

Ten Years Successful Collaboration to Achieve No Net Impact for Plan Species by the HCPs' Signatory Parties

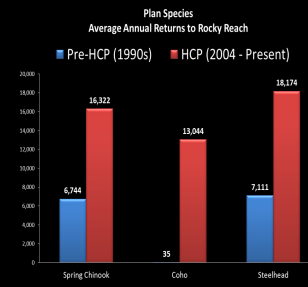
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Fish and Wildlife Manager
Public Utility District No. 1 of Chelan County



CHELAN COUNTY



Presentation Outline



The
Projects

The
Goal

The
Approach

The
Results

The
Benefits

The Projects

Rocky Reach Hydroelectric Project

(1300 MW)

43 Mile Reservoir

Juvenile Fish Bypass System

Upstream - Wells Hydro

Downstream – Rock Island Hydro

Rock Island Hydroelectric Project

(624 MW)

20 Mile Reservoir

Juvenile Fish Spill Program

Upstream – Rocky Reach

Downstream - Wanapum Hydro



The Projects



Chelan County Public Utility District Acclimation and Hatchery Facilities

Operate responsibly to
provide protection for salmon and
steelhead while ensuring a reliable
supply of
clean, renewable, affordable hydropower

Habitat Conservation Plans

Collaborative Approach to ESA Protection

- 50-year Agreements (signed 2002, approved 2004)
- No surprise clause
- Unanimous decision making
- Adaptive approach to achieving no-net impact for salmon and steelhead



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HCP Framework

- **adaptive and collaborative**
- **outcome based** goals and objectives to achieve **no-net impact**
- use **best available science** and unique **site specific set of tools** rather than one size fits all prescriptive methods

The Approach

A Three-Pronged Approach to Reaching No-Net Impact



**7% Hatchery
Production**



**91% Combined
Adult/Juvenile Survival
93% Juvenile Survival**



**2% Tributary
Projects**

The Approach

Site Specific Tools to Reach NNI

Rocky Reach **Juvenile Bypass System**

- Installed in 2002/2003

Rock Island **notched surface spill**

- Over/under & notched spill gates

Both Projects - **Predator Control**

- Remove an average of 65,000 northern pikeminnow annually

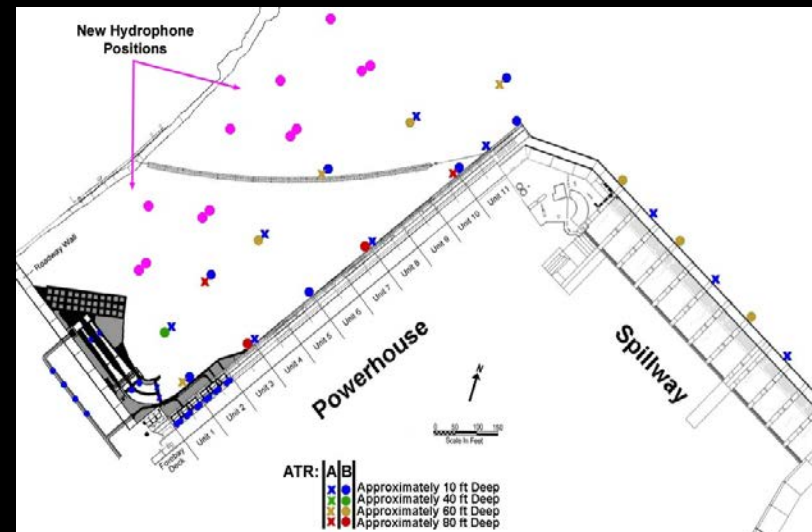


The Approach



Best Available Science for Evaluating Juvenile Survival

- Conducted **annual survival studies** from 2003-2011
- Utilized **best available science** tools and methodology over time to **refine future studies and project operations**



The Results

10-year Project Survival Achievement

Rocky Reach

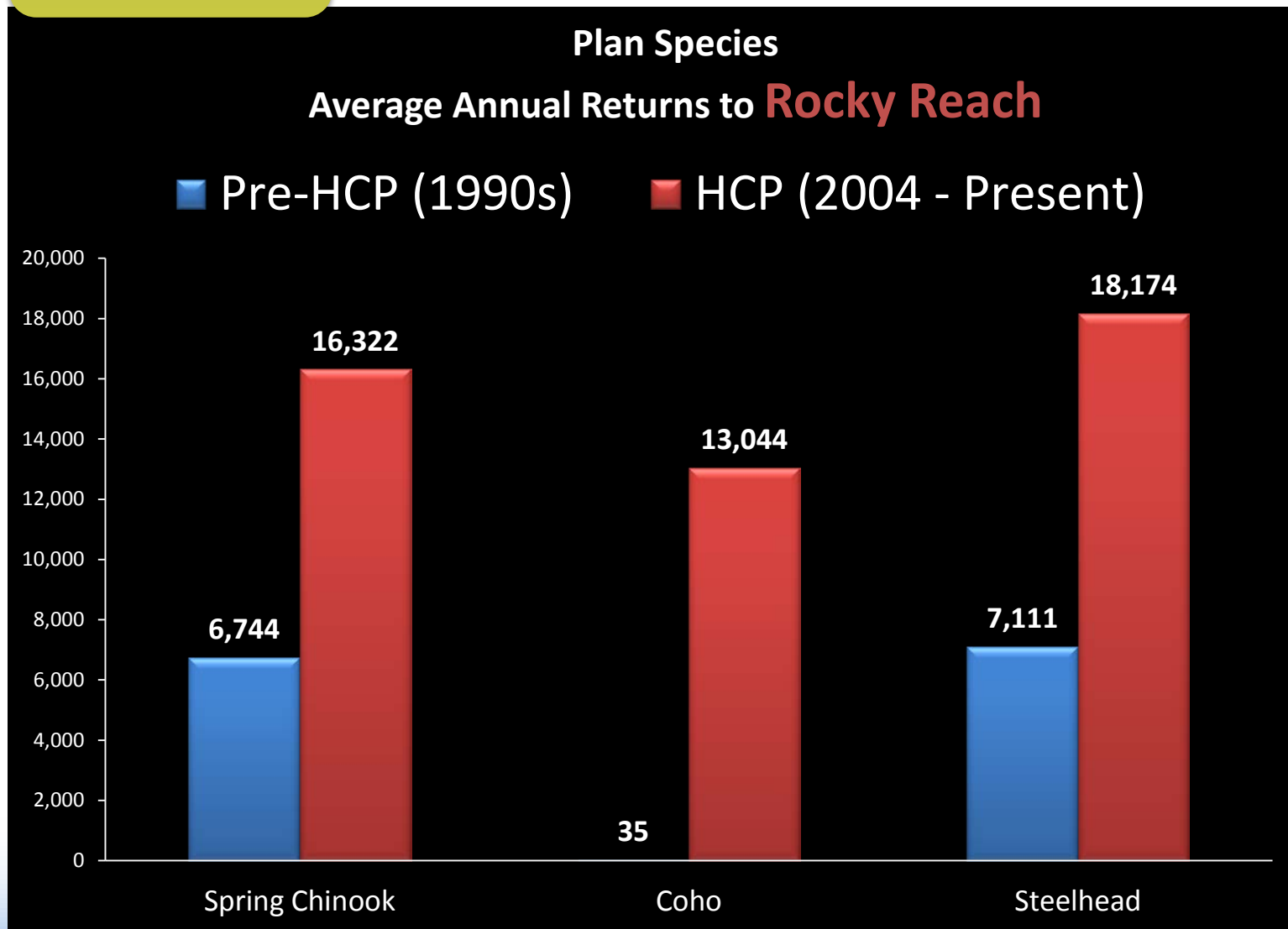
Species	Juvenile Survival	Combined Survival	Standard Achieved?
Sockeye	93.6%	92.6%	Yes
Spring Chinook	92.3%	92.3%	Yes
Steelhead	95.8%	94.8%	Yes

Rock Island

Species	Juvenile Survival	Combined Survival	Standard Achieved?
Sockeye	93.3	91.8%	Yes
Spring Chinook	93.8	93.7%	Yes
Steelhead	96.8	96.1%	Yes

The Results

Return Success

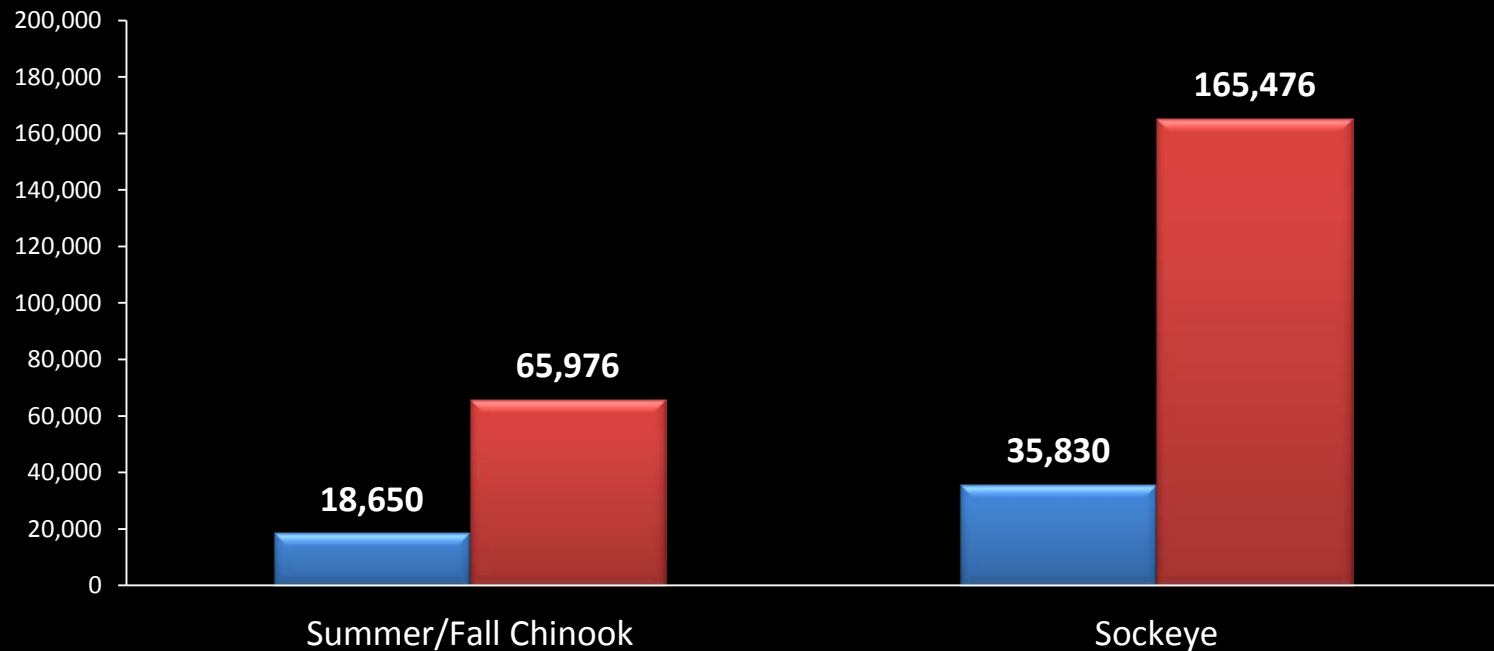


Return Success

Plan Species

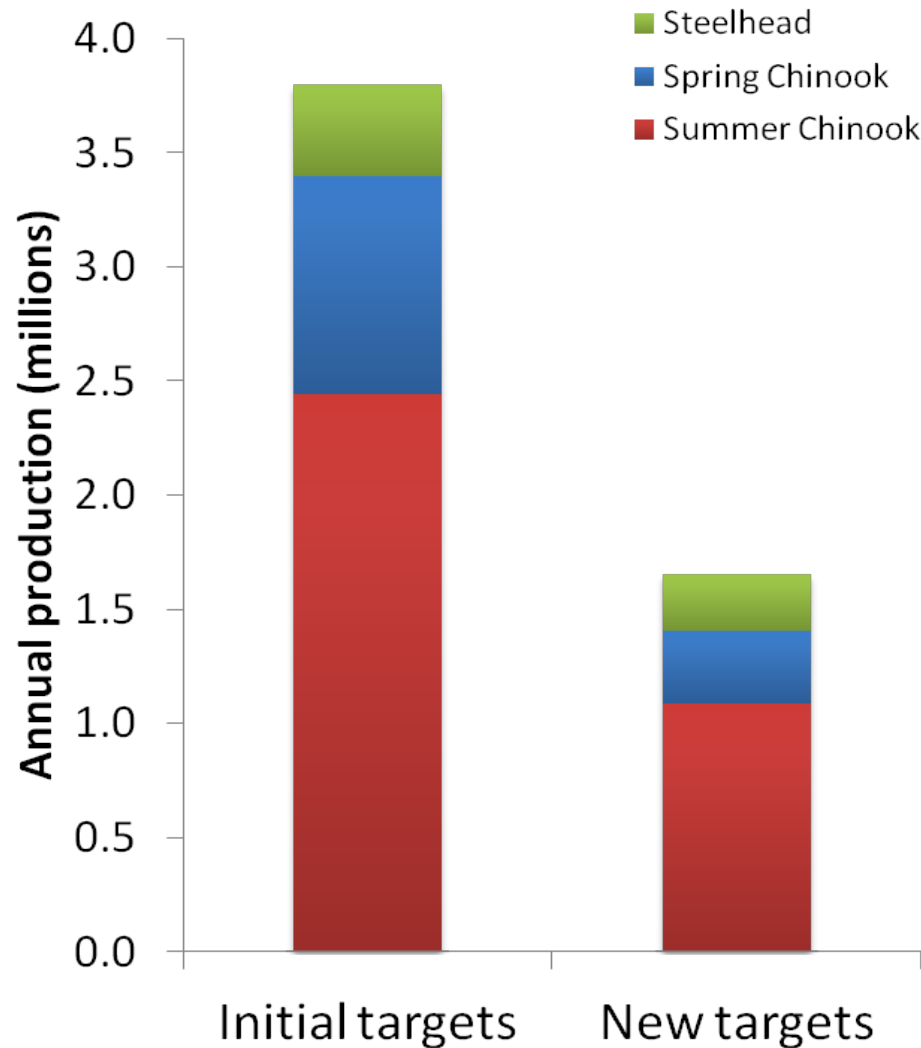
Average Annual Returns to **Rock Island**

■ Pre-HCP (1990s) ■ HCP (2004 - Present)



The
Results

Less Reliance on Hatchery Production



The Results

Tributary Protection and Enhancement

Account	Number of Trib. Projects	Chelan PUD Funding	Total Project Funding
Rocky Reach	28	\$2,243,499	\$16,416,921
Rock Island	31	\$3,234,748	\$24,641,005
Total	59	\$5,478,247	\$41,057,926



Success for fish Success for our future

- Long-term ESA protection
- Reduced spill, less reliance on hatcheries
 - Environmental stewardship
- Predictable, efficient operations
 - Collaborative achievement

Questions?



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