

Are Hatcheries Appropriate Mitigation for Hydro Impacts?

- **Jim Hastreiter (FERC)**
- **Rob Jones (NOAA)**
- **Jim Martin (Berkley Conservation Institute)**
- **Brett Swift (American Rivers)**

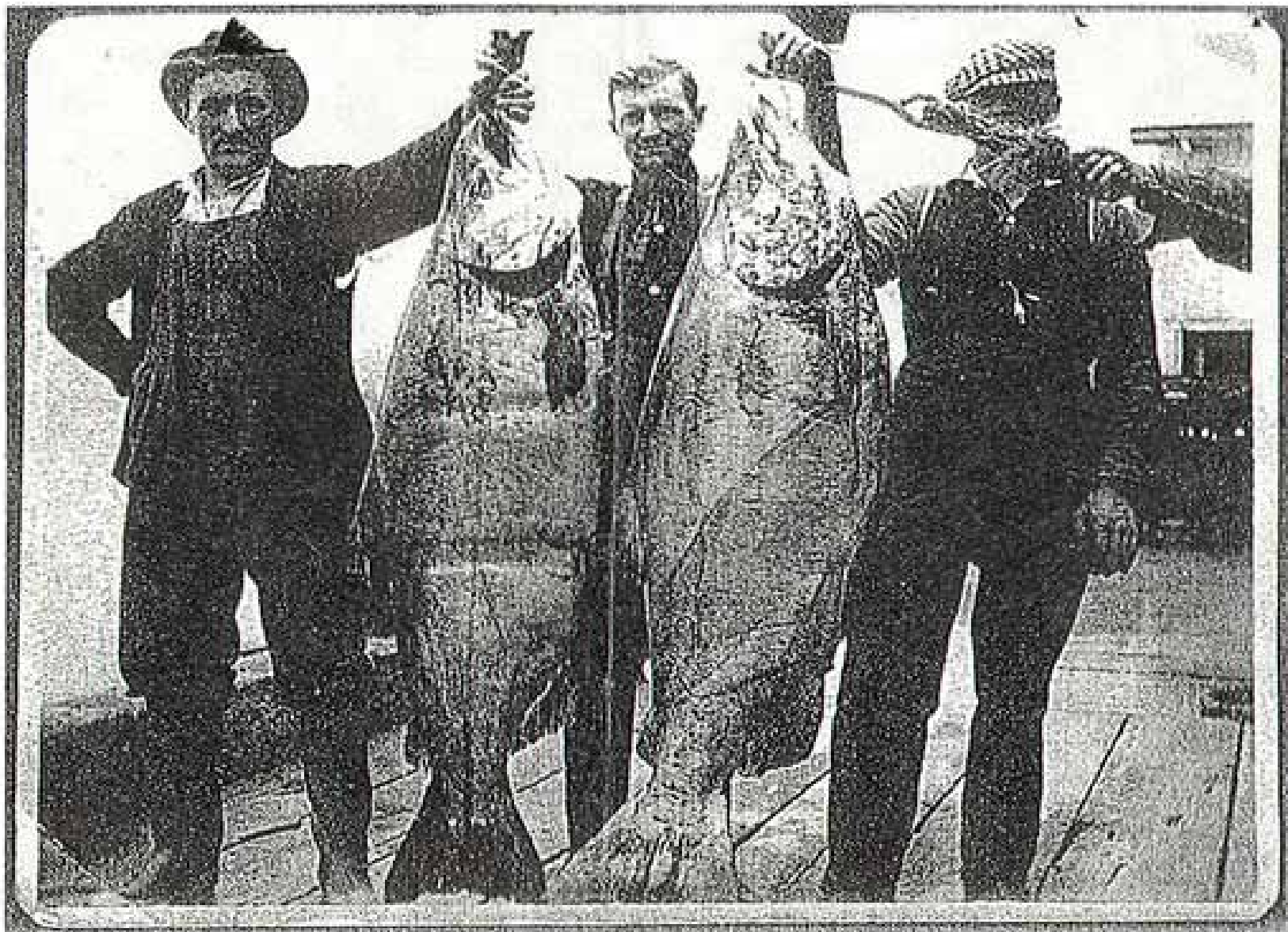
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Hatcheries as Mitigation for Hydro?

YES and NO





This picture was taken at the Union Fisherman's Dock in Astoria, Oregon in about 1910.
Left to right - Salmon weights 116 lbs and 121 lbs.
They were salted down in 100 lb barrels and sent to Europe on sailing ships.

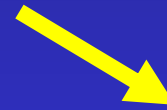
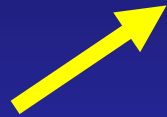




HATCHERIES

Conventional

- Maximize smolt numbers
- Maximize in-hatchery survival



Harvest

- Max adults
- Max post-release survival
- Min effects on natural production and watersheds

Conservation

- Increase natural production
- Maintain nat. productivity

Refuge

- Interim genetic repository

THEN

&

NOW

ODFW Hatchery Programs

- **33 Hatcheries: 18 Mitigation**
- **63 Programs: 45 Mitigation, 18 Conservation**
- **36M annual release**
- **Policies: NFCP, HFMP, FHMP**

Mitigation is key,
not hatcheries



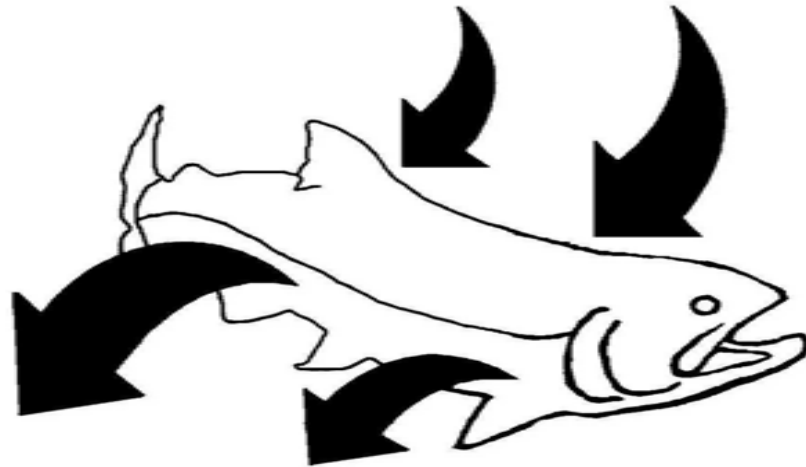
Hatchery Premise

- **Remove as much random mortality effects as possible without having any other influence on the natural life or experience of the fish or their habitats**

***HATCHERY
PREMISE***

Training

**Selective
Natural
Mortality**



**Random
Natural
Mortality**

**Artificial
Selection**