## **Desired Status**

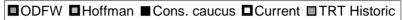
- Identify a level of abundance and productivity for coho that provides economic, cultural and ecological benefits.
- Exploring what has been proposed and what has been seen or estimated.
- Decide with your constituents what is reasonable.
- Decide with your fellow stakeholders what is reasonable.
- Adaptive management allows for reconsideration of desired status goal.

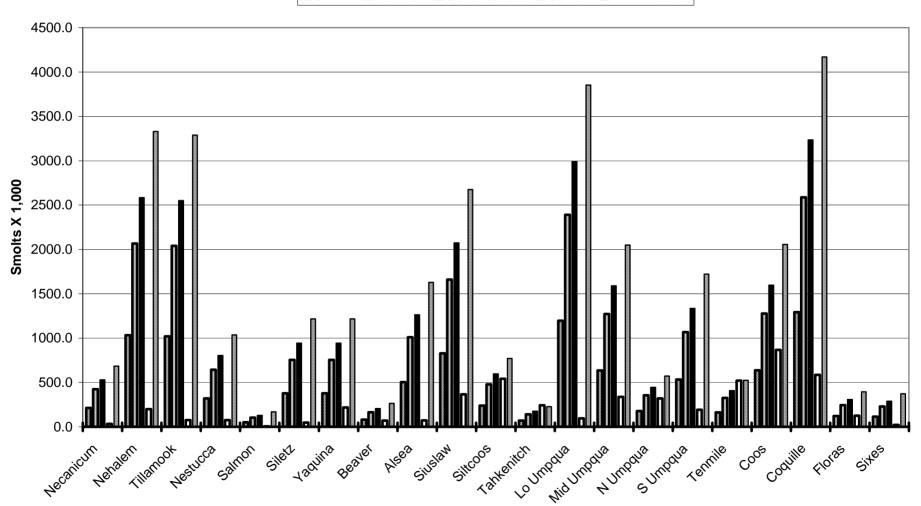
### Stakeholder Principles for Coastal Coho Conservation Planning

- Salmon in our rivers and ocean support Oregon's ecosystem health and economic well-being.
  - Ecosystem health is supported by
    - the nutrients returning salmon bring to local streams,
    - the efforts Oregonians' make to help protect and restore functional salmon habitats, and
    - the stewardship of industries and local residents who live and work in salmon supporting habitats.
  - Community livability and economic well-being is supported by, among others, strong fish runs that
    - enable commercial fisheries to command premium market prices,
    - · enable sport fishers to experience great pride, and
    - invite tourism which enjoys the aesthetic qualities of salmon in Oregon's coastal landscapes.
  - Oregonians believe that productive, clean streams can (and do) exist in and contribute to economically productive landscapes.
- The recovery of salmon in Oregon will symbolize Oregonian's ability to work together to achieve positive, measurable environmental results for salmon compatible with local economies, jobs, property values and property rights.
  - Oregonians have shown their commitment to conserving these species by providing public and private funds. They want to see those funds used to produce real results in a cost effective manner.
  - While we focus on Coho salmon, the health of other native fish and wildlife species will be enhanced and sustained through
    - · the protection of the ecosystems upon which they all depend,
    - the control of non-native species, and
    - the restoration of balanced predator/prey relationships.
- Finally, Oregonians value salmon and their unique life cycles as an important source of cultural, subsistence, nutritional and educational enrichment for tribal peoples and all Oregonians.

#### Smolts Needed for Three Desired Status Scenarios Under Poor Ocean Survival (1% Smolt-to-Adult)

**Compared to Current and TRT Historic Estimates** 





# Smolts (in thousands) for three Desired Status scenarios compared to current and TRT's Historic estimates (Proportioned identical to TRT historic)

Population	ODFW	Hoffman	Cons Grp	# smolts	Historic
-	desir smlt	desir smlt	desir smlt	Current*	TRT est.
Necanicum	212.6	425.1	531.4	32.8	685.0
Nehalem	1033.3	2066.6	2583.2	201	3330.0
Tillamook	1020.3	2040.5	2550.7	76.8	3288.0
Nestucca	321.8	643.6	804.4	76.7	1037.0
Salmon	52.1	104.3	130.3	5.8	168.0
Siletz	377.6	755.3	944.1	48	1217.0
Yaquina	377.6	755.3	944.1	218.4	1217.0
Beaver	82.2	164.5	205.6	70.9	265.0
Alsea	505.2	1010.3	1262.9	72.5	1628.0
Siuslaw	829.7	1659.5	2074.3	366.5	2674.0
Siltcoos	239.2	478.5	598.1	541.6	771.0
Tahkenitch	70.7	141.5	176.9	243	228.0
Lo Umpqua	1195.7	2391.5	2989.4	95.8	3853.5
Mid Umpqua	636.0	1272.1	1590.1	338.3	2049.8
N Umpqua	178.1	356.2	445.2	321.8	573.9
S Umpqua	534.3	1068.5	1335.7	193.4	1721.8
Tenmile	162.9	325.8	407.3	520.9	525.0
Coos	638.6	1277.2	1596.5	868.2	2058.0
Coquille	1293.6	2587.3	3234.1	586.5	4169.0
Floras	122.9	245.8	307.2	125.9	396.0
Sixes	115.4	230.9	288.6	21.7	372.0
Totals	10000	20000	25000	5026.5	32227

<sup>\* -</sup> Current is the smolts needed for the 1993 thru 1999 average spawners estimated and reflects the avg. for each population.

### Proportion of ESU Smolt Total in each Population for Six Different Parameters

	Current <sup>1</sup>	Hi Intrin Pot. <sup>2</sup>	Recr Mod. <sup>3</sup>	Amend 13	Hab Miles <sup>4</sup>	TRT Hist.
Necanicum	0.7%	1.4%	1.1%	0.3%	1.1%	2.1%
Nehalem	4.0%	11.3%	9.4%	13.7%	10.5%	10.3%
Tillamook	1.5%	4.3%	8.9%	1.6%	5.8%	10.2%
Nestucca	1.5%	2.2%	4.6%	1.4%	3.2%	3.2%
Salmon	0.1%	0.5%	0.4%	1.1%	0.9%	0.5%
Siletz	1.0%	3.3%	1.9%	3.4%	4.0%	3.8%
Yaquina	4.3%	5.3%	5.6%	5.6%	3.9%	3.8%
Beaver	1.4%	0.8%	1.2%	3.4%	0.6%	0.8%
Alsea	1.4%	5.6%	3.4%	11.8%	6.0%	5.1%
Siuslaw	7.3%	15.3%	6.8%	17.9%	12.0%	8.3%
Siltcoos	10.8%	2.1%	6.4%	9.1%	1.4%	2.4%
Tahkenitch	4.8%	0.9%	2.4%	3.4%	0.8%	0.7%
Lo Umpqua	1.9%	7.9%	4.0%	5.8%	8.5%	12.0%
Mid Umpqua	6.7%	8.2%	3.3%	4.7%	8.3%	6.4%
N Umpqua	6.4%	1.6%	2.7%	0.8%	2.8%	1.8%
S Umpqua	3.8%	9.9%	1.9%	0.6%	11.7%	5.3%
Tenmile	10.4%	1.7%	16.1%	4.9%	1.3%	1.6%
Coos	17.3%	6.1%	5.7%	5.6%	6.5%	6.4%
Coquille	11.7%	9.0%	13.3%	4.2%	8.6%	12.9%
Floras	2.5%	2.0%	0.6%	0.6%	1.1%	1.2%
Sixes	0.4%	0.5%	0.1%	0.1%	1.0%	1.2%

<sup>&</sup>lt;sup>1</sup> Based on 1993-99 average spawners for each population.

<sup>&</sup>lt;sup>2</sup> Based on estimate of high intrinsic potential habitat by ODFW.

<sup>&</sup>lt;sup>3</sup> Based on spawners needed for maximum recruits (Smax) from Chilcote recruit models.

<sup>&</sup>lt;sup>4</sup> Based on stream miles available to juvenile coho - from Coho Assessment.

What might be expected for adults under the worst and best ocean survivals for three desired status scenarios compared to what was seen in the last 10 years

			Worst Ocean	Best Ocean	% of
			(Smolt surv.)	(Smolt surv.)	TRT Hist.
			23,700 <sup>1</sup>	253,400 <sup>2</sup>	
Recent Past			(1.3%)	(5%)	15% <sup>3</sup>
			100,000	1,000,000	
ODFW Desired Status			(1%)	(10%)	30%
			200,000	2,000,000	
Wayne Hoffman Desire	ed Status		(1%)	(10%)	60%
			250,000	2,500,000	
Conservation Caucus [	Desired St	atus	(1%)	(10%)	76%
			330,000	3,300,000	
TRT Estimated Historic	Abundan	ce	(1%)	(10%)	100%
<sup>1</sup> Spawners	for 1997				
<sup>2</sup> Spawners	for 2002				
<sup>3</sup> Based on 9	(50,000)				

## In-basin commercial coho harvest in thousands of adult fish. From Mullen, 1981. Starting in 1923 a poundage tax was imposed so data quality improves.

	Nehalem	Tillamook	Nestucca	Siletz	Yaquina	Alsea	Siuslaw	Umpqua	Coos	Coquille
1923	66	51	16	21	26	21	29	134	34	64
1924	66	66	26	38	48	30	35	234	49	41
1925	51	48	24	35	13	16	29	101	55	12
1926	47	33	16	15	15	13	20	66	19	60
1927	37	35		12	13	11	26	74	28	31
1928	45	37		21	28	12	19	47	44	26
1929	57	54		22	14	18	21	29	5	20
1930	70	51		13	9	11	24	86	7	13
1931	30	34		13	25	11	24	77	8	14
1932	55	28		18	21	26	15	104	9	25
1933	43	23		8	9	23	19	54	5	15
1934	59	55		10	10	16	9	55	6	30
1935	84	70		25	21	52	42	173	19	31
1936	47	35		8	12	29	12	61	7	12
1937	44	46		9	15	29	25	91	7	41
1938	62	48		17	21	39	32	56	6	30
1939	53	47		17	24	46	35	38	3	47
1940	39	24		8	13	24	19	34	4	24

1923-40 avg.	53.1	43.6 NA	17.2	18.7	23.7	24.2	84.1	17.5	29.8

Appendix 1 – Annual estimates for the OPI marine survival index and fishery mortality impact rates for Oregon coastal coho, for adults that returned in 1961 to 2003.

	OPI	Fishery		OPI	Fishery
Return	Marine	Mortality	Return	Marine	Mortality
Year	Survival	Rate	Year	Survival	Rate
1961	0.0457	0.744	1983	0.0182	0.761
1962	0.0282	0.588	1984	0.0223	0.830
1963	0.0568	0.607	1985	0.0239	0.633
1964	0.0453	0.625	1986	0.0840	0.800
1965	0.0780	0.607	1987	0.0223	0.372
1966	0.0748	0.753	1988	0.0476	0.468
1967	0.0936	0.698	1989	0.0478	0.399
1968	0.0667	0.680	1990	0.0200	0.627
1969	0.0592	0.634	1991	0.0504	0.590
1970	0.0853	0.726	1992	0.0129	0.600
1971	0.1168	0.753	1993	0.0066	0.724
1972	0.0578	0.698	1994	0.0051	0.560
1973	0.0515	0.707	1995	0.0046	0.555
1974	0.0914	0.839	1996	0.0063	0.449
1975	0.0507	0.865	1997	0.0063	0.068
1976	0.1143	0.835	1998	0.0083	0.125
1977	0.0295	0.855	1999	0.0115	0.084
1978	0.0514	0.833	2000	0.0226	0.124
1979	0.0398	0.913	2001	0.0441	0.078
1980	0.0358	0.909	2002	0.0247	0.076
1981	0.0330	0.838	2003	0.0377	0.073
1982	0.0329	0.796			

### **OPI Smolt-to-Adult Survival Estimates for Smolt Years 1960 - 2002**

