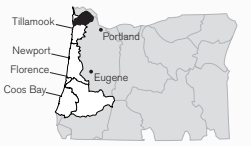
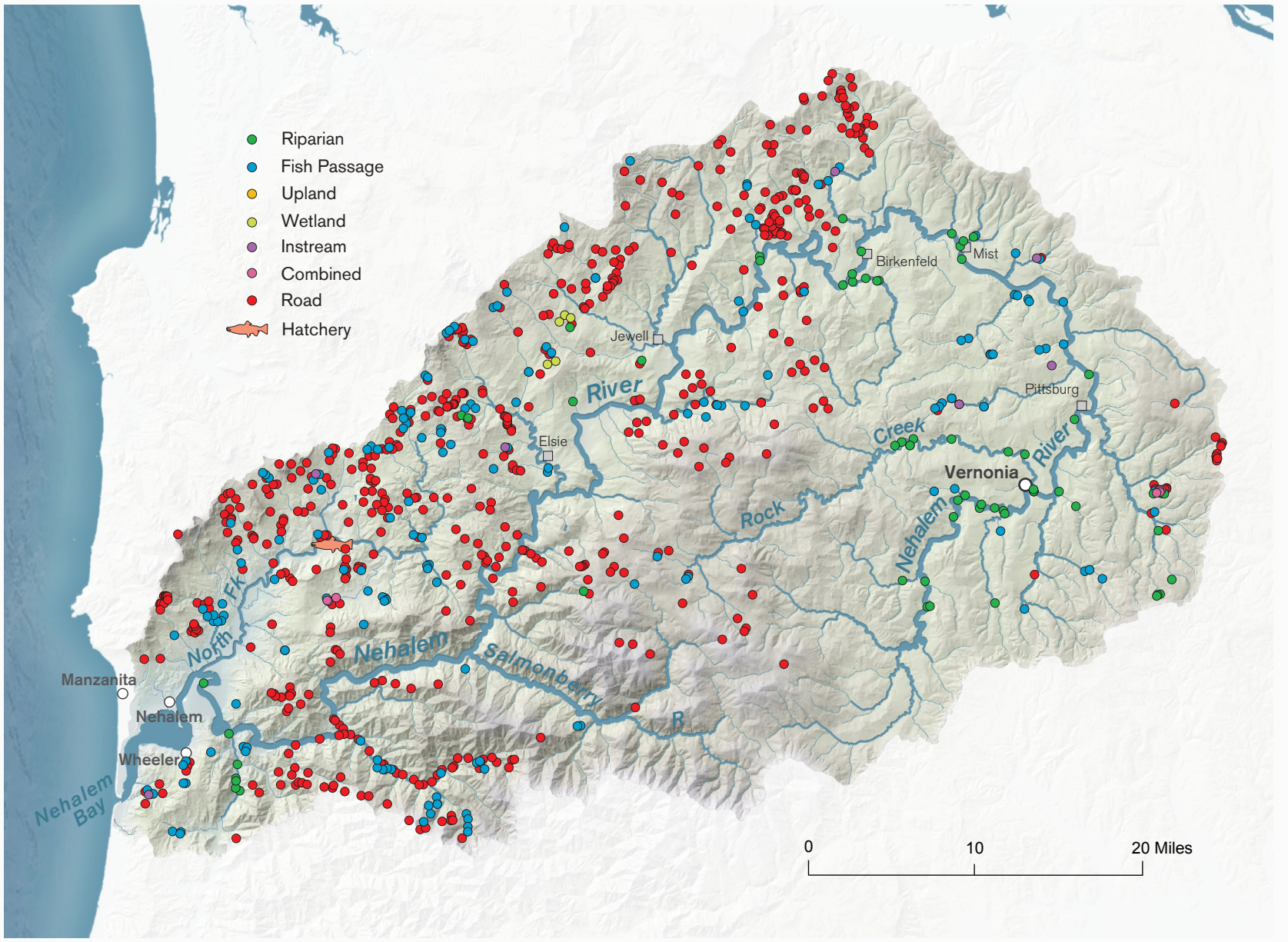
Nehalem Population Unit

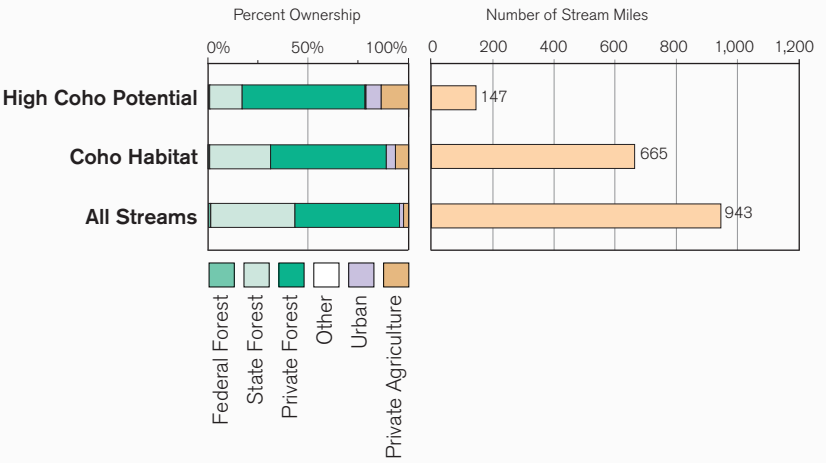
Watershed Assessments
Percent of Population Unit Completed
1997: *0%*
2004: *100%*



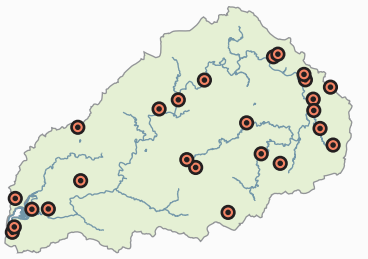
Restoration Completed and Reported 1997 - 2003



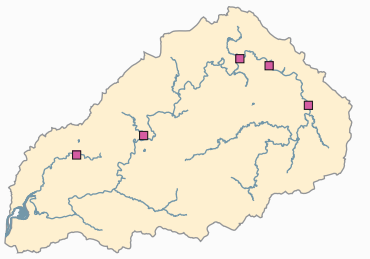
Characteristics of Coho Habitat



State/County Culverts with High Priority for Improvement

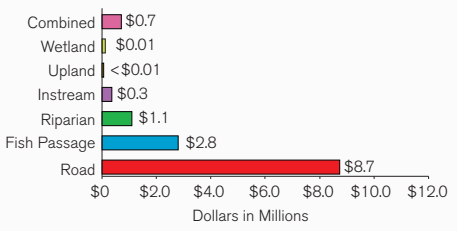


Historic Splash Dam Sites

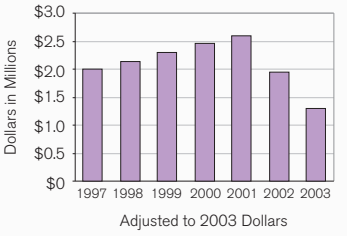


Restoration Funding 1997 - 2003: $13.7 Million

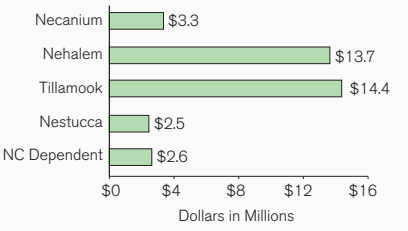
Restoration Activity Type



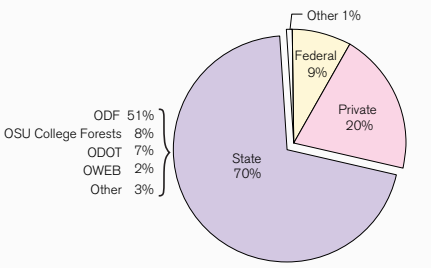
Restoration Yearly Total



Restoration Funds Region Total



Source of Restoration Funds

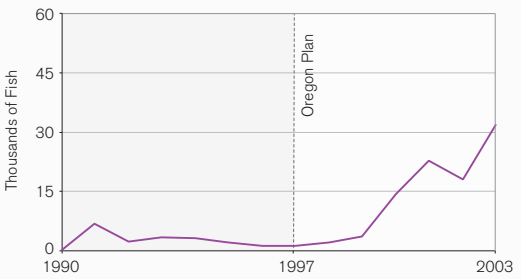


Analysis of Nehalem Population Unit

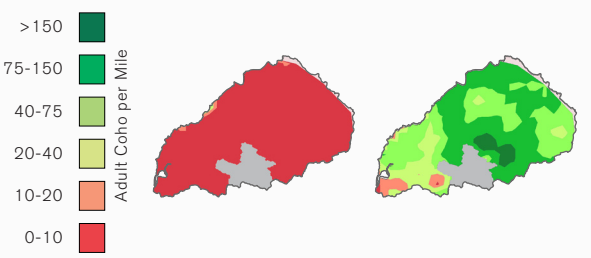
Biological Viability Status

PASS+
PASS
FAIL

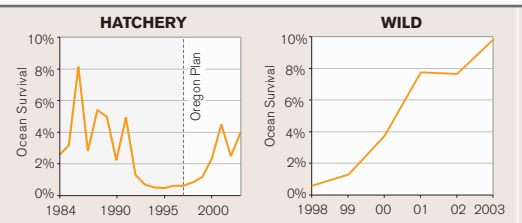
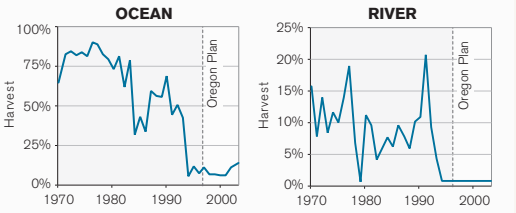
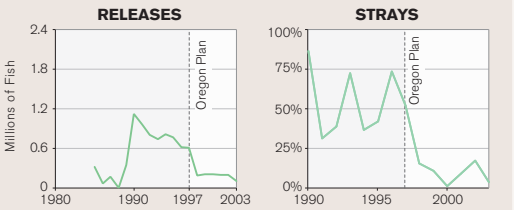
Number of Wild Adult Spawners



Density of Wild Adult Spawners



Analysis of Potential Limiting Factors

FACTOR	OREGON PLAN ACTION	OBSERVATIONS	INTERPRETATION	PRIMARY LIMITING FACTOR*	NEED
MARINE HABITAT Data scale: ESU [X] MA [ ] POP [ ]	Hatchery coho survival monitored at all hatcheries. Wild coho survival monitored at five lifecycle monitoring sites.		Marine survival rate of both hatchery and wild coho increased coincident with Oregon Plan implementation.	**N/A**	Adjust harvest levels consistent with marine survival, adult escapement and population needs.
FISHERY HARVEST Data scale: ESU [X] MA [ ] POP [ ]	Harvest rates dictated by PFMC Amendment 13 will constrain harvest of wild coho consistent with recovery needs.		High harvest rates on coho prior to Oregon Plan have been reduced by management action. Harvest rates are no longer limiting recovery.		Maintain PFMC Amendment 13 to restrain harvest consistent with population productivity.
HATCHERY IMPACTS Data scale: ESU [ ] MA [ ] POP [X]	Genetic Management Plans have been drafted for all hatcheries - awaiting approval by NOAA. Hatchery practices are managed consistent with local population status and recovery needs.		Hatchery programs are not constraining coho recovery. The percent of hatchery coho in natural spawning areas has declined because of management action and is now within policy guidelines.		Continue implementing Native Fish Conservation Policy and Hatchery Genetic Management Plans.
STREAM COMPLEXITY Data scale: ESU [ ] MA [X] POP [ ]	▪ Regulatory programs: Oregon For. Practices, Fill and Removal, Federal Forest Plan, Goal 5. ▪ Conduct restoration to recruit wood and increase complexity. Instream miles treated.....77 Riparian miles planted.....130 Riparian miles fenced.....44	▪ Coho streams have less large wood, more fine sediment, and fewer streamside conifers than reference streams. ▪ No significant trend was detected in most habitat parameters over the last decade. ▪ Habitat conditions were generally better in the North Coast and MidSouth Coast area of the ESU.	Availability of complex stream habitat probably limits coho production.		Focus habitat restoration investments in areas of high intrinsic coho potential.
FISH PASSAGE Data scale: ESU [X] MA [ ] POP [ ]	▪ Fish Passage Law ▪ Improve fish passage at stream crossings. Counted.....4,413 Improved.....1,140 Mapped.....3,392 Assessed.....2,145 Unknown.....1,247	▪ Improved access - result to date Non Coho Distribution.....+16% Non HIP Coho Distribution.....+10% HIP Coho Distribution.....+6% ▪ Improved Access - remaining opportunity Non Coho.....16% impaired - 40% unknown Non HIP Coho.....11% impaired - 32% unknown HIP.....10% impaired - 28% unknown	It is unknown if coho have access to roughly one third of their potential habitat. Access can be improved 10% by correcting documented problems. Impact of tide gates has not been determined.		Opportunity to increase access to high quality habitat may exist in local areas. Focus passage inventory and restoration in these areas.
WATER QUALITY Data scale: ESU [ ] MA [X] POP [ ]	▪ Federal Clean Water Act ▪ Conduct restoration to reduce sediment, moderate temp. ▪ SB-1010 Plans completed ▪ TMDLs are being developed Road miles upgraded .....692 Road miles retired 115	▪ The North Coast MA had the best overall water quality with the fewest stream miles exceeding standards or benchmarks (targets) for temperature, pH, fine sediment, total solids, and vertebrate assemblage. ▪ 6 of 9 large river ambient monitoring sites in the North Coast MA had improving trends in water quality. ▪ Compared to other MAs the North Coast had the poorest dissolved oxygen saturation levels and macroinvertebrates.	Although not currently a significant constraint on coho recovery, water quality has the potential of limiting coho production at local spatial scales.		Take restoration action at local spatial scales as appropriate to maintain or improve rearing capacity.
WATER QUANTITY Data scale: ESU [ ] MA [X] POP [ ]	▪ Oregon Water Law ▪ 850 miles of stream are protected (instream right). ▪ At an 80% exceedance flow, water is not available for new appropriations in August in 97% of the total area of the North Coast MA.	▪ Over 80% of the North Coast MA had an August consumptive use less than 10% of the 80% natural exceedance flow. ▪ The Necanicum and Tillamook populations had the greatest portion of their total watershed (up to 12% of the total area) with August consumptive use more than 100% of the 80% exceedance natural flow. ▪ 97% of the total North Coast MA had no change in August consumptive use between 1997 and 2004.	Although not currently a significant constraint on coho recovery, water quantity has the potential of limiting coho production at local spatial scales.		Focus habitat restoration investments in areas of high intrinsic coho potential.
OTHER FACTORS Toxics, DO, pH, Stream fertility and shade, Spawning gravel, Hydro power, Illegal harvest, Disease, Estuaries, Wetlands, Exotic fish interactions, Predation by birds & pinnipeds	Assessed data, literature, and local observations.	Data, analyses, and interpretation of these limiting factors are available at www.oregon-plan.org.	Although not currently a significant constraint on coho recovery, each factor has the potential of limiting coho at local spatial scales.		Remain alert to detect future change in importance of these factors.

** Primary and Secondary risk factor(s) that most limit the population. Supporting information can be viewed at* www.oregon-plan.org/OPSW/cohoproject/coho_proj.shtml.