## Native Fish Conservation Policy

**Purpose:** delist and avoid future listings **Focus:** naturally produced native fish

Native Fish Conservation Policy Goals • Prevent serious depletion ... Maintain and restore .... to provide substantial ecological, economic and cultural benefits... Foster and sustain opportunities for sport, commercial and tribal fishers ...

## **Fish Management Foundation**

Management unit boundaries
Desired status
Existing status
Causes for gap
Management actions
Monitoring and evaluation

## **Fish Management Foundation**

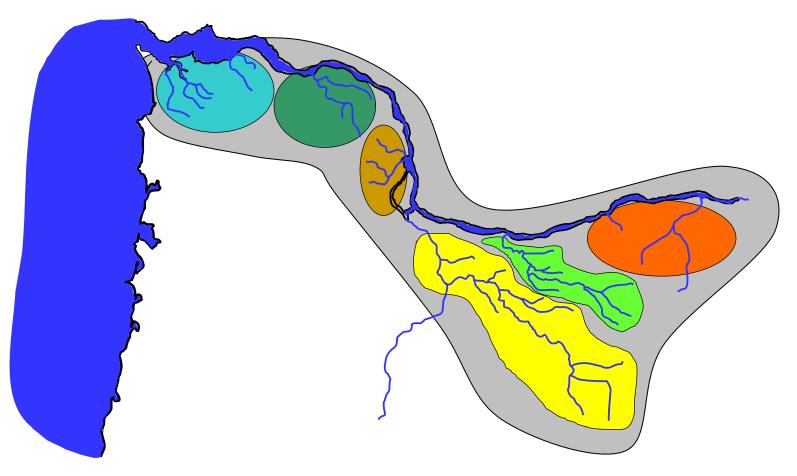
- Management unit boundaries
- Desired status
- Existing status
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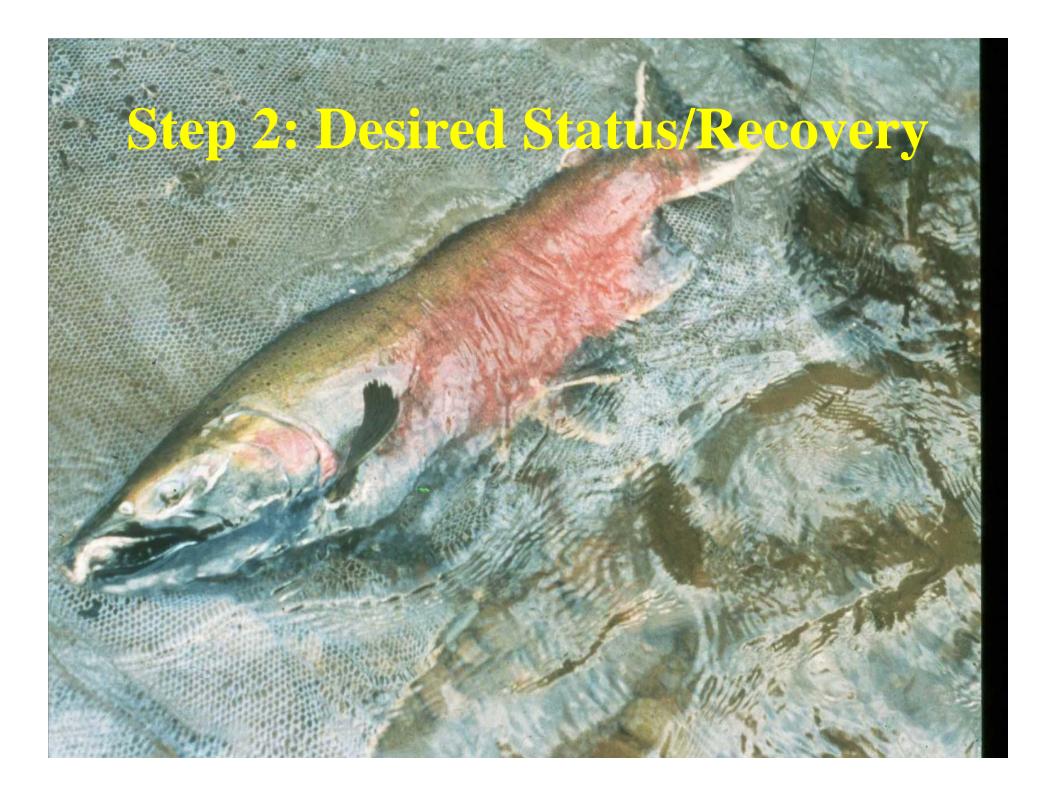
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## Lower Columbia River Coho Example

#### **Step 1: Identify Species Management Unit**

**Example: Lower Columbia River Coho** 





#### **Abundance** Lower Columbia River Coho Example

#### **De-listing**

- 50% of spawners for maximum smolts for 3 consecutive years
  - Sandy (670), Clackamas (1900)
  - Plus 2 other populations

#### **Long-term Recovery**

- 80% spawners for maximum smolts for 12 consecutive "normal" years
  - Sandy (1066), Clackamas (3042)
  - Plus all remaining populations

#### **Productivity/Persistence** Lower Columbia River Coho Example

**De-listing** 

- < 5% probability of extinction in 36 years</p>

#### **Long-term Recovery**

- < 5% probability spawner abundance in 36</li>
 years is less than de-listing abundance

#### **Distribution** Lower Columbia River Coho Example

#### **De-listing**

- 65% of named streams populated
- Sandy & Clackamas self-sustaining
- 2 out of 4 additional populations self-sustaining

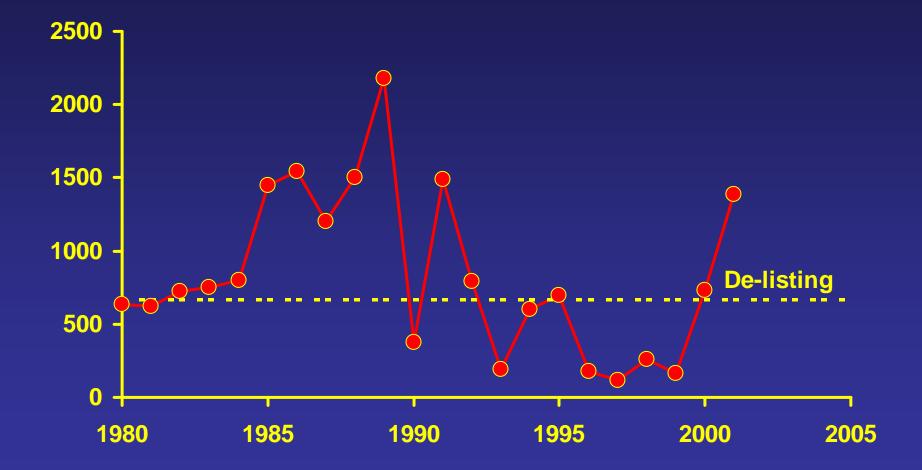
#### **Long-term Recovery**

- 85% of named streams populated
- All 6 populations self-sustaining

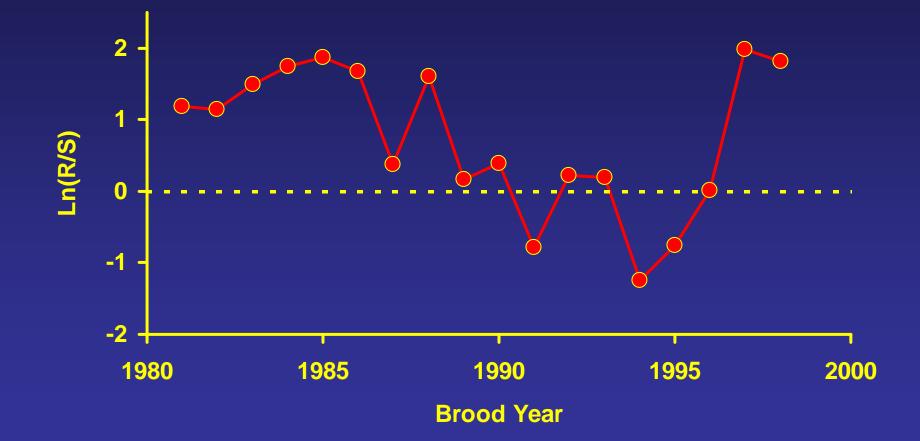
Step 3: Assess Existing Status Relative to Desired Status

(Based on same attributes)

#### **Sandy Population Naturally Produced Spawners**



#### **Sandy Population Recruits per Spawner**



Step 4: Identify causes for the gap between existing and desired status

Primary limiting factors: manageable and non manageable

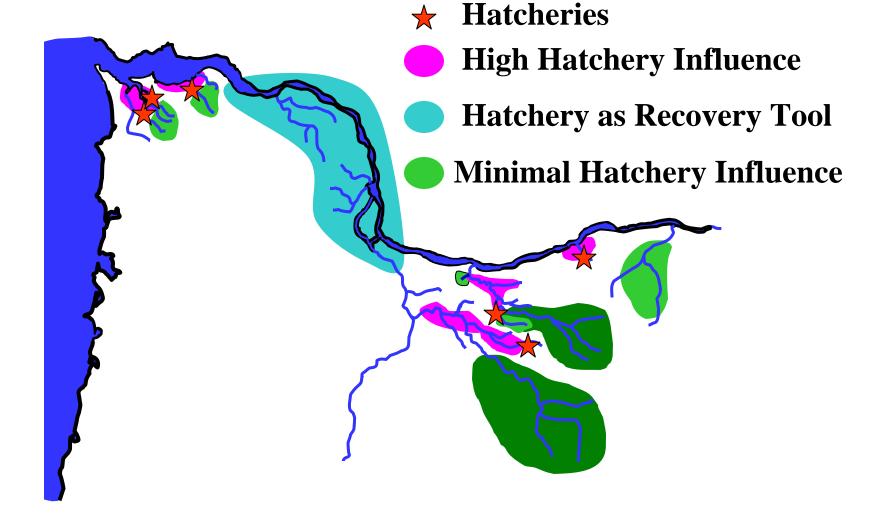
#### **Step 5: Management Options to Close Gap**

e.g., Hatcheries Habitat Harvest Predators Competitors Health

#### **Fishery Management** Lower Columbia River Coho Example



### Hatchery Measures Long-term Management Emphasis

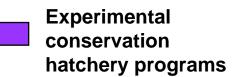


## **Step 6: Monitoring and Evaluation**

# Gauge success Contain risks Feedback for adaptive management

Oregon Coastal Coho Species Management Unit (Consistent with NMFS ESU)

Hatchery Management Opportunities (examples are hypothetical)



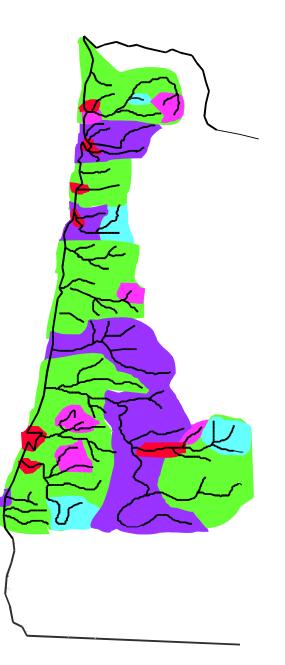


- Hatchery/terminal harvest programs



Minimal hatchery influence

Areas outside of historic range



Single Watershed within the Coastal Coho Species Management Unit (examples are hypothetical)

Hatchery

#### Acclimation Facility

- Experimental conservation hatchery program
- Conservation hatchery program with harvest



- (artificial barriers)
- Hatchery/terminal harvest program
- Min. hatchery influence
- Areas outside of historic range (natural barriers)