



Washington
Department of
**FISH and
WILDLIFE**

2010 Alternative Gear Implementation Project

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Photo by Wild Fish Conservancy

What we'll cover

- Why do this project
- Status of LC populations
- Hatchery challenges
- 2009 project
- 2010 project
- Future

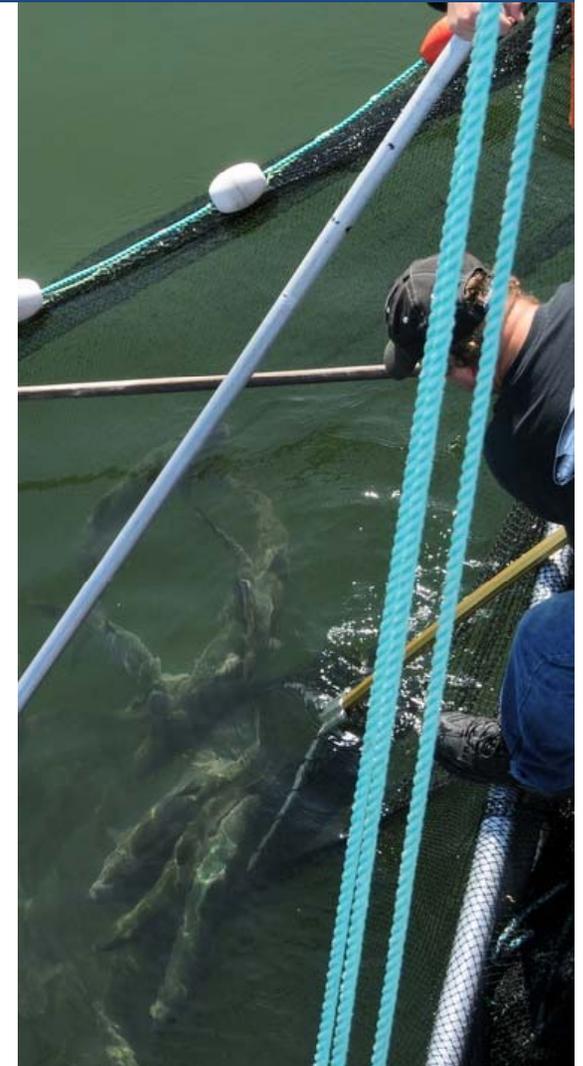


Photo by Wild Fish Conservancy

This Project is in response to...

- Endangered Species Act (ESA)
- Salmon Recovery Plan
- HSRG Review
- Environmental Impact Study on Columbia Basin Hatcheries
- Hatchery Reform Policy
- Sustainable Fisheries

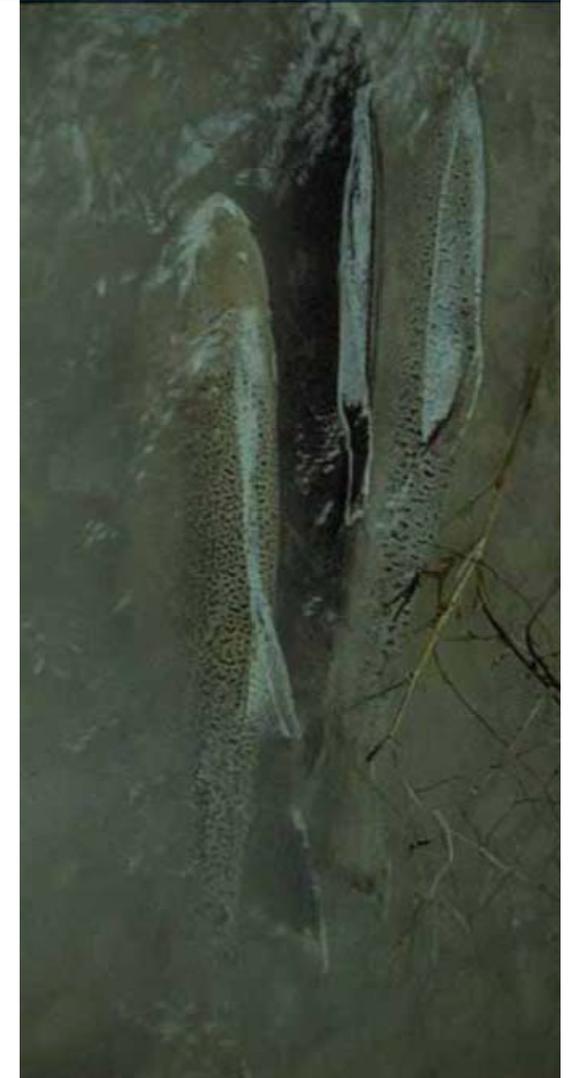


Photo by Wild Fish Conservancy

Why we're doing the Project

- Its important for wild fish
- Its important for fishers
- Its important for communities



Photo by Wild Fish Conservancy

Federal ESA Listings

- Snake River Sockeye listed in 1991
- Lower Columbia River coho listed in 2005
- Total of 13 listed stocks in Columbia River
- All lower Columbia River salmon and steelhead stocks are listed under Federal ESA
 - except for Winter Steelhead downstream of the Cowlitz River

Recovery Plan

- Lower Columbia River Fish Recovery Board (LCFRB) lead effort
 - WDFW
 - Counties & Cities
 - Other State and Federal Agencies
 - Cowlitz Tribe
 - Five citizen groups
- Revised plan approved by LCFRB

www.lcfrb.gen.wa.us

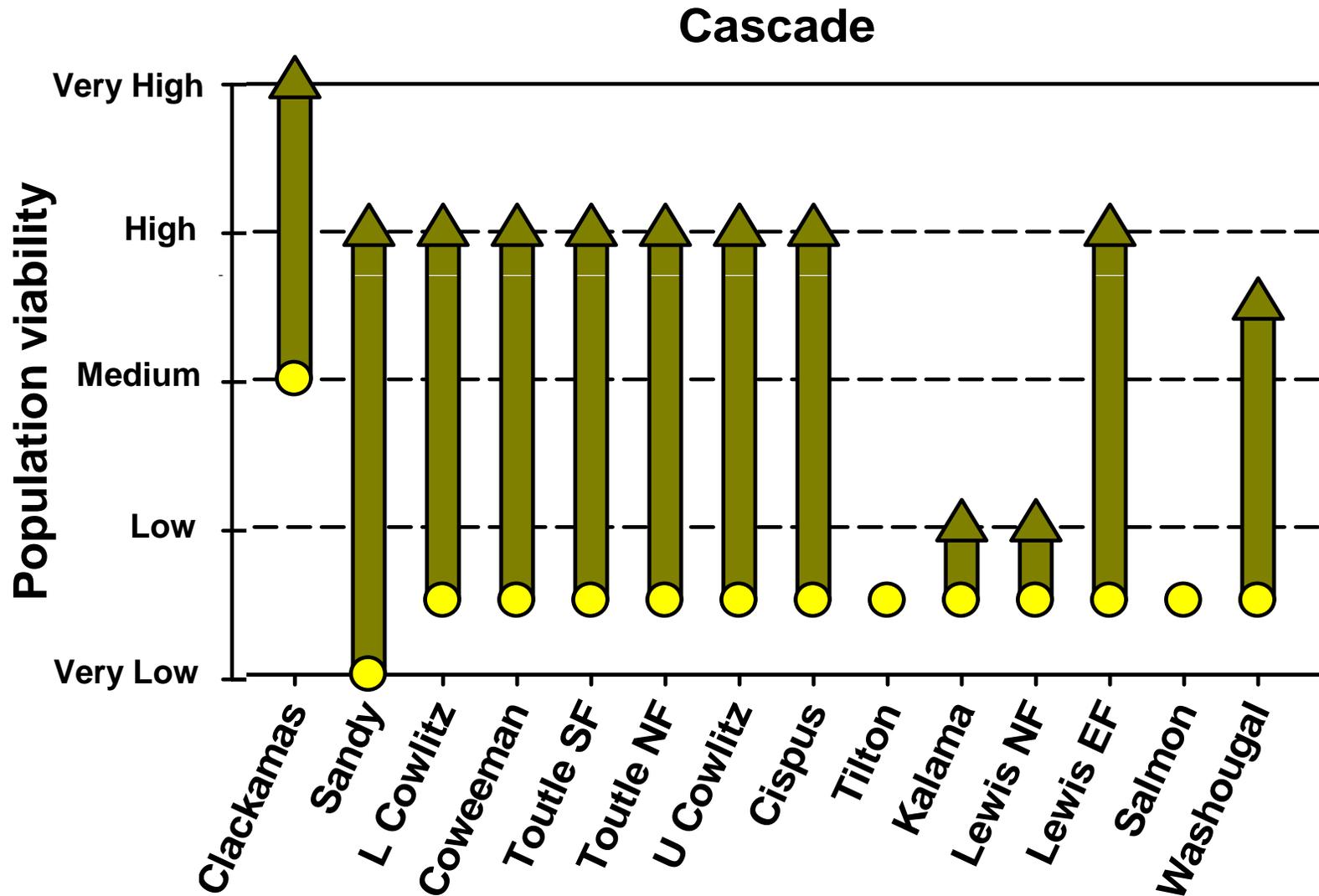


Status: WA LC Populations

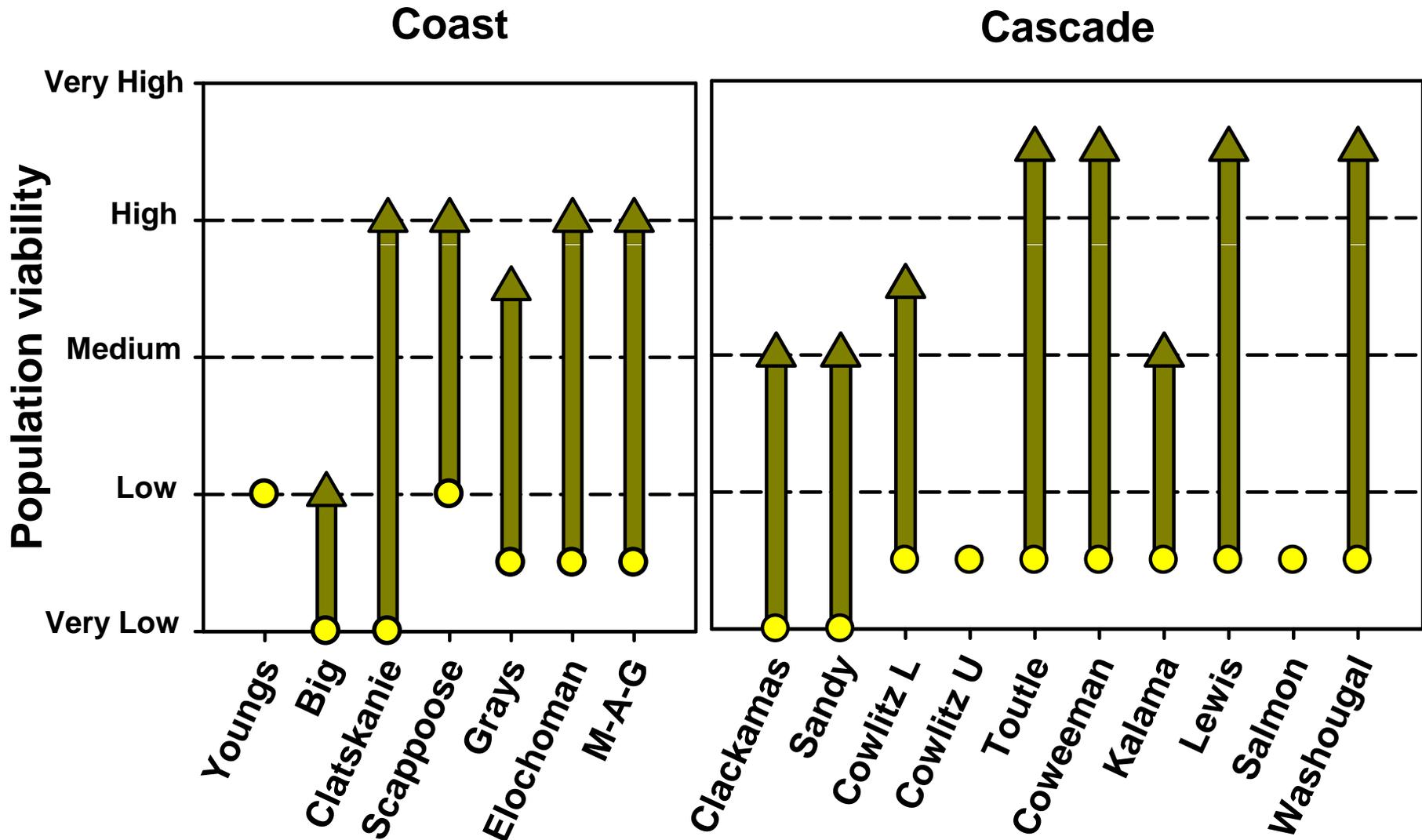
Species	Total	Status: Current Viability	
		Very Low	Very High
Chinook	20	19	1
Chum	9	8	0
Coho	16	16	0
Steelhead (W)	15	6	0
Steelhead (S)	5	2	0

Viability: Abundance and productivity. Ability to replace themselves.

Status of LC Coho Populations



Status of LC Fall Chinook



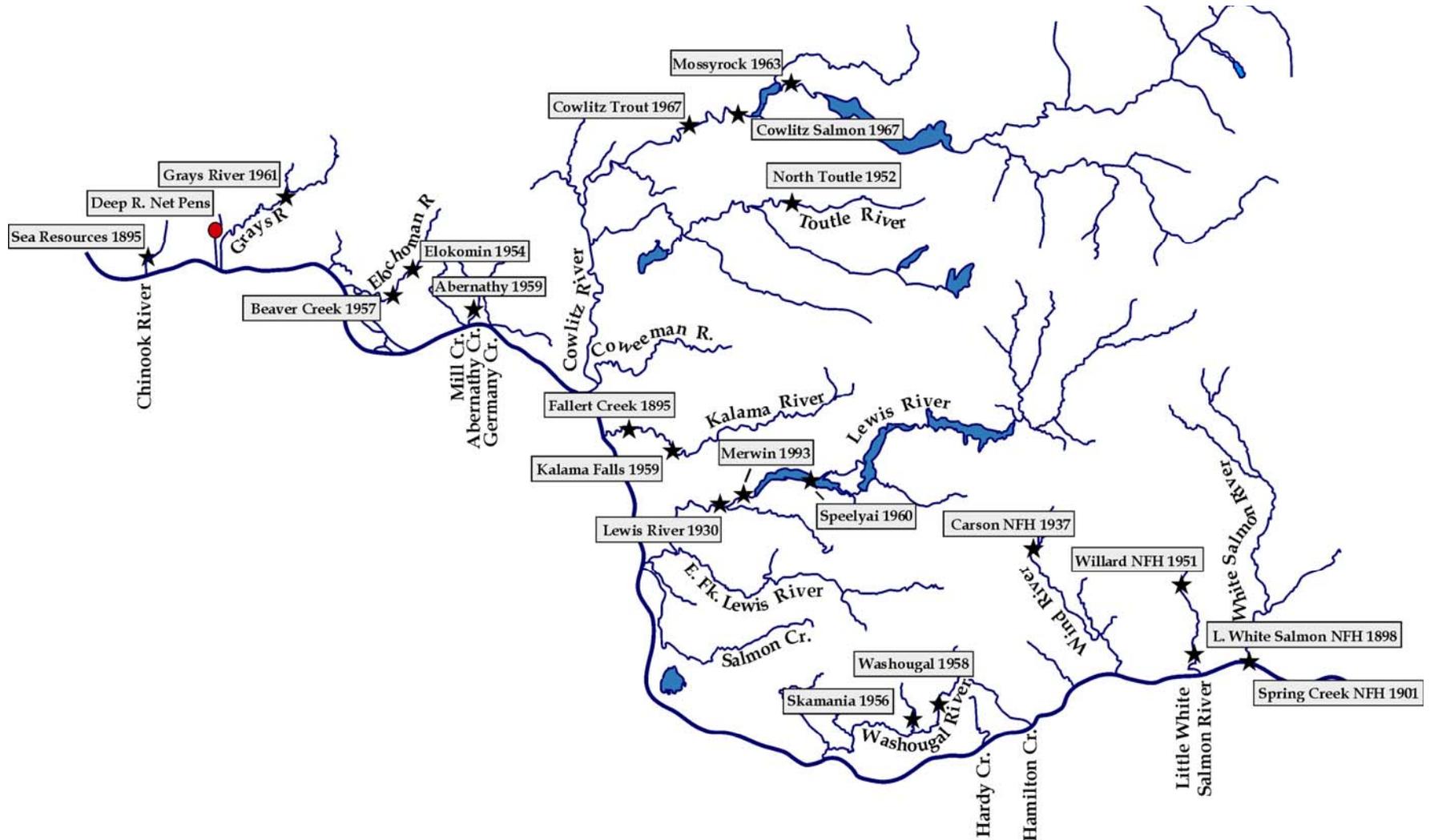
Fish and Wildlife Commission Hatchery Reform Policy

“Advance conservation and recovery
of wild salmon and steelhead
by promoting and guiding
the implementation of
hatchery reform”

“...Promote the conservation and recovery of wild salmon and steelhead and provide fishery related benefits...”



Lower Columbia Hatcheries



Where there's Work to be Done

- Lower Columbia Coho
 - primary populations (9)
 - contributing populations (4)
 - stabilizing populations (2)
- Lower Columbia Fall Chinook
 - primary populations (8)
 - contributing populations (3)
 - stabilizing populations (2)

Where there's work to be done

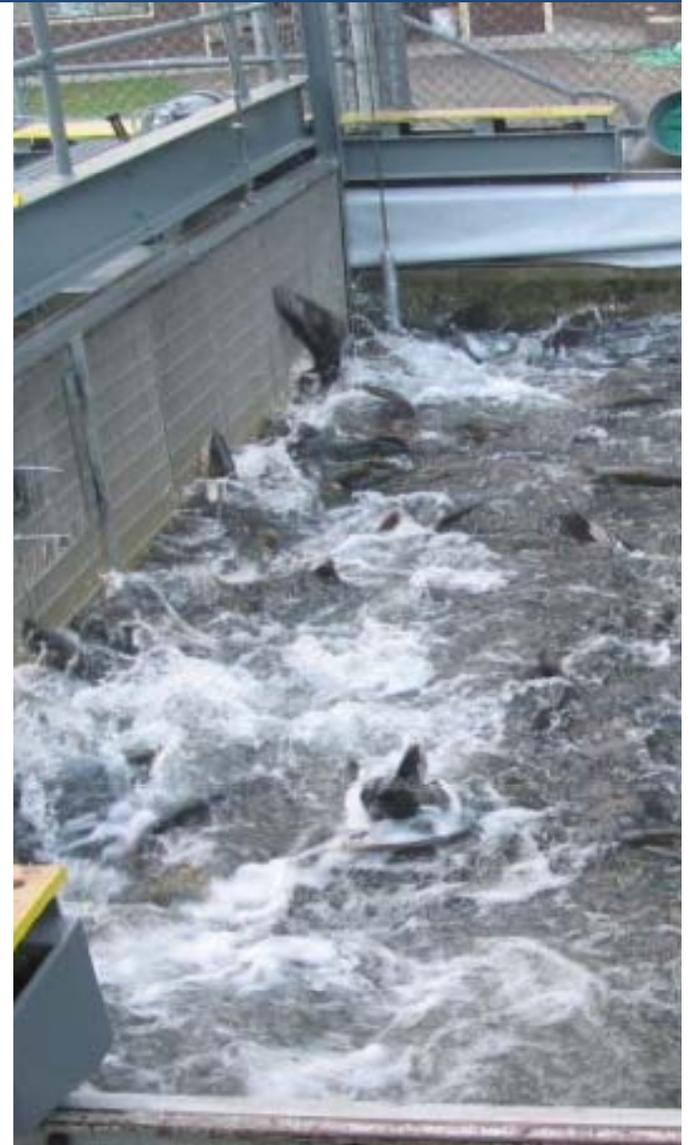
Chinook	Population Designation	Spring	Fall	Late Fall
Grays-Chinook	Contributing	--		--
Eloch-Skam	Primary	--		--
Mill-Ab-Germ	Primary	--		--
Cowlitz L	Contributing	--		--
Cowlitz U	Spr: Primary Fall: Stabilizing			--
Cispus	Primary		--	--
Tilton	Stabilizing		--	--
Toutle NF	Spr: Contrib Fall: Primary			--
Coweeman	Primary			--
Kalama	Spr: Contrib. Fall: Contrib.			--
Lewis NF	Primary		--	0.95
Lewis EF	Primary	--		--
Salmon	Stabilizing	--		--
Washougal	Primary	--		--
Gorge L	Contributing	--		--
Gorge U	Contributing	--		--
White Salmon	Contributing	--		--

Where there's work to be done

Coho	Population Designation	
Grays-Chinook	Primary	
Eloch-Skam	Primary	
Mill-Ab-Germ	Contributing	
Cowlitz L	Primary	
Cowlitz U	Primary	
Cispus	Primary	
Tilton	Stabilizing	
Toutle NF	Primary	
Toutle SF	Primary	
Coweeman	Primary	
Kalama	Contributing	
Lewis NF	Contributing	
Lewis EF	Primary	
Salmon	Stabilizing	
Washougal	Contributing	
Gorge L	Primary	
Gorge U	Primary	

Managing Hatchery Fish

- Increase harvest of hatchery fish
- Install weirs to remove hatchery fish
- Decrease hatchery production



Increase harvest of hatchery fish

- Mass mark hatchery fish
- Implement selective fisheries
 - Recreational
 - Commercial



Alternative Commercial Fishing Gears

Goals

- Maximize harvest of hatchery fish and survival rate of wild fish
- Support stable and economically viable commercial fisheries

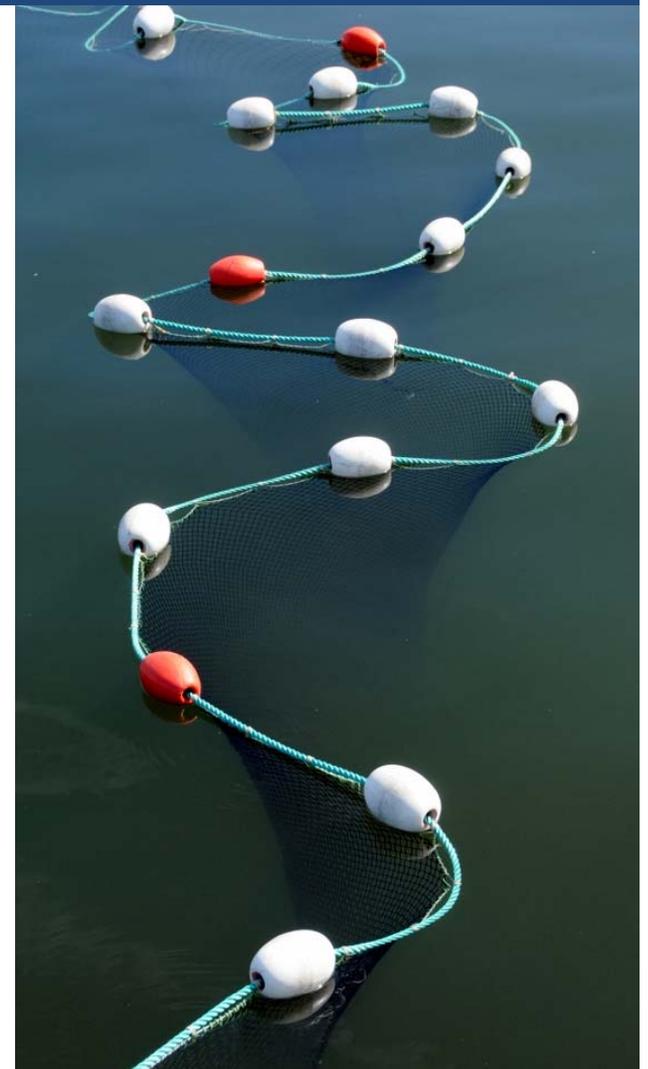


Photo by Wild Fish Conservancy

Alternative Commercial Fishing Gears

Implementation

- Fish and evaluate alternative fishing gears and methods
- Utilize results to implement alternative gears and methods

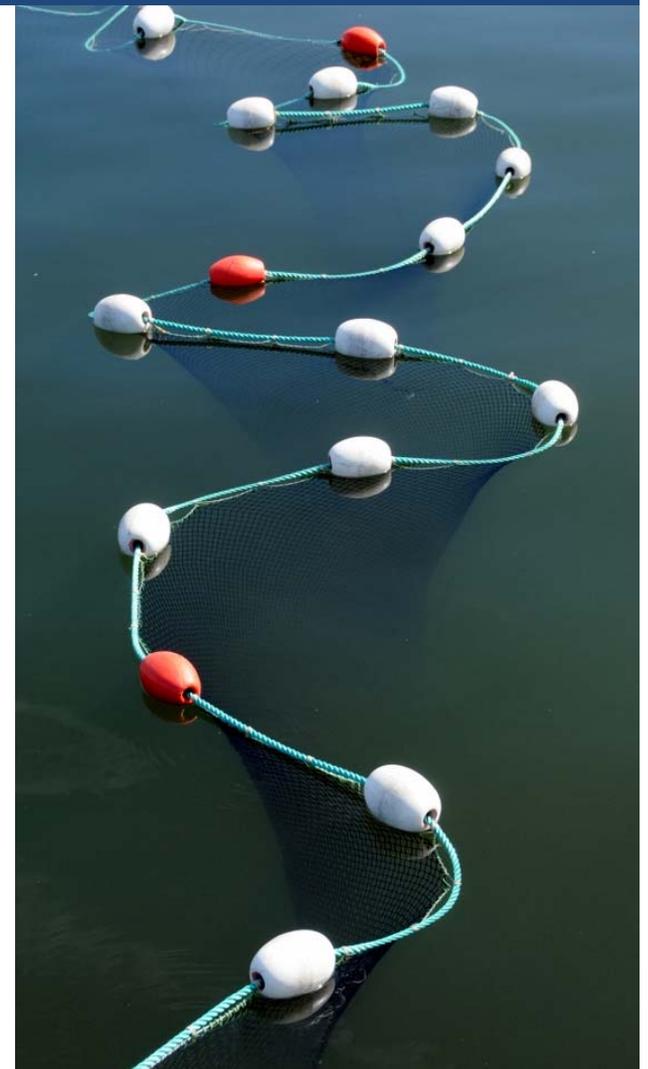


Photo by Wild Fish Conservancy

2009 Pilot

Gears Tested

- Purse Seine
- Beach Seine
- Trap Net

Time Frame

- Late Aug. through mid-Sept.
 - Early to late October
-

2009

Purse Seine

Location and Gear

- Fished at Welch Island near Skamokawa
- Net: 100 fathoms
3½" mesh
- 11 Total fishing days

Catch Rates

- Total catch
 - 203 Chinook
 - 397 Coho
 - 54 Steelhead
- Catch per day
 - 0-34 Chinook
 - 0-102 Coho

* Increase net length

2009 Beach Seine

Location and Gear

- Fished at Welch Island near Skamokawa
- Net: 100 fathoms
3½" mesh
- 11 Total fishing days

Catch Rates

- Total catch
 - 49 Chinook
 - 112 Coho
 - 17 Steelhead
- Catch per day
 - 0-29 Chinook
 - 0-32 Coho

* Improve retrieval technique

2009 Trap Net

Location and Gear

- Fished at Jim Crow Island near Brookfield
- 15 Total fishing days

Catch Rates

- Total catch
 - 1 Chinook
 - 50 Coho
 - 1 Steelhead
- Catch per day
 - 0-1 Chinook
 - 0-15 Coho

* Improve leads, trap structure and anchoring system

2010 Project

- Expand effort:
 - More fishers
 - More areas
 - More days
- Short-term mortality testing



Photo by Wild Fish Conservancy

2010 Project

Gear:

- Purse Seines (5)
- Beach seines (6)
- Trap Nets (2)

Species: Chinook and Coho

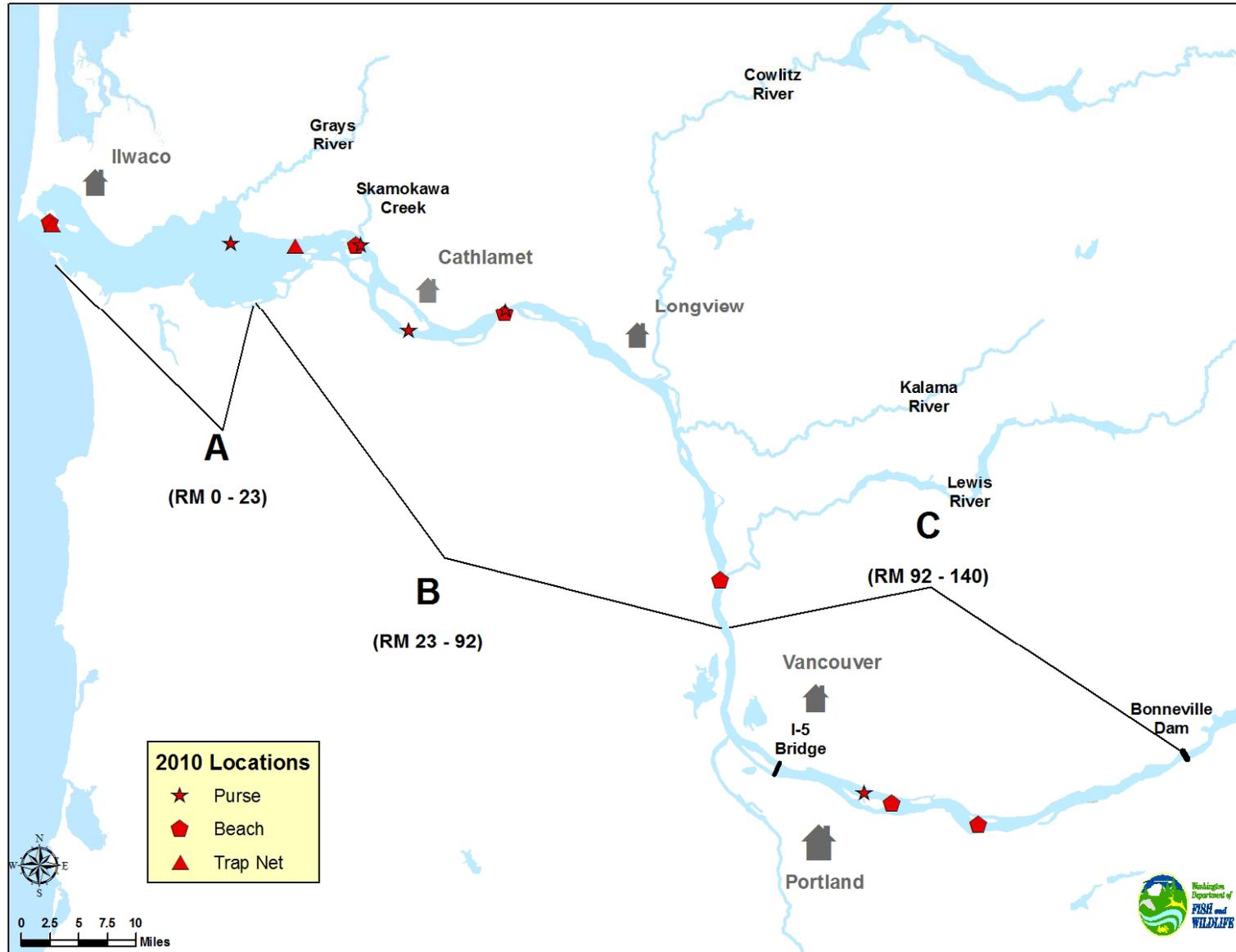
When:

- 30 days per fisher
- Mid Aug. through late Oct.



Photo by Wild Fish Conservancy

Location of Fishers



2010 Project Objectives

- Prove we can catch fish
- Prove we can catch hatchery fish and protect wild fish
- Evaluate short term mortality
 - 24-48 hour mortality
- Get a sense of how many wild and upriver Chinook we will encounter



Photo by Wild Fish Conservancy

Monitoring

- Observer on every boat
 - Species identification
 - Hatchery/wild
 - Lively or injured
 - Catch of target species
 - Document bycatch
- Random percentage to net pen



Photo by Wild Fish Conservancy

Next Steps

- Catch Fish!
- Design 2011 project
- Long-term mortality study
- Implementation plan
 - Investment, marketing, equipping, location, gear types



6/12/2010

SEP 14 2009

WDFW 2011

Photos by Wild Fish Conservancy