planting trees and shrubs for sediment control and stream shading. Modification of Agricultural practices.
Access	Remove/Replace culverts and tide gates

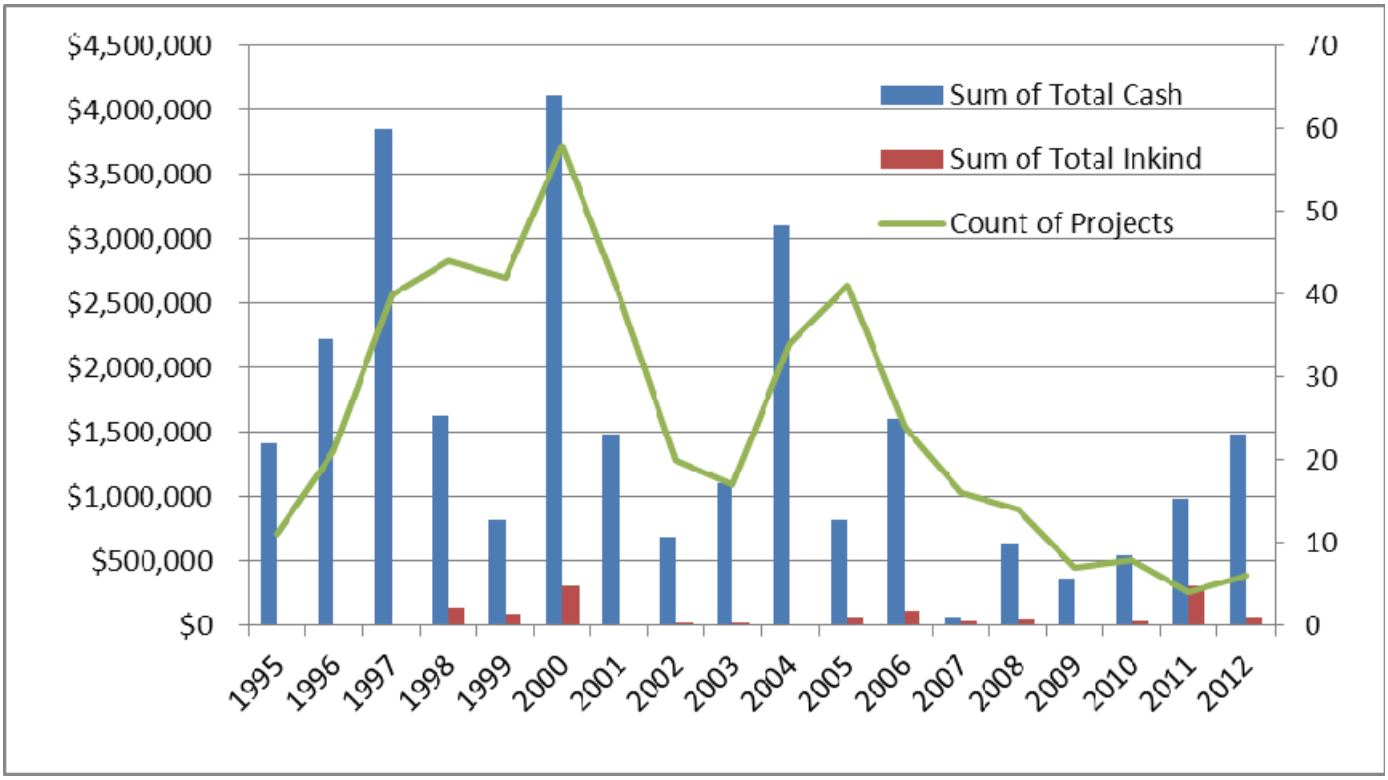


Total Restoration Expenditures in 2011 and 2012 For Tillamook Bay Watersheds

Year	Sum Cash $	Sum in–kind $	Total $	# of projects
2011	$985,929	$304,681	$1,290,610	4
2012	$1,479,881	$62,972	$1,542,853	6

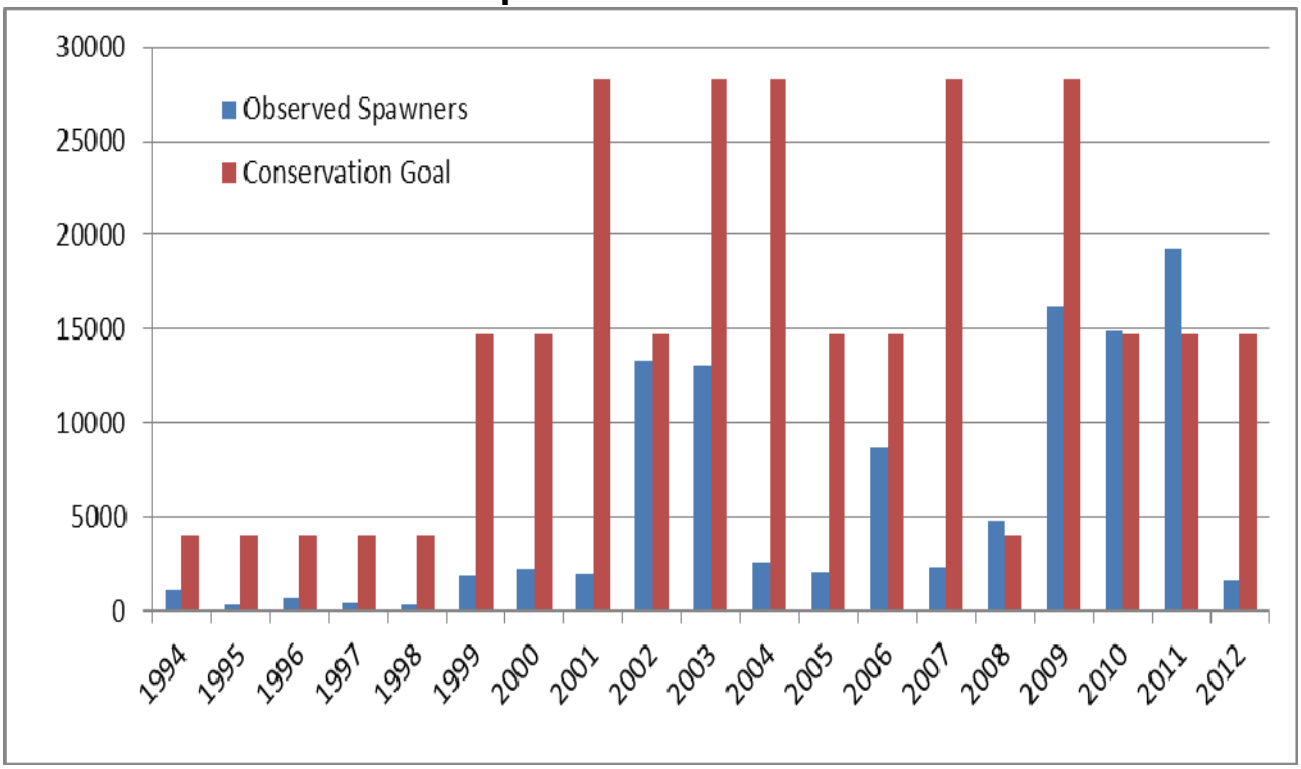
The Tillamook basin is located in Tillamook, Yamhill and Washington counties with a basin size of approximately 561 square miles containing 396 miles of current coho habitat.

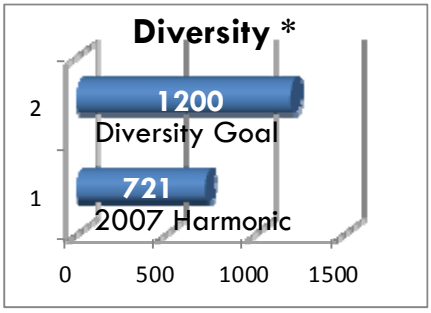
Tillamook Restoration Efforts 1994-2012

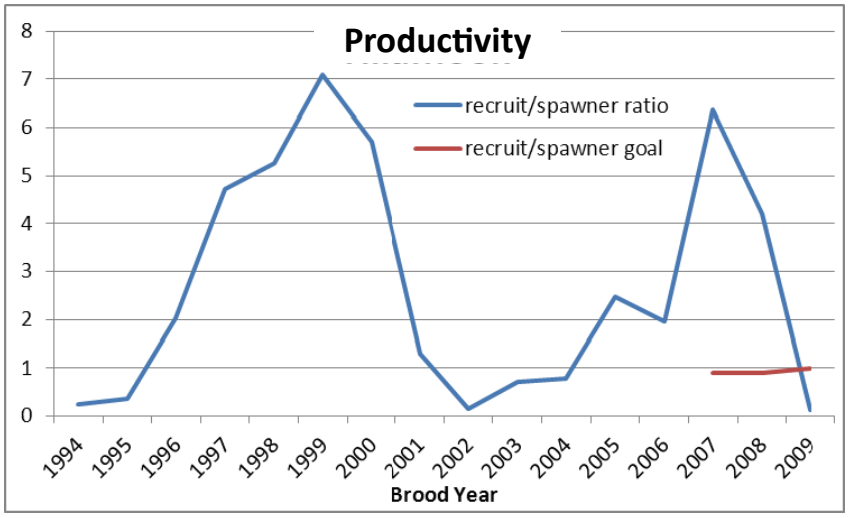


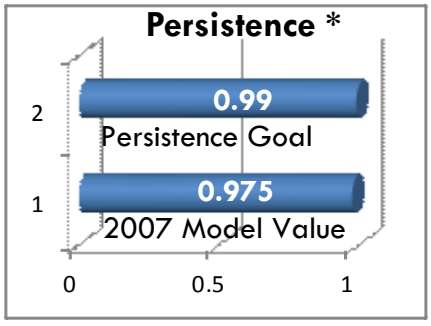
Population Status and Trends

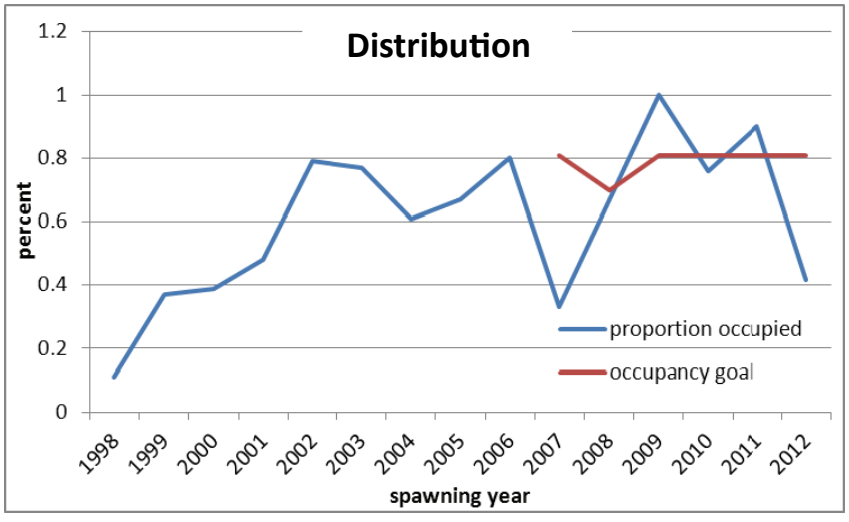
Abundance

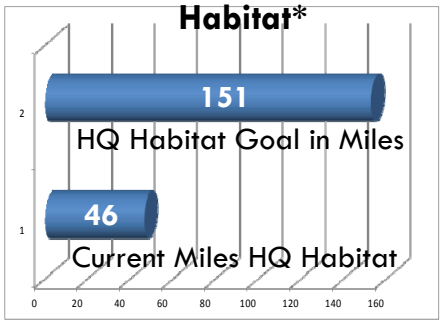












Tillamook Bay

* See page 5 for definitions

Tillamook Bay

Activity Type summaries for Tillamook Bay Population unit (year 2012)

Location	Limiting Factor	Project Type / Action	Cost	Ac/mi treated	Detail 1	Detail 2
Tillamook River	Riparian Condition	Fencing, planting	$13,083	0.3 miles	0.02 miles of fencing, .3 miles tree planting	
Miami River	Instream Complexity, Floodplain Function	Instream structures, wetland/floodplain improvement	$1,244,975	1.17 miles, 2 acres	187 key pieces of LWD in 37 structures, I channel modified	2 acres of wetland improved (overhead power lines / poles removed)
S.F. Wilson River	Fish Access	Culvert replacement	$24,100	0.2 miles of fish habitat opened	1 culvert replaced	
Bales Cr	Instream complexity	Instream structures	$8,452		LWD placement	

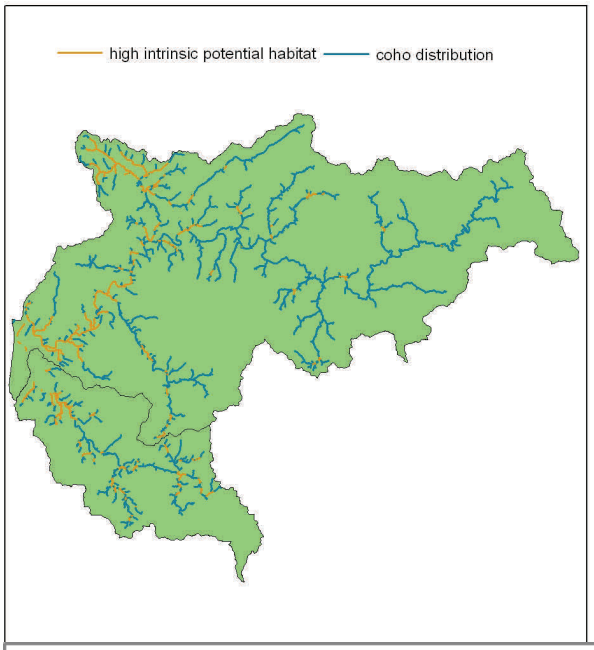
Activity Type summaries for Tillamook Bay Population unit (year 2012)

Location	Limiting Factor	Project Type / Action	Cost	Ac/mi treated	Detail 1	Detail 2
Elliot Cr.	Riparian condition	Tree planting	$14,520	0.1 miles	1 mile riparian tree planting	0.1 miles road decommissioned
Miami R.	Stream complexity	Instream structures, Tree planting, Road decommission	$144,753	1.35 miles	35 boulders placed, LWD placed, 135 key pieces in 26 structures	1 mile tree planting, 2.5 miles road decommissioned
Fawcett Cr.	Fish passage	Fish ladder, fish screens	$610,841	3 miles made accessible	1 fish ladder installed,1 fish screen installed	
Devils Lake Fork Wilson r.	Fish passage	Culvert replacement	$30,589	6.9 miles made accessible	1 culvert replaced with a bridge	
Miami R Wetlands	Floodplain connectivity	Land Acquisition	$205,000	40 acres	Breaching dikes, filling ditches, restore hydrology	Estuarine wetlands
Dooher Wetlands	Floodplain connectivity	Land Acquisition	$537,150	66 acres	Breaching dikes, filling ditches, restore hydrology	Tidally influenced wetlands

Conservation Strategy - Implement OCCCP physical habitat restoration activities, and maintain hatchery production and recreational harvest at levels identified in the 2007 Conservation Plan.

Nestucca

Limiting Factors for freshwater and estuarine habitat	Actions to address limiting factors
Stream Complexity,	Placement of large woody debris (short term) planting of riparian trees and vegetation (long term.
Water Quality	Planting trees and shrubs for sediment control and stream shading. Modification of agricultural and timber practices.
Access	Remove/ Replace culverts and tide gates

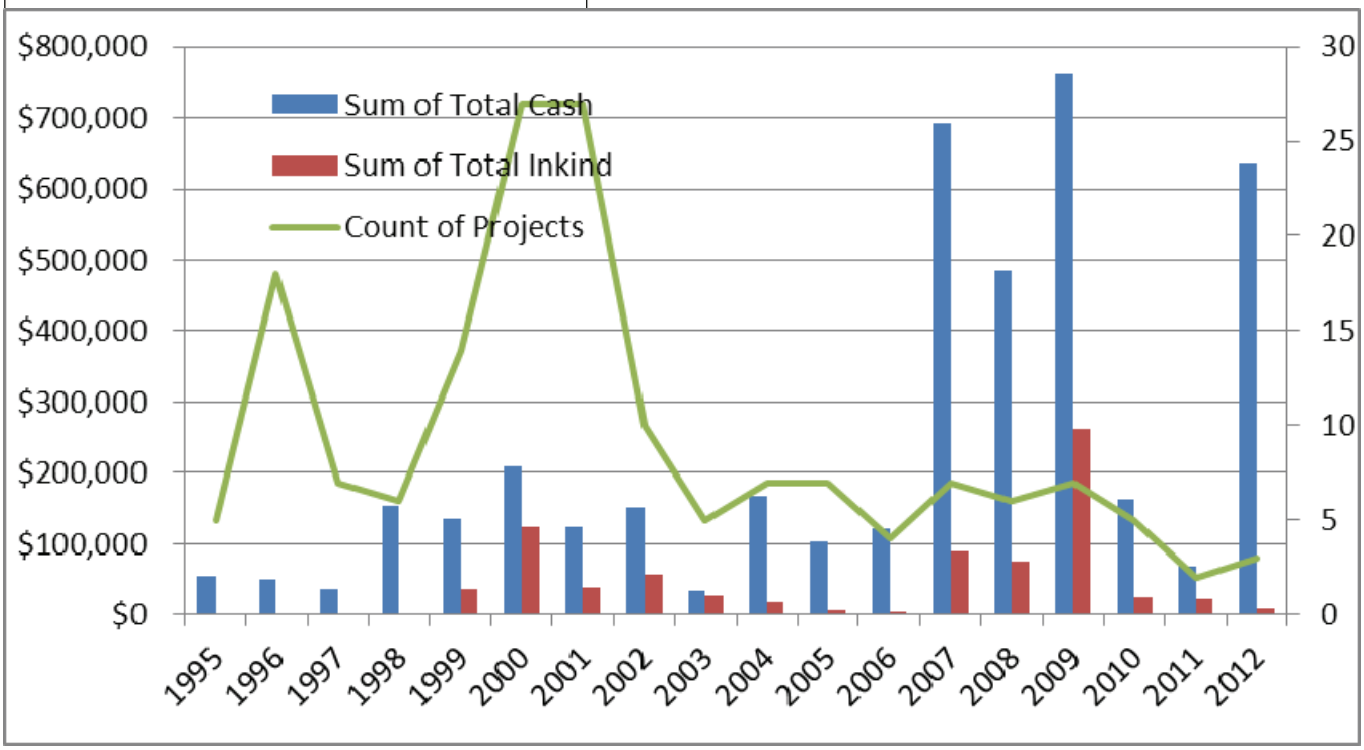


Total Restoration Expenditures in 2011-2012 For Nestucca Watershed

Year	Sum Cash $	Sum in-Kind $	Total $	# of projects
2011	$68,832	$23,260	$92,092	2
2012	$636,959	$7,445	$644,404	3

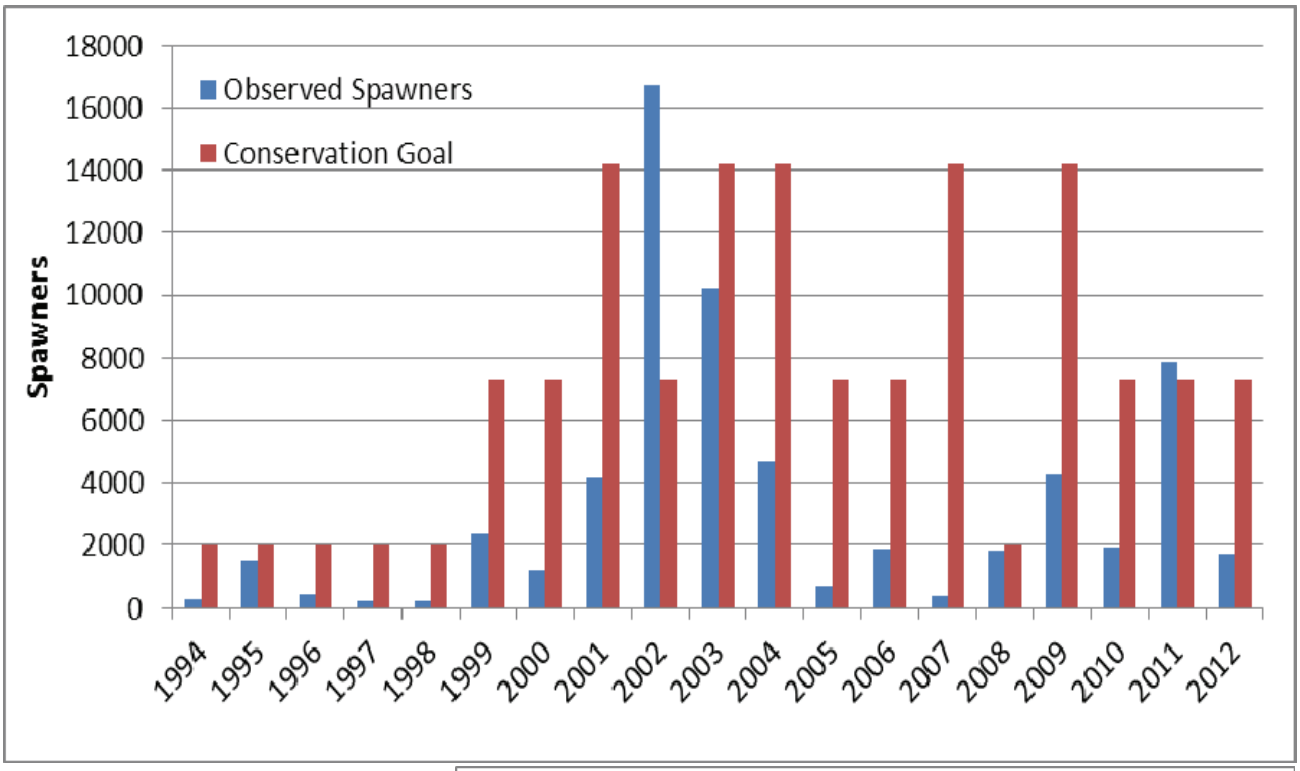
The Nestucca basin is located in Tillamook, Yamhill and Polk counties with a basin size of approximately 319 square miles containing 224 miles of current coho habitat .

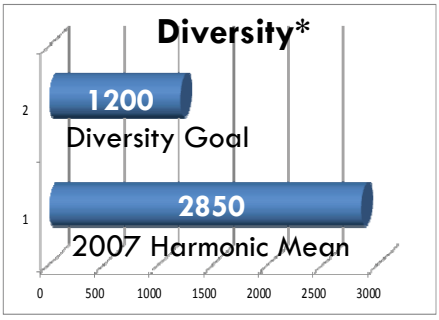
Nestucca Restoration Efforts 1994 - 2012

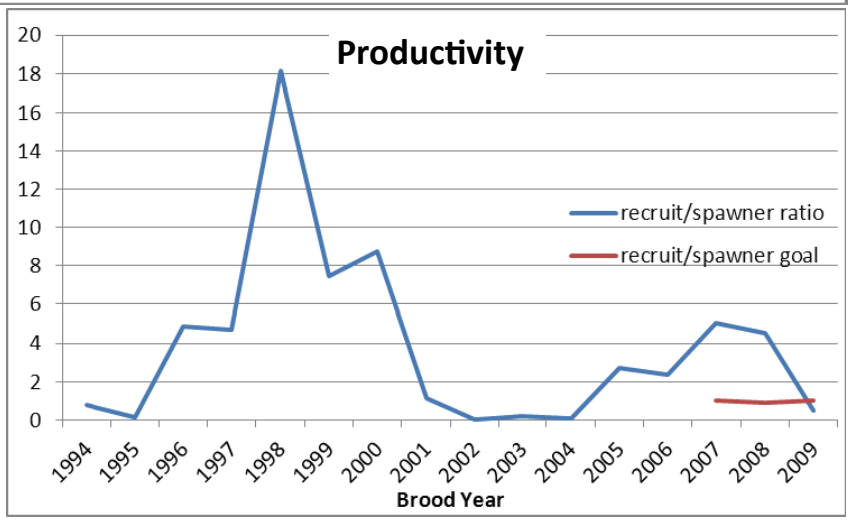


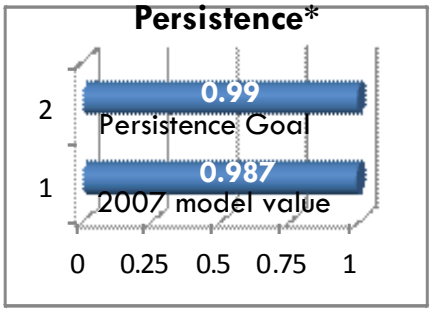
Population Status and Trends

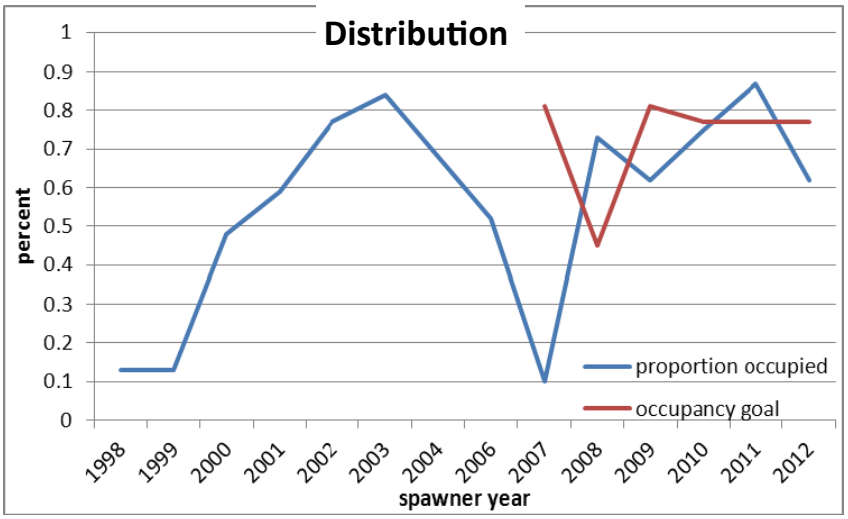
Abundance

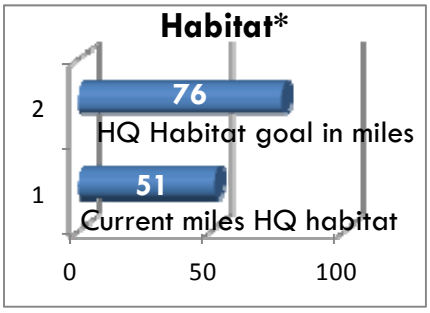












Nestucca

* See page 5 for definitions

Nestucca

Activity Type summaries for the Nestucca Population unit (year 2011)

Location	Limiting Factor	Project Type / Action	cost	Ft/mi/ac/ treated	Detail 1	Detail 2
Nestucca River	Riparian condition	Tree planting	$54,615	1.7 miles	Invasive plant control	Riparian tree planting
Farmer Cr	Stream complexity	Instream and riparian work	$37,477	0.95 miles	64 key pieces LWD in 7 strucutres	Riparian tree planting

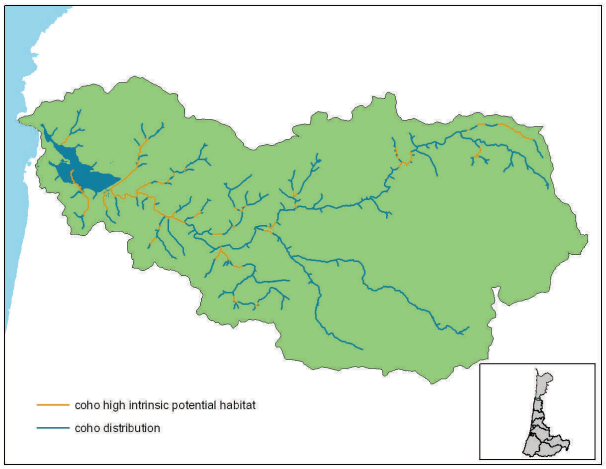
Activity Type summaries for the Nestucca Population unit (year 2012)

Location	Limiting Factor	Project Type / Action	cost	Ft/mi/ac/ treated	Detail 1	Detail 2
Niagra Cr	Riparian Condition	Tree/vegetation planting	$17,554	0.72 miles	Riparian tree planting	
Nestucca R.	Fish access	Culvert replace-ment	$622,668	1.2 miles fish access	2 culverts replaced	
Nestucca Bay	Fish access	Fish screens	$4,291		1 new fish screen	

Salmon

Conservation Strategy - Implement OCCCP physical habitat restoration activities, and maintain hatchery production and recreational harvest at levels identified in the 2007 Conservation Plan.

Limiting Factors for freshwater and estuarine habitat	Actions to address limiting factors
Stream Complexity,	Placement of large woody debris (short term) planting of riparian trees and vegetation (long term.
Water Quality	Planting trees and shrubs for sediment control and stream shading. Modification of agricultural and timber harvest practices.
Hatchery Impacts	Eliminated hatchery production of coho in the Salmon R.

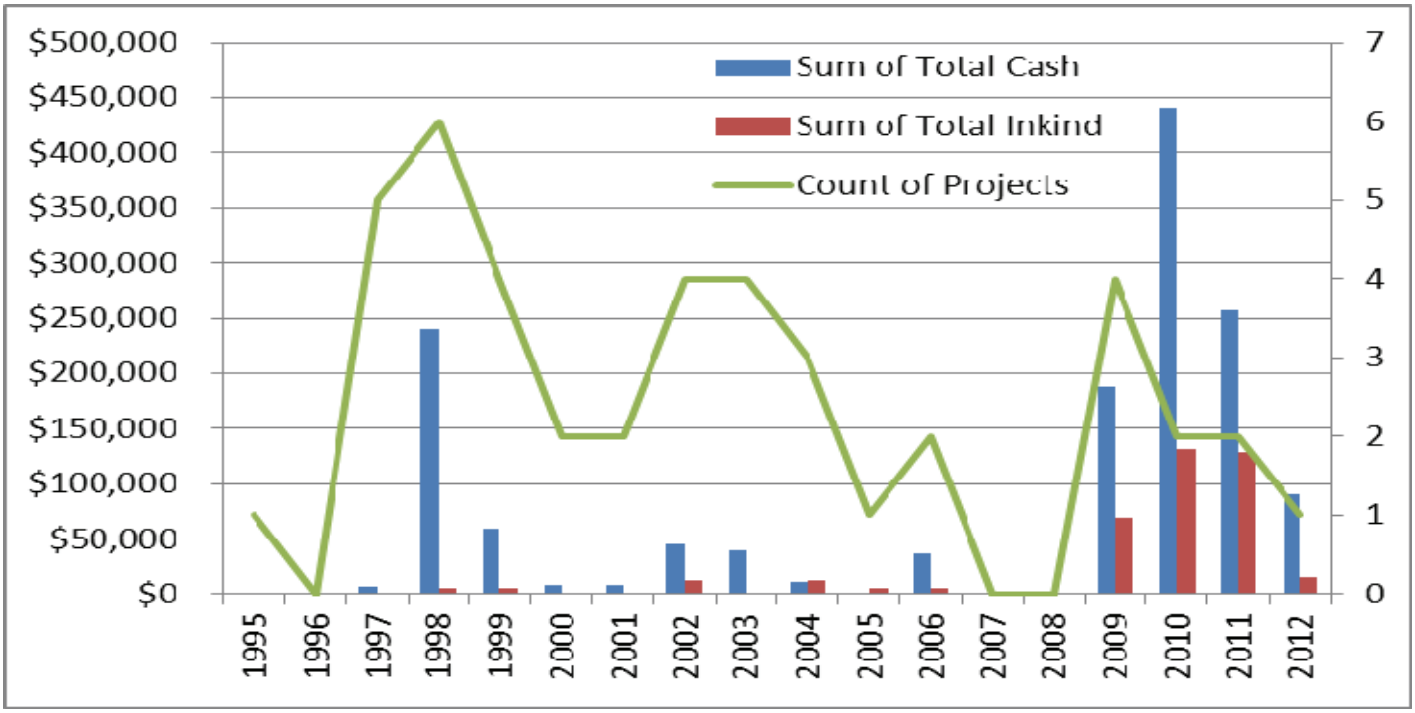


Total Restoration Expenditures in 2011– 2012 for the Salmon Watershed

Year	Sum $ Cash	Sum in-Kind $	Total $	# of projects
2011	$256,442	$129,140	$385,582	2
2012	$89,700	$15,200	$104,900	1

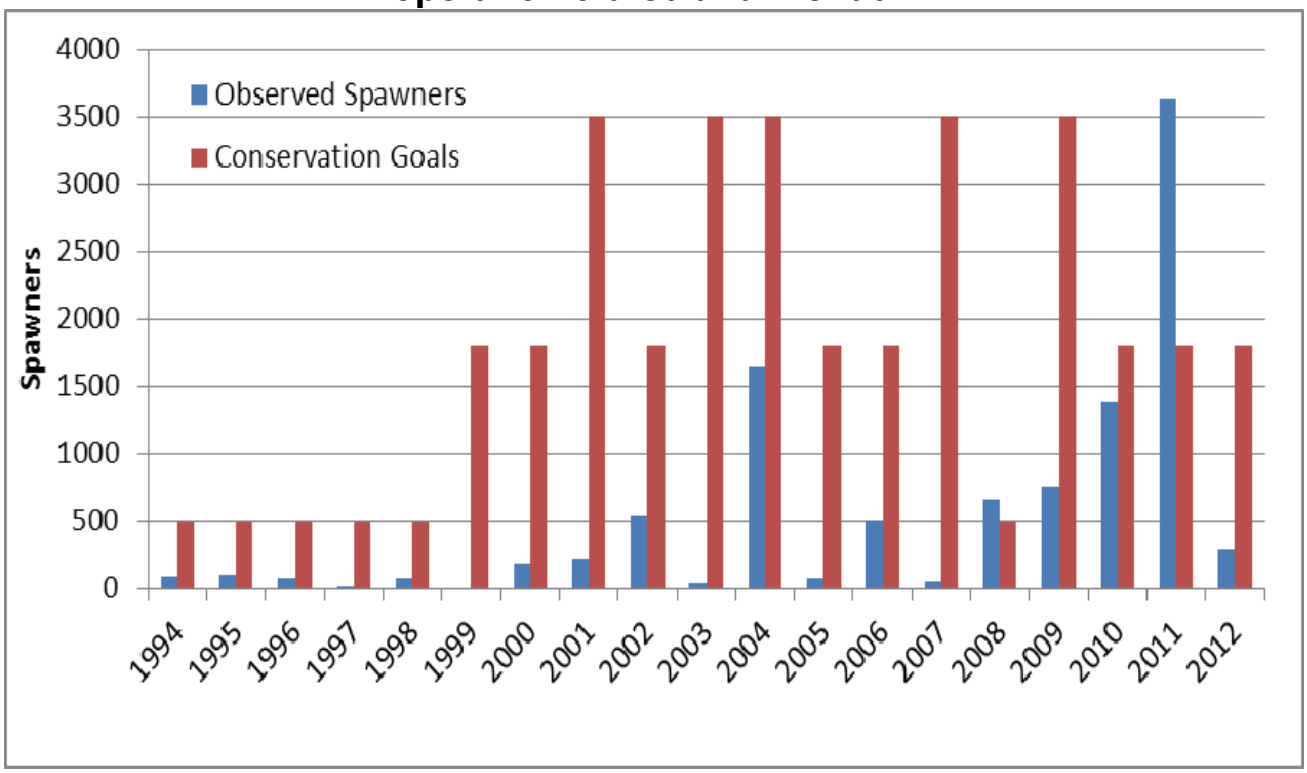
The Salmon basin is located in Lincoln, Tillamook and Polk counties with a basin size of approximately 75 square miles containing about 56 miles of current coho habitat.

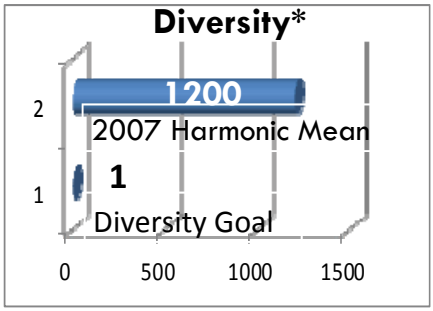
Salmon Restoration Activities 1995 - 2012

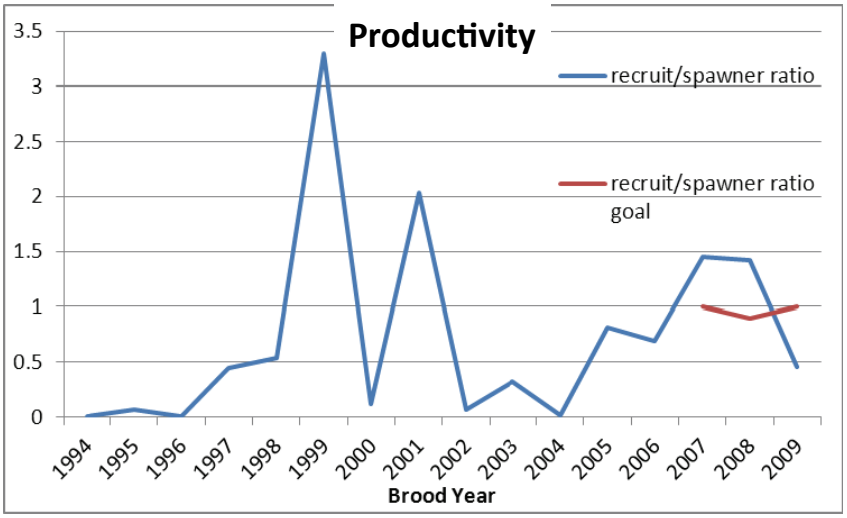


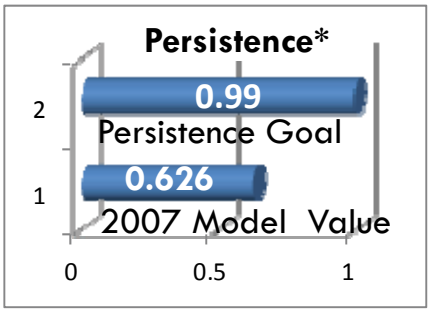
Population Status and Trends

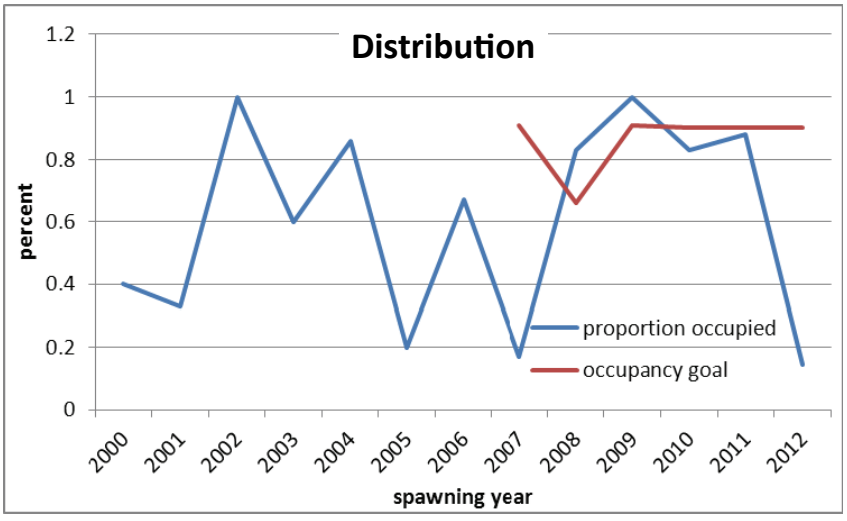
Abundance

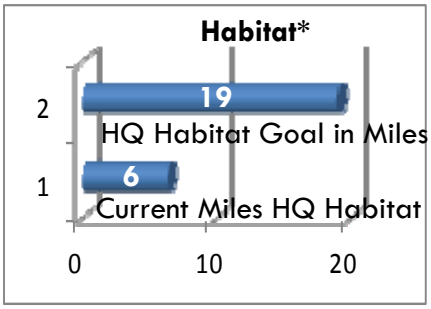












Salmon

* See page 5 for definitions

Salmon

Activity Type summaries for the Salmon Population unit 2011

Location	Limiting Factor	Project Type	cost	Ft/mi/ac/ treated	Detail 1	Detail 2
Salmon River	Floodplain connectivity	Channel modifications, dike removal	$313,249	40 acres, 1 miles	Channel modifications, fill removal, reestablish 40 acres flooded forest wetland	
Salmon River	Floodplain function	Invasive plant control	$72,333	22 acres	Wetland invasive plant control	Estuary Invasive plant control

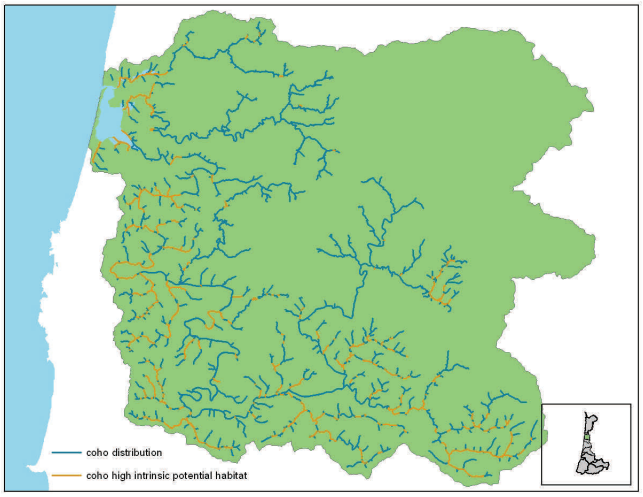
Activity Type summaries for the Salmon Population unit 2012

Location	Limiting Factor	Project Type	cost	Ft/mi/ac/ treated	Detail 1	Detail 2
Prairie Cr	Fish access	Culvert removal / replacement	$104,900	3 (1 miles per structure)	Removed 2 culverts Replaced 1 culvert w/ bridge	Decommissioned 0.28 miles roads

Conservation Strategy - Implement OCCCP physical habitat restoration activities, and maintain hatchery production and recreational harvest at levels identified in the 2007 Conservation Plan.

Siletz

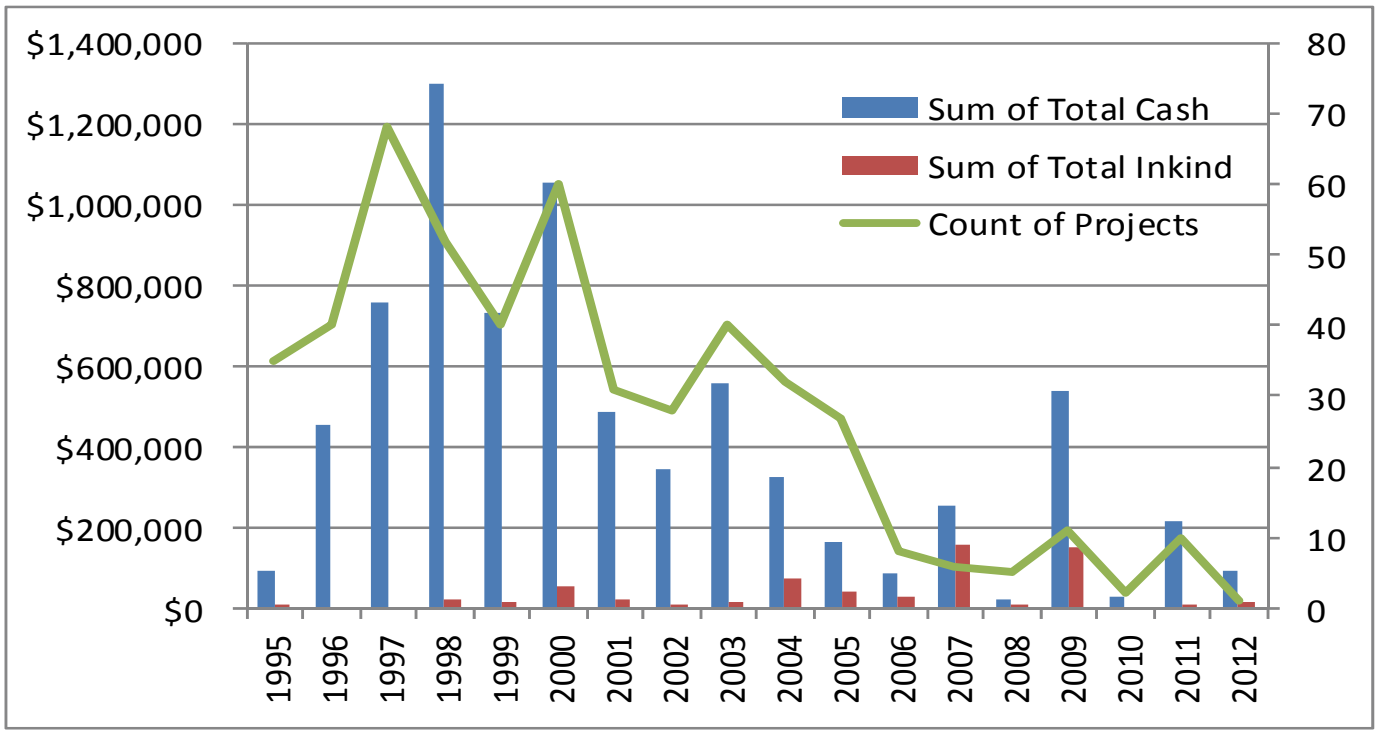
Limiting Factors for freshwater and estuarine habitat	Actions to address limiting factors
Stream Complexity,	Placement of large woody debris (short term) planting of riparian trees and vegetation (long term.
Water Quality	Planting trees and shrubs for sediment control and stream shading. Modification of agricultural and timber harvest practices.



Total Restoration Expenditures in 2011-2012 for the Siletz Watershed

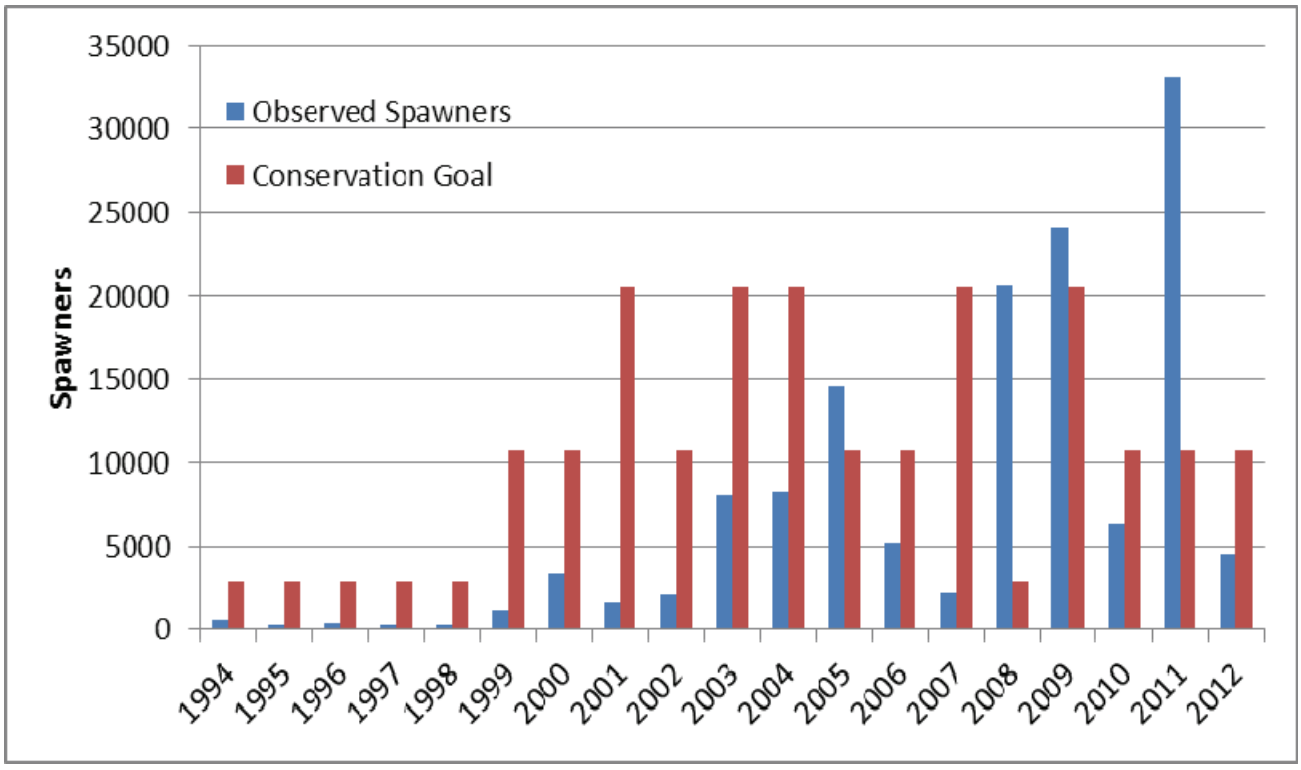
Year	Sum Cash $	Sum in-Kind $	Total $	# of projects
2011	$213,082	$8,900	$221,982	10
2012	$92,200	$17,700	$109,900	1

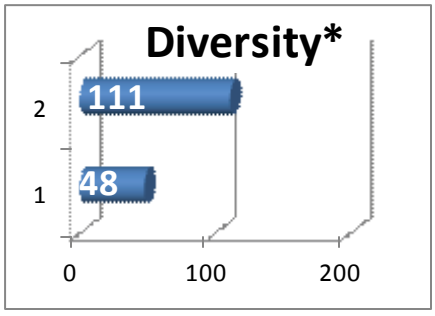
The Siletz basin is located in Lincoln, Benton and Polk counties with a basin size of approximately 368 square miles containing about 267 miles of current coho stream habitat.

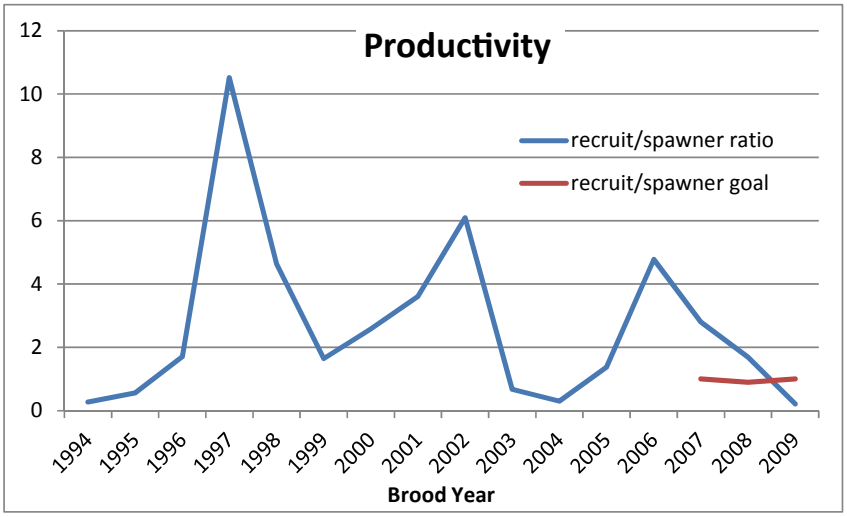


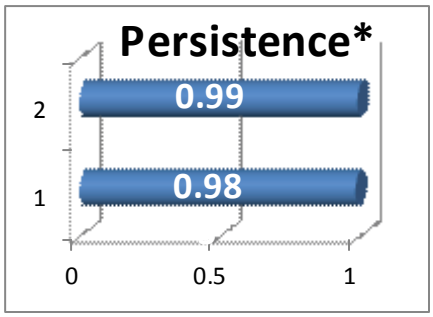
Population Status and Trends

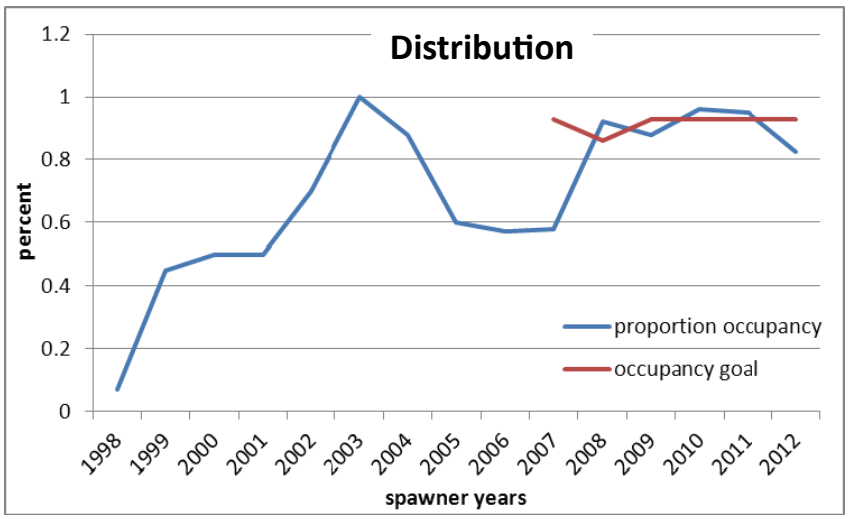
Abundance

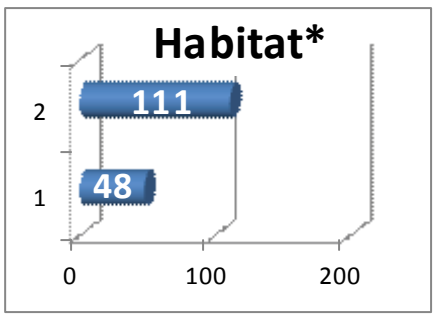












Siletz

* See page 5 for definitions

Siletz

Activity Type summaries for Siletz Population (year 2011)

Location	Limiting Factor	Project Type	Cost	Ft/mi/ ac/ treated	Detail 1	Detail 2
Big Rock Cr	Fish Access	Culvert Replacement	$16,415	.3	1 Culvert replaced	
Schooner Cr.	Fish Access	Culvert Replacement	$9,600	..28	1 Culvert replaced	
South Depoe Bay Cr.	Fish Access	Culvert Replacement	$9464		1 Structure replaced	
Schooner Cr.	Fish Access	Culvert Replacement	$5857	0.35	Dam removed	
Rocky Cr.	Fish Access	Culvert Replacement			2 culverts replaced	
Buck Cr.	Fish Access		$4,700		7 culverts Removed	1.52 miles road decommis-sioned
South Depoe Bay Cr.	Fish Access	Culvert Replacement, Road Improvement	$73,060		7 culverts re-placed	1.7 miles roads rocked, 1.69 miles roads seed-ed w/ grass

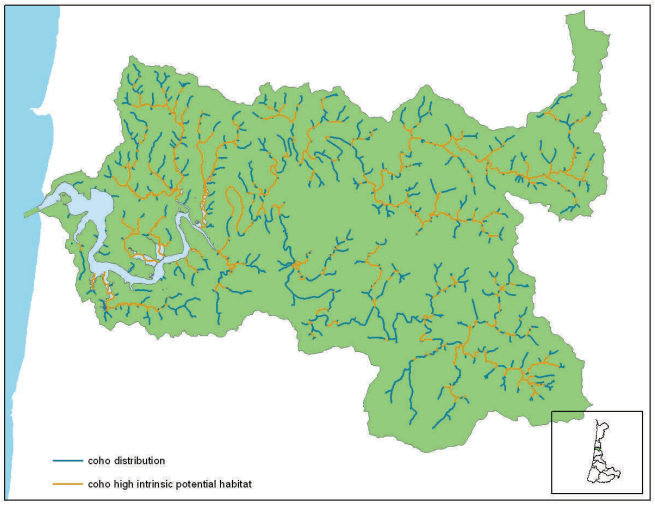
Activity Type summaries for Siletz Population unit (year 2012)

Location	Limiting Factor	Project Type	Cost	Ft/mi/ac/ treated	Detail 1	Detail 2
Siletz River	sediment	Stream bank stabilization	$109,900	0.08 miles	Log revetment installed, bank re-sloped	

Conservation Strategy - Implement OCCCP physical habitat restoration activities, and maintain hatchery production and recreational harvest at levels identified in the 2007 Conservation Plan.

Yaquina

Limiting Factors for freshwater and estuarine habitat	Actions to address limiting factors
Stream Complexity,	Placement of large woody debris (short term) planting of riparian trees and vegetation (long term.
Water Quality	Planting trees and shrubs for sediment control and stream shading.

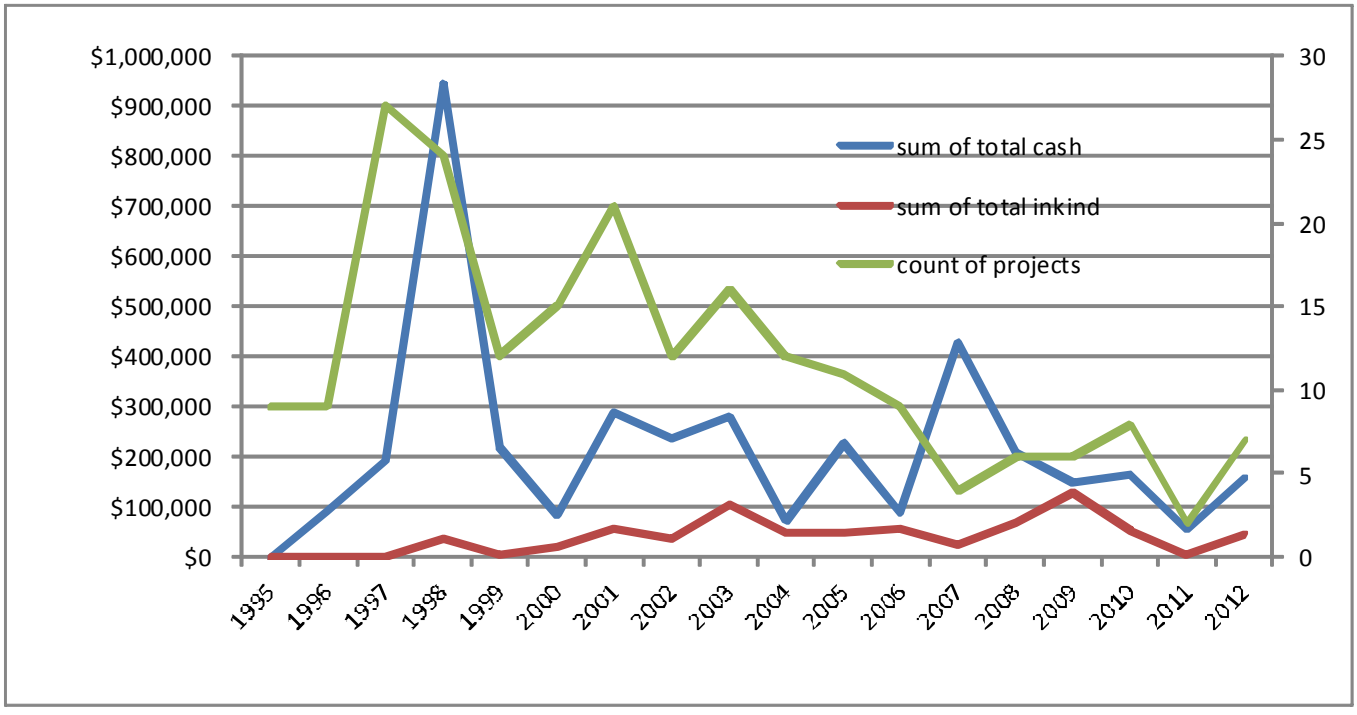


Total Restoration Expenditures in 2011 and 2012 for the Yaquina Watershed

Year	Sum Cash $	Sum in-Kind $	Total $	# of projects
2011	$56,630	$5,000	$61,630	2
2012	$161,512	$45,093	$206,605	7

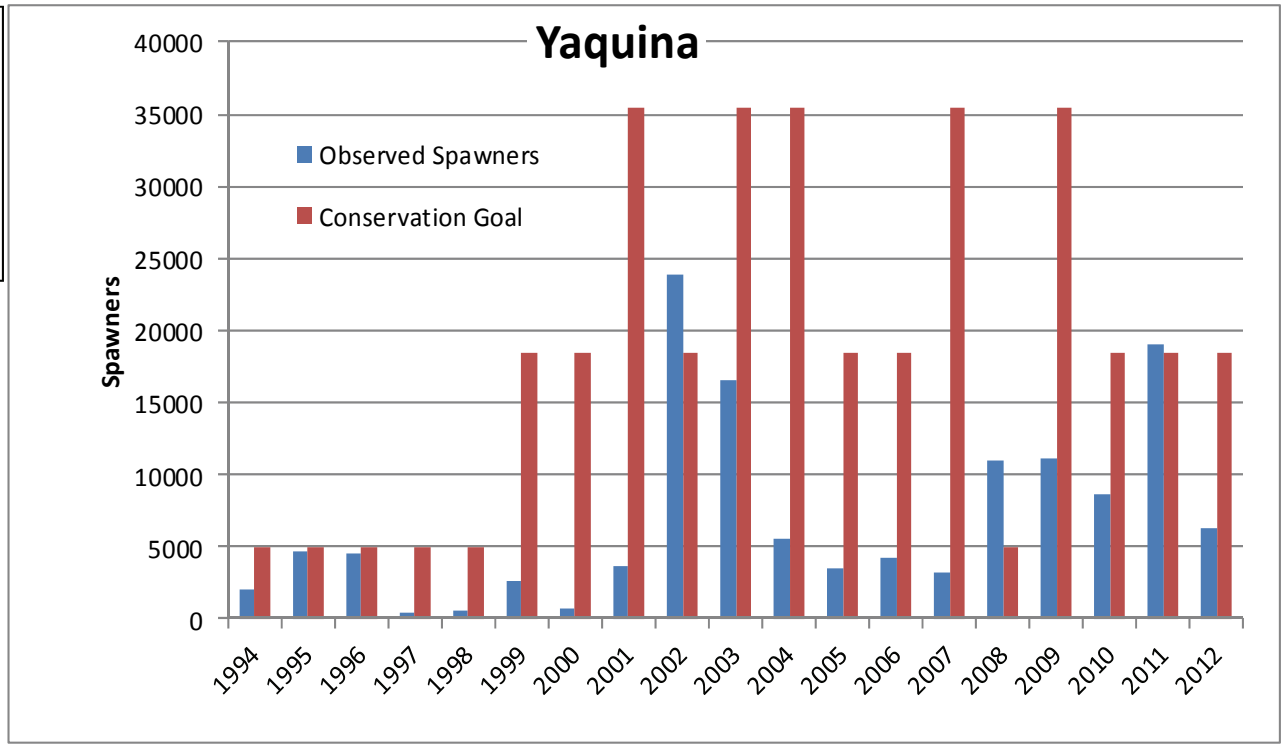
The Yaquina basin is located in Lincoln, Benton and Polk counties with a basin size of approximately 251 square miles containing about 272 miles of current coho stream habitat.

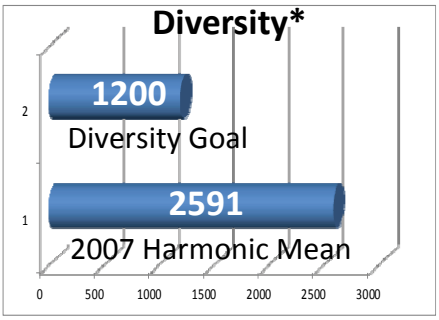
Yaquina Restoration Efforts 1994 - 2012

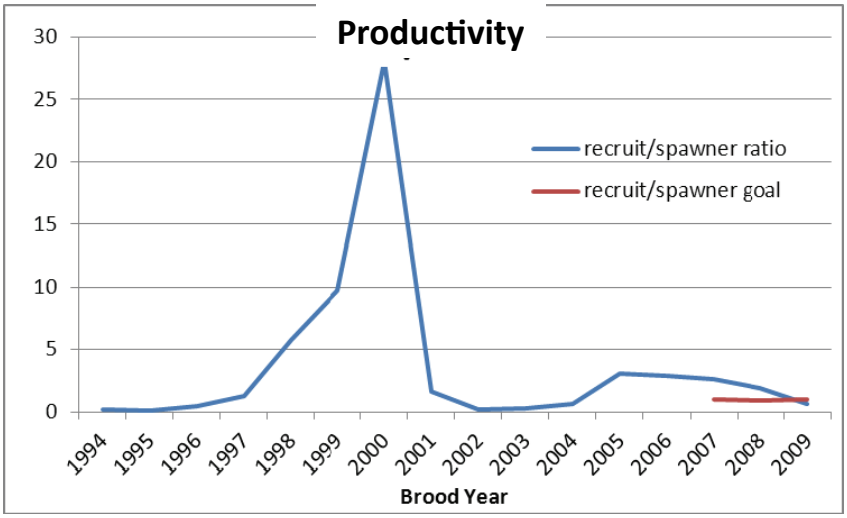


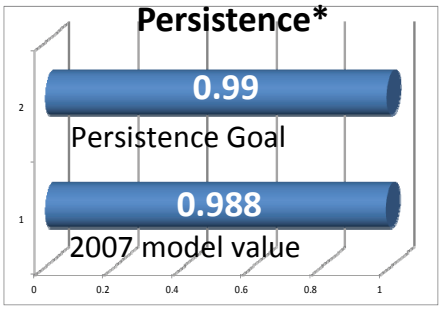
Population Status and Trends

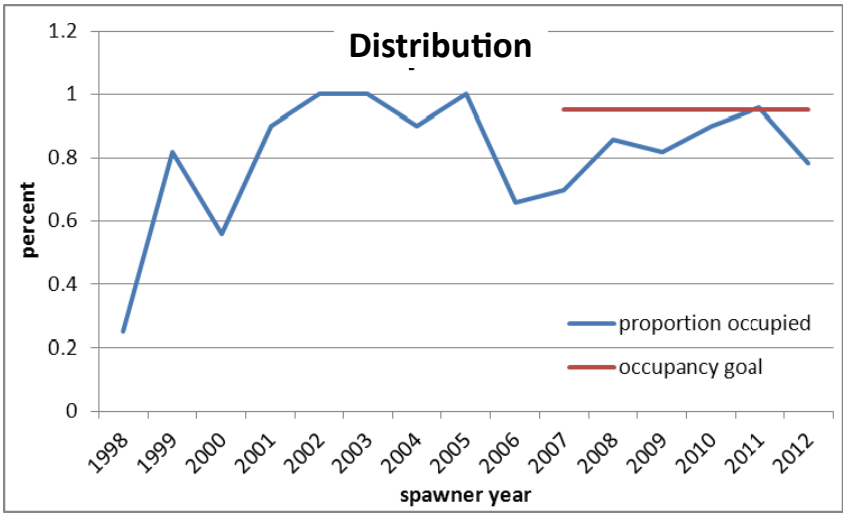
Abundance

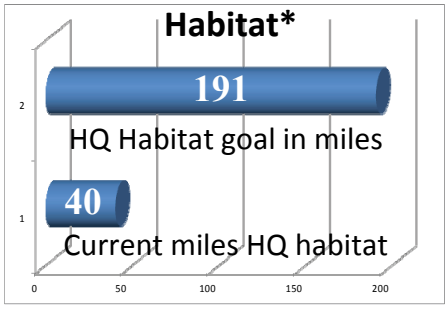












Yaquina

* See page 5 for definitions

Yaquina

Activity Type summaries for Yaquina Population unit (year 2011)

Location	Limiting Factor addressed	Project Type	Cost	Ft/mi/ac/ treated	Detail 1	Detail 2
West Olalla Cr.	Fish passage	Culvert replace-ment	$20,630		1 culvert re-placed	Improved fish access to 1.2 miles of stream
Beaver Cr.	Fish passage Riparian road	Road move, up-grade, culvert replacement	$41,000	0.28 miles	0.28 miles of road moved and rocked	1 culvert replaced

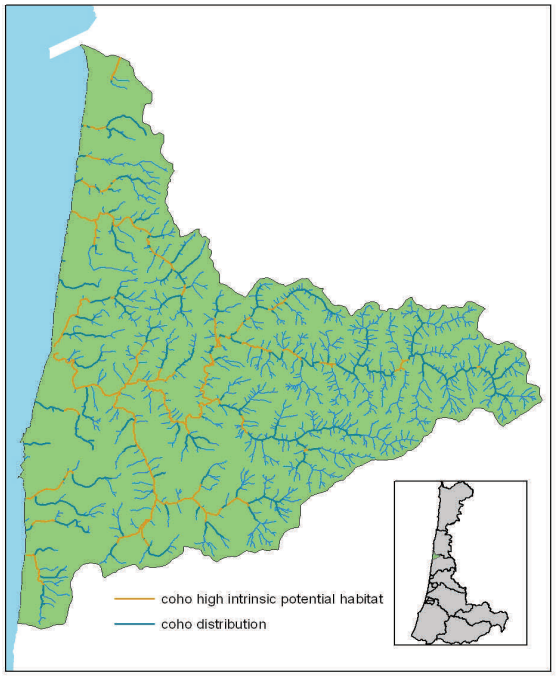
Activity Type summaries for Yaquina Population unit (year 2012)

Location	Limiting Factor addressed	Project Type	Cost	Ft/mi/ac/ treated	Detail 1	Detail 2
Sprout Cr.	Riparian Condition	Invasive plant removal, tree / shrub planting	$4,167	0.1miles	Remove invasive plants, plan ripar-ian trees	Add new tree protection
Poole slough	Upland Vegetation, invasive plant control	Invasive plant removal, tree planting	$16,500	20 acres	Remove invasive plants on uplands	Plant upland trees
Feagles Cr.	Stream Channel modified	Stream channel modified, tree planting	$19,850	0.04 miles	Modify channel	Plant riparian trees
Slack Cr.	Instream complexity	Place LWD	$6,009	0.25 miles	Place 40 key pieces in 6 structures	
Big Elk Cr.	Sediment reduction	Upgrade road, culvert Replacement	$15,057		Replace culvert to 50 year peak flow	Rock road
Tributary X	Riparian Condition	Riparian tree planting	$40,592	0.7 miles	Plant riparian trees	Plant vegetation to en-courage beaver colonization
Feagles Cr.	Riparian condition	Riparian fencing, riparian tree planting	$101,430	1.3 miles	Fence riparian area	Plant riparian trees, add tree protection

Conservation Strategy - Implement OCCCP physical habitat restoration activities, and maintain hatchery production and recreational harvest at levels identified in the 2007 Conservation Plan.

Limiting Factors for freshwater and estuarine habitat	Actions to address limiting factors
Stream Complexity	Placement of large woody debris (short term) Planting of riparian trees and vegetation (long term).
Water Quality	Planting trees and shrubs for sediment control and stream shading. Modification of agricultural and timber harvest practices.

Beaver Cr.

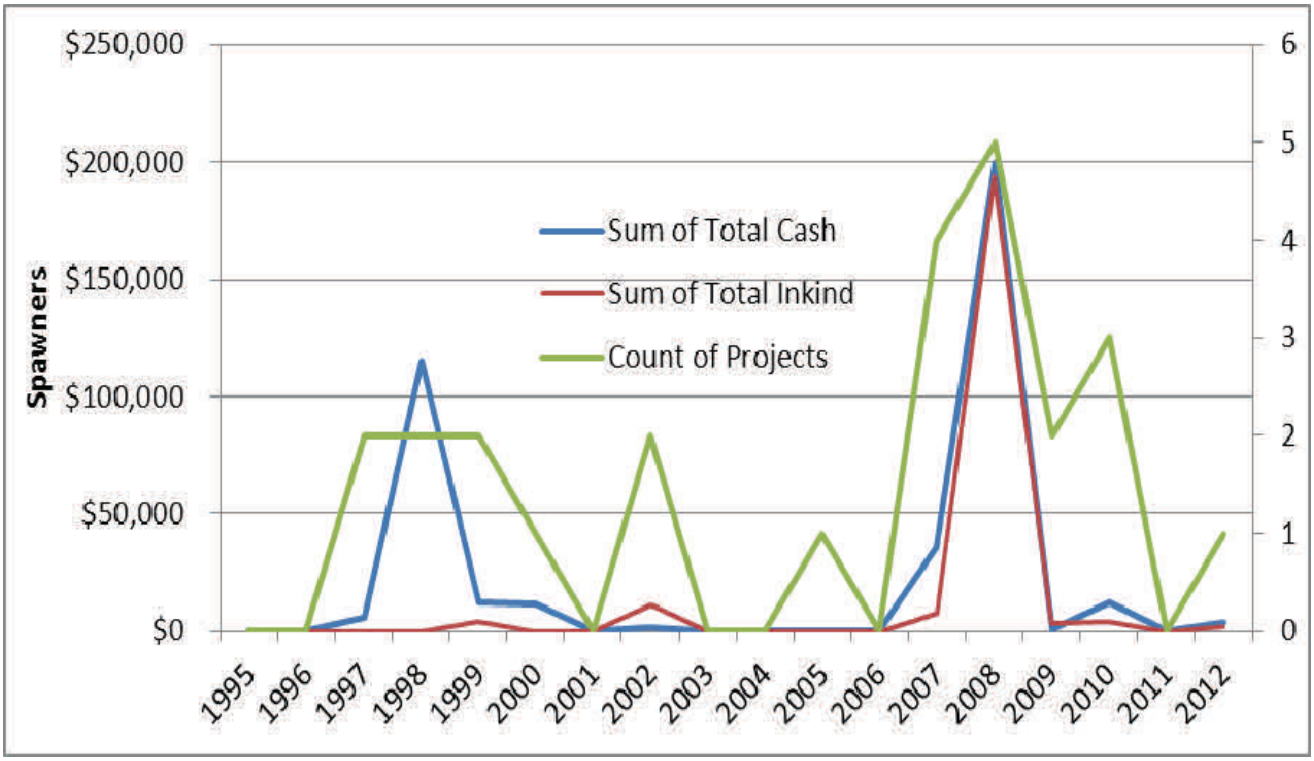


Total Restoration Expenditures in 2011 and 2012 for the Beaver Cr. Watershed

Year	Sum Cash $	Sum in-Kind $	Total $	# of projects
2011	$0	$0	$0	0
2012	$3,805	$1,910	$5,715	1

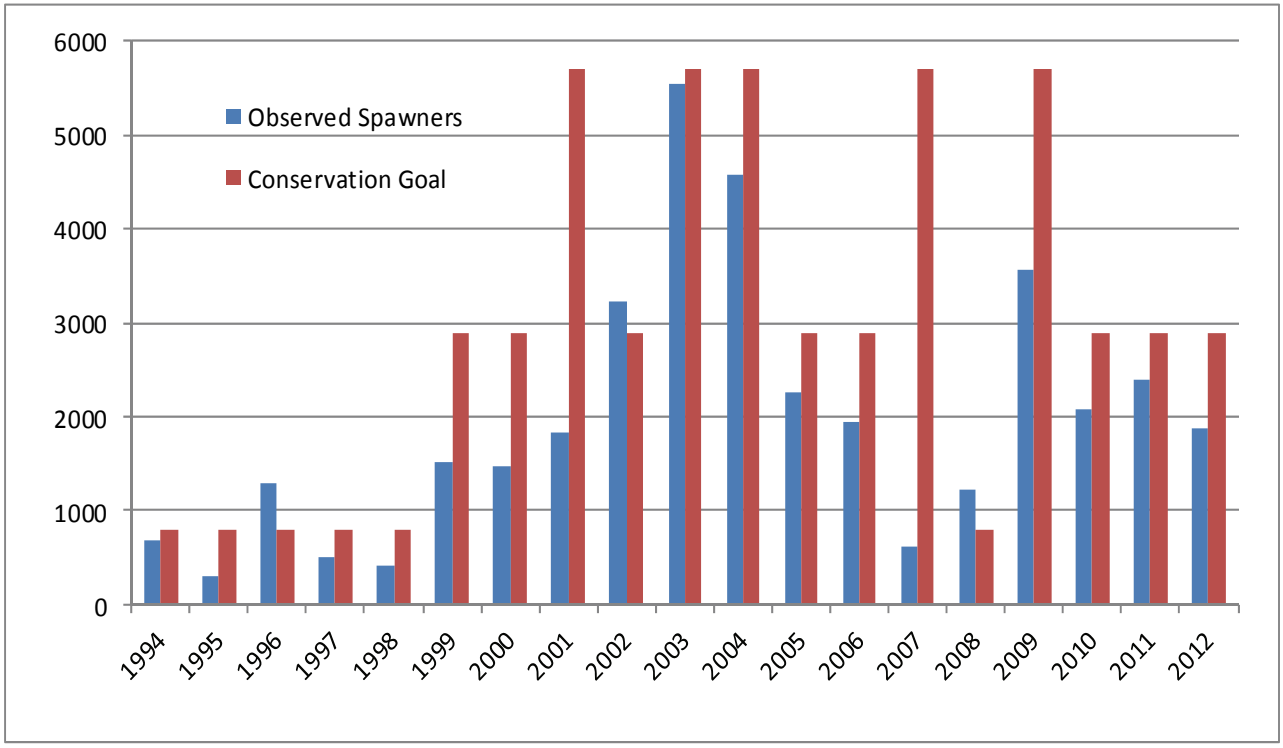
The Beaver Cr. basin is located in Lincoln county with a basin size of approximately 49 square miles containing about 44 miles of current coho stream habitat.

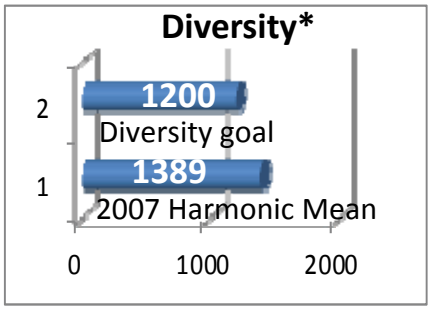
Beaver Creek Restoration Efforts 1995 –2012

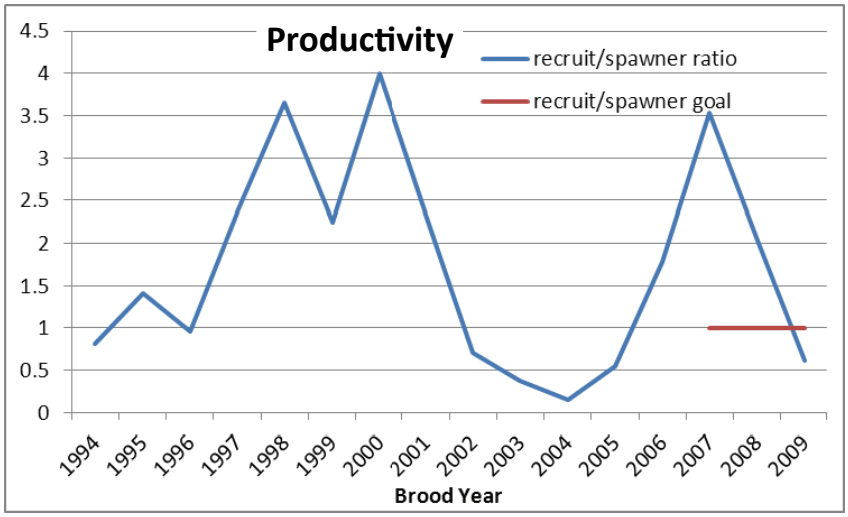


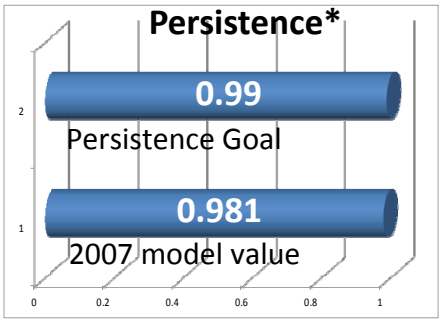
Population Status and Trends

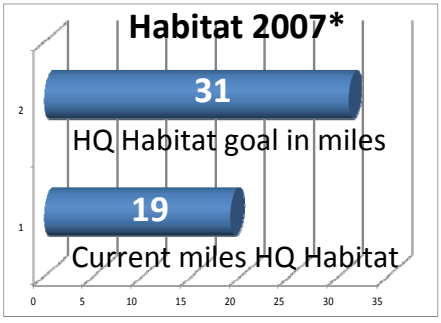
Abundance

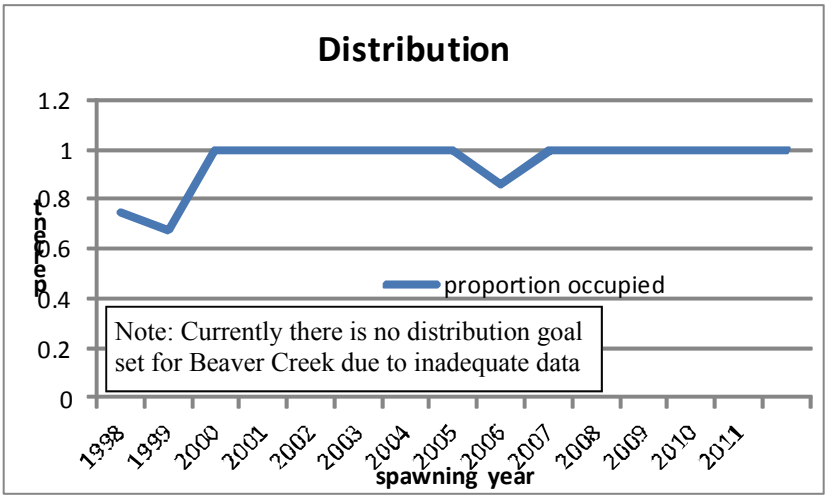












Beaver Cr.

* See page 5 for definitions

Beaver Cr.

Activity Type summaries for Beaver Cr. (year 2011)

Location	Limiting Factor	Project Type	Cost	Ft/mi/ac/ treated	Detail 1	Detail 2
		No Projects in 2011				

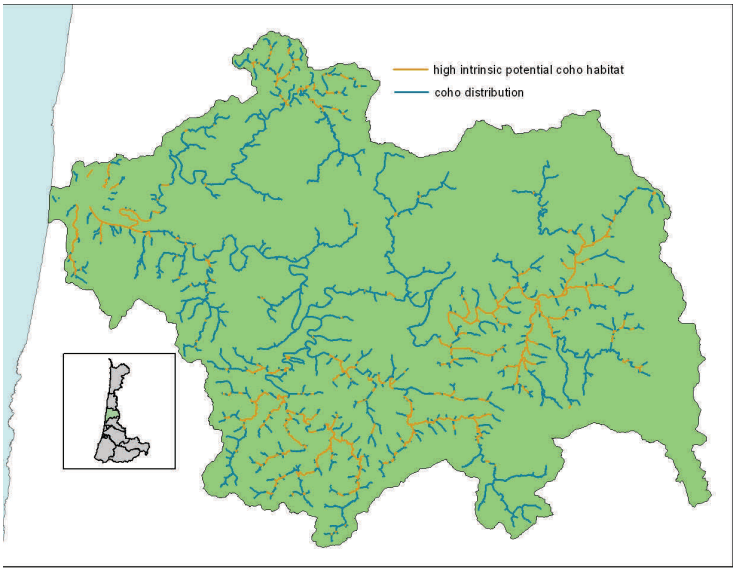
Activity Type summaries for Beaver Cr. (year 2012)

Location	Limiting Factor	Project Type	Cost	Ft/mi/ac/ treated	Detail 1	Detail 2
Jack Rabbit Creek	Fish Access	Push up Dam removal	$5,715	1 mile of habitat opened	Removal of a push -up dam	

Conservation Strategy - Implement OCCCP physical habitat restoration activities, and maintain hatchery production and recreational harvest at levels identified in the 2007 Conservation Plan.

Alsea

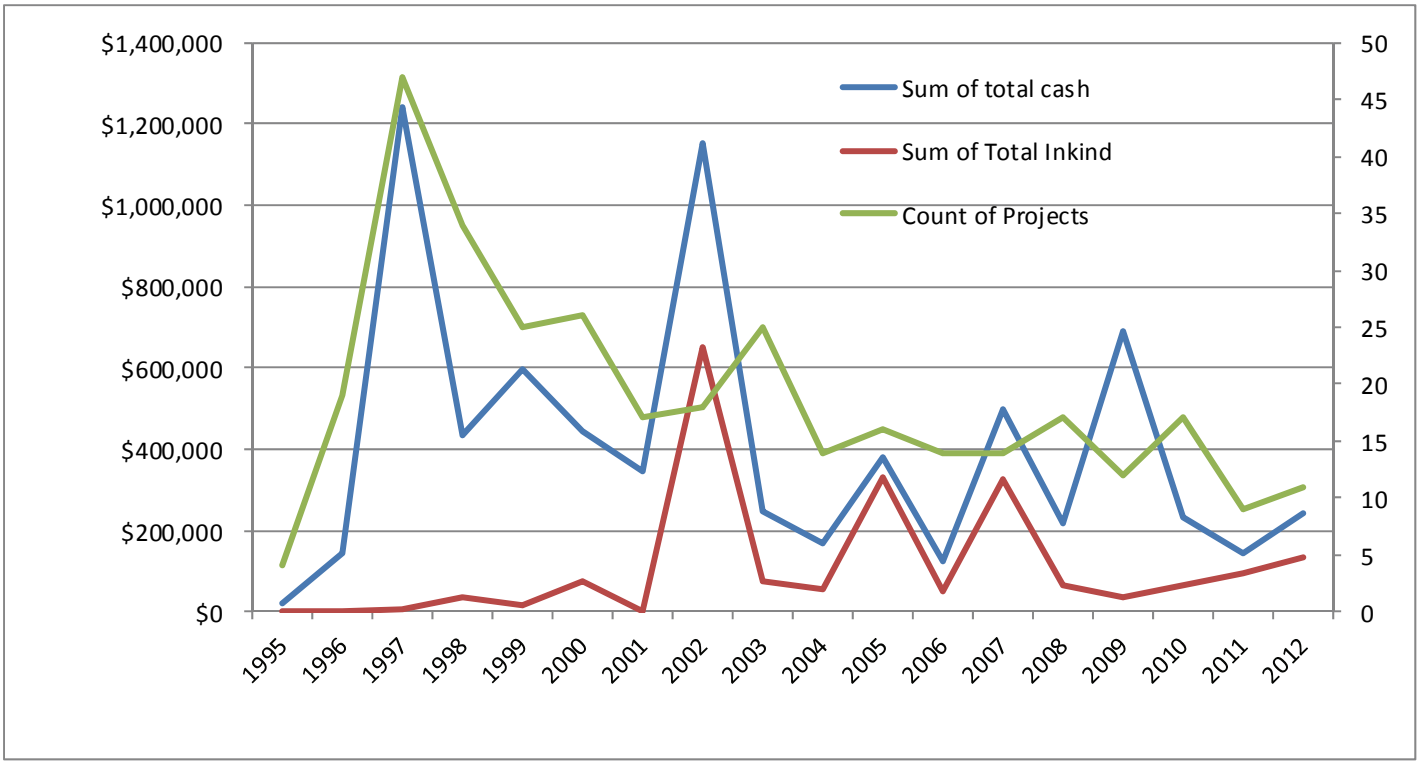
Limiting Factors for freshwater and estuarine habitat	Actions to address limiting factors
Stream Complexity,	Placement of large woody debris (short term) planting of riparian trees and vegetation (long term.
Water Quality	Planting trees and shrubs for sediment control and stream shading. Modification of agricultural and timber practices.



Total Restoration Expenditures in 2011and 2012 for the Alsea Watershed

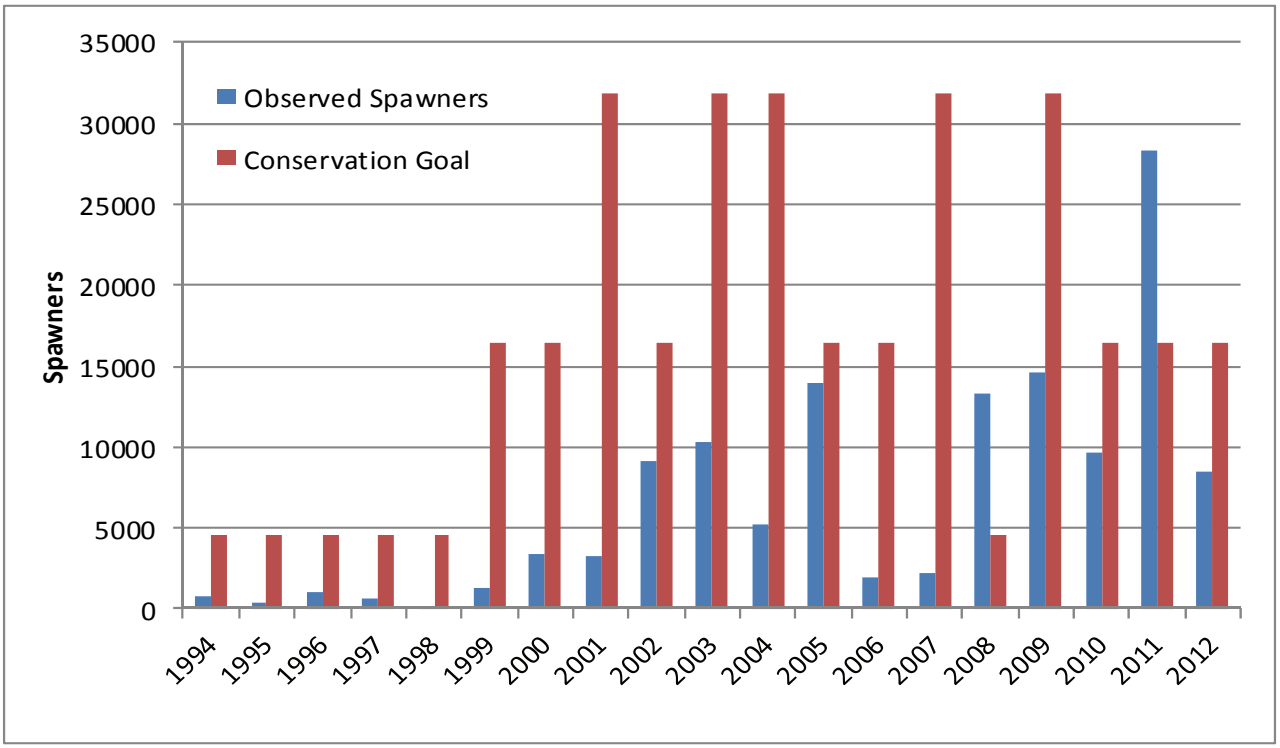
Year	Sum Cash $	Sum in-Kind $	Total $	# of projects
2011	$143,183	$93,274	$236,457	9
2012	$240,618	$133,829	$374,447	11

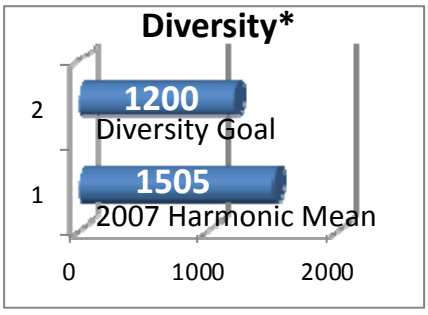
The Alsea basin is located in Lincoln, Benton and Lane counties with a basin size of approximately 472 square miles containing about 406 miles of current coho stream habitat.

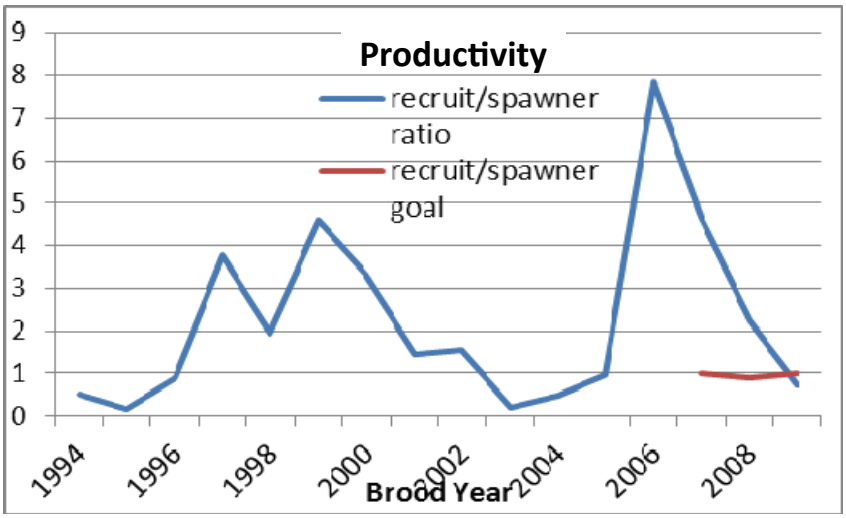


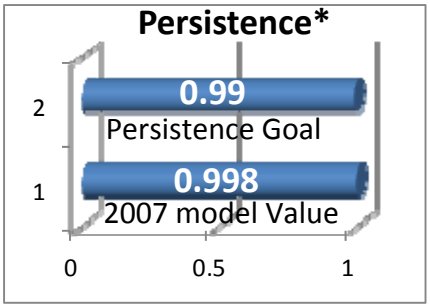
Population Status and Trends

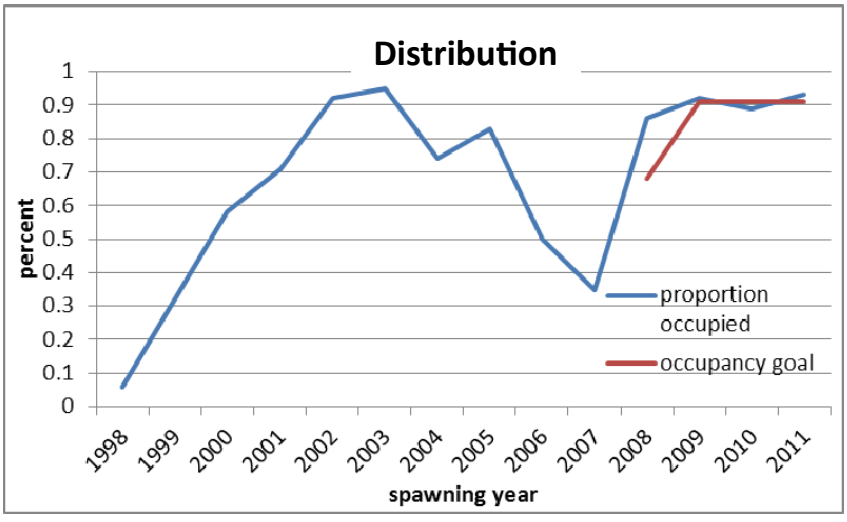
Abundance

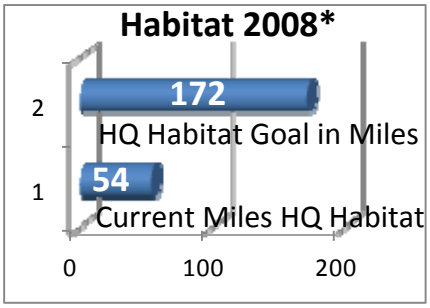












Alsea

* See page 5 for definitions

Alsea

Activity Type summaries for Alsea Population unit (year 2011)

Location (trib. of)	Limiting Factor	Project Type	Cost	Mi/ac/ treated	Detail 1	Detail 2
Yachats River	Riparian condition	Tree planting, fencing	$14,754	0.04 miles	0.35 miles riparian tree planting	0.4 miles riparian fencing
Yachats River	Riparian condition	Tree planting, fencing, invasive removal	$18,752	0.14 miles	0.14 miles riparian tree planting, fencing	0.14 miles invasive plant removal
Trout Cr.	Instream complexity	LWD placement, Culvert replacement	$202,951	1 mile	12 key pieces in 6 structures, 1mile riparian tree planting	Replaced 1 Culvert, opened 4 miles of fish habitat
Headrick Cr.	Riparian condition	Voluntary tree retention	$0	0.22 miles	Voluntary tree retention	
Headrick Cr.	Riparian condition	Voluntary tree retention	$0	0.2 miles	Voluntary tree retention	
Alsea River	Riparian condition	Voluntary tree retention	$0	0.32 miles	Voluntary tree retention	
Honeygrove Cr.	Riparian condition	Voluntary tree retention	$0	0.1 miles	Voluntary tree retention	
Honeygrove Cr.	Riparian condition	Voluntary tree retention	$0	0.42 miles	Voluntary tree retention	
South Beamer Cr.	Riparian condition	Hardwood conversion	$0	1 mile	Hardwood conversion	

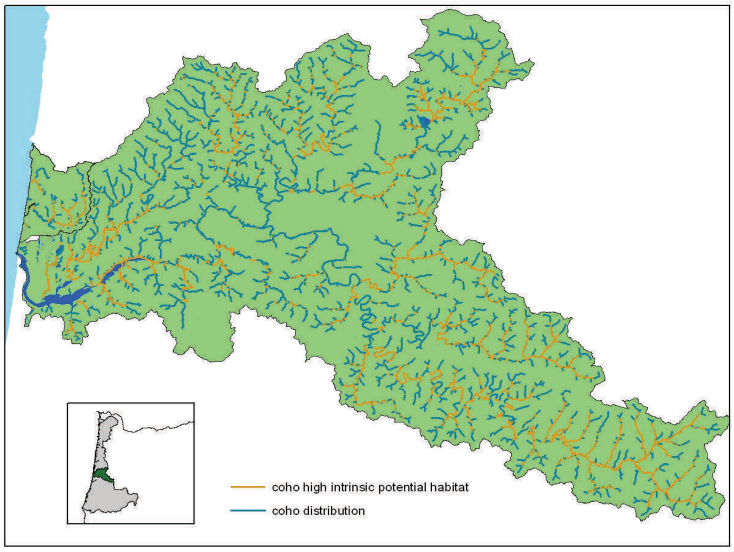
Activity Type summaries for Alsea Population unit (year 2012)

Location (trib. of)	Limiting Factor	Project Type	Cost	Mi/ac/ treated	Detail 1	Detail 2
Yachats River	Riparian Condition	Tree, vegetation planting	$20,504	1mile, 2 acres	1 mile of riparian tree planting, and invasive plant control	1.2 miles grass seeding road, 2 acres wetland vegetation
Yachats River	Upland invasive plants	Invasive plant removal	$6,060	2 acres	Upland invasive plant control	
Starr Cr.	Upland vegetation	Vegetation management	$38,502	40 acres	Upland vegetation management, planting	
Deer Cr.	Instream Complexity	Instream complexity	$3,620	0.25 miles	LWD placement, 22 key pieces in 4 structures	
Canal cr.	Sediment	Bank stabilization	$59,854	0.40 miles	0.06 mile stream bank stabilization w/ log and rock revetments	0.34 miles riparian tree planting
Baker Cr.	Riparian Condition	Voluntary tree retention	$13,945	0.15 miles	Riparian fencing	2 off channel water sites developed
Alsea River	Riparian Condition	Voluntary tree retention	$0	0.75 miles	Voluntary tree retention	
Unnamed tributary	Riparian Condition	Voluntary tree retention	$0	0.19 miles	Voluntary tree retention	
Alsea River	Riparian Condition	Voluntary tree retention	$0	0.38 miles	Voluntary tree retention	
Baker Cr.	Riparian Condition	Voluntary tree retention	$0	0.61 miles	Voluntary tree retention	
Bummer Cr.	Instream Complexity	Instream complexity, fish access, riparian planting	$231,962	1.8 miles	LWD placement, 95 key pieces in 13 total structures, riparian fencing, invasive plant control	Replaced 1 culvert, 0.4 acres wetland restoration

Conservation Strategy - Implement OCCCP physical habitat restoration activities, and maintain hatchery production and recreational harvest at levels identified in the 2007 Conservation Plan.

Siuslaw

Limiting Factors for freshwater and estuarine habitat	Actions to address limiting factors
Stream Complexity,	Placement of large woody debris (short term) planting of riparian trees and vegetation (long term.
Water Quality	Planting trees and shrubs for sediment control and stream shading. Modification of agricultural and timber harvest practices.

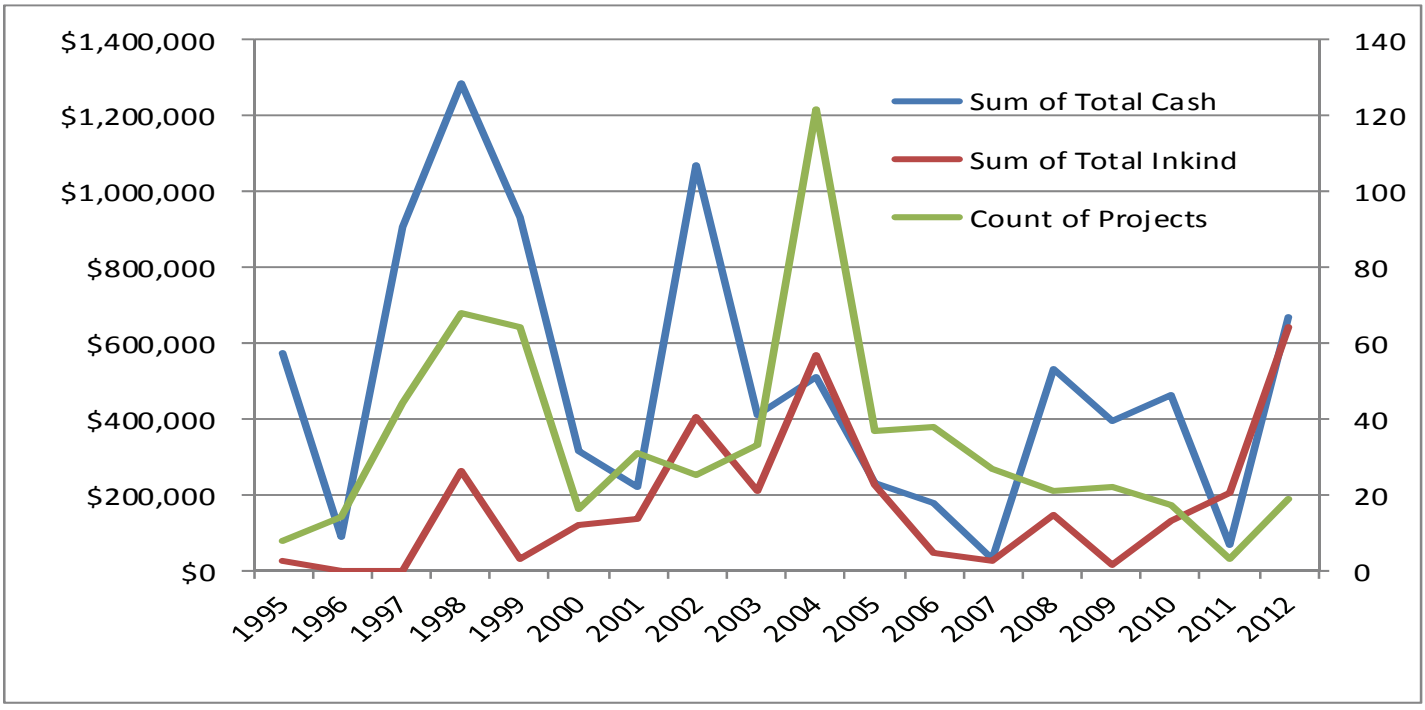


Total Restoration Expenditures in 2011—2012 for the Siuslaw Watershed

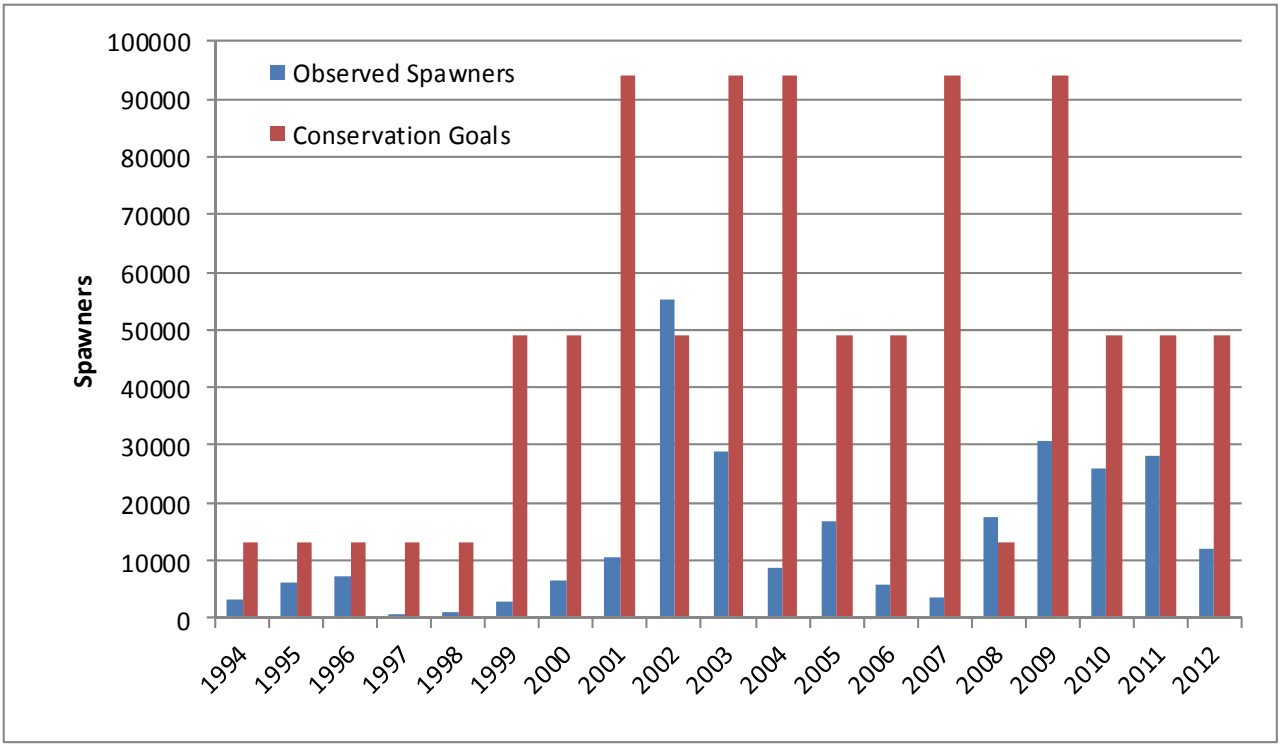
Year	Sum Cash $	Sum in-Kind $	Total $	# of projects
2011	$69,424	$204,324	$273,748	3
2012	$667,301	$641,451	$1,308,752	19

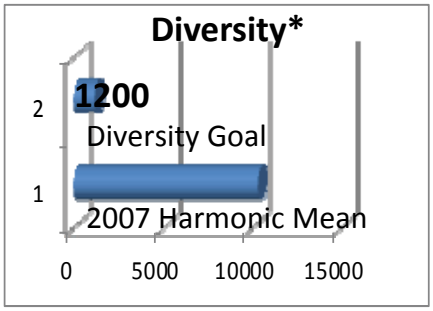
The Siuslaw basin (including the Mercer lake sub basin) is located in Benton, Lane and Douglas counties with a basin size of approximately 798 square miles containing about 814 miles of current coho stream habitat.

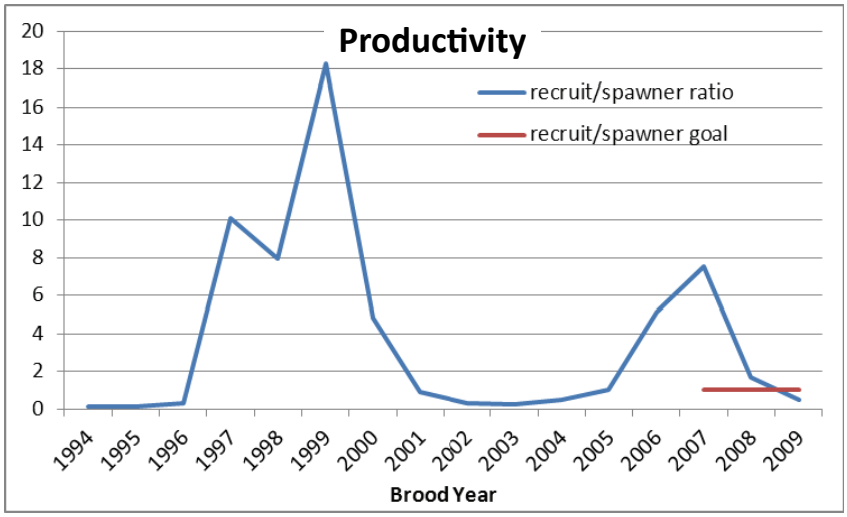
Siuslaw Restoration Efforts 1994 - 2012

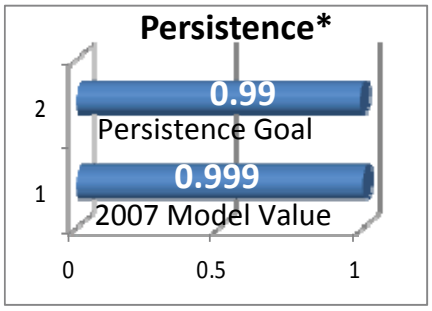


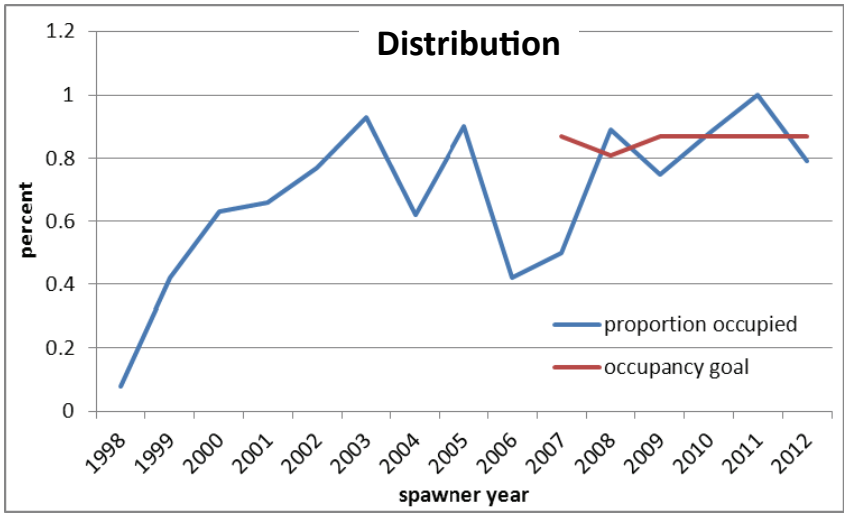
Abundance

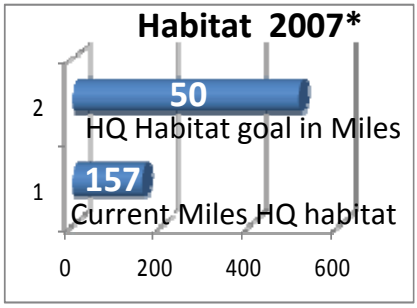












Siuslaw

* See page 5 for definitions

Siuslaw

Activity Type summaries for Siuslaw Population unit (year 2011)

Location	Limiting Factor	Project Type	Cost	Ft/mi/ac/ treated	Detail 1	Detail 2
Letz Cr	Riparian Condition	Voluntary tree retention	$0	0.6 miles	Voluntary riparian tree retention	
Siuslaw River	Riparian Condition	Tree/shrub planting	$156,814	15 miles	3 miles invasive plant control	10 miles riparian tree planting, 5.5 miles riparian shrub planting
Siuslaw River	Riparian Condition	Tree planting	$116,934	15.6 miles	2.6 miles invasive control, 11 miles riparian tree planting	5.6 miles shrub riparian shrub planting

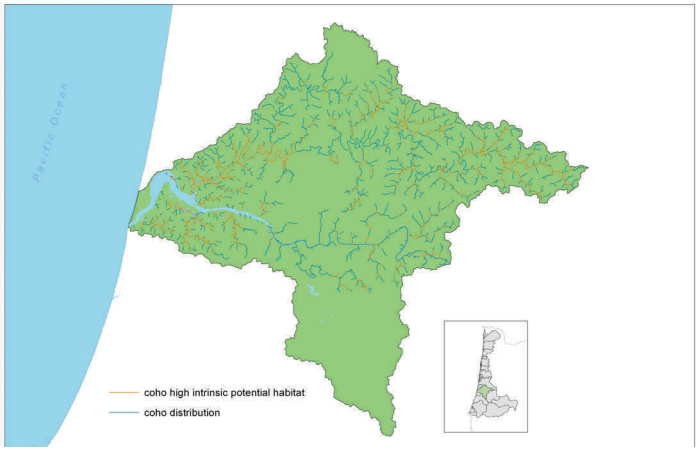
Activity Type summaries for Siuslaw Population unit (year 2012)

Location	Limiting Factor	Project Type	Cost	Ft/mi/ac/ treated	Detail 1	Detail 2
Knapp Cr.	Stream Complexity	LWD placement	$15,450	0.85 miles	48 key pieces in 10 structures	
Siuslaw River	Riparian Condition	Tree and vegetation planting	$89,968	17 miles	Invasive plant control, tree planting, vegeta-tion planting	Tree protection
Misery Cr, Dead-wood Cr, Failor Cr, Bear Cr, and Green Cr.	Stream Complexity	LWD placement, tree planting	$1,026,691	14 miles	535 key pieces in 76 structures, riparian tree planting	Power line moved out of riparian
Siuslaw River	Invasive Plant Control		$14,800	6 miles	Riparian Knotweed Control	
Condon Cr	Instream Complexity	LWD placement, culvert replacement	$133,705	1.25 miles	100key pieces in 14 total structures, riparian tree planting	24 structures re-placed to meet 50yr flow, 30 cross drains Added
Tenmile Cr	Fish Access	Culvert removal	$5,092	0.15 miles	Culvert removed	1 mile habitat opened
Siuslaw River	Sediment control	Road maintenance	$23,041	0.19 miles	Cross drains add-ed, road rocked	
Greenleaf Cr.		Voluntary riparian tree retention	$0	0.23 miles		
Greenleaf Cr		Voluntary riparian tree retention	$0	0.29 miles		
Douglas Cr		Voluntary riparian tree retention	$0	0.15 miles		
Buck Cr		Voluntary riparian tree retention	$0	0.53 miles		
Norris Cr		Voluntary riparian tree retention	$0	0.11 miles		
Saleratus Cr		Voluntary riparian tree retention	$0	0.34 miles		
Oat Cr		Voluntary riparian tree retention	$0	0.09 miles		
Shaw Cr		Voluntary riparian tree retention	$0	0.03 miles		
Wolf Cr		Voluntary riparian tree retention	$0	0.09 miles		
Luyne Cr		Voluntary riparian tree retention	$0	0.14 miles		
Fawn Cr		Voluntary riparian tree retention	$0	0.4 miles		
North Cr		Voluntary riparian tree retention	$0	0.5 miles		

Conservation Strategy - Implement OCCCP physical habitat restoration activities, and maintain hatchery production and recreational harvest at levels identified in the 2007 Conservation Plan.

Lower Umpqua

Limiting Factors for freshwater and estuarine habitat	Actions to address limiting factors
Stream Complexity,	Placement of large woody debris (short term) planting of riparian trees and vegetation (long term.
Water Quality	Planting trees and shrubs for sediment control and stream shading. Modification of agricultural and timber harvest practices.

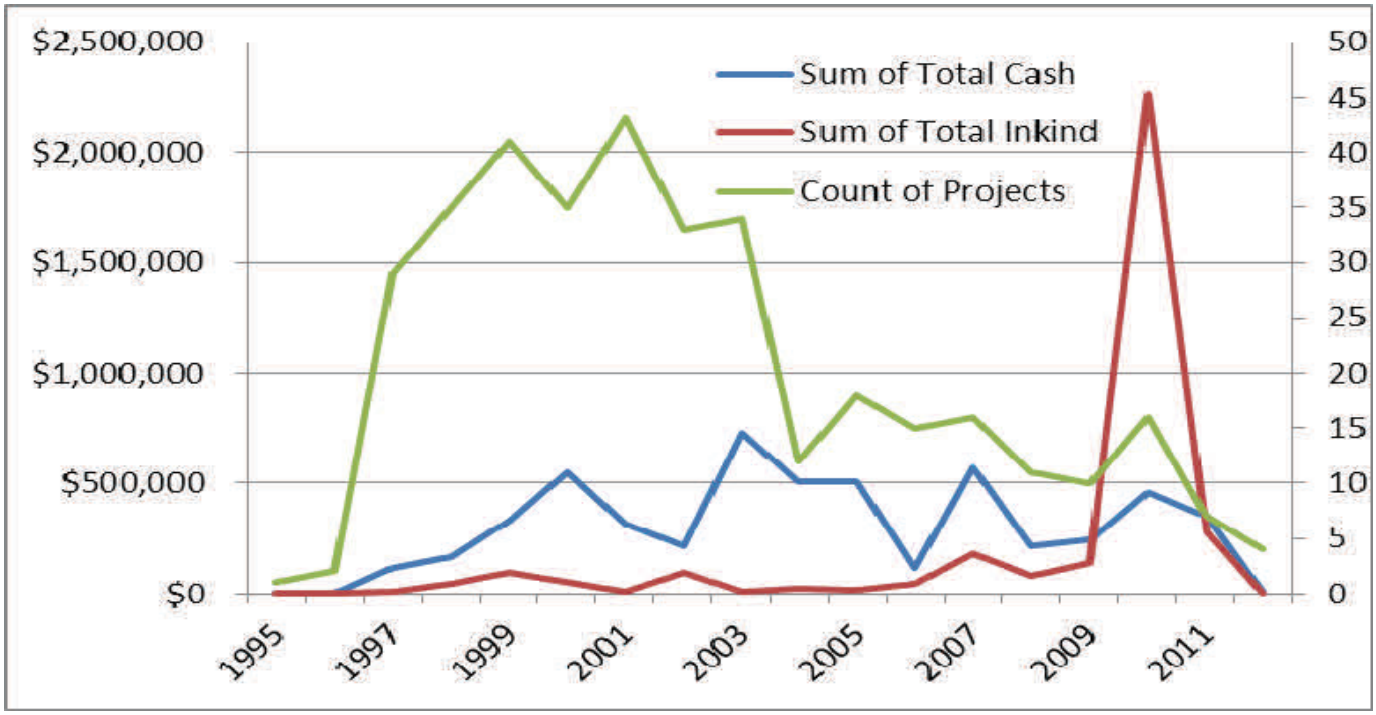


Total Restoration Expenditures in 2011 –2012 for the Lower Umpqua Watershed

Year	Sum Cash $	Sum in-Kind $	Total $	# of projects
2011	$351,810	$281,280	$633,090	7
2012	$10,398	$5,000	$15,398	4

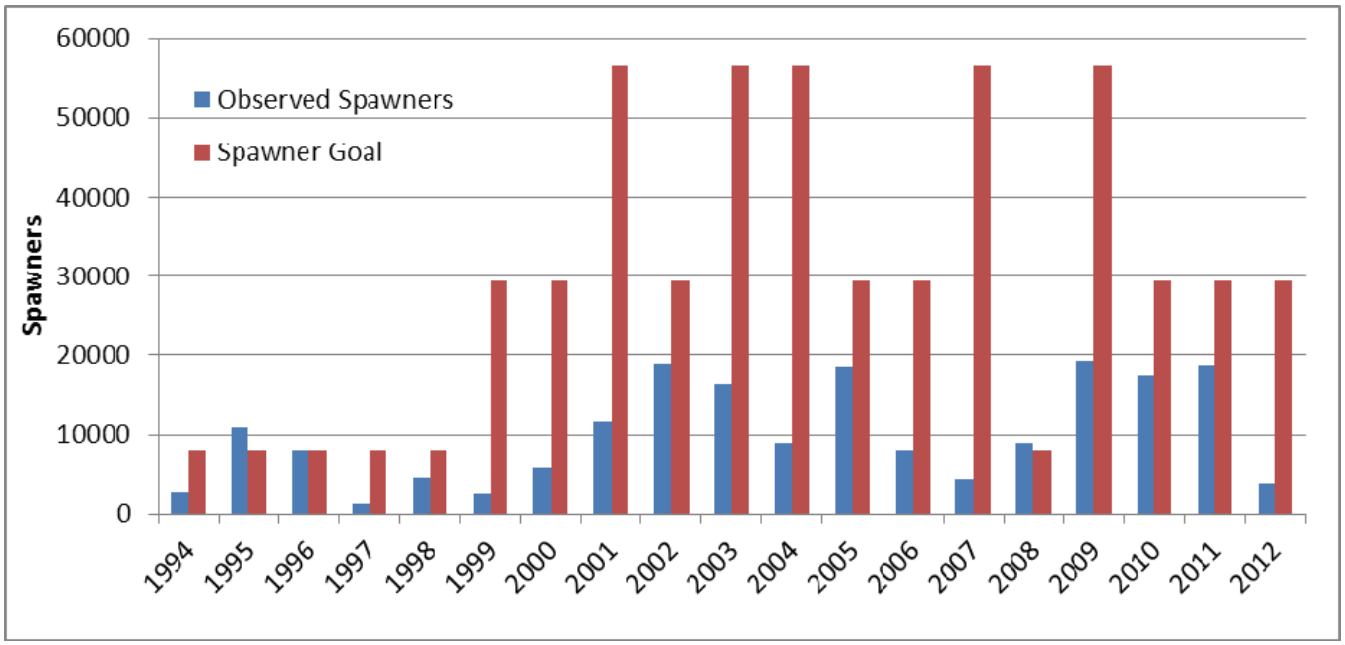
The lower Umpqua basin is in Lane, Douglas and Coos counties with a basin size of approximately 710 square miles and containing about 589 miles of current coho stream habitat.

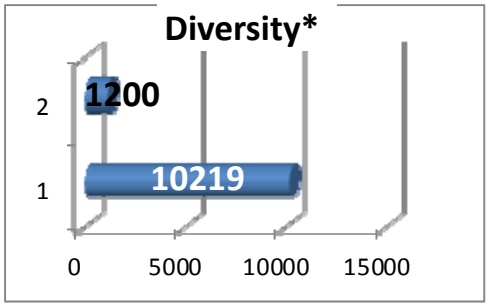
Lower Umpqua Restoration Efforts 1994 - 2012

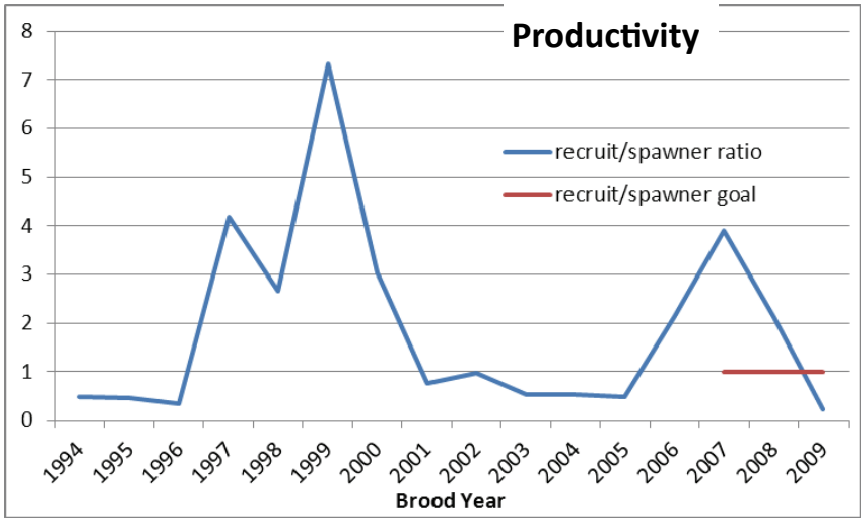


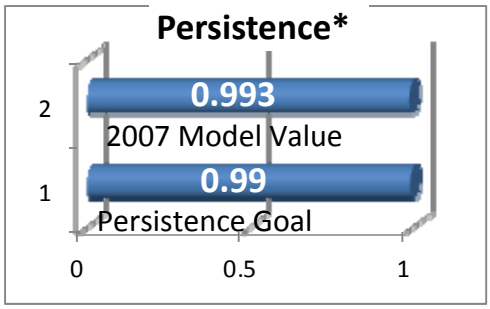
Population Stratus and Trends

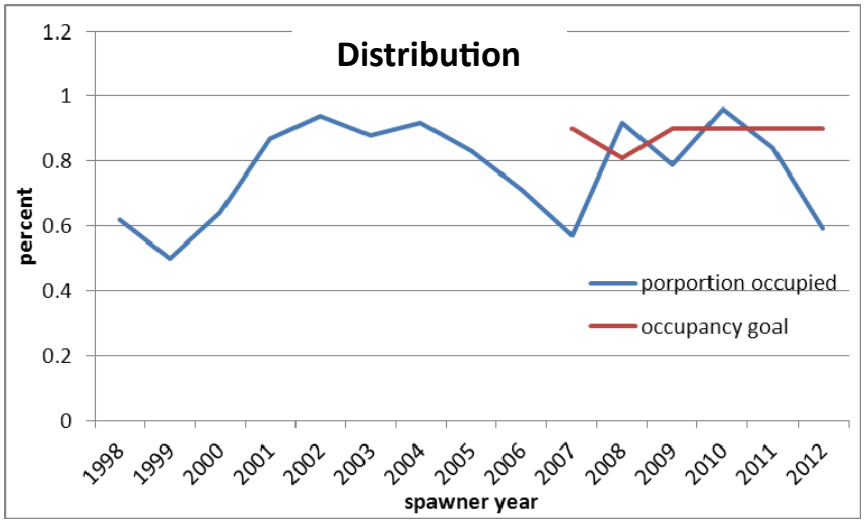
Abundance

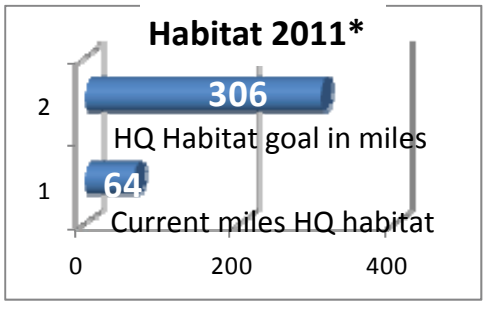












Lower Umpqua

* See page 5 for definitions

Population Status and Trends

Lower Umpqua

Activity Type summaries for Lower Umpqua Population unit (year 2011)

Location	Limiting Factors	Project Type	Cost (cash + in kind)	Ft/mi/ac/ treated	Detail 1	Detail 2
Deans Cr	Water Quality	Nutrient management	$9,549	2 acres	Manure management	
West Fork Smith	Instream complexity	Instream LWD placement	$553,837	11 miles	834 key pieces in 230 structures	121 rootwads placed
Little Salander Cr	Riparian Condition	Voluntary tree retention	$0	0.33 miles	Voluntary tree retention	
Pheasant Cr	Fish access	Culvert replacement	$68,250	1.03 miles made accessible to fish	Culver replaced	
Panther Cr	Riparian Condition	Voluntary riparian tree retention	$0	0.13 miles	Voluntary riparian tree retention	
Smith River	Riparian Condition	Voluntary riparian tree retention	$0	0.1 miles	Voluntary riparian tree retention	
Umpqua River	Fish Access	Fish screen	$1,454		New fish screen installed	

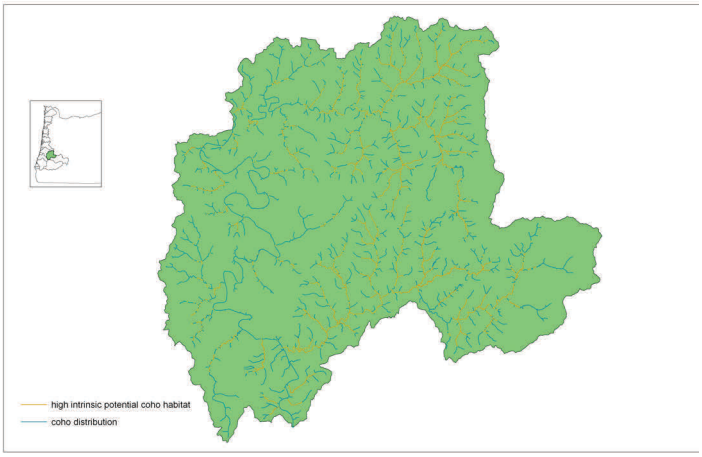
Activity Type summaries for Lower Umpqua Population unit (year 2012)

Location	Limiting Factors	Project Type	Cost (cash + in kind)	Ft/mi/ac/ treated	Detail 1	Detail 2
Otter Slough	sediment	Road upgrade	$14,448	0.26 miles	Cross drains, road rocking	
Paradise Creek	Riparian condition	Voluntary riparian tree retention	$0	0.19miles	Voluntary riparian tree retention	
Little Paradise Cr	Riparian Condition	Voluntary riparian tree retention	$0	0.24 miles	Voluntary riparian tree retention	
Summit Cr	sediment	Road upgrade	$950	0.43 miles	Cross drains, road rocking	

Conservation Strategy - Implement OCCCP physical habitat restoration activities, and maintain hatchery production and recreational harvest at levels identified in the 2007 Conservation Plan.

Middle Umpqua

Limiting Factors for freshwater and estuarine habitat	Actions to address limiting factors
Stream Complexity,	Placement of large woody debris (short term) planting of riparian trees and vegetation (long term.
Water Quality	Planting trees and shrubs for sediment control and stream shading. Modification of agricultural and timber harvest practices.

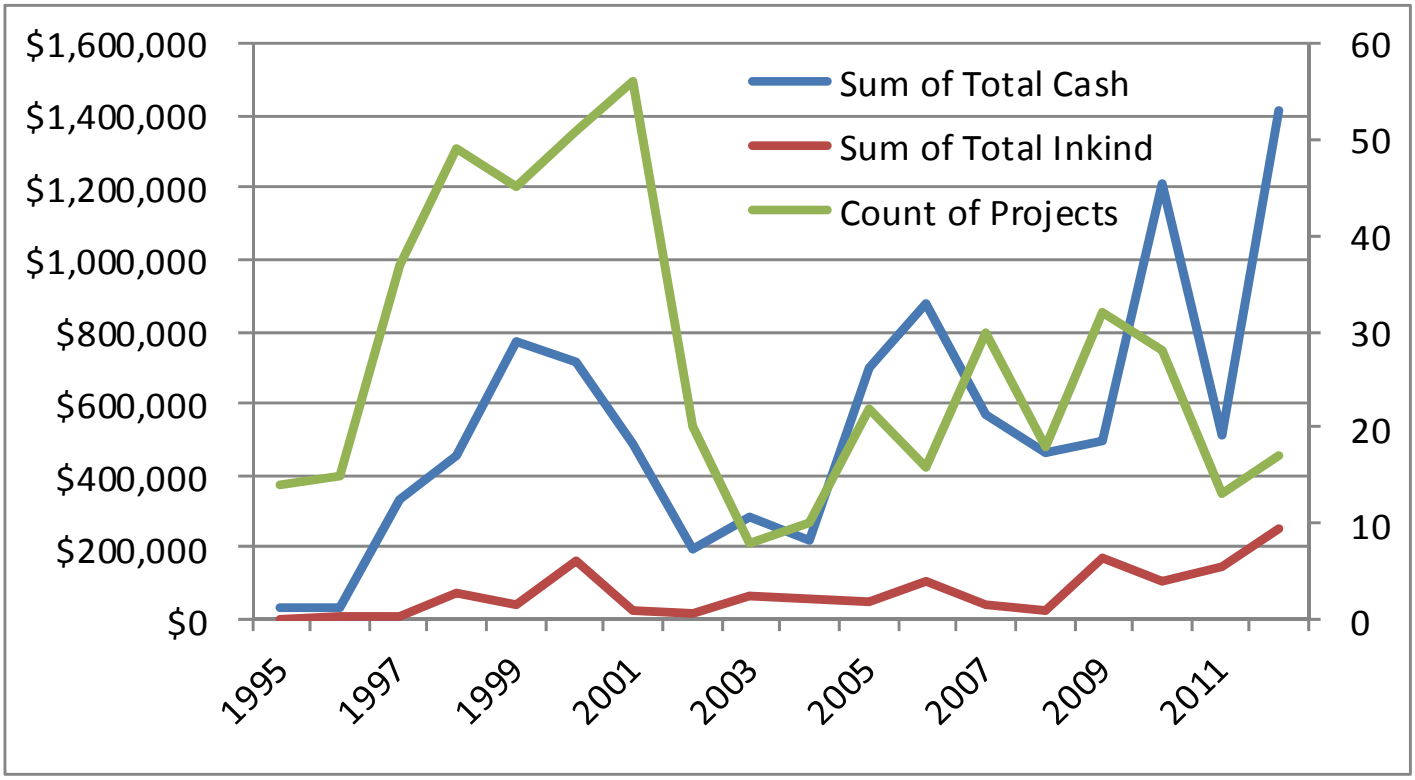


Total Restoration Expenditures in 2011 and 2012 for the Middle Umpqua Watershed

Year	Sum Cash $	Sum in-Kind $	Total $	# of projects
2011	$508,452	$145,162	$653,614	13
2012	$1,412,440	$256,053	$1,668,493	17

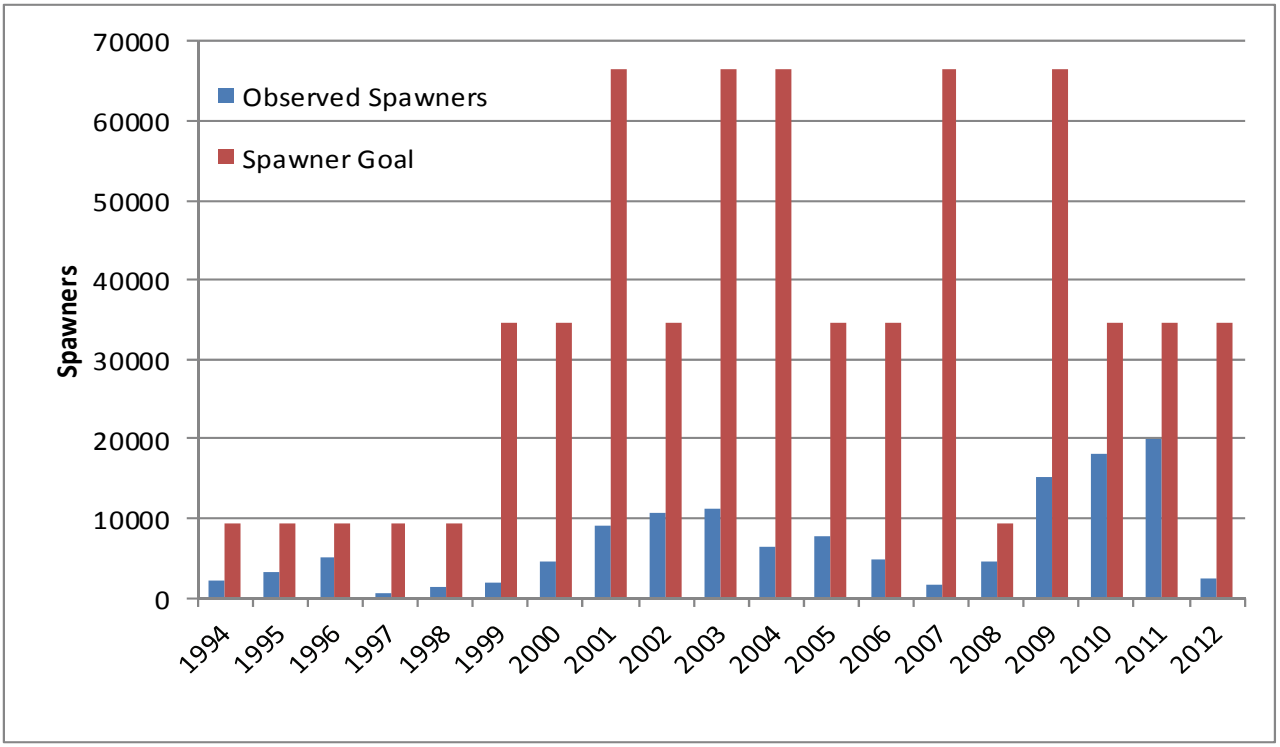
The middle Umpqua basin is located in Douglas and Lane counties with a basin size of approximately 804 square miles containing about 544 miles of current coho stream habitat.

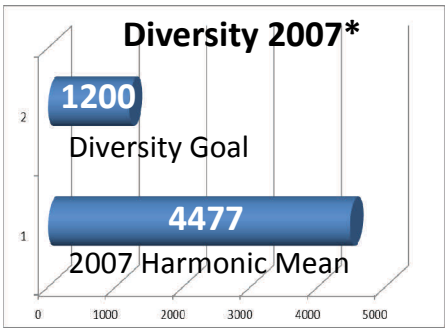
Middle Umpqua Restoration Efforts 1994 - 2012

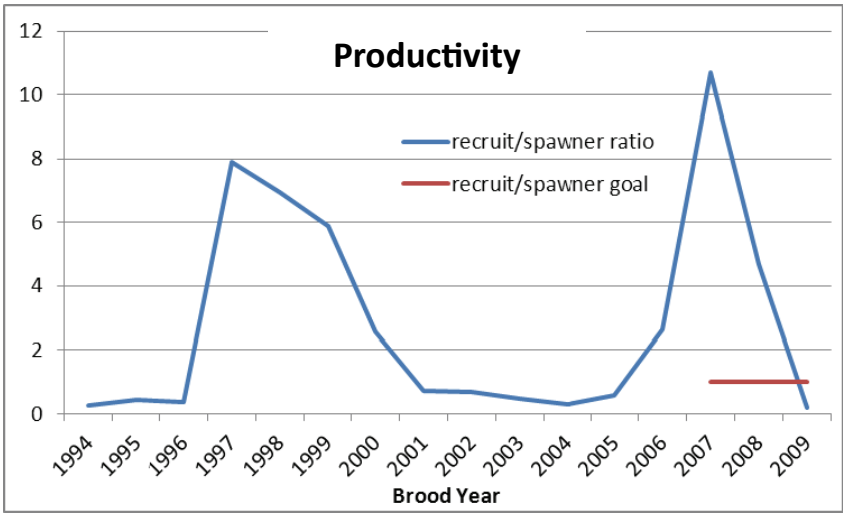


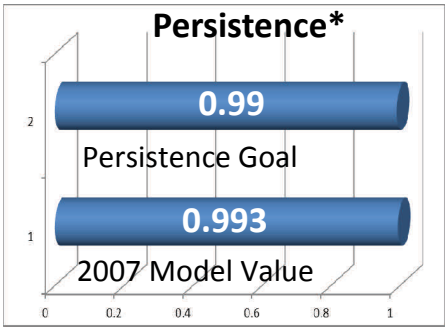
Population Status and Trends

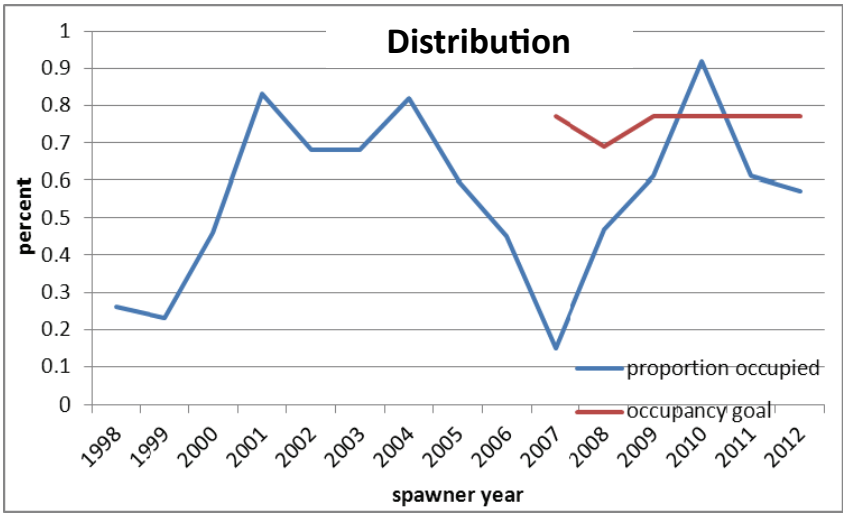
Abundance

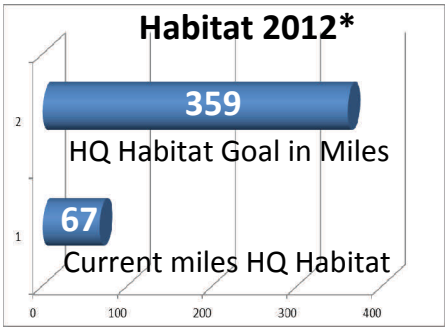












Middle Umpqua

* See page 5 for definitions

Middle Umpqua

Activity Type summaries for Middle Umpqua Population unit (year 2011)

Location	Limiting Factors	Project Type	Cost (cash + in kind)	Ft/mi/ac/ treated	Detail 1	Detail 2
Elk Cr	Riparian Condition	Tree and shrub planting	$5,519	0.5 miles	Riparian tree planting, shrub planting	Riparian Invasive plant control
Cox Cr	Riparian Condition	Tree and shrub planting	$13,063	0.75 miles	Riparian tree planting, shrub planting	Riparian Invasive plant control
Clarks Branch Cr	Riparian Condition	Tree and shrub planting	$15,704	0.03 miles	Riparian tree planting, shrub planting	
Norton Cr, Williams Cr	Riparian Condition	Tree and shrub planting	$10,765	1.1 miles	Riparian tree planting, shrub planting	Riparian Invasive plant control
Cox Cr	Stream Complexity	Instream placement	$70,033	0.75 miles	350 boulders and 28 key pieces LWD in 6 structures	2 side channels constructed, fencing, tree and shrub planting
Seeley Cr	Stream Complexity	Instream placement	$12,324	0.01 miles	15 boulders and 5 key pieces LWD in 3 structures	
Umpqua River	Riparian Condition	Voluntary riparian tree retention	$0	0.62 miles	Voluntary riparian tree retention	
Little Tom Foley Cr	Sediment	Road upgrade	$31,139	0.57 miles	Rocked road	
Jack Cr, Hardscrabble Cr	Fish Access	Culvert removal and replacement	$147,538	3 miles	7 culverts removed, 2 culverts replaced	1 culvert replace w/ bridge
Umpqua River	Fish Access	Fish Screen	$1,967		New fish screen	
Umpqua River	Fish Access	Fish Screen	$4,004		New fish screen	
Wolf Cr	Riparian Condition	Voluntary riparian tree retention	$0	0.04 miles	Voluntary riparian tree retention	
Wolf Cr	Stream complexity	Instream structures	$343,160	3.5 miles	LWD placement	

The 2012 projects are on the next page.

Middle Umpqua

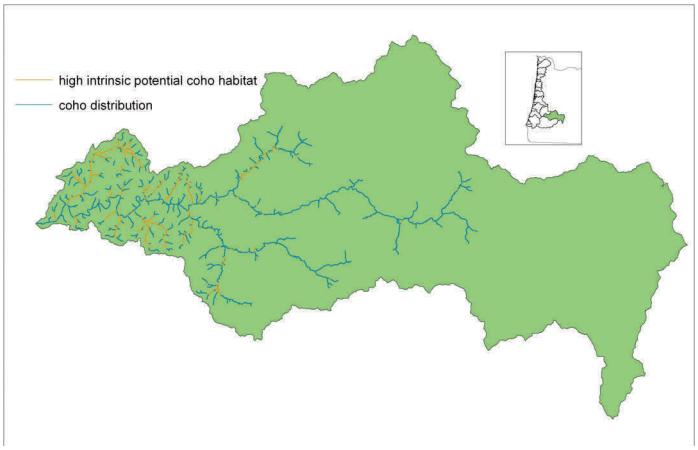
Activity Type summaries for Middle Umpqua Population unit (year 2012)

Location	Limiting Factors	Project Type	Cost (cash + in kind)	Ft/mi/ac/ treated	Detail 1	Detail 2
Cox Cr	Invasive plants	Invasive plant control	$50,425	1240 acres	Upland invasive plant removal	
Wolf Cr	Stream Complexity	Instream work	$1,050,776	11.5 miles	3946 boulders and 754 key pieces LWD in 130 structures	200 yard spawning gravel, 0.5 miles riparian veg
Fitch Cr	Stream Complexity	Instream work	$17,709	0.1 miles	96 boulders and 12 key pieces LWD in 12 structures	Main channel modified, invasive plant control
North Fork Calapooya Cr	Riparian Condition	Voluntary tree retention	$8,000	0.6 miles	Voluntary tree retention	
South Fork Calapooya Cr	Riparian Condition	Voluntary tree retention	$8,000	0.1 miles	Voluntary tree retention	
Coon Cr	Riparian Condition	Voluntary tree retention	$0	0.5 miles	Voluntary tree retention	
Coon Cr	Riparian Condition	Voluntary tree retention	$0	0.4 miles	Voluntary tree retention	
Coon Cr	Riparian Condition	Voluntary tree retention	$2,000	0.6 miles	Voluntary tree retention	
Coon Cr	Riparian Condition	Voluntary tree retention	$8,000	0.7 miles	Voluntary tree retention	
Coon Cr	Fish Access	Culvert replacement	$250,000	0.11 miles	Replace culvert to meet 50yr flow	
Mehls Cr	Riparian Condition	Voluntary tree retention	$0	0.13 miles	Voluntary tree retention	
Doe Cr	Riparian Condition	Voluntary tree retention	$0		Voluntary tree retention	
Umpqua River	Fish Access	Fish screen	$1,270		New fish screen installed	
Tom Folley Cr	Sediment	Cross drain	$950		New cross drain installed on road	
Tom Folley Cr			$4,984			
North Fork tom Folley Cr			$2,103			
Elk Cr			$264,276	4.5 miles		

Conservation Strategy - Implement OCCCP physical habitat restoration activities, and maintain hatchery production and recreational harvest at levels identified in the 2007 Conservation Plan.

North Umpqua

Limiting Factors for freshwater and estuarine habitat	Actions to address limiting factors
Stream Complexity,	Placement of large woody debris (short term) Planting of riparian trees and vegetation (long term).
Water Quality	Planting trees and shrubs for sediment control and stream shading. Modification of agricultural and timber harvest practices.
Hatchery Impacts	Coho hatchery production was ended in 2005, with the last hatchery return occurring in 2007.

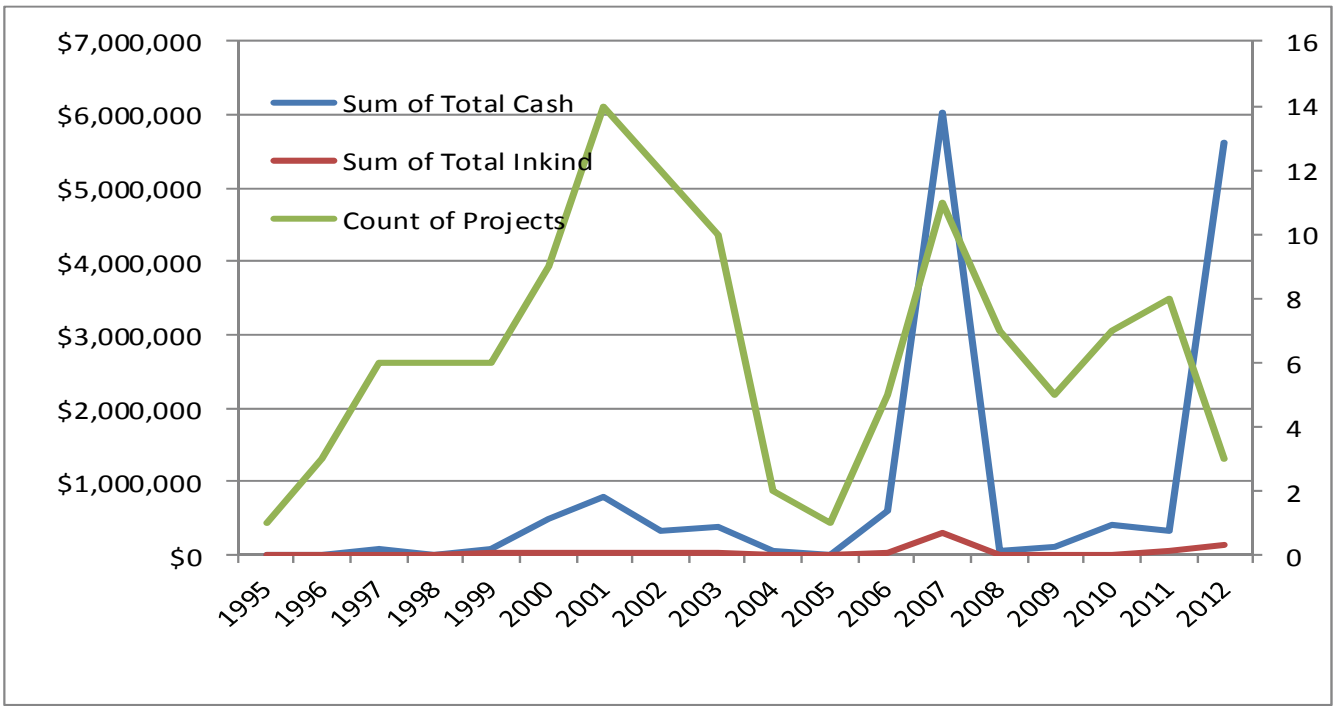


Total Restoration Expenditures in 2011 and 2012 for the North Umpqua Watershed

Year	Sum Cash $	Sum in-Kind $	Total $	# of projects
2011	$336,348	$67,500	$67,500	8
2012	$5,628,010	$142,036	$5,770,046	3

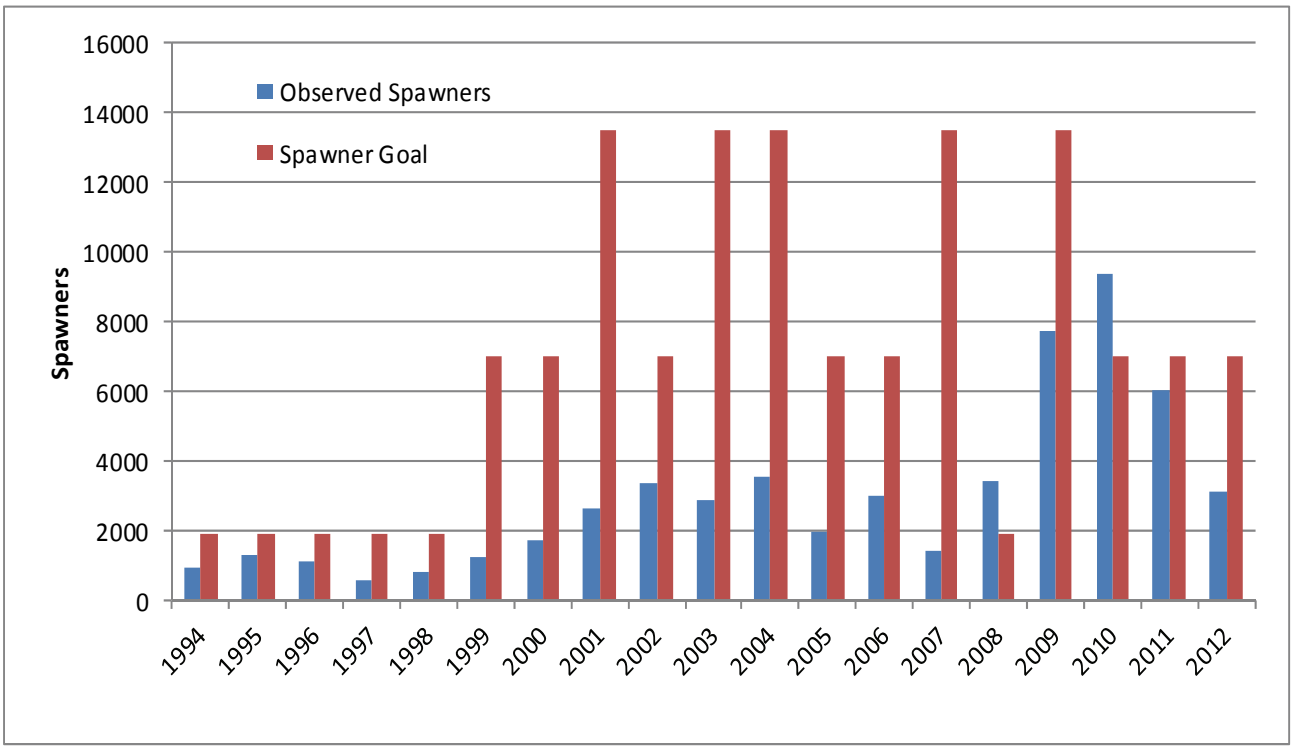
The North Umpqua basin is located in Douglas and Lane counties with a basin size of approximately 1,374 square miles containing about 184 miles of current coho habitat.

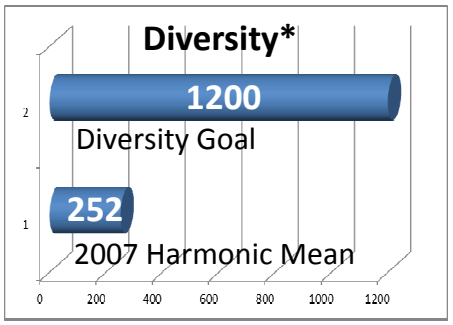
North Umpqua Restoration Efforts 1994 - 2012

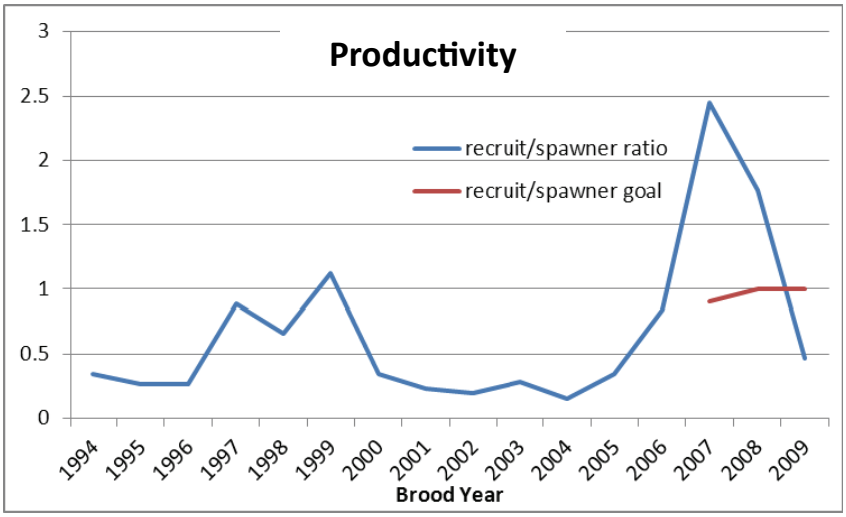


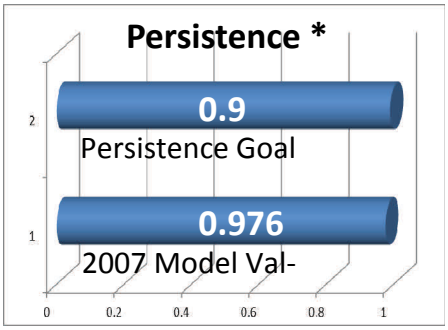
Population Status and Trends

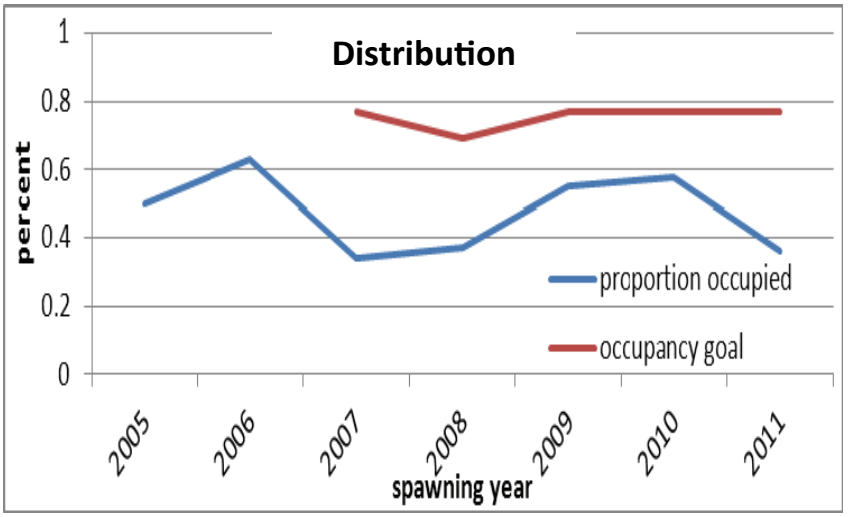
Abundance

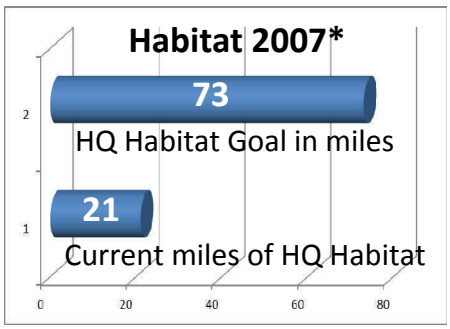












North Umpqua

* See page 5 for definitions

North Umpqua

Activity Type summaries for North Umpqua Population unit (year 2011)

Location	Limiting Factor	Project Type	Cost (cash + in-kind)	Ft/mi/ac/ treated	Detail 1	Detail 2
North Umpqua River	Stream Complexity	Instream work	$131,327	1.5	Placed 1,911 cubic yards of spawning gravel	
Steamboat Cr, Steelhead Cr	Stream Complexity	Instream work	$207,756	5.5	LWD placement, 90 key pieces in 18 structures	
Little River	Sediment	Road maintenance	$49,320	1.38	5 cross drains added	1.38 miles of road rocked
Cavitt Cr	Sediment	Road maintenance	$5,570	0.09	9 cross drains added	0.09 miles of road rocked
Evarts Cr	Sediment	Road Maintenance	$8,075	0.06	6 cross drains added 1 culvert replaced to meet 50yr flow	0.06 miles of road rocked
Rock Cr	Riparian Condition	Voluntary riparian tree retention	$0	0.3	Voluntary riparian tree retention	
Umpqua River	Riparian Condition	Voluntary riparian tree retention	$0	0.6	Voluntary riparian tree retention	
North Umpqua River	Fish Access	Fish screens add-ed	$2,070		New fish screen added at diversion	

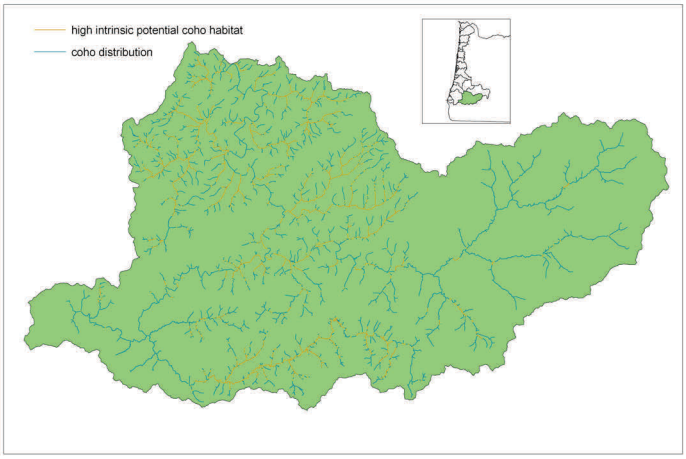
Activity Type summaries for North Umpqua Population unit (year 2012)

Location	Limiting Factor	Project Type	Cost (cash + in-kind)	Ft/mi/ac/ treated	Detail 1	Detail 2
North Umpqua River	Invasive Plants	Plant removal	$24,290	97.5 acres	Upland invasive plant removal	
Cavitt Cr	Sediment	Road Maintenance	$140,980	2.01 miles	Road rocked	
Rock Cr	Fish Access	Fish ladder, fish screens	$5,604,776	22 miles	Installed new fish ladder and 3 new fish screens	

Conservation Strategy - Implement OCCCP physical habitat restoration activities, and maintain hatchery production and recreational harvest at levels identified in the 2007 Conservation Plan.

South Umpqua

Limiting Factors for freshwater and estuarine habitat	Actions to address limiting factors
Stream Complexity,	Placement of large woody debris (short term) planting of riparian trees and vegetation (long term.
Water Quality	Planting trees and shrubs for sediment control and stream shading. Modification of agricultural and timber harvest practices.

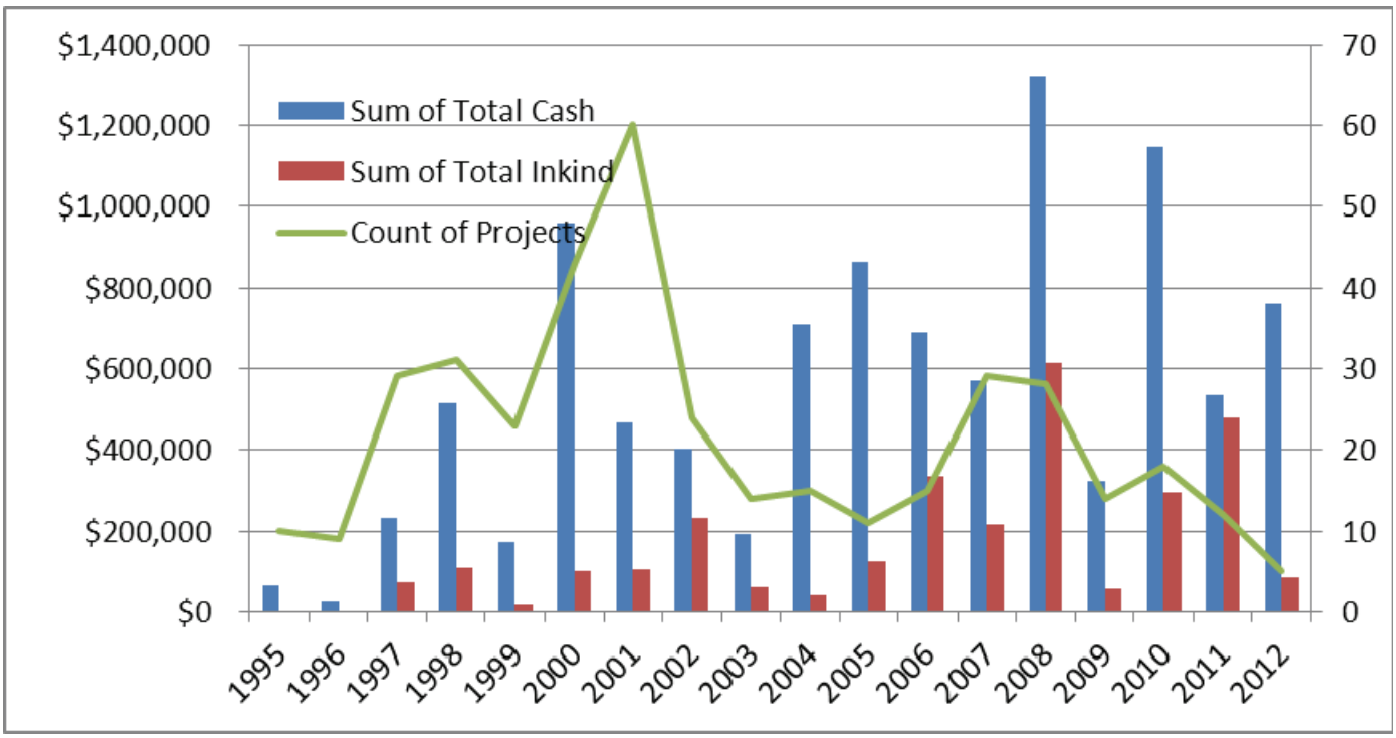


Total Restoration Expenditures in 2011 and 2012 for the South Umpqua Watershed

Year	Sum Cash $	Sum in-Kind $	Total $	# of projects
2011	$532,272	$476,950	$1,009,222	12
2012	$762,027	$83,561	$84,588	5

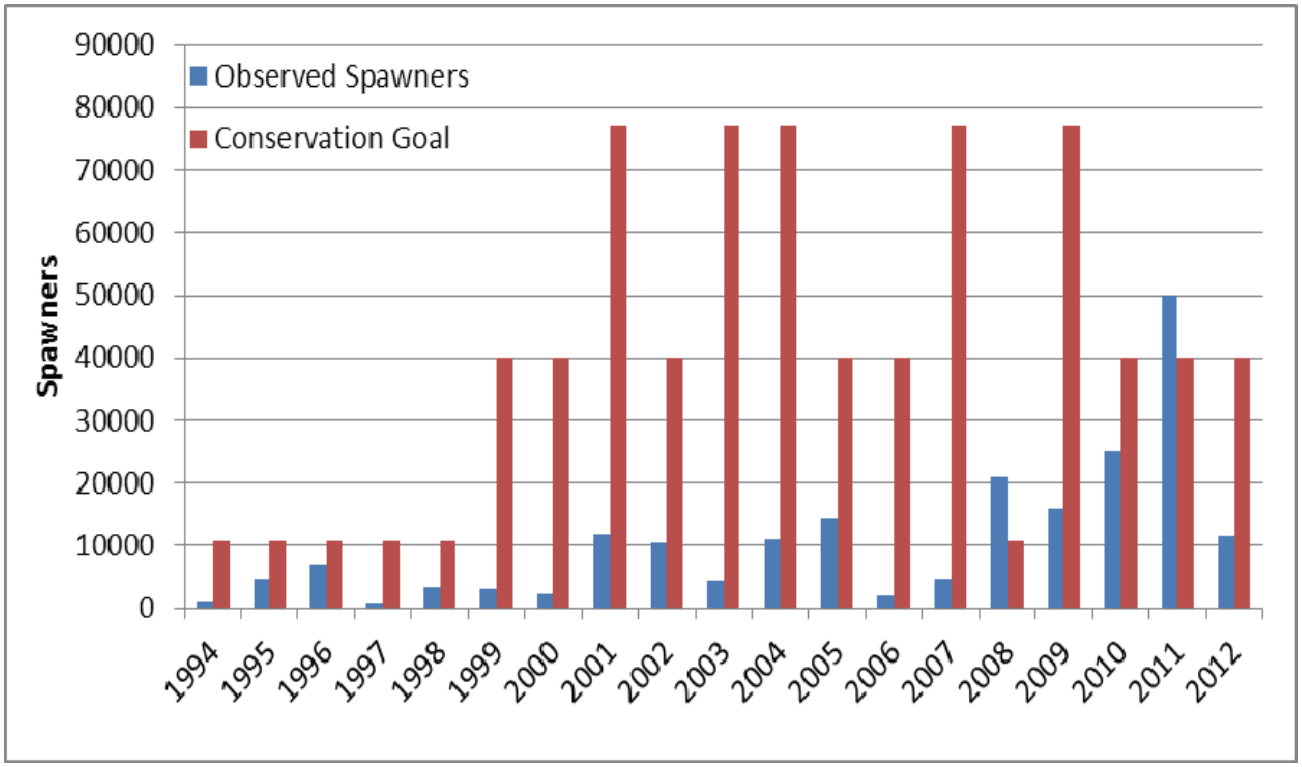
The South Umpqua basin is located in Douglas and Jackson counties with a basin size of approximately 1,801 square miles containing about 713 miles of current coho habitat.

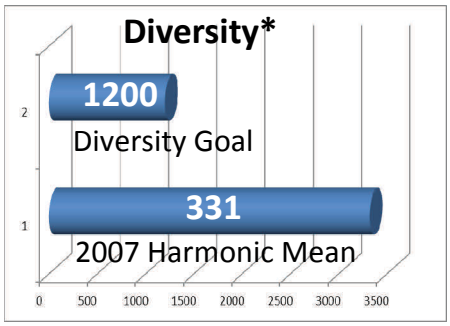
South Umpqua Restoration Efforts 1994 - 2010

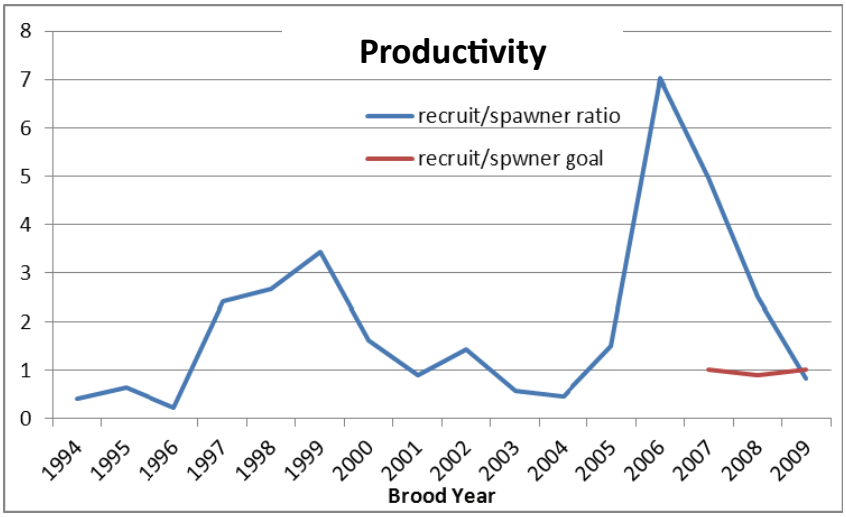


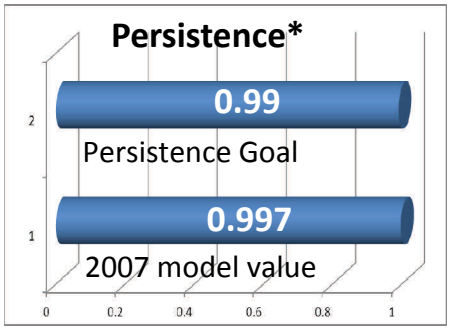
Population Status and Trends

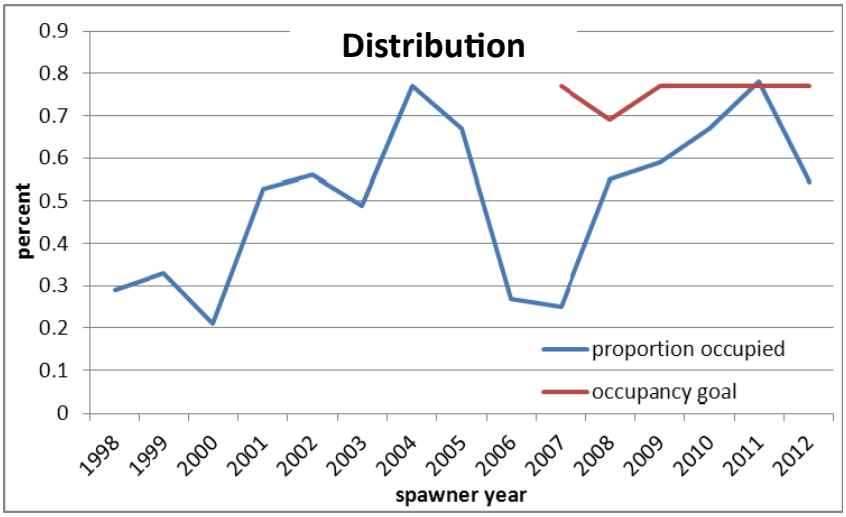
Abundance

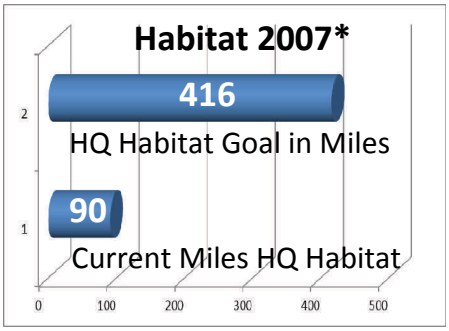












South Umpqua

* See page 5 for definitions

South Umpqua

Activity Type summaries for South Umpqua Population unit (year 2011)

Location	Limiting Factor	Project Type	Cost (cash + inkind)	Ft/mi/ac/ treated	Detail 1	Detail 2
Union Cr	Sediment	Road Maintenance	$40,540	0.57 miles	0.57 miles road rocked, 3 cross drains installed	
Black Canyon Cr	Stream complexity	Instream structures	$779,092	7 miles	535 key pieces LWD in 107 structures	
Muns Cr, Thompson Cr	Stream complexity	Instream structures	$171,811	3 miles	164 key pieces LWD in 37 structures	
Beals Cr	Riparian condition	Voluntary Tree Retention	$0	0.5	Voluntary Tree Retention	
South Umpqua River	Riparian condition	Voluntary Tree Retention	$0	0.1	Voluntary Tree Retention	
Lavadoure Cr	Riparian condition	Voluntary Tree Retention	$0	0.1	Voluntary Tree Retention	
Beals Cr	Riparian condition	Voluntary Tree Retention	$0	0.1	Voluntary Tree Retention	
Shively Cr	Riparian condition	Voluntary Tree Retention	$0	0.05	Voluntary Tree Retention	
Rice Cr	Riparian condition	Voluntary Tree Retention	$0	0.4	Voluntary Tree Retention	
Lww Cr	Riparian condition	Voluntary Tree Retention	$0	0.2	Voluntary Tree Retention	
Days Creek	Fish Access	Fish screen installed	$3,017		1 new fish screen installed	
			$			

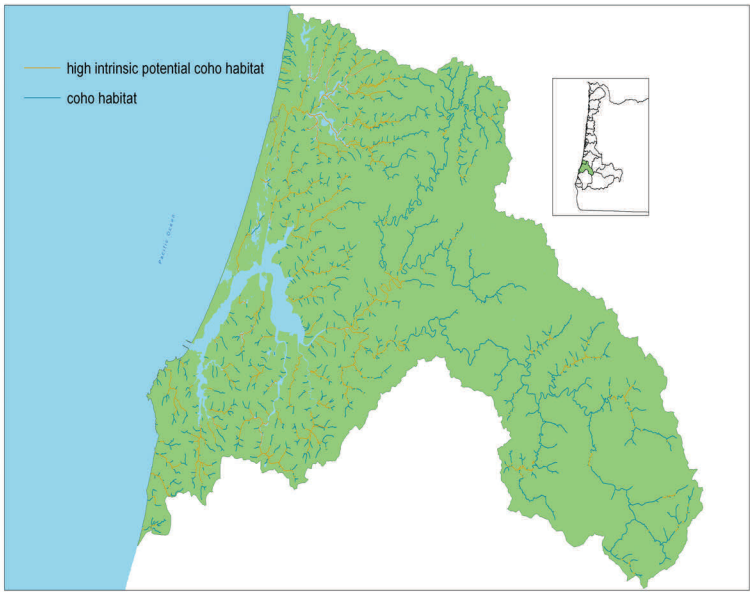
Activity Type summaries for South Umpqua Population unit (year 2012)

Location	Limiting Factor	Project Type	Cost (cash + inkind)	Ft/mi/ac/ treated	Detail 1	Detail 2
Fate Cr, Days Cr	Stream Complexity	Instream Restoration	$145,753	3 miles	500 boulders and 160 key pieces of LWD in 40 Structures. 0.5 miles riparian tree and shrub planting	0.5 miles invasive plant removal,
Morgan Cr	Stream Complexity	Instream Restoration	$267,757	1.5 miles	249 boulders and 139 key pieces LWD in 28 structures. 0.5 miles invasive plant control	2 culverts replaced, 0.5 miles riparian trees and shrubs planted
Hoot - n - Holler Cr	Steam Complexity	Instream Restoration	$351,440	2 miles	157 key pieces LWD in 24 structures, 2.25 miles riparian fencing	1 culvert removed. 6 culverts replaced w/ bridges
Curry, Josephine, And Douglas County			$67,239	2.47 acres	Upland invasive plant control	
Douglas County			$13,399	10.4 acres	Upland invasive plant control	

Conservation Strategy - Implement OCCCP physical habitat restoration activities, and maintain hatchery production and recreational harvest at levels identified in the 2007 Conservation Plan.

Coos

Limiting Factors for freshwater and estuarine habitat	Actions to address limiting factors
Stream Complexity,	Placement of large woody debris (short term) planting of riparian trees and vegetation (long term.
Water Quality	Planting trees and shrubs for sediment control and stream shading. Modification of agricultural and timber harvest practices.

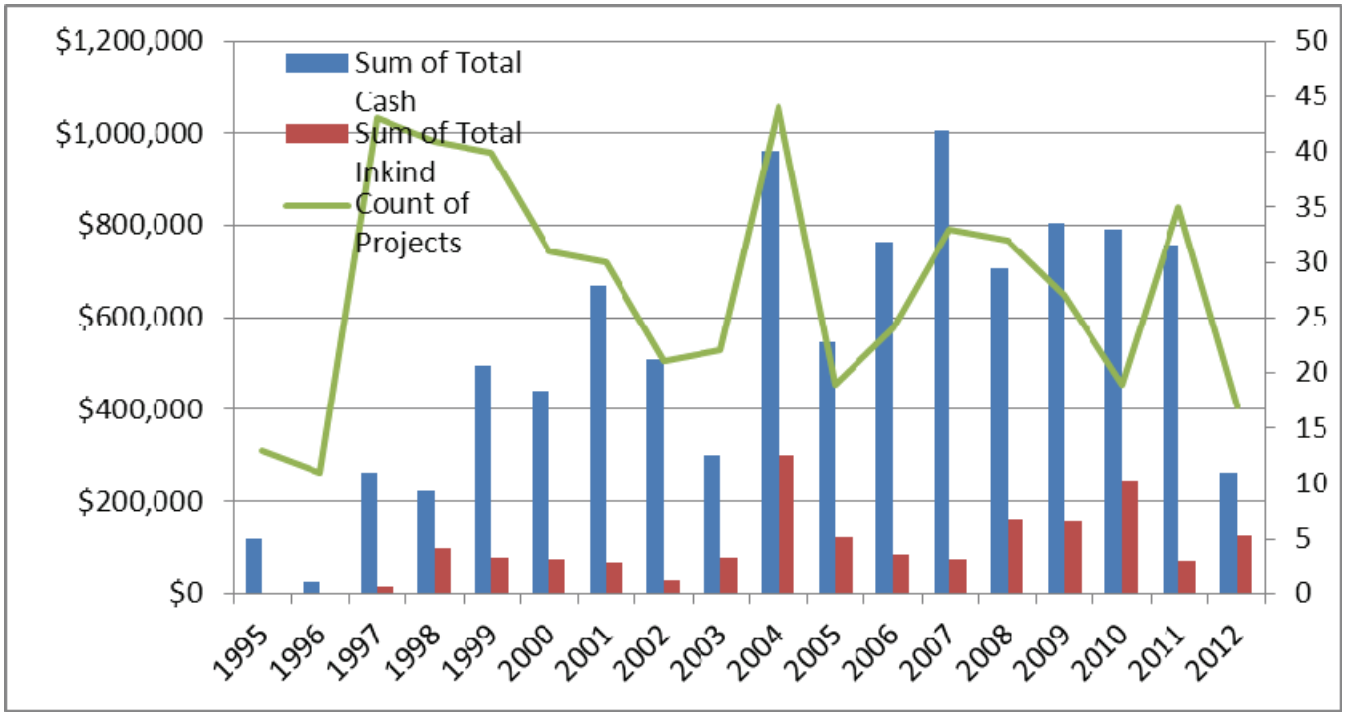


Total Restoration Expenditures in 2011 and 2012 for the Coos Watershed

Year	Sum Cash $	Sum in-Kind $	Total $	# of projects
2011	$759,146	$70,538	$829,684	35
2012	$262,066	$127,530	$389,596	17

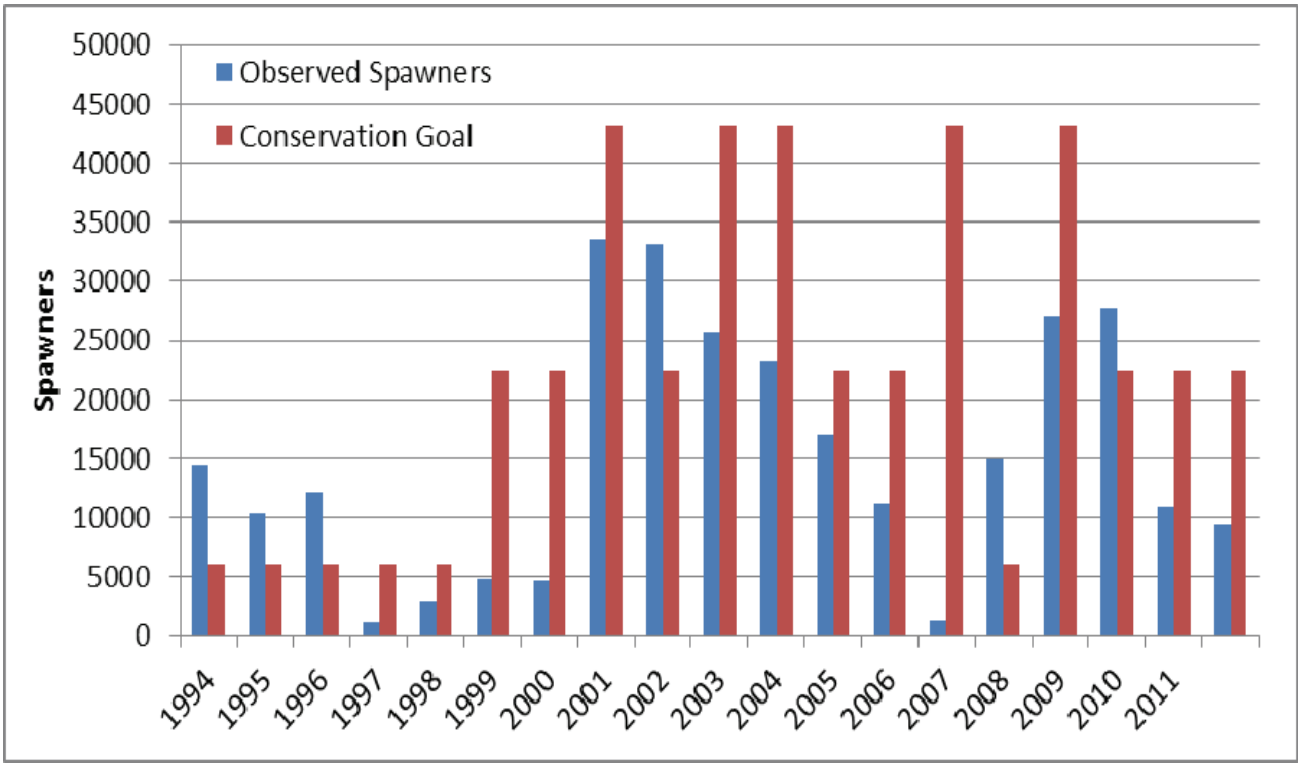
The Coos, Tenmile and Cape Arago basins are located in Coos and Douglas counties with a basin size of approximately 736 square miles containing about 556 miles of current coho stream habitat.

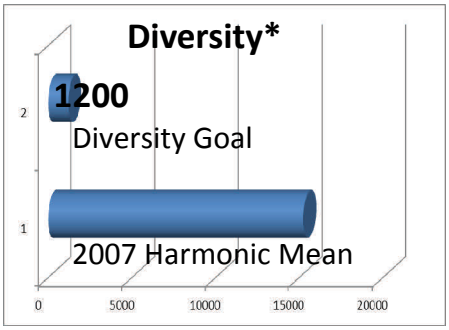
Coos Restoration Efforts 1994 - 2012

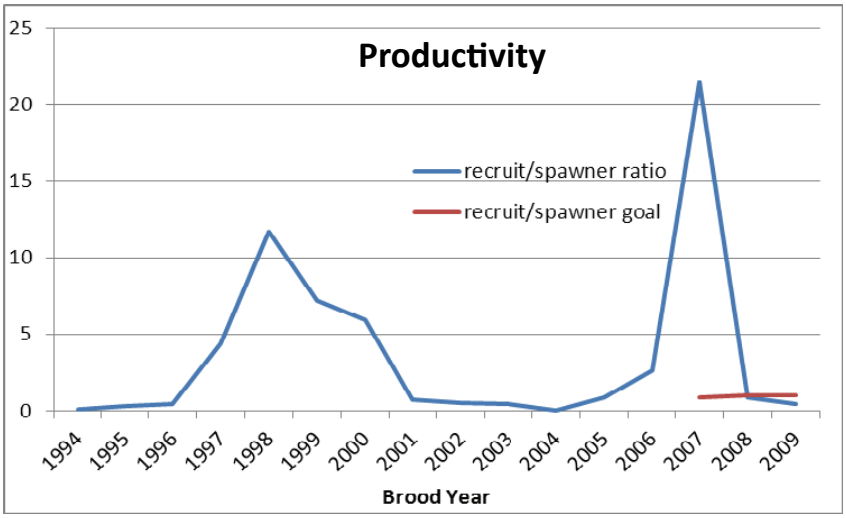


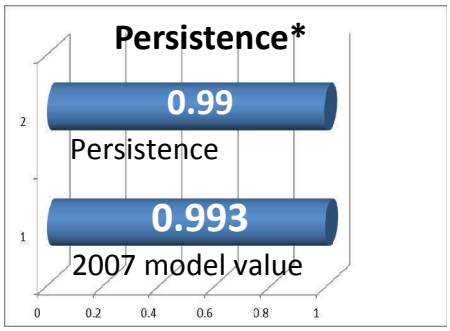
Population Status and Trends

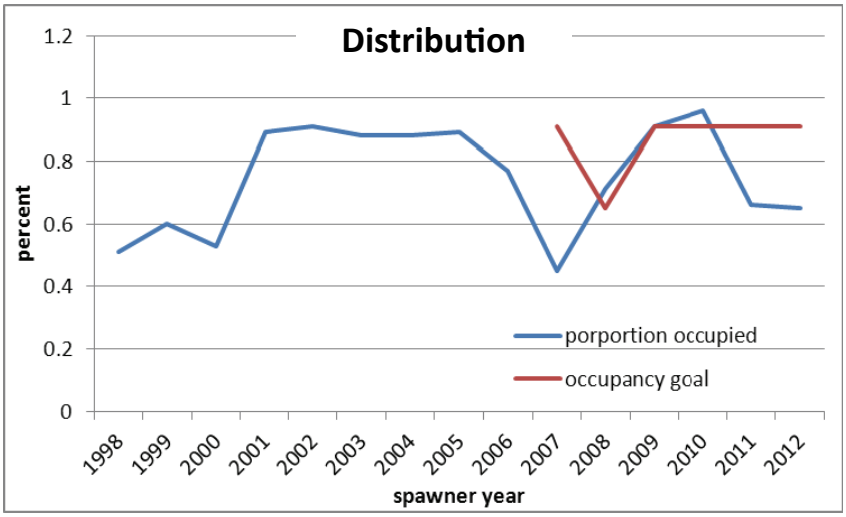
Abundance

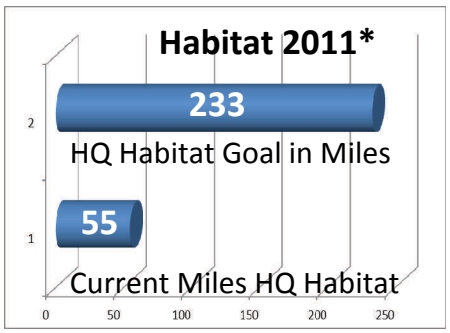












Coos

* See page 5 for definitions

Coos

Activity Type summaries for Coos Population unit (year 2011)

Location	Limiting Factors	Project Type	Cost (cash + inkind)	Ft/mi/ac/ treated	Detail 1	Detail 2
Deer Cr, W.F. Millacoma R.	Stream Complexity	Instream restoration	$10,397	1.24 miles	LWD placement with 28 keys pieces in 5 structures	0.93 miles voluntary riparian tree retention
W.F. Millacoma R.	Riparian Condition	Instream Restoration	$0	0.96 miles	0.95 miles voluntary riparian tree retention	
Ferry Cr	Fish Access	Culvert removal	$16,567		2 culverts replaced w/ bridges	
Catching Slough	Fish Access	Culvert replacement	$61,861		1 culvert replaced	
Catching Slough	Fish Access	Culvert Replacement	$41,241		1 culvert replaced	
Daniels Cr	Riparian Condition	Plant establishment	$5,648	0.3 miles	03 miles of plant establishment	0.05 miles invasive plant removal
Palouse Cr	Riparian Condition	Tree planting	$8,176	0.61miles	0.61 miles riparian tree planting	0.61 miles of plant establishment
Palouse Cr	Riparian Condition	Plant establishment	$12,813	0.72 miles	0.72 miles of plant establishment	
Larson Cr	Sediment	Bank stabilization	$4,161	0.25 miles	0.04 miles stream bank stabilization	
S.F. Coos River	Riparian Condition	Plant establishment	$9,213	1.16 miles	1.16 miles of plant establishment	1.03 miles invasive plant removal
Palouse Slough	Wetland function	Wetland plant restoration	$9,389	4.68 acres	4 acres wetland plant control	0.68 acres wetland vegetation planting
Echo Cr	Wetland function	Wetland plant restoration	$6,736	6 acres	6 acres of wetland plant control	
S.F. Coos River	Riparian Condition	Plant establishment	$12,862	0.72 miles	Riparian plant establishment (not planting)	0.08 miles invasive plant control
S. F. Coos River	Riparian Condition	Plant establishment	$11,156	1.6 miles	Riparian plant establishment (not planting)	1 culvert repaired
S. F. Coos River, Rogers Cr	Riparian Condition	Plant establishment	$8,818	1.23 miles	Riparian plant establishment (not planting	
S.F. Coos River	Riparian Condition	Plant protection, invasive control	$6,363	0.95 miles	0.95 miles of plant protection installed	0.05 miles invasive plant control
Hendrickson Cr	Riparian Condition	Plant establishment	$3,727	0.39 miles	Riparian plant establishment (not planting	
Packard Cr	Riparian Condition	Plant establishment	$5,483	0.41 miles	Riparian plant establishment (not planting	
Millacoma R	Riparian Condition	Plant establishment	$12,224	0.56 miles	Plant protection installed	0.05 miles invasive plant control
W.F. Millacoma R	Fish Access	Culvert replacement	$46,243	0.76 miles	1 culvert replaced	0.76 miles of fish habitat opened
Piledriver Cr	Fish Access	Culvert replacement	$39,333		1 culvert replaced	0.4 miles of fish habitat opened
W.F. Millacoma	Fish Access	Culvert removed	$2,000		1 culvert removed	0.1 miles of fish habitat opened
Palouse Cr	Fish Access	Culvert replacement	$38,873		1 culvert replaced	0.5 miles of fish habitat opened
Palouse Cr	Fish Access	Culvert replacement	$14,943		1 culvert replaced	0.1 miles of fish habitat opened
Cougar Cr	Stream Complexity	Instream structure	$6,800	1.81 miles	24 key pieces LWD in 7 structures	voluntary riparian tree retention
Matson Cr	Floodplain Connectivity	Wetland planting	$8,047	0.5 acres	Wetland planting	Wetland invasive plant control
Palouse Slough	Riparian Condition	Tree planting, invasives control	$8,762	0.46 miles	Riparian tree planting	Invasive plant control
Palouse Cr	Fish Access	Culver replacment	$21,327	0.29 miles	Culvert replaced	

Coos

Activity Type summaries for Coos Population unit (year 2011—continued)

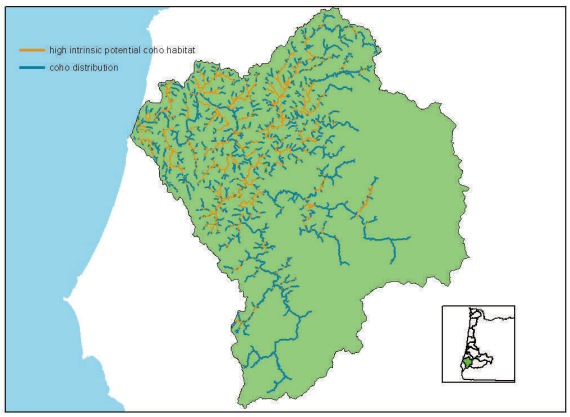
Location	Limiting Factors	Project Type	Cost (cash + inkind)	Ft/mi/ac/ treated	Detail 1	Detail 2
Joe's Cr Knife Cr	Stream Complexity	Instream structures	$4,264	0.99 miles	8 key pieces LWD in 2 structures	voluntary riparian tree retention
W.F. Millacoma,	Riparian Condition	Voluntary riparian tree retention	$0	0.27 miles	Voluntary riparian tree retention	
W.F. Millacoma	Riparian Condition	Voluntary riparian tree retention	$0	1.18 miles	Voluntary riparian tree retention	
Kentuck Cr	Fish Access	Culvert replacement	$90,512			0.7 miles of fish habitat opened
Bottom Cr	Fish Access	Culvert removal	$5,250		1 culvert removed	0.18 miles of fish habitat opened
Palouse Cr	Fish Access	Culvert replaced	$28,561		Culvert replaced	
Williams River	Sediment	Road maintenance	$267,934		Cross drains	Road improvement

Activity Type summaries for Coos Population unit (year 2012)

Location	Limiting Factors	Project Type	Cost (cash + inkind)	Ft/mi/ac/ treated	Detail 1	Detail 2
W.F. Millacoma	Riparian Condition	Voluntary riparian tree retention	$0	1.39 miles	Voluntary riparian tree retention	
W.F. Millacoma	Riparian Condition	Voluntary riparian tree retention	$0	0.24 miles	Voluntary riparian tree retention	
W.F. Millacoma	Riparian Condition	Voluntary riparian tree retention	$0	0.72 miles	Voluntary riparian tree retention	
Deer Cr.	Stream Complexity	Instream restoration	$27,952	2.69 miles	52 key pieces LWD in11 structures	1.99 miles voluntary riparian tree retention
Kelly Cr, W.F. Millacoma	Stream Complexity	Instream restoration	$19,650	2.05 miles	42 key pieces LWD in 11 structures	1.63 miles voluntary riparian tree retention
Catching Slough	Riparian Condition	Fencing	$21,275	1 mile	Riparian fencing, riparian tree planting	Invasive plant removal
	Wetland Functions	Vegetation Management	$10,227	0.08 miles	13.8 acres wetland plant control	.75 acres wetland planting
Miner Cr	Riparian Condition	Riparian tree Planting	$16,883	0.3 miles	Riparian planting, 2 offsite channel watering sites	2 livestock stream crossings created
Palouse Slough	Riparian condition. Instream complexity, wetland function	Instream restoration	$42,400	0.68 miles	11 root wads placed instream, 1 side channel created,	14 acres wetland improvements, 1 acre wetland plantings
Knife Cr	Instream complexity	Instream restoration	$3,030	2.58 miles	24 key pieces LWD in 6 total structures	2.7 miles voluntary tree retention
W.F. Millacoma	Riparian Condition	voluntary tree retention	$0	0.62 miles	0.62 miles volun-tary tree retention	
W.F. Millacoma	Stream Complexity	Instream restoration	$127,914	0.9 miles	106 key pieces LWD in 31 structures	
W.F. Millacoma	Stream Complexity	Instream restoration	$4,034	0.1 miles	11 key pieces LWD in 5 structures	
W.F. Millacoma	Stream Complexity	Instream restoration	$11,545	0.1 miles	4 key pieces LWD in 2 structures	
School house Cr	Fish Passage	Culvert replacement	$68,250	0.15 miles	1 culvert replaced	
W.F. Millacoma	Riparian Condition	Voluntary riparian tree retention	$0	1.1	1.1 miles voluntary riparian tree retention	1 mile grass seeding of road
Williams River	Sediment	Road maintenance	$35,943		18 cross drains added	

Conservation Strategy - Implement OCCCP physical habitat restoration activities, and maintain hatchery production and recreational harvest at levels identified in the 2007 Conservation Plan.	Coquille

Limiting Factors for freshwater and estuarine habitat	Actions to address limiting factors
Stream Complexity,	Placement of large woody debris (short term) planting of riparian trees and vegetation (long term.
Water Quality	Planting trees and shrubs for sediment control and stream shading. Modification of agricultural and timber harvest practices.

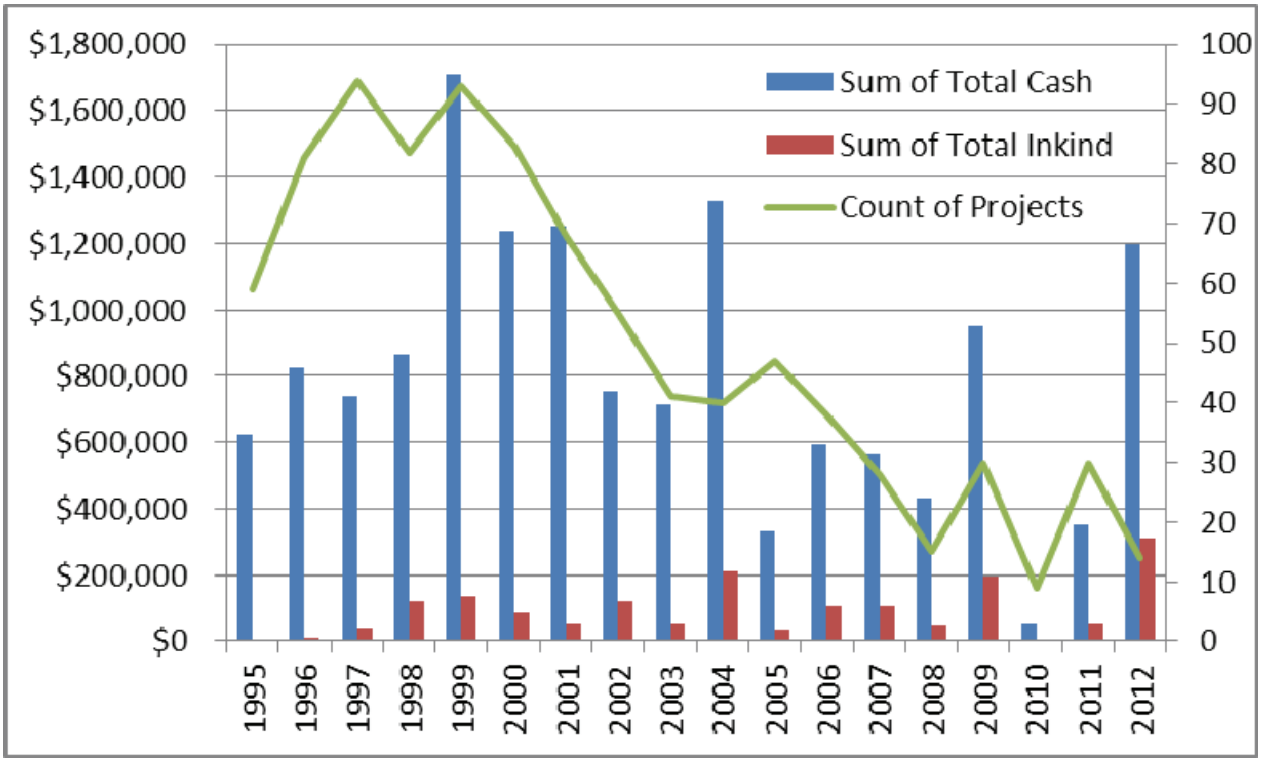


Total Restoration Expenditures in 2011– 2012 for the Coquille Watershed

Year	Sum Cash $	Sum in-Kind $	Total $	# of projects
2011	$353,077	55,321$	$408,398	30
2012	$1,195,174	$312,646	$1,507,820	14

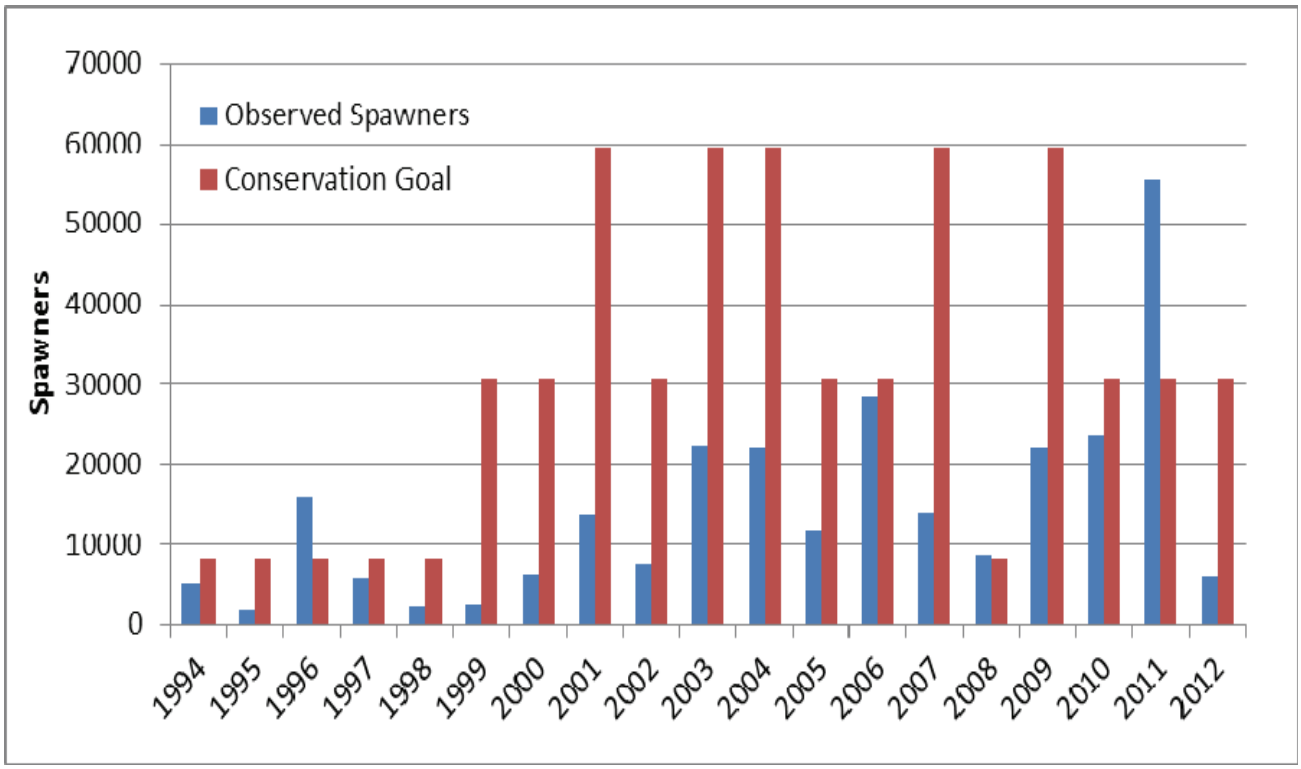
The Coquille basin is located in Coos, Douglas and Curry counties with a basin size of approximately 1,057 square miles containing about 578 miles of current coho stream habitat.

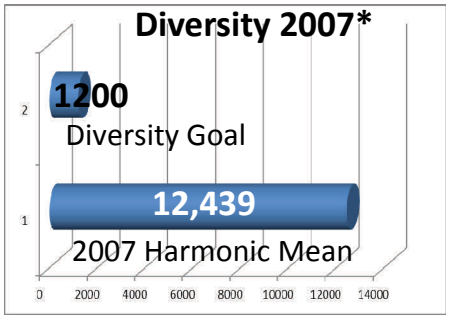
Coquille Restoration Efforts 1994 - 2012

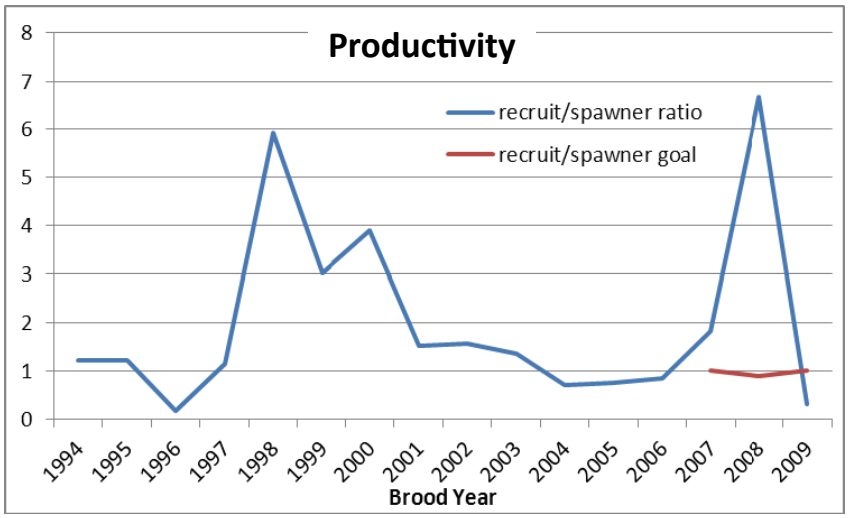


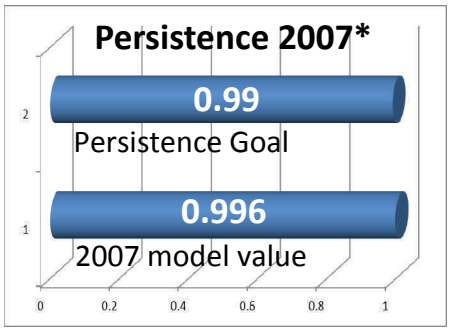
Population Status and Trends

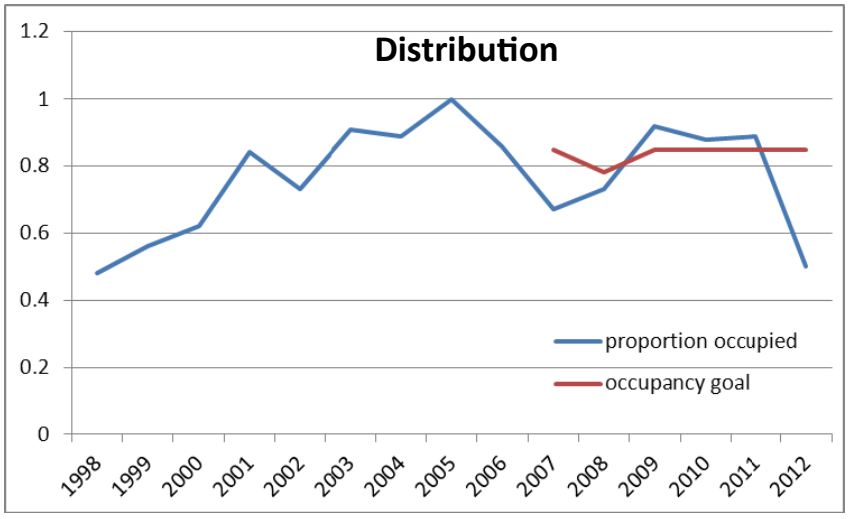
Abundance

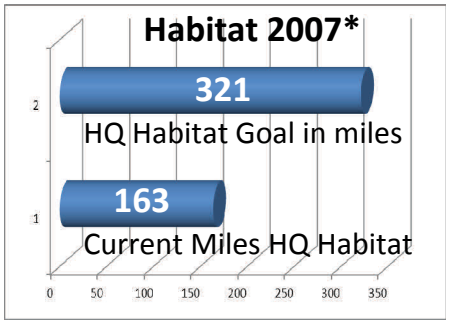












Coquille

* See page 5 for definitions

Coquille

Activity Type summaries for Coquille Population unit (year 2011)

Location	Limiting Factors	Project Type	Cost (cash + in kind)	Ft/mi/ac/ treated	Detail 1	Detail 2
Jim Belieu Cr	Riparian conditions	Fencing, tree planting	$13,354	0.5 miles	Riparian fencing, riparian tree planting,	invasive plant removal
Elk Cr	Sediment	Road Maintenance	$21,715	0.06 miles	0.06 miles road rocked	
E.F. Coquille River, Weekly Cr	Riparian conditions	Fencing, tree planting	$59,358	1.06 miles	1.06 mils riparian fencing, 0.75 miles tree planting	
Lowe Cr	Stream Complexity	Instream Restoration	$175,025	1 miles	Instream pool creation, 12 engineered structures, 20 anchored habitat structures	1 culvert replaced
E.F. Coquille River	Stream Temperature, flow		$21,894	14.2 acres	Upland irrigation improvement	
N.F. Coquille River	Stream Temperature, flow		$79,357	62 acres	Upland irrigation improvement	
Ferry Cr	Instream complexity		$12,345	0.16 miles	140 cubic yards of spawning gravel	
Upper Rock Cr	Riparian Conditions		$0	0.89 miles	Voluntary riparian tree retention	
Upper Rock Cr	Riparian Conditions		$0	0.38 miles	Voluntary riparian tree retention	
Suicide Cr	Riparian Conditions		$0	0.5 miles	Voluntary riparian tree retention	
Coquille R	Riparian Conditions		$0	0.04 miles	Voluntary riparian tree retention	
Coquille R	Riparian Conditions		$0	0.3 miles	Voluntary riparian tree retention	
Slater Cr	Riparian Conditions		$0	0.1 miles	Voluntary riparian tree retention	
N. F. Coquille River	Fish Access		$3,462		New Fish Screen	
N.F. Coquille River	Fish Access		$3,137		New Fish Screen	
N.F. Coquille River	Fish Access		$3,182		New Fish Screen	
N.F. Coquille River	Fish Access		$3,182		New Fish screen	
N.F. Coquille River	Fish Access		$3,207		New Fish screen	
N.F. Coquille River	Fish Access		$5,881		New Fish screen	
Upper Rock Cr	Riparian Conditions		$0	0.36	Voluntary riparian tree retention	
Upper Rock Cr	Riparian Conditions		$0	0.52	Voluntary riparian tree retention	
Tenmile Cr	Riparian Conditions		$0	0.44	Voluntary riparian tree retention	
Bear Cr	Riparian Conditions		$0	0.45	Voluntary riparian tree retention	
Elk Cr	Riparian Conditions		$0	0.48	Voluntary riparian tree retention	
Elk Cr	Riparian Conditions		$0	0.08	Voluntary riparian tree retention	
Elk Cr	Riparian Conditions		$0	0.42	Voluntary riparian tree retention	
Brummit Cr	Riparian Conditions		$0	0.47	Voluntary riparian tree retention	
Brummit Cr	Riparian Conditions		$0	0.42	Voluntary riparian tree retention	

Coquille

Activity Type summaries for Coquille Population unit (year 2011)

Location	Limiting Factors	Project Type	Cost (cash + in kind)	Ft/mi/ac/ treated	Detail 1	Detail 2
			$			
			$			
			$			
			$			
			$			

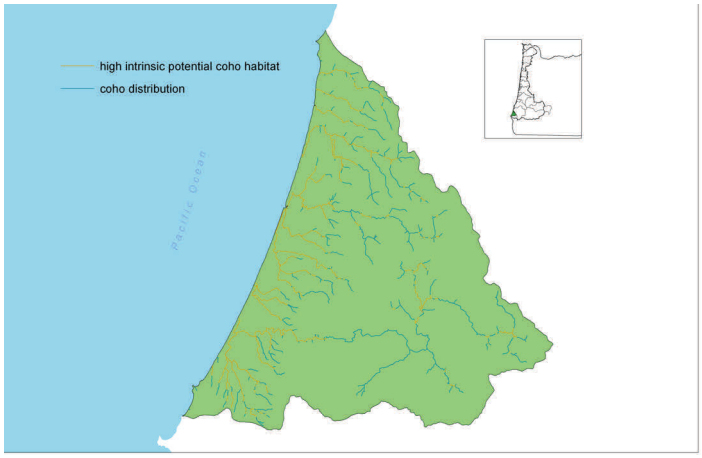
Activity Type summaries for Coquille Population unit (year 2012)

Location	Limiting Factors	Project Type	Cost (cash + in kind)	Ft/mi/ac/ treated	Detail 1	Detail 2
Elk Cr	Stream complexity		$287,924	5.08 miles	615 key pieces LWD in 71 structures	
Upper Rock Cr	Riparian condition		$0	0.48 miles	Voluntary riparian tree retention	
Coquille River	Instream complexity		$124,658	1.05 miles	Channel modified, side channel reconnected, riparian fencing, tree and shrub planting , invasive plant management	2 culverts replaced
Rock Cr	Stream complexity		$115,367	0.8 miles	74 boulders and 15 key pieces LWD in 10 structures. Side channel reconnected	Invasive plant control
			$44,760	42 acres		
			$163,178	182 acres		
			$37,048	27.31 acres		
Swamp Cr			$24,841	0.07 miles		
S.F. Coquille River			$67,863	46 acres		
Coquille River			$23,457	24 acres		
Beaverdam Cr			$0	0.66 miles		
Beaverdam Cr			$0	0.2 miles		
N.F. Coquille River,			$368,948	13.72		
N.F. Coquille River, Beaver Cr			$240,726	5.4		

Conservation Strategy - Implement OCCCP physical habitat restoration activities, and maintain hatchery production and recreational harvest at levels identified in the 2007 Conservation Plan.

Floras

Limiting Factors for freshwater and estuarine habitat	Actions to address limiting factors
Stream Complexity,	Placement of large woody debris (short term) planting of riparian trees and vegetation (long term.
Water Quality	Planting trees and shrubs for sediment control and stream shading. Modification of agricultural and timber harvest practices.

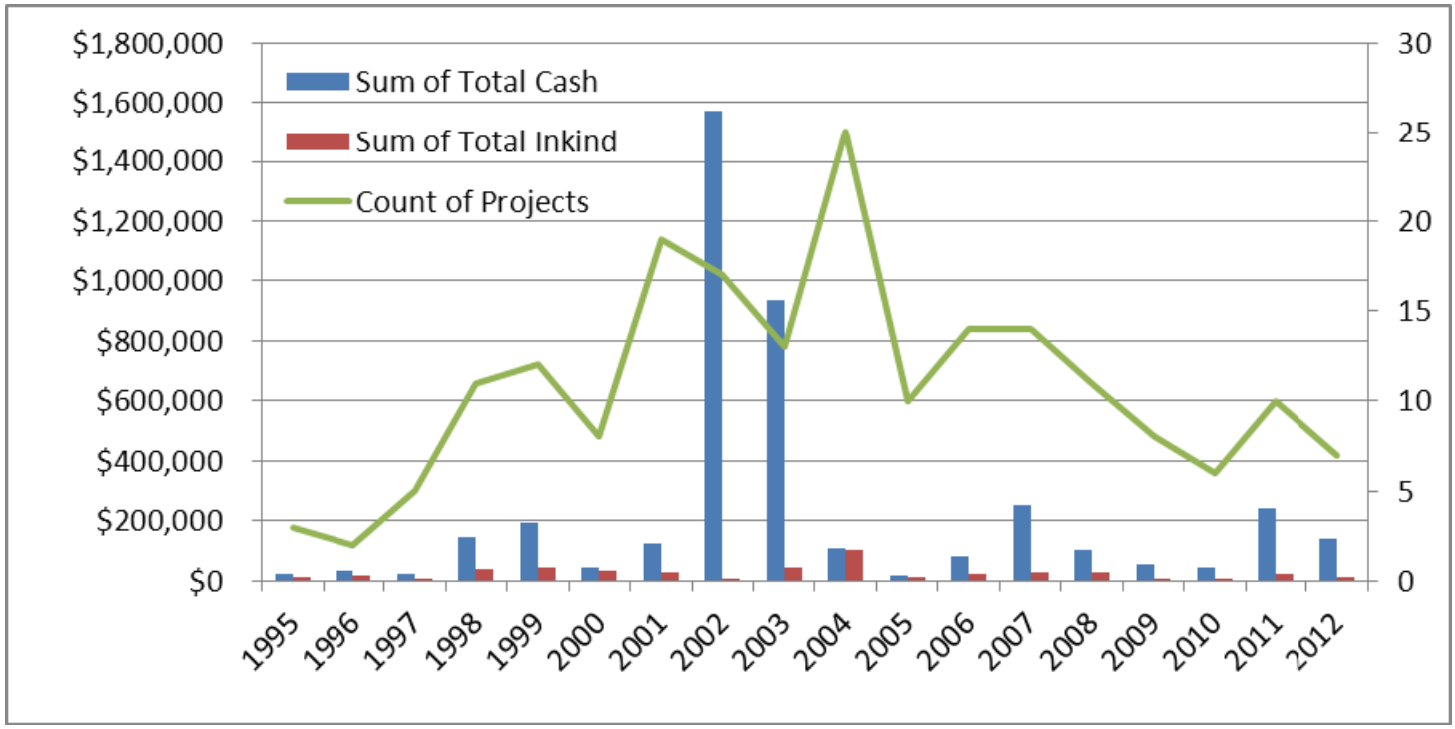


Total Restoration Expenditures in 2011 and 2012 for the Floras Watershed

Year	Sum Cash $	Sum in-Kind $	Total $	# of projects
2011	$244,297	$23,409	$267,706	10
2012	$141,616	$11,930	$153,546	7

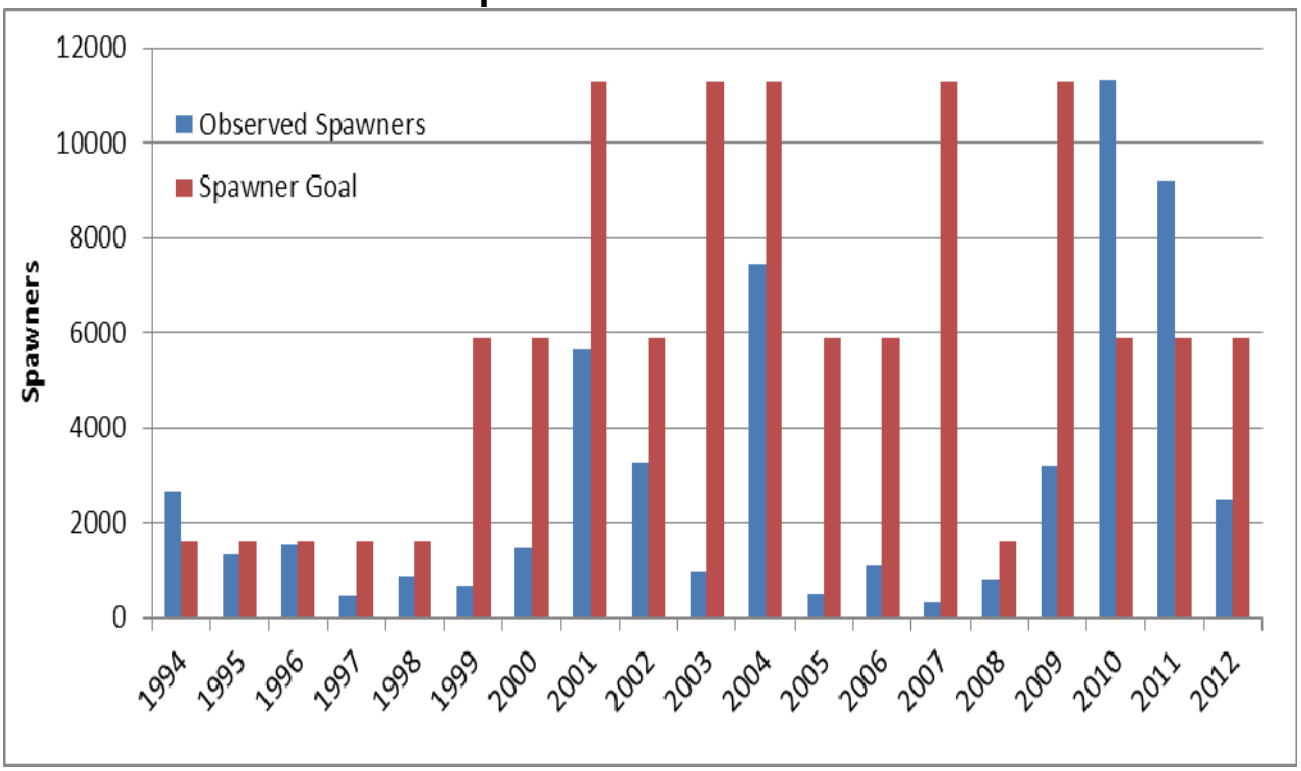
The Floras basin is located in Coos and Curry counties with a basin size of approximately 155 square miles containing about 96 miles of current coho habitat.

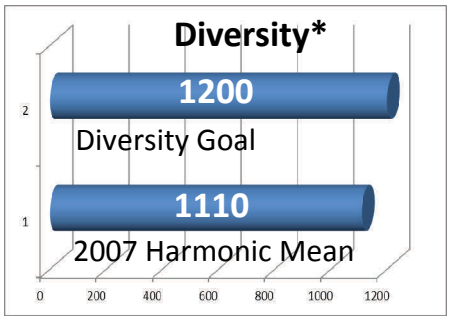
Floras Restoration Efforts 1994 - 2012

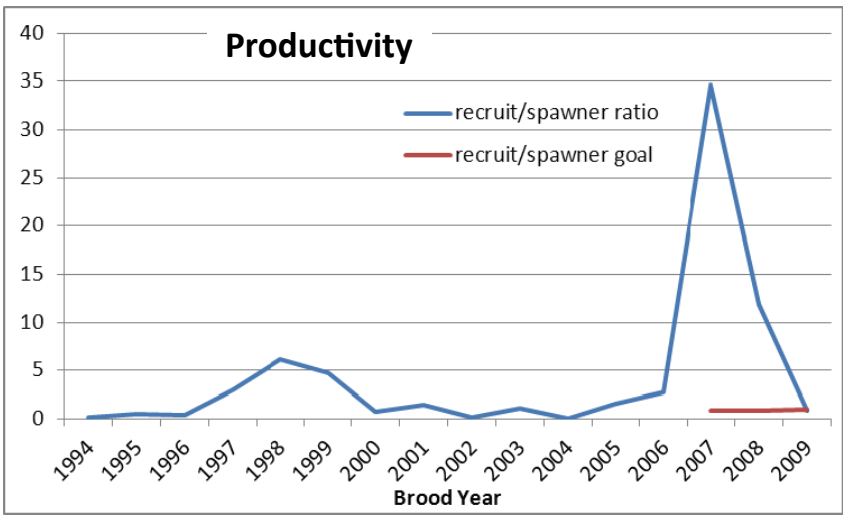


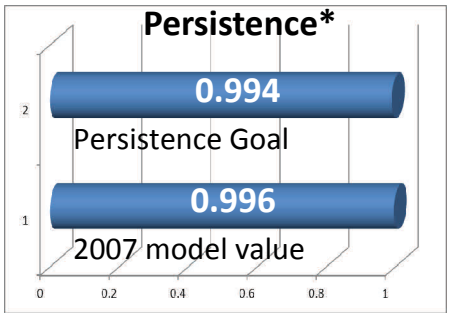
Population Status and Trends

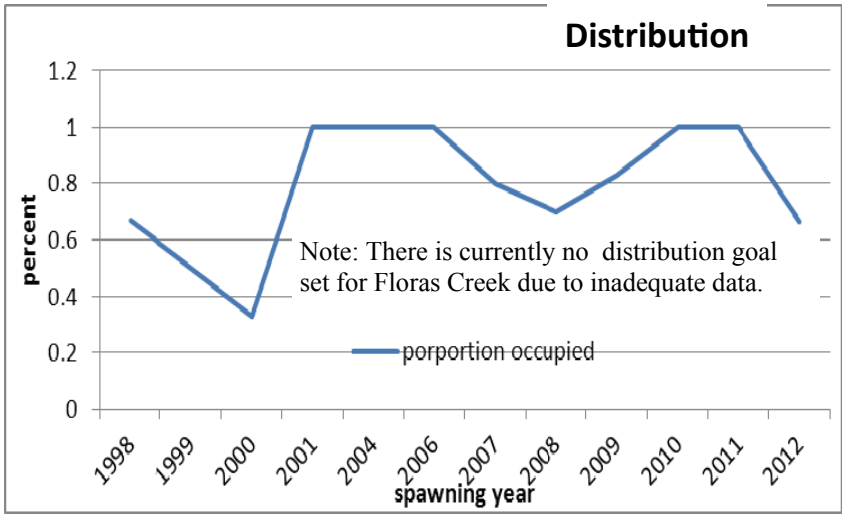
Abundance

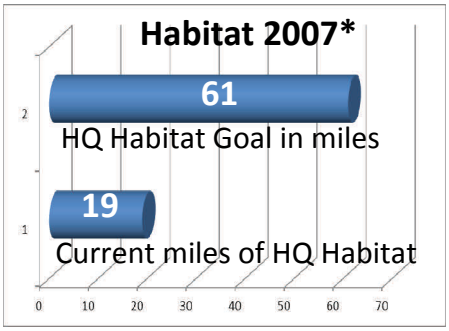












Floras Cr

* See page 5 for definitions

Floras

Activity Type summaries for Floras Population unit (year 2011)

Location	Limiting Factor	Project Type	Cost (cash + inkind)	Ft/mi/ac/ treated	Detail 1	Detail 2
Morton Cr	Stream Complexity	Instream structure	$132,235	1 mile	28 key pieces LWD in 16 total structures, channel modifications	Fencing, riparian tree and shrub planting
S.F. Langlois Cr	Sediment	Upland structure	$5,837		1 bioswale installed	
Floras Cr	Riparian Condition	Upland structure	$12,990		1 off channel water site developed	
Guerin Cr. E.F. Floras Cr	Instream Complexity	Instream structure	$45,697	0.63 miles	30 key pieces LWD in 16 structures, 1 culvert replaced w/ bridge	Road seeded w/ grass, 1 cross drain installed, riparian tree and shrub planting, road rocked
S. Langlois Cr	Instream Complexity	Instream structure	$42,057	0.25 miles	4 pieces LWD on 4 structures, I culvert replaced w/ bridge	Fencing, riparian tree planting
Willow Cr	Riparian Condition	Fencing, planting	$17,998	0.45 miles	Riparian fencing, tree planting	5 off channel water sites developed
E.F. Floras Cr	Fish Access	Fish Screen	$2,338		New fish screen Installed	
E.F. Floras Cr	Fish Access	Fish Screen	$2,338		New Fish screen Installed	
E.F. Floras Cr	Fish Access	Fish Screen	$2,442		New fish Screen installed	
Willow Cr	Fish Access	Fish Screen	$3,774		New fish screen installed	

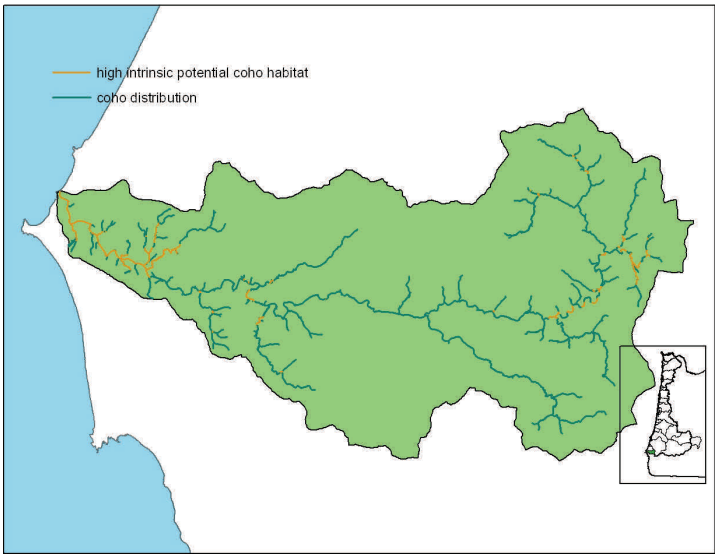
Activity Type summaries for Floras Population unit (year 2012)

Location	Limiting Factor	Project Type	Cost (cash + inkind)	Ft/mi/ac/ treated	Detail 1	Detail 2
Floras Cr, New River	Riparian condition	Off channel live-stock watering sites	$12,750		3 off channel water sites developed	
N.F. Floras Cr, E.F. Floras Cr	Riparian condition	Off channel live-stock watering sites	$13,490		10 off channel water sites developed	
Willow Cr	Riparian condition	Tree planting	$22,543	1 miles	Riparian planting, invasive plant control	Livestock crossing improved
Floras Cr	Invasive plants	Invasive plant control	$9,359	50 acres	Upland invasive plant control	
Willow Cr	Riparian condition	Fencing, tree planting	$78,447	2.25 miles	Riparian fencing, tree planting, invasive plant control	1 off channel watering site developed
Davis Cr	Instream flow	Irrigation Improvements	$16,957	8 acres	Upland irrigation improvements	
W.F. Floras Cr	Riparian condition	Voluntary riparian tree retention	$0	0.11 mile	Voluntary riparian tree retention	

Conservation Strategy - Implement OCCCP physical habitat restoration activities, and maintain hatchery production and recreational harvest at levels identified in the 2007 Conservation Plan.

Sixes

Limiting Factors for freshwater and estuarine habitat	Actions to address limiting factors
Stream Complexity,	Placement of large woody debris (short term) planting of riparian trees and vegetation (long term.
Water Quality	Planting trees and shrubs for sediment control and stream shading. Modification of agricultural and timber harvest practices.

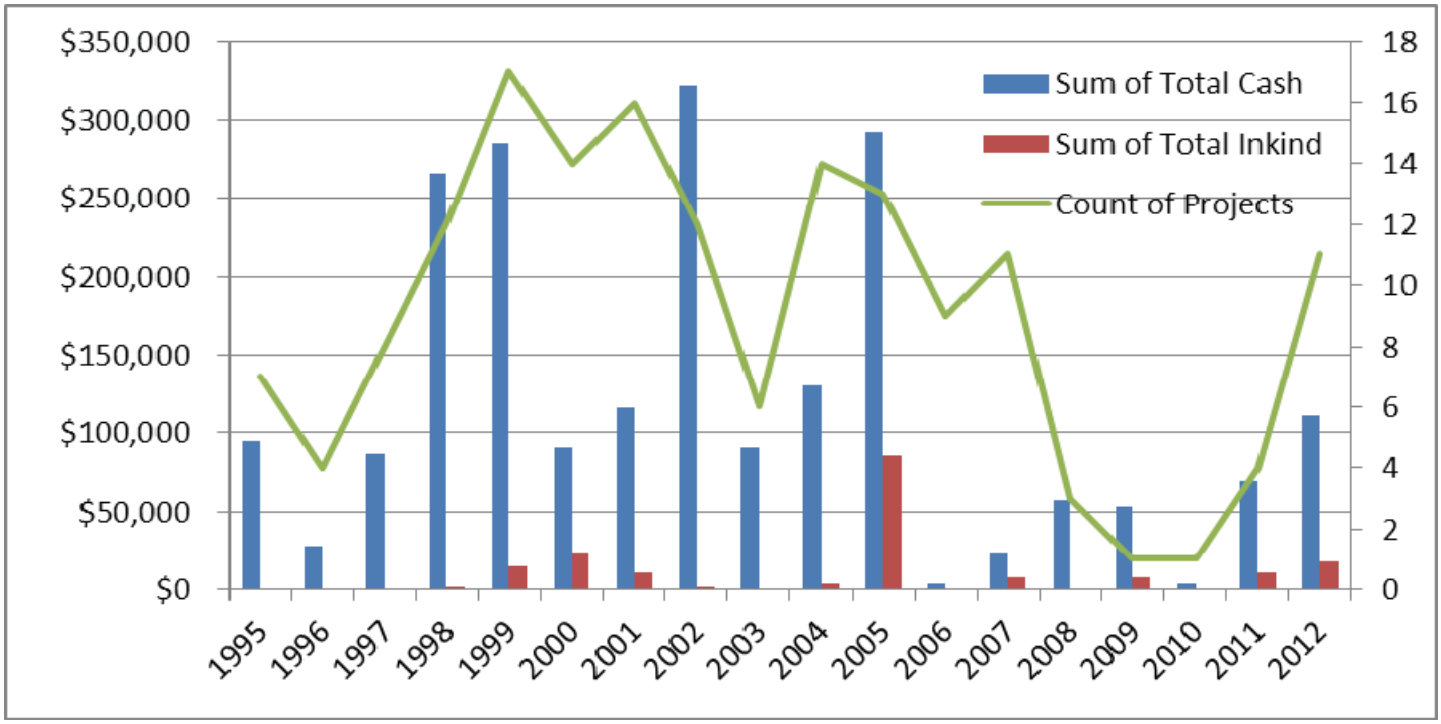


Total Restoration Expenditures in 2011 – 2012 for the Sixes Watershed

Year	Sum Cash $	Sum in-Kind $	Total $	# of projects
2011	$69,117	$11,000	$80,117	4
2012	$111,401	$18,360	$129,761	11

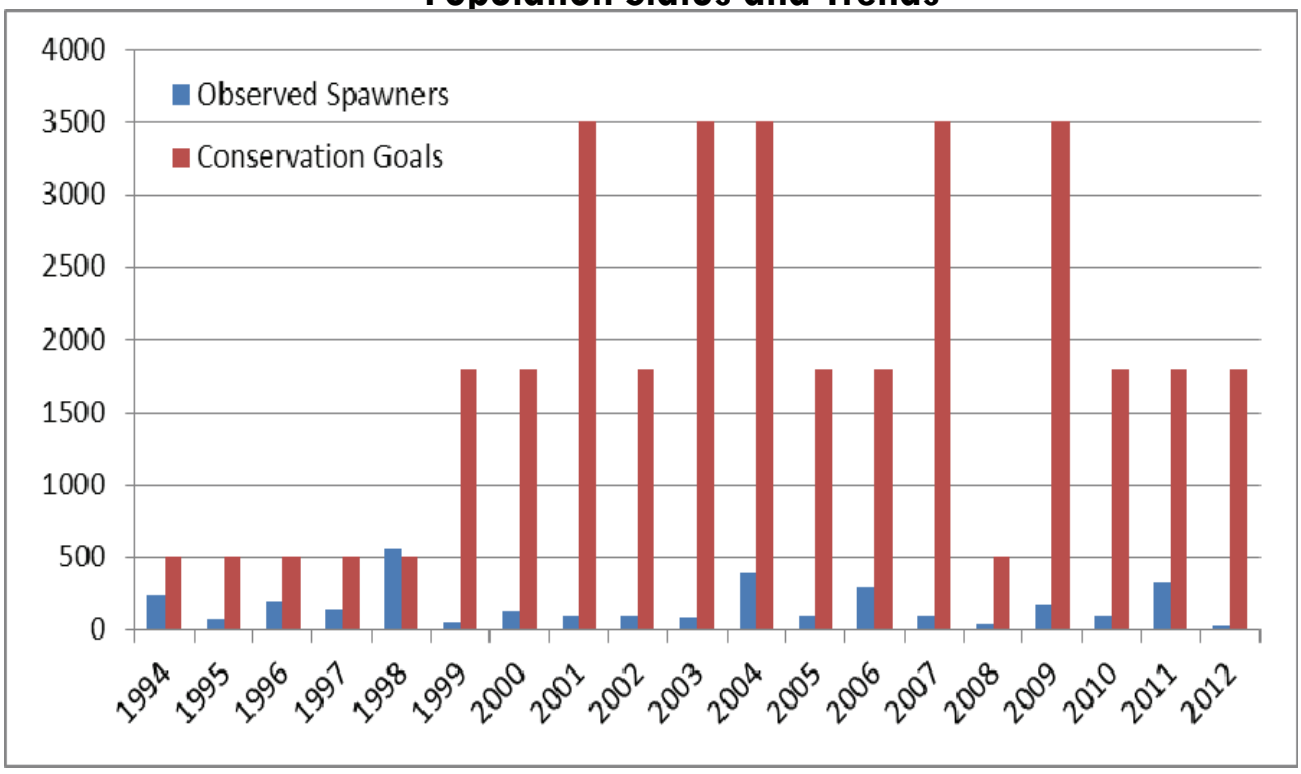
The Sixes basin is located in Coos and Curry counties with a basin size of approximately 155 square miles containing 63 miles of current coho stream habitat.

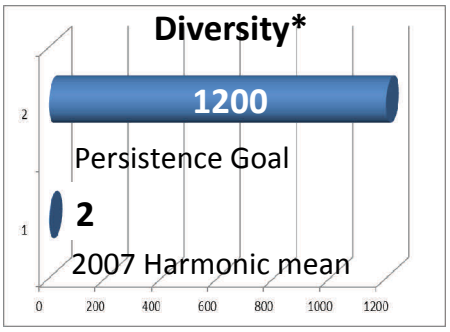
Sixes Restoration Efforts 1994 - 2012

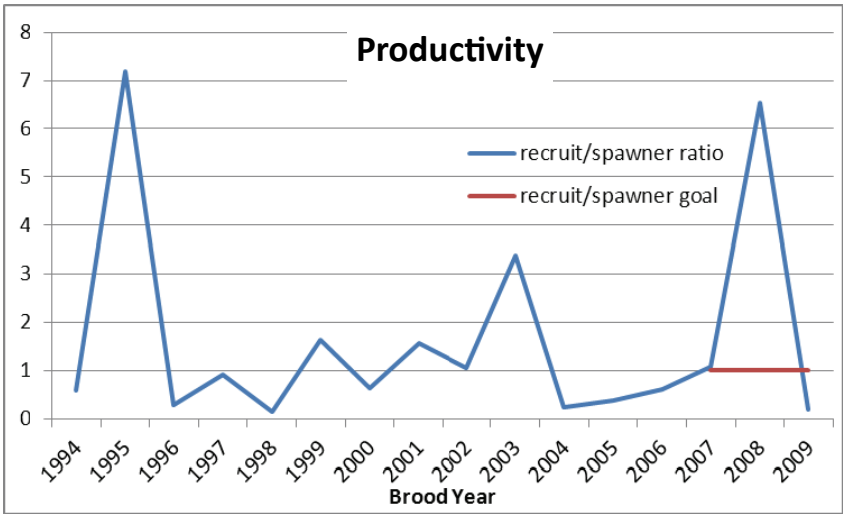


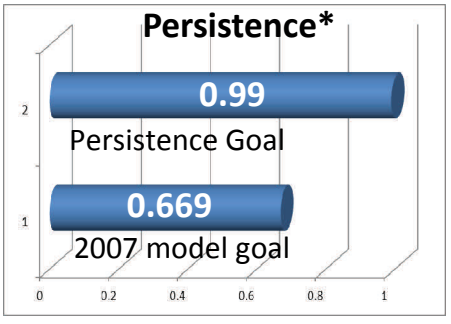
Population Status and Trends

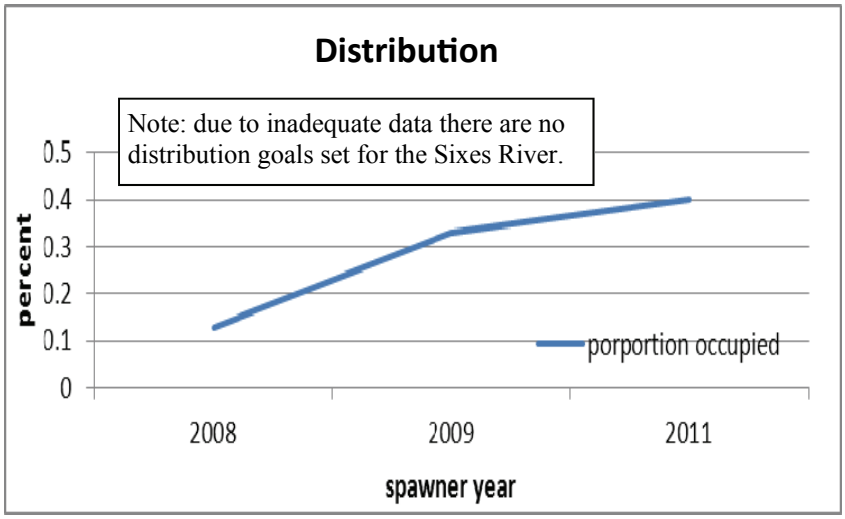
Abundance

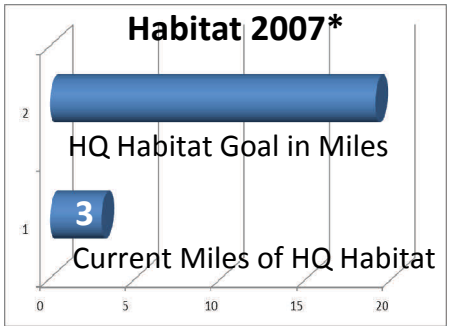












Sixes

Sixes

Activity Type summaries for Sixes Population unit (year 2011)

Location	Limiting Factor	Project Type	Cost (cash + inkind)	Ft/mi/ac/ treated	Detail 1	Detail 2
Sugar Cr	Riparian Condition	Voluntary tree retention	$0	0.37 miles	Voluntary tree retention	
Red Rock Cr	Riparian Condition	Voluntary tree retention	$0	0.42 miles	Voluntary tree retention	
Sixes	Riparian Condition	Voluntary tree retention	$0	0.91 miles	Voluntary tree retention	
			$			

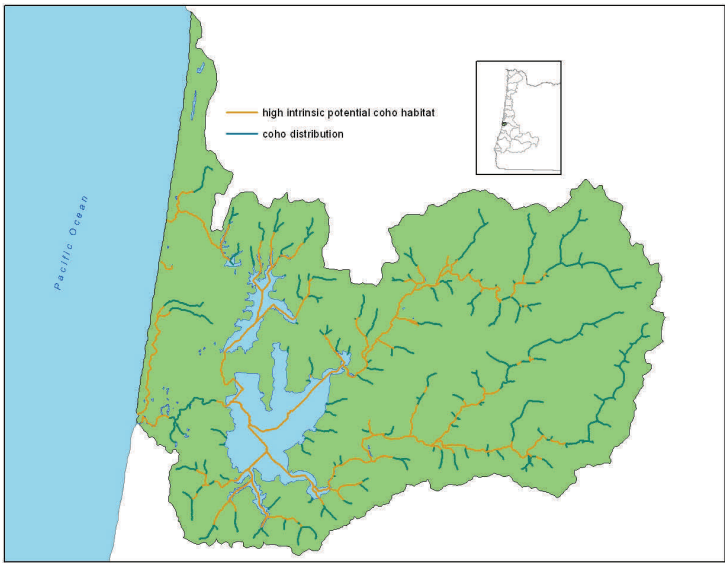
Activity Type summaries for Sixes Population unit (year 2012)

Location	Limiting Factor	Project Type	Cost (cash + inkind)	Ft/mi/ac/ treated	Detail 1	Detail 2
Carlton Cr	Riparian Condition	Voluntary riparian tree retention	$0	0.5 mile	Voluntary riparian tree retention	
Sixes River	Riparian Condition	Invasive plant control	$2,224	1.0 mile 1 acre	Riparian and upland invasive plant control	
Sixes River	Invasive plants	Invasive plant control	$8,217	25 acres	Upland invasive plant control	
Sixes River	Flow improvement	Irrigation system upgrade	$19,094	70 acres	Irrigation system improvements	
N.F. Sixe River	Riparian Condition	Voluntary riparian tree retention	$0	0.69 mile	Voluntary riparian tree retention	
Sixes River Estuary	Stream Complexity	Instream work	$100,226	2.07 miles	30 key pieces LWD in 10 total structures, Fencing, riparian tree planting, 2 off channel livestock watering sites	1 culvert replaced, 1 livestock crossing improved
Carlton Cr	Riparian Condition	Voluntary riparian tree retention	$0	0.35 mile	Voluntary riparian tree retention	
M.F. Sixes River	Riparian Condition	Voluntary riparian tree retention	$0	0.24 mile	Voluntary riparian tree retention	
N.F. Sixes River	Riparian Condition	Voluntary riparian tree retention	$0	0.5 mile	Voluntary riparian tree retention	
Sixes River	Riparian Condition	Voluntary riparian tree retention	$0	0.26 mile	Voluntary riparian tree retention	
M.F. Sixes River	Riparian Condition	Voluntary riparian tree retention	$0	0.72 mile	Voluntary riparian tree retention	

Conservation Strategy - Implement OCCCP physical habitat restoration activities, and maintain hatchery production and recreational harvest at levels identified in the 2007 Conservation Plan.

Siltcoos Lake

Limiting Factors for freshwater and estuarine habitat	Actions to address limiting factors
Stream Complexity,	Placement of large woody debris (short term) planting of riparian trees and vegetation (long term.
Water Quality	Planting trees and shrubs for sediment control and stream shading. Modification of agricultural and timber harvest practices.
Exotic Fish species	Annual monitoring of the introduced warm water fish population to determine its status

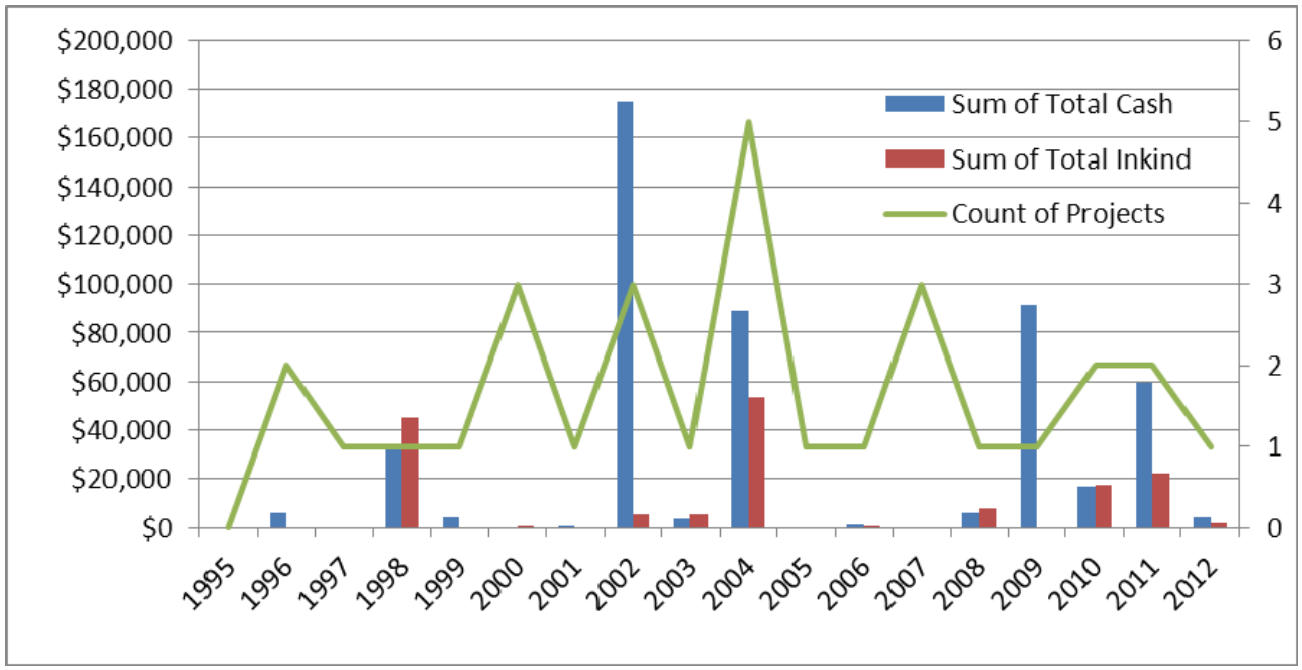


Total Restoration Expenditures in 2011 and 2012 for the Siltcoos Lake Watershed

Year	Sum Cash $	Sum in-Kind $	Total $	# of projects
2011	$59,513	$22,345	$81,858	2
2012	$4,000	$2,000	$6,000	1

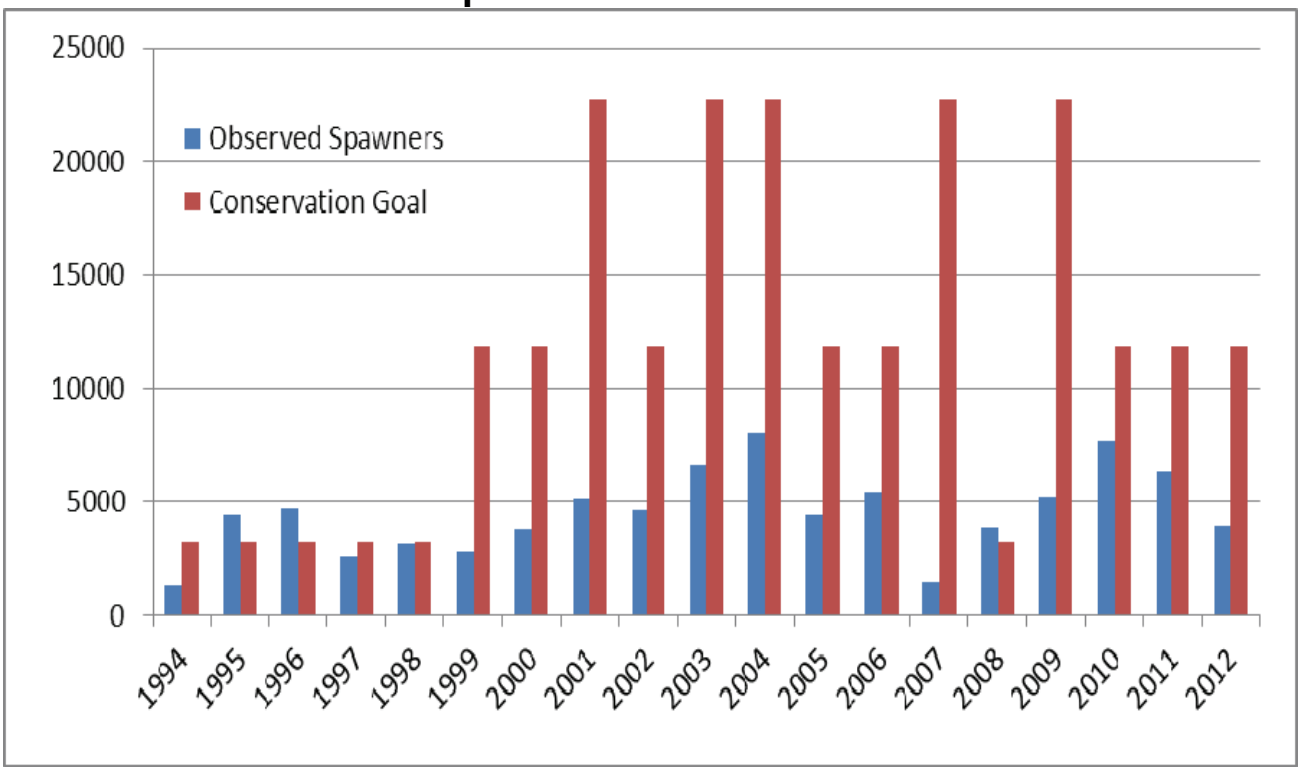
The Siltcoos basin is located in Lane and Douglas counties with a basin size of approximately 83 square miles containing about 131 miles of coho stream habitat. Considerable additional rearing habitat exists in the lakes themselves.

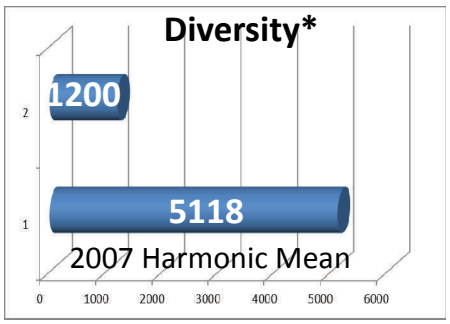
Siltcoos Lake Restoration Efforts 1994 - 2012

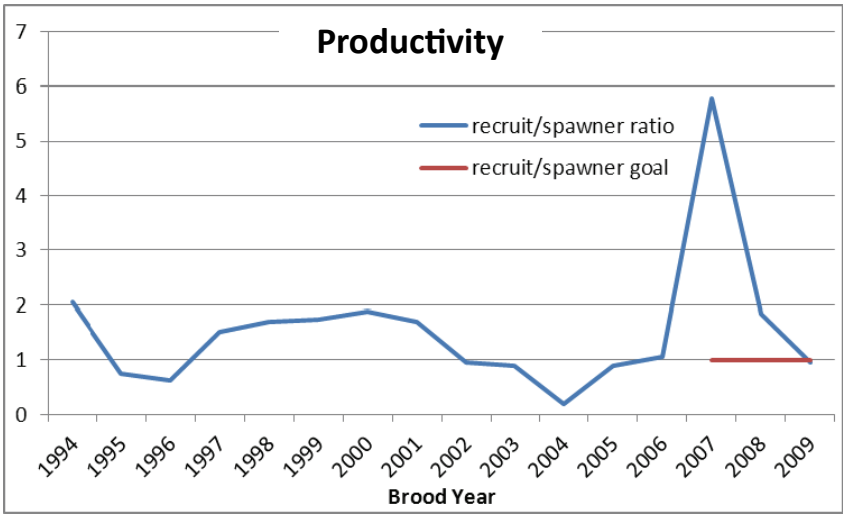


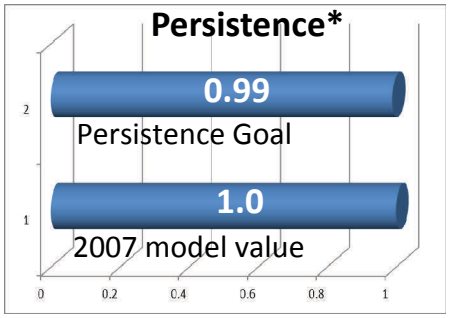
Population Status and Trends

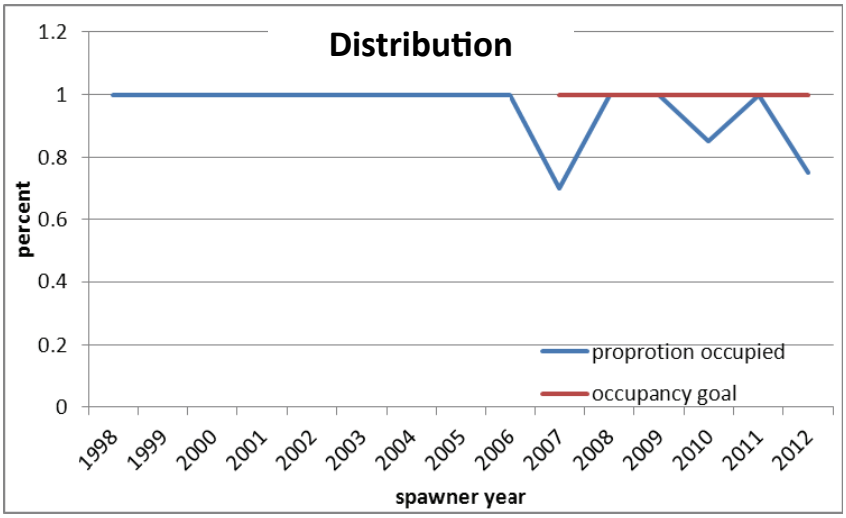
Abundance











Habitat*

The 2007 OCCCP did not set a value for the needed miles of HQ habitat for lake populations because this criteria reflects the miles of winter habitat needed for juvenile coho and in the lake populations this winter habitat is provided primarily by the lakes rather than the tributary streams.

Siltcoos Lake

* See page 5 for definitions

Siltcoos Lake

Activity Type summaries for Siltcoos Population unit (year 2011)

Location	Limiting Factor	Project Type	Cost (cash + inkind)	Ft/mi/ac/ treated	Detail 1	Detail 2
Kimberly Cr	sediment	Bank stabilization	$50,885	0.25 mile	Stream bank stabilization, 4 weirs installed instream, Tree and shrub Planting	1 culvert replaced, road rocked
Kimberly Cr	Riparian / channel condition	Riparian planting, fencing, channel modification	$30,973	0.2 mile	Stream channel modified, riparian planting, riparian fencing	

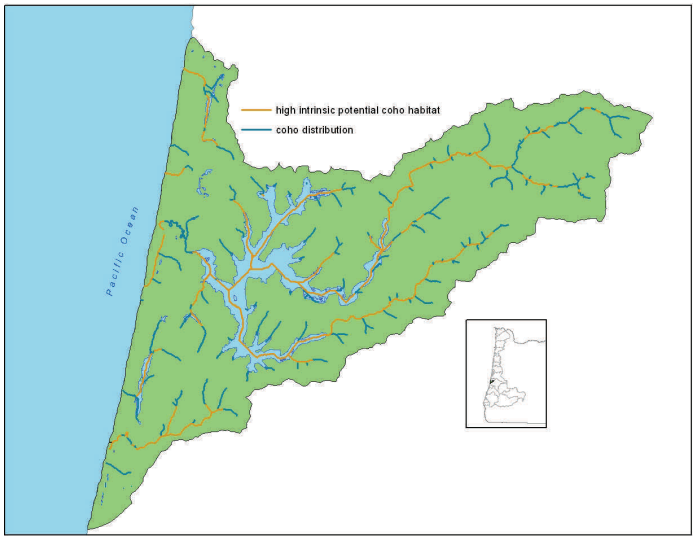
Activity Type summaries for Siltcoos Population unit (year 2012)

Location	Limiting Factor	Project Type	Cost (cash + inkind)	Ft/mi/ac/ treated	Detail 1	Detail 2
Kimberly Cr	Riparian condition, sediment	Bank stabilization	$6,000	0.02 miles	Bank stabilization, riparian shrub planting	

Conservation Strategy - Implement OCCCP physical habitat restoration activities, and maintain hatchery production and recreational harvest at levels identified in the 2007 Conservation Plan.

Tahkenitch Lake

Limiting Factors for freshwater and estuarine habitat	Actions to address limiting factors
Stream Complexity,	Placement of large woody debris (short term) planting of riparian trees and vegetation (long term.
Water Quality	Planting trees and shrubs for sediment control and stream shading. Modification of agricultural and timber harvest practices.
Exotic Fish species	Annual monitoring of the introduced warm water fish population to determine its status

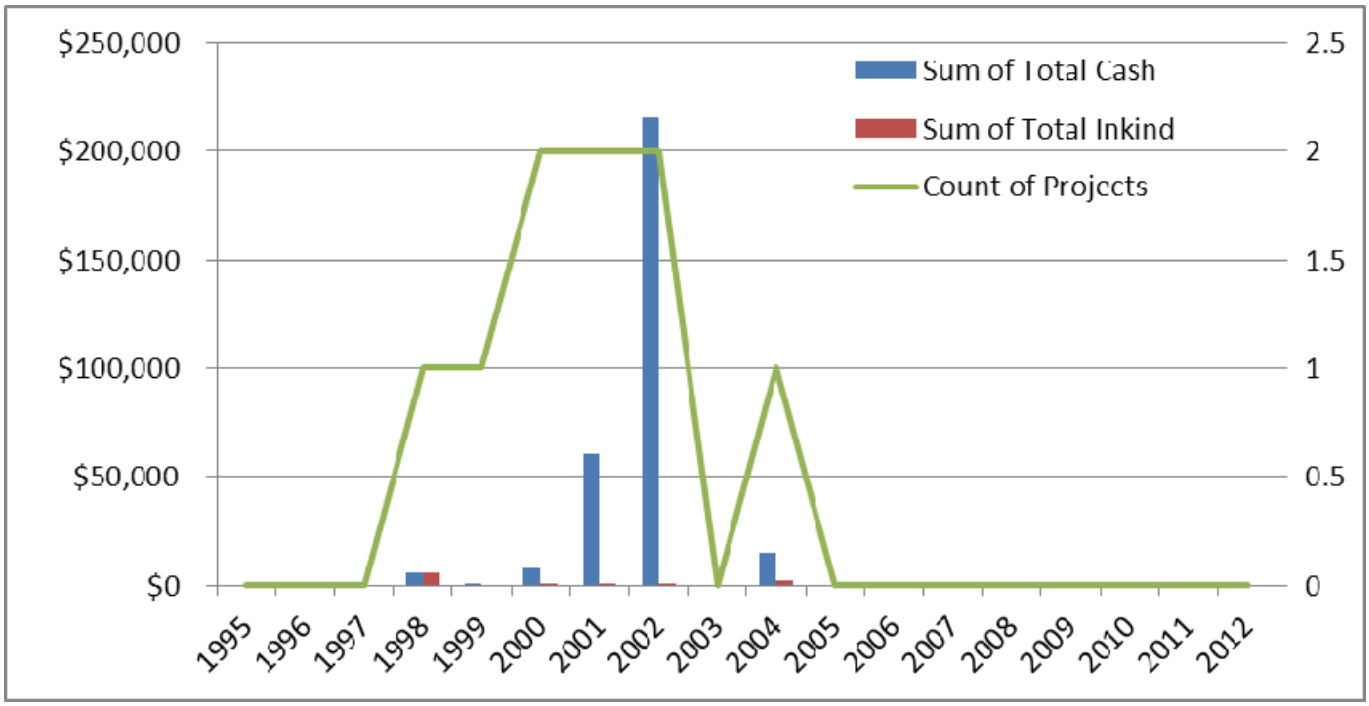


Total Restoration Expenditures in 2011—2012 for the Tahkenitch Lake Watershed

Year	Sum Cash $	Sum in-Kind $	Total $	# of projects
2011	$0	$0	$0	0
2012	$0	$0	$0	0

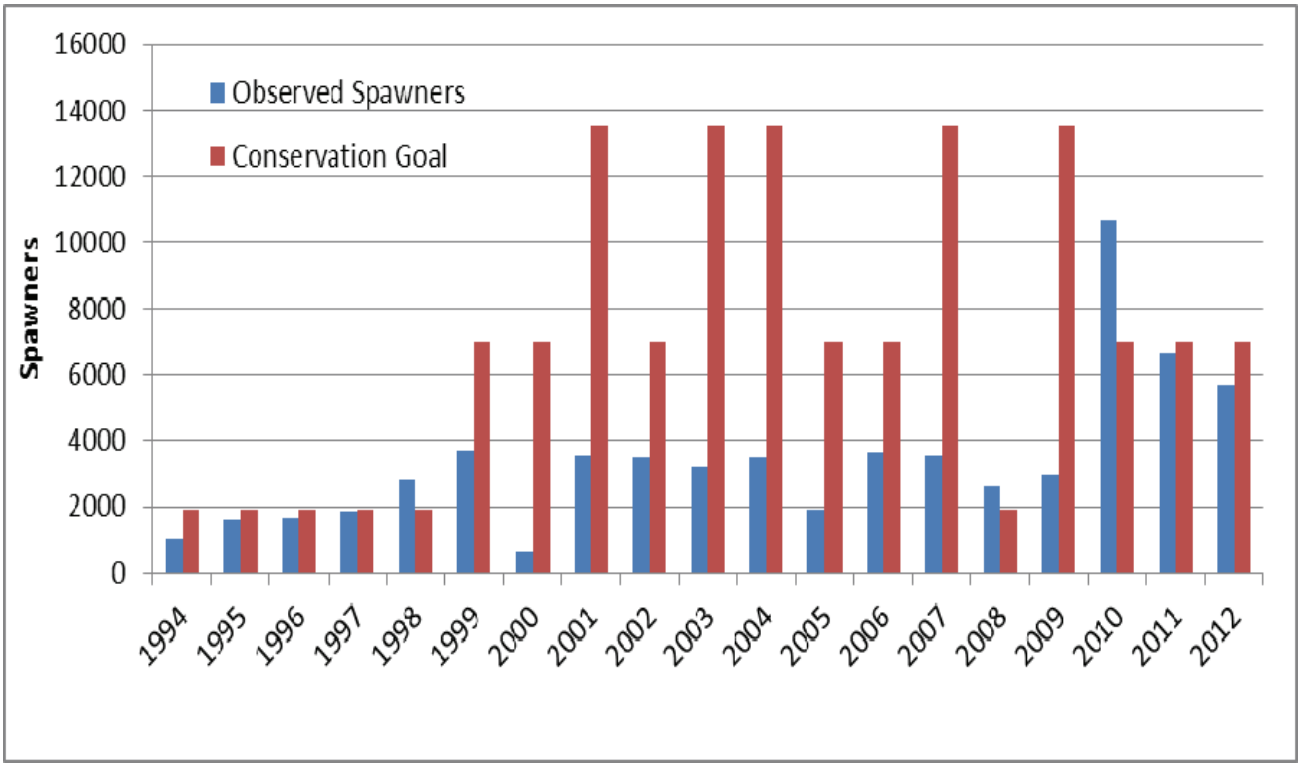
The Tahkenitch basin is located in Lane and Douglas counties with a basin size of approximately 47 square miles containing about 81 miles of coho stream habitat. Considerable additional rearing habitat exists in the lake itself.

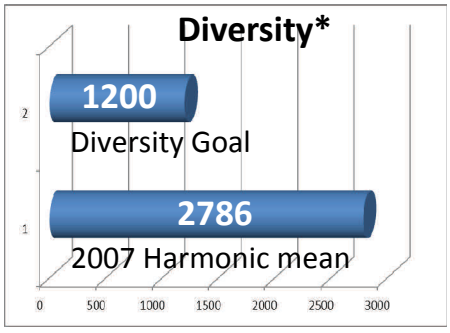
Tahkenitch Restoration Efforts 1994 - 2012

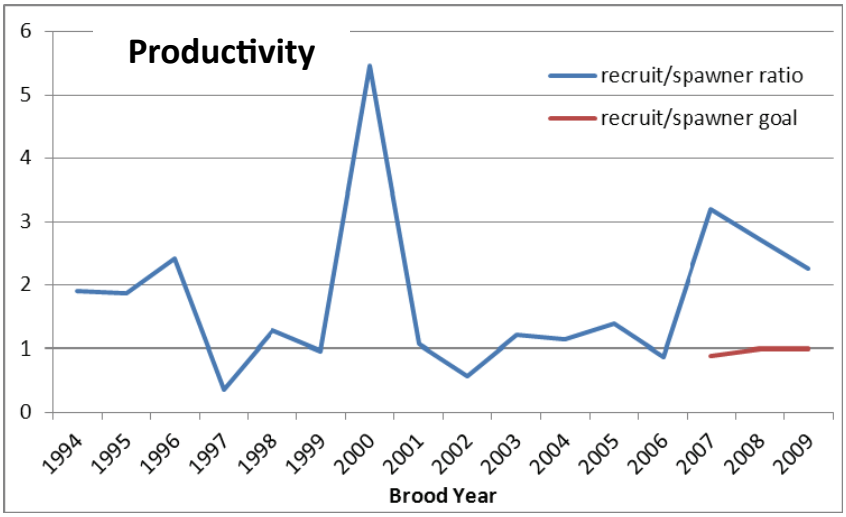


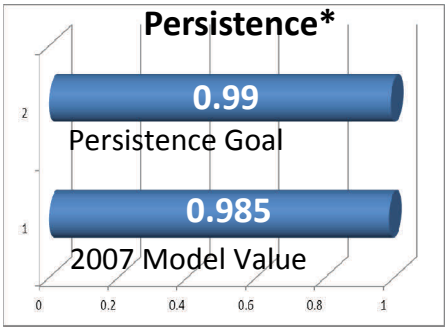
Population Status and Trends

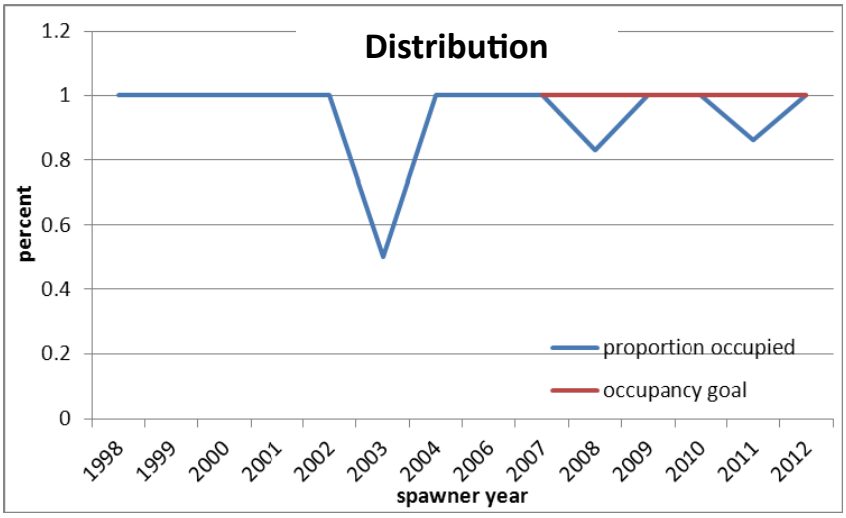
Abundance











Habitat*

The 2007 OCCCP did not set a value for the needed miles of HQ habitat for lakes populations because this criteria reflects the miles of winter habitat needed for juvenile coho and in the lakes populations this winter habitat is provided primarily by the lakes rather than the tributary streams

Tahkenitch Lake

* See page 5 for definitions

Tahkenitch Lake

Activity Type summaries for Tahkenitch Population unit (year 2011)

Location	Limiting Factors	Project Type	Cost (cash + inkind)	Ft/mi/ac/ treated	Detail 1	Detail 2
No projects reported in 2011						

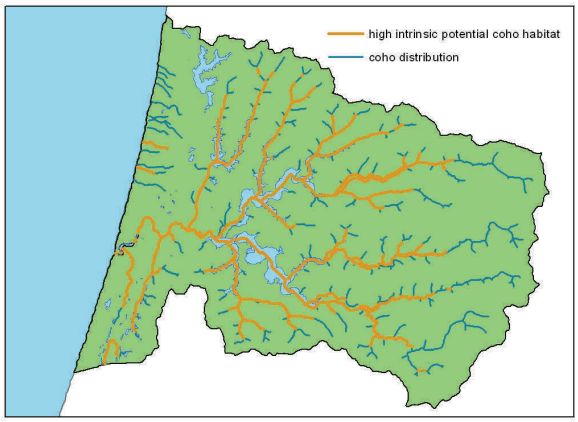
Activity Type summaries for Tahkenitch Population unit (year 2012)

Location	Limiting Factors	Project Type	Cost (cash + inkind)	Ft/mi/ac/ treated	Detail 1	Detail 2
No projects reported in 2012						

Conservation Strategy - Implement OCCCP physical habitat restoration activities, and maintain hatchery production and recreational harvest at levels identified in the 2007 Conservation Plan.

Tenmile Lake

Limiting Factors for freshwater and estuarine habitat	Actions to address limiting factors
Stream Complexity,	Placement of large woody debris (short term) planting of riparian trees and vegetation (long term.
Water Quality	Planting trees and shrubs for sediment control and stream shading. Modification of agricultural and timber harvest practices.
Exotic Fish species	Annual monitoring of the introduced warm water fish population to determine its status.

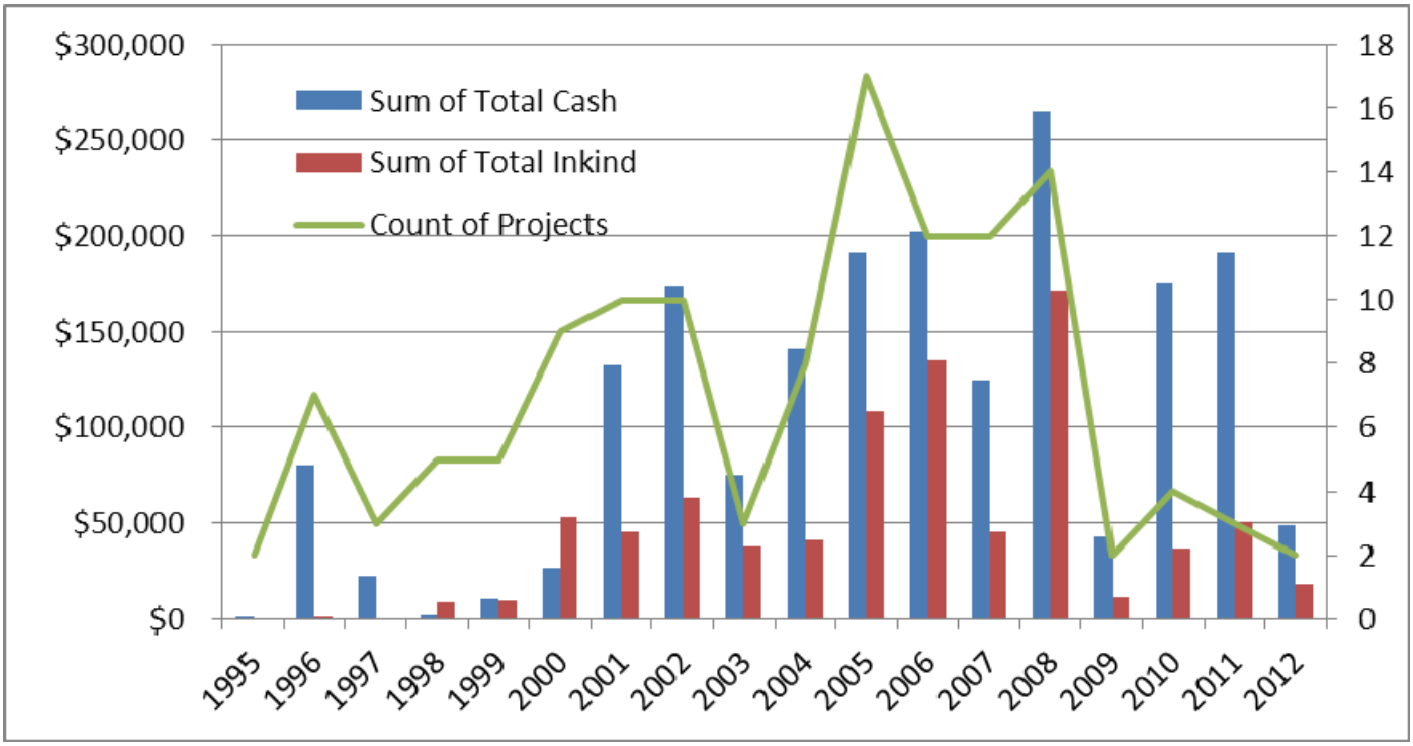


Total Restoration Expenditures in 2011 and 2012 for the Tenmile Lake Watershed

Year	Sum Cash $	Sum in-Kind $	Total $	# of projects
2011	$190,701	$50,460	241,161	3
2012	$49,106	$18,000	$67,106	2

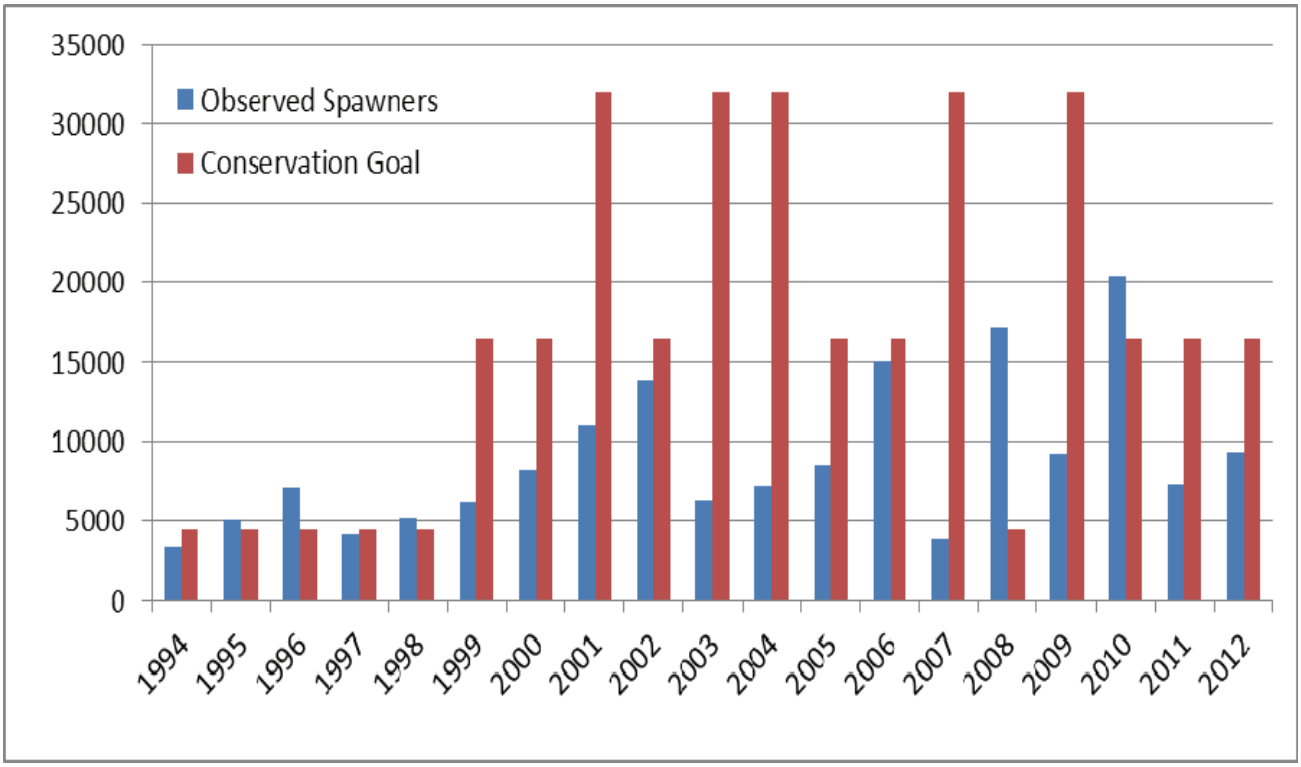
The Tenmile basin is located in Coos and Douglas counties with a basin size of approximately 99 square miles containing about 165 miles of coho stream habitat. Considerable additional rearing habitat exists in the lakes themselves

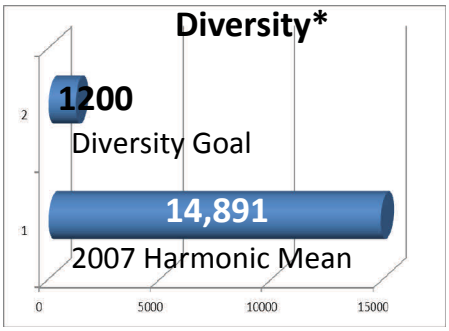
Tenmile Lakes Restoration Efforts 1994 - 2012

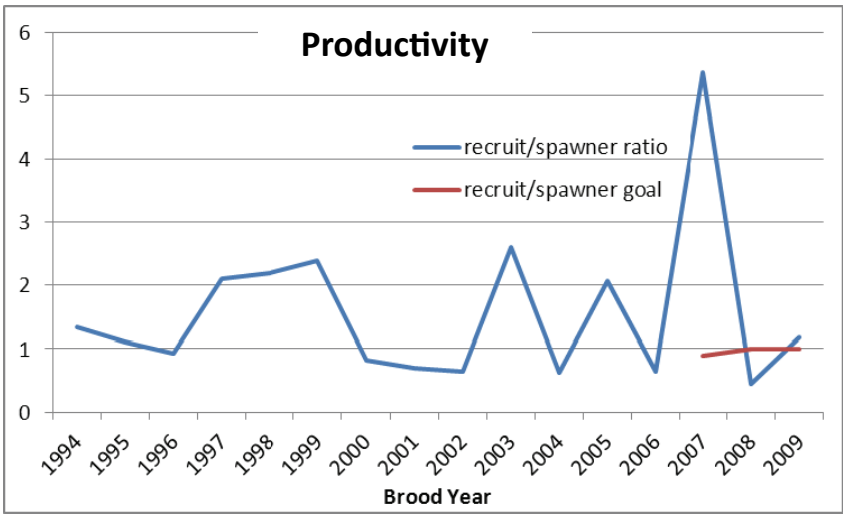


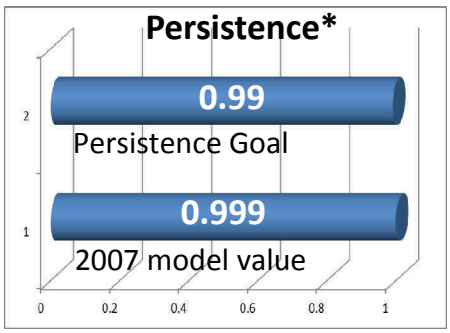
Population Status and Trends

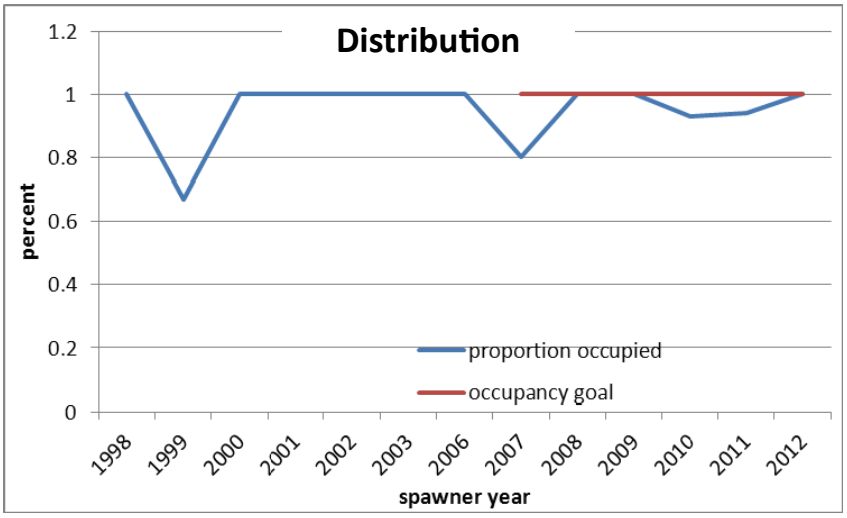
Abundance











Habitat*

The 2007 OCCCP did not set a value for the needed miles of HQ habitat for lakes populations because this criteria reflects the miles of winter habitat needed for juvenile coho and in the lakes populations this winter habitat is provided primarily by the lakes rather than the tributary streams

Tennile Lake

* See page 5 for definitions

Tenmile Lake

Activity Type summaries for Tenmile Population unit (year 2011)

Location	Limiting Factor	Project Type	Cost (cash + inkind)	Ft/mi/ac/ treated	Detail 1	Detail 2
Johnson Cr	Fish Access	Culvert Replacement	$39,759	7.5 miles of habitat opened	1 culvert replaced with bridge	
Johnson Cr	Fish Access	Culvert Replacement	$39,759	8 miles of habitat opened	1 culvert replaced with bridge	
Johnson Cr	Fish Access	Culvert Replacement	$161,643	2	1 culvert replaced with bridge	2 miles riparian fencing, 4 culverts replaced to meet 50yr flow

Activity Type summaries for Tenmile Population unit (year 2012)

Location	Limiting Factor	Project Type	Cost (cash + inkind)	Ft/mi/ac/ treated	Detail 1	Detail 2
Big Cr	Riparian condition	Tree planting	$57,449	4	Riparian tree planting	
Shutters Cr	Fish Access	Culvert replacement	$9,657	1 mile habitat opened	2 culverts replaced	