

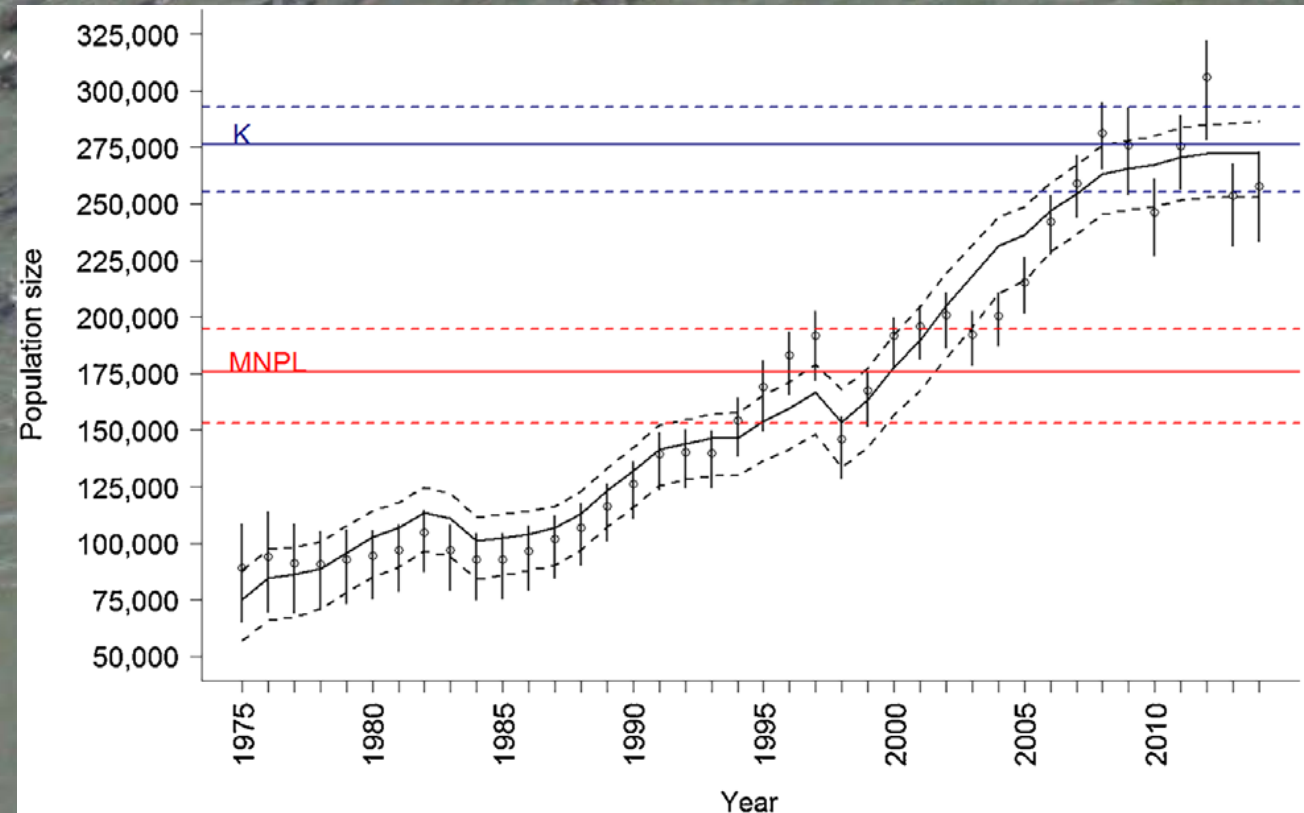
FISH AND PINNIPEDS IN THE COLUMBIA RIVER

Reconciling the ESA and MMPA



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Oregon Department of Fish and Wildlife
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MARINE MAMMAL PROTECTION ACT | A SUCCESS STORY...



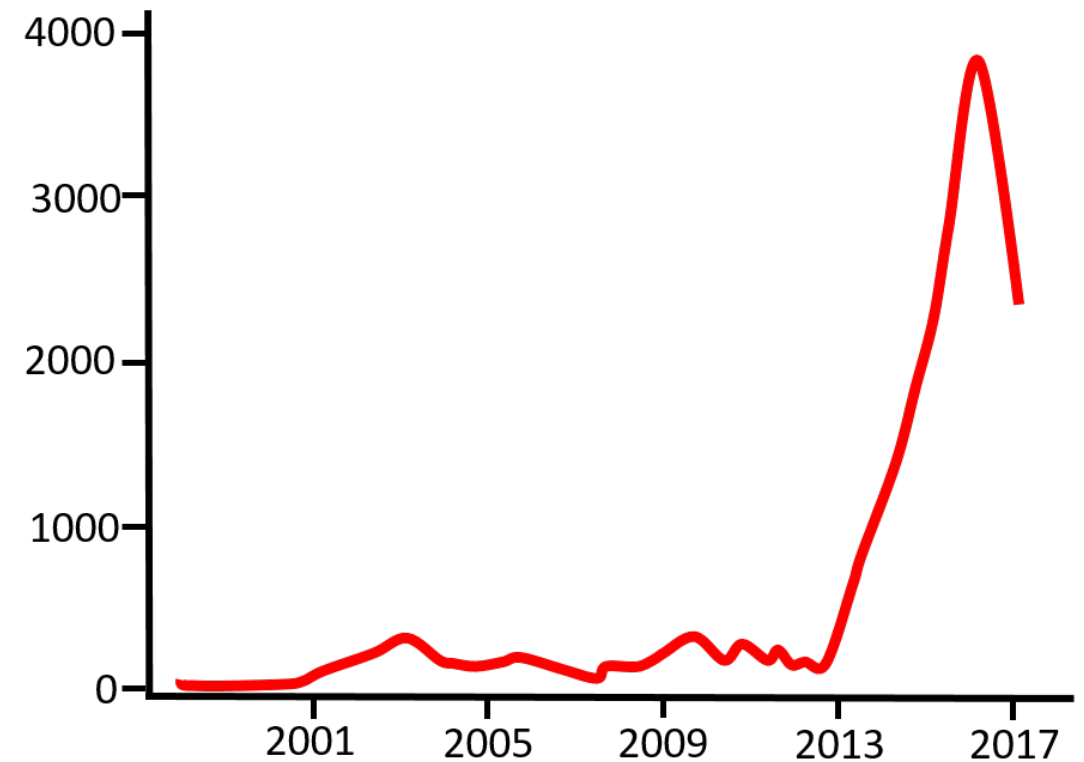
A SUCCESS STORY...WITH UNFORSEEN CONSEQUENCES



MMMPA: Rise of “PROBLEM” ANIMALS and AREAS



Increasing number of California Sea lions in the Columbia Basin





N

100

mi

100

km

PACIFIC OCEAN

Astoria

Columbia River

WASHINGTON

Portland

Bonneville Dam

The Dalles Dam

Willamette Falls & Dam

OREGON

BONNEVILLE DAM | 146 MILES UPRIVER



ESA
13
Listed Runs



100-200
Sea lions



Predation
~6%
Loss



Sea lions
210
Removed



WILLAMETTE FALLS | 128 MILES UPRIVER

WILLAMETTE WINTER STEELHEAD

A RUN IN PERIL



Fish

512

Returned 2017



40+

Sea lions



Predation

25%

Loss








Probability

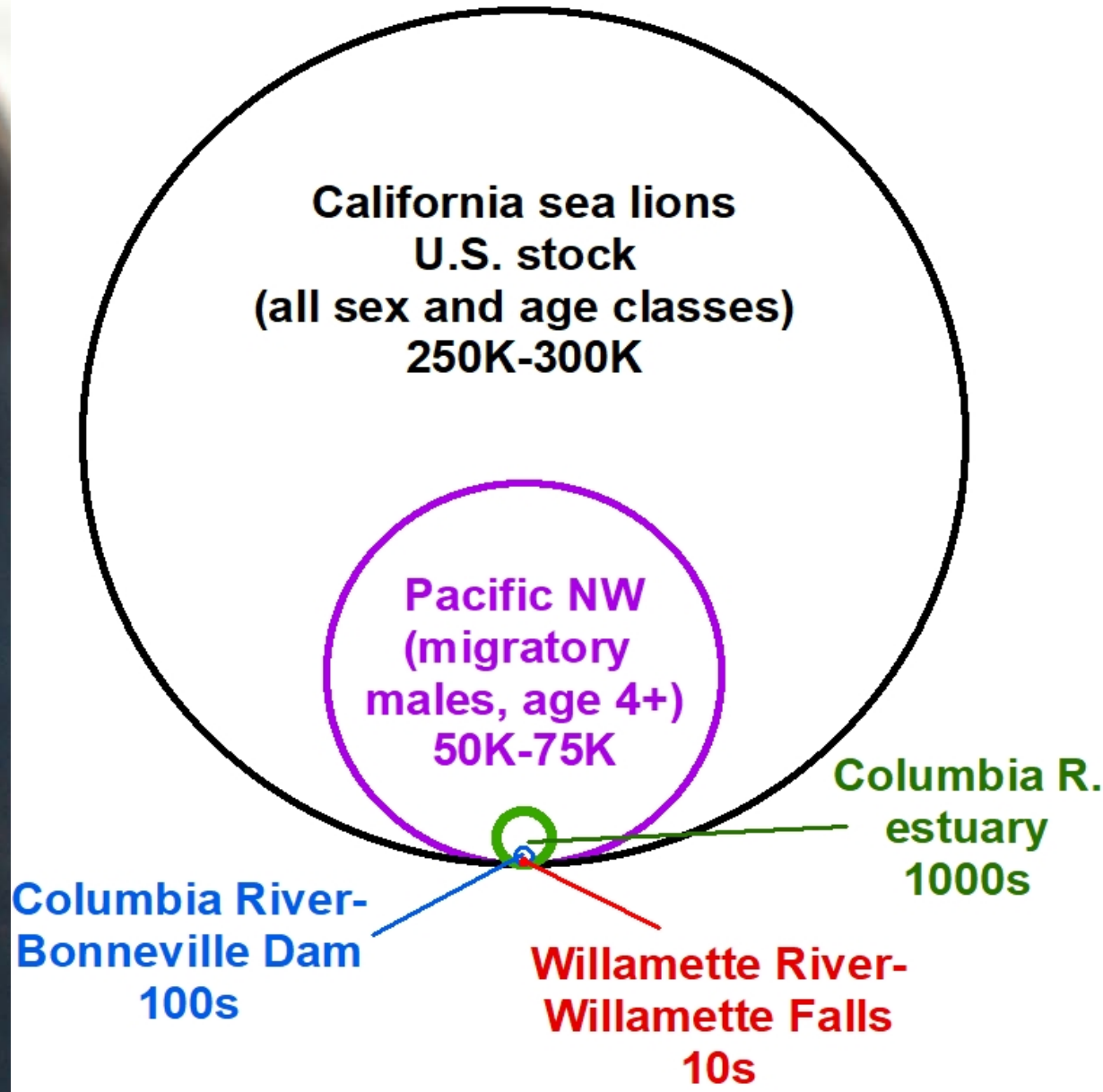
~90% vs 6%

of Extinction

MANAGEMENT | NON-LETHAL OPTIONS

Deterrent Type	Effective	Ineffective	The Bottom Line
Physical Barriers for Fishways			No animals in fishways in 2008, but C404 was absent this year.
Acoustic Deterrents at Fishways			No visible effects on sea lion behavior near fishways.
Hazing Calif. Sea Lions			Effects seem temporary; Usual avoidance noted. <i>Record salmonid catch!</i>
Hazing Steller Sea Lions			Not as effective as in 2006 and 2007.
Relocation (Trap & Release)			Most animals return after release. <i>Does help individual ID efforts!</i>

COLUMBIA RIVER | “PROBLEM” ANIMALS and AREAS





- Target spawners
- Displace spawners

EMERGING ISSUES \ STELLER SEA LIONS & STURGEON

MMPA | LESSONS LEARNED



Sea lions
210
Removed



Years
20+
Non-lethal effort



Runs
1
Extirpated



Salmon
>0.33M
Consumed



Human Safety
4
Incidents



CSL's in the
~3000+
Columbia



Runs at
1
Extreme risk



Developing
6
Problems



MMPA | IMPROVING IMPLEMENTATION

More efficient use of existing authority (NOAA)

- Permit conditions
- Funding
- Emergency action



MMPA | STRATEGY FOR LEGISLATIVE CHANGE

Develop Pathways for Proactive and Flexible Management

- Place-based “bottleneck” areas
- Address before entrenched
- Columbia River as pilot area
- HB 2083, SB 3119



Questions?