

**Why now?**

- Commercial fleets have a long history of regulation by time and area closures, some gear restrictions.
- Effective avoidance of “grouped” by-catch.
- Workable if there are few weak stocks.
- Many weak stocks require unprecedented restrictions on all sectors of commercial fleets.

**Why now?**

- We have healthy hatchery and wild populations.
- Mass marking allows distinction between hatchery and wild stocks of coho and chinook – avoid individuals.
- Must reduce the number of surplus hatchery fish returning to spawning grounds and to hatcheries.

**Challenges to Implementing Commercial Selective Fisheries in Washington**

- **Social Issues**
  - Changing traditions, cost, disagreement within sectors
- **Political and Fish Management Issues**
  - Restrictive laws, agency “culture”, allocation issues
- **Practical and Technical Issues**
  - Science and practicalities

**Which Gears?**

- Some gears can be fished selectively, others require modification or substitution.
- Build on Canadians’ experience.
- With limited funds, we chose gears that had potential for our gill net fisheries.

**Which Gears?**



## Fish Handling

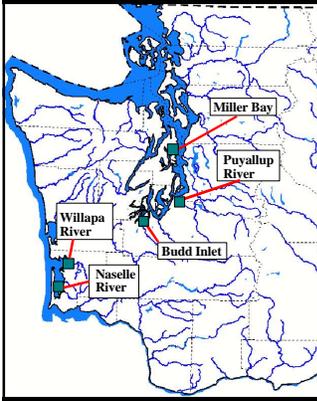
- Quick response to capture, short set times.
- Careful release from the net or trap.
- Minimize exposure to air.
- Use recovery box when necessary.



## Goals

- Can the tangle net and floating trap work in Washington?
- How does their catch efficiency compare to conventional gill nets?
- How well do fish released from these gears survive to complete their migrations?

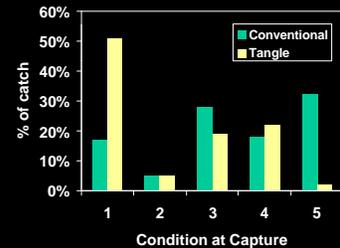
## Methods



- Contract local fishermen to fish experimental gears.
- Combination nets for area and target species.
- Recorded catch in each gear and immediate mortality.

## Budd Inlet 11 nights fished

- **Tangle net:**
  - 37 chinook
  - 24% mortality
  - 19% excluding seal kills
- **Conventional net:**
  - 101 chinook,
  - 41% mortality
  - 32% excluding seals



## Willapa River 9 Days Fished

- Caught about 800 fish.
- Tangle net caught as many fish as gill net.
- Chinook
  - Gill net 79% live release
  - Tangle net 93% live release
- Coho
  - Gill net 75% live release
  - Tangle net 80% live release

## Naselle River Summary 21 Days Fished

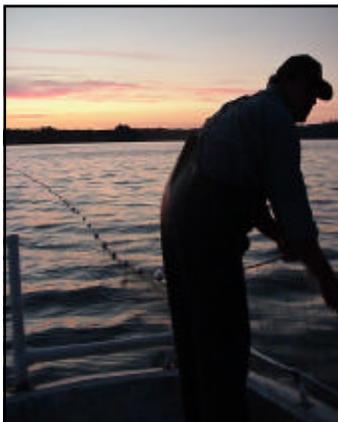
	Catch	% M	% Live
CK	62	58.1	93.6
CH	210	91.9	99.0
CO	68	66.2	89.7





## Conclusions

- Catch in trap was poor – modify.
- Catch in tangle net varied, but encouraging.
- By-catch?
- Live release excellent; fishery around physiological stages.
- Tag recovery low, unable to evaluate survival
- Move holding and recovery boxes forward on fishing vessel to minimize exposure to air.
- Brail fish out of the tangle and trap.
- Fisher's attitudes excellent, need education on handling for optimal recovery.



**2001**

**Columbia River**  
– Post release survival  
– Soak time  
– 20 boat test  
– Fish trap net

**Budd Inlet**  
– Improve chinook catch

**Willapa River**  
– 5 boat test  
– Multiple recaptures