# Desired Status

- Proposal at November meeting – 80% of full-seeding during poor ocean with no backsliding from current.

- Still need to define full-seeding, model lakes better, and identify timeframe.

Full-seeding

- Better term may be "production capacity".

- Definition: The level of spawners needed to produce the most offspring (recruits).

- Recruit model for each population can estimate "production capacity".

Generic Recruitment Curve

Rmax ↔

Progeny (Recruits)

Smax

NEQ

Parents (Spawners)
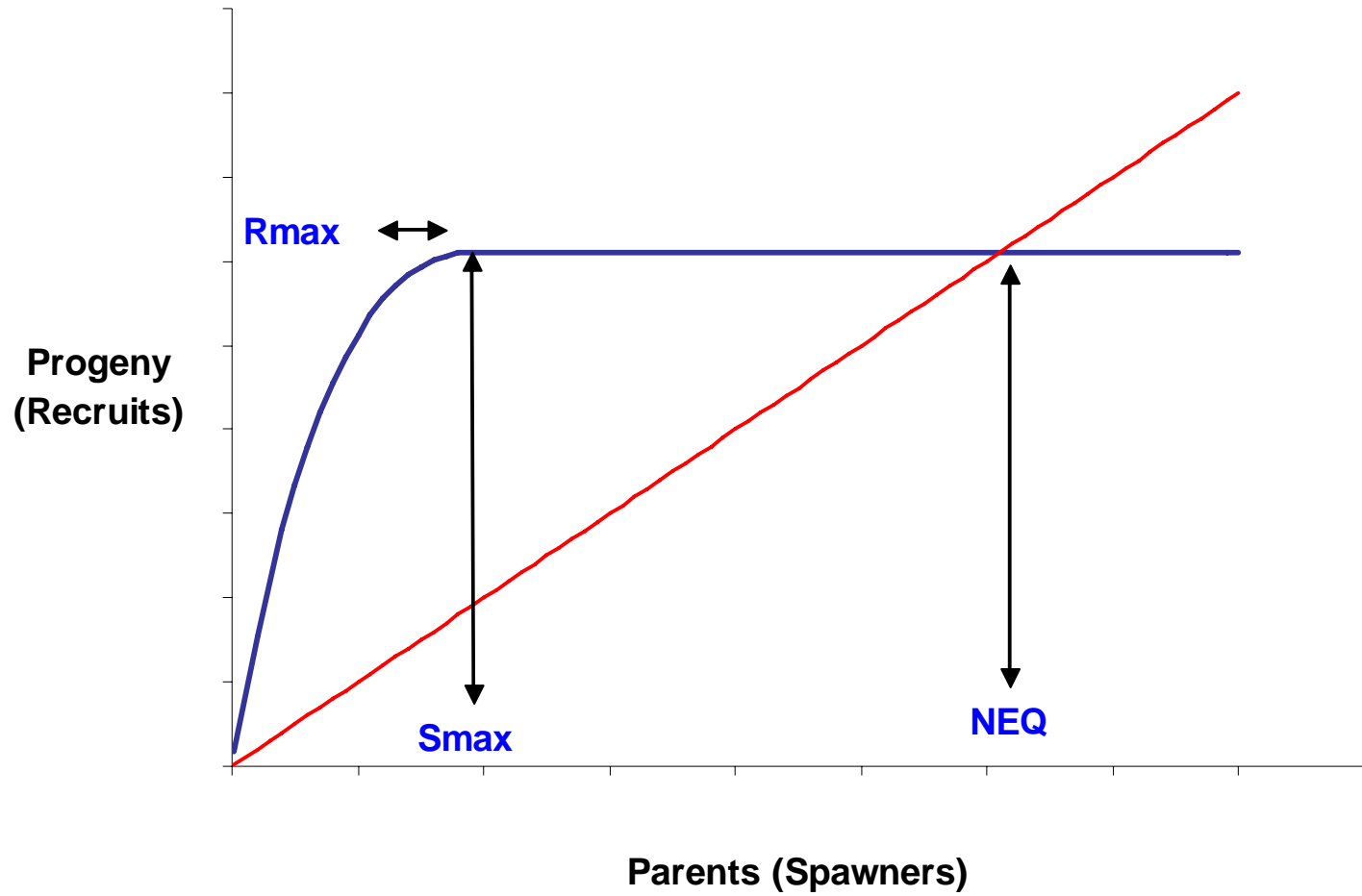
Lakes

- Recruit model for each lake population was developed with that lake's spawner data.

- These are the best we're going to have for awhile.

Complications Since Last Meeting

- Unable to resolve difference between recruit models and Amendment 13.
- Recruit models predict 80% of production capacity to total 77,000.
- Concern for populations already at >80%.
- Propose 80% of production capacity plus 25% increase for populations already >80% - estimated total = 99,000.
- Better ability to detect improvement if compared to goal under average ocean.
- Production capacity may change with habitat changes.
- Emphasizes need to explore better ways to look at capacity.

Recruit Models

- The recruit models are only tools to help us make decisions.
- Models allow us to identify goals based on an estimate of what the population can produce.
- Models allow us to "turn up" survival to achieve desired status in each population.
- This allows differentiation between what will be easy and what will be hard.
- Still won't be able to identify how many restoration projects will be needed to achieve increased survival.

The following three tables were created with the use of the recruitment model that was developed for the Oregon Coastal Coho Assessment. A description of the model can be found in Part 2 (Viability Criteria and Status Assessment of Oregon Coastal Coho) of the Assessment. The Assessment can be viewed online at http://nrimp.dfw.state.or.us/OregonPlan/default.aspx?page=152. Each table represents one of the proposed desired status scenarios and shows how many adults would result from poor, average and good ocean survival. The survival increase is what the model predicts would be necessary to achieve the number of adults shown during poor ocean conditions.

Alternative 1 - 80% of production capacity + 25% increase for populations already > 80%.

Population	Production Capacity	Current	Poor Ocean	Average Ocean	Good Ocean	Survival Increase
Necanicum	1,081	410	864	3,294	19,009	52%
Nehalem	9,073	0	7,259	49,980	634,825	131%
Tillamook	8,534	0	6,828	29,642	203,563	179%
Nestucca	4,481	1,794	3,585	13,767	80,291	49%
Salmon	390	0	312	508	946	302%
Siletz	1,868	705	1,494	4,940	23,593	53%
Yaquina	5,395	2,935	4,316	15,848	87,049	29%
Beaver	1,203	1,005	1,273	3,010	9,463	25%
Alsea	3,286	1,207	2,629	8,566	40,126	54%
Suislaw	6,539	6,553	8,012	30,756	179,504	25%
LoUmpqua	6,149	6,716	8,063	19,988	63,553	25%
MidUmpqua	2,310	4,370	4,298	8,805	16,645	25%
NUmpqua	3,888	0	3,110	9,390	39,725	177%
SUmpqua	3,198	3,786	4,452	8,081	16,491	25%
Siltcoos	2,613	4,489	4,610	10,041	21,818	25%
Tahkenitch	1,793	2,374	2,696	6,037	15,558	25%
Tenmile	15,553	11,642	12,442	25,592	64,907	5%
Coos	5,523	13,308	11,612	28,893	60,328	25%
Coquille	12,801	8,444	10,241	25,887	86,434	15%
Floras	607	654	787	2,249	8,674	25%
Sixes	136	368	301	350	243	25%
Total	96,421	70,757	99,185	305,626	1,672,746	62%

Alternative 2 - Adjust survival of Alt. 1 to achieve 200,000 during poor ocean.

Population	Production Capacity	Current	Poor Ocean	Average Ocean	Good Ocean	Survival Increase
Necanicum	1,081	410	1,996	9,388	54,177	334%
Nehalem	9,073	0	16,761	142,443	1,809,251	557%
Tillamook	8,534	0	15,766	84,480	580,154	695%
Nestucca	4,481	1,794	8,277	39,237	228,829	325%
Salmon	390	0	720	1,449	2,695	1045%
Siletz	1,868	705	3,451	14,080	67,239	335%
Yaquina	5,395	2,935	9,967	45,168	248,090	268%
Beaver	1,203	1,005	2,534	8,580	26,970	256%
Alsea	3,286	1,207	6,070	24,414	114,359	339%
Suislaw	6,539	6,553	14,860	87,654	511,588	256%
LoUmpqua	6,149	6,716	14,503	56,967	181,127	256%
MidUmpqua	2,310	4,370	6,718	25,095	47,438	256%
NUmpqua	3,888	0	7,182	26,761	113,217	691%
SUmpqua	3,198	3,786	7,801	23,030	47,001	256%
Siltcoos	2,613	4,489	7,347	28,618	62,182	256%
Tahkenitch	1,793	2,374	4,574	17,205	44,340	256%
Tenmile	15,553	11,642	28,731	72,937	184,985	200%
Coos	5,523	13,308	17,396	82,346	171,935	256%
Coquille	12,801	8,444	23,647	73,777	246,337	228%
Floras	607	654	1,422	6,409	24,720	256%
Sixes	136	368	444	998	692	256%
Total	96,421	70,757	200,168	871,035	4,767,326	361%

Alternative 3 - Adjust survival of Alt.1 to achieve 250,000 under poor ocean.

Population	Production Capacity	Current	Poor Ocean	Average Ocean	Good Ocean	Survival Increase
Necanicum	1,081	410	2,555	15,745	90,865	628%
Nehalem	9,073	0	21,453	238,904	3,034,463	1002%
Tillamook	8,534	0	20,179	141,689	973,030	1234%
Nestucca	4,481	1,794	10,594	65,808	383,790	613%
Salmon	390	0	922	2,430	4,520	1821%
Siletz	1,868	705	4,417	23,615	112,773	630%
Yaquina	5,395	2,935	12,757	75,756	416,094	517%
Beaver	1,203	1,005	3,156	14,390	45,235	498%
Alsea	3,286	1,207	7,769	40,946	191,803	637%
Suislaw	6,539	6,553	18,241	147,013	858,031	498%
LoUmpqua	6,149	6,716	17,683	95,545	303,785	498%
MidUmpqua	2,310	4,370	7,913	42,089	79,562	498%
NUmpqua	3,888	0	9,193	44,883	189,887	1226%
SUmpqua	3,198	3,786	9,455	38,627	78,829	498%
Siltcoos	2,613	4,489	8,698	47,998	104,292	498%
Tahkenitch	1,793	2,374	5,501	28,856	74,367	498%
Tenmile	15,553	11,642	36,774	122,329	310,255	403%
Coos	5,523	13,308	20,252	138,110	288,368	498%
Coquille	12,801	8,444	30,266	123,739	413,155	450%
Floras	607	654	1,736	10,748	41,460	498%
Sixes	136	368	514	1,673	1,161	498%
Total	96,421	70,757	250,029	1,460,894	7,995,725	673%

Timeline

- Suggestion to consider proposed desired status as a more near-term goal and something more ambitious as a long-term goal.

- As monitoring provides insight into effectiveness, adjust goal or timeline accordingly.

- Difficult to say what is a reasonable timeline.