

COWLITZ 2015 ANNUAL PROJECT REVIEW MEETING

Centralia College
Walton Science Center
June 3, 2015
6-8 p.m.

TACOMA  **POWER**
TACOMA PUBLIC UTILITIES





GROUND RULES

- **Begin and end on time**
- **Cell phones on “stun”**
- **No sidebars / interruptions**
- **Signal desire to speak by raising hand**
- **Option to write questions and comments on 3” x 5” cards**



AGENDA

- **Welcome**
- **Annual Project Review process**
- **2014 Cowlitz Complex hatchery production plan**
- **2015 Cowlitz Complex draft hatchery production plan**
- **News you can use**
- **Wrap-up**



TONIGHT'S MEETING

- **Annual Project Review overview**
 - Purpose
 - Goals
- **Public input**
 - When
 - How
- **Where we're at in the process**
- **What's next**



FHMP – PURPOSE

The Fisheries and Hatchery Management Plan (FHMP) identifies:

- Quantity and size of fish to be produced at the Cowlitz Complex
- Rearing and release strategies for each stock, including adjustments to accommodate recovery of indigenous stocks
- Credit mechanism for production of high-quality natural stocks
- Plans for licensee-funded ongoing monitoring and evaluation
- A fisheries management strategy consistent with the priority objective of maximizing the natural production of wild indigenous fish stocks in the basin

COWLITZ SALMONID POPULATIONS

Lower Cowlitz River

- Fall Chinook
- Summer-run steelhead
- Spring Chinook
- Winter-run steelhead
- Coho
- Cutthroat (includes Tilton River)

Tilton River

- Fall Chinook
- Winter-run steelhead
- Coho
- Spring Chinook

Upper Cowlitz River

- Spring Chinook
- Fall Chinook
- Winter-run steelhead
- Coho
- Cutthroat



ANNUAL PROJECT REVIEW

How do we achieve recovery and still support harvest fisheries?

- Long-term goal for natural populations is to achieve healthy and harvestable levels
- Current natural populations are generally depressed
- During transition period how can we manage hatchery programs to:
 - ✓ Improve the health of natural populations
 - ✓ Provide fishing opportunities

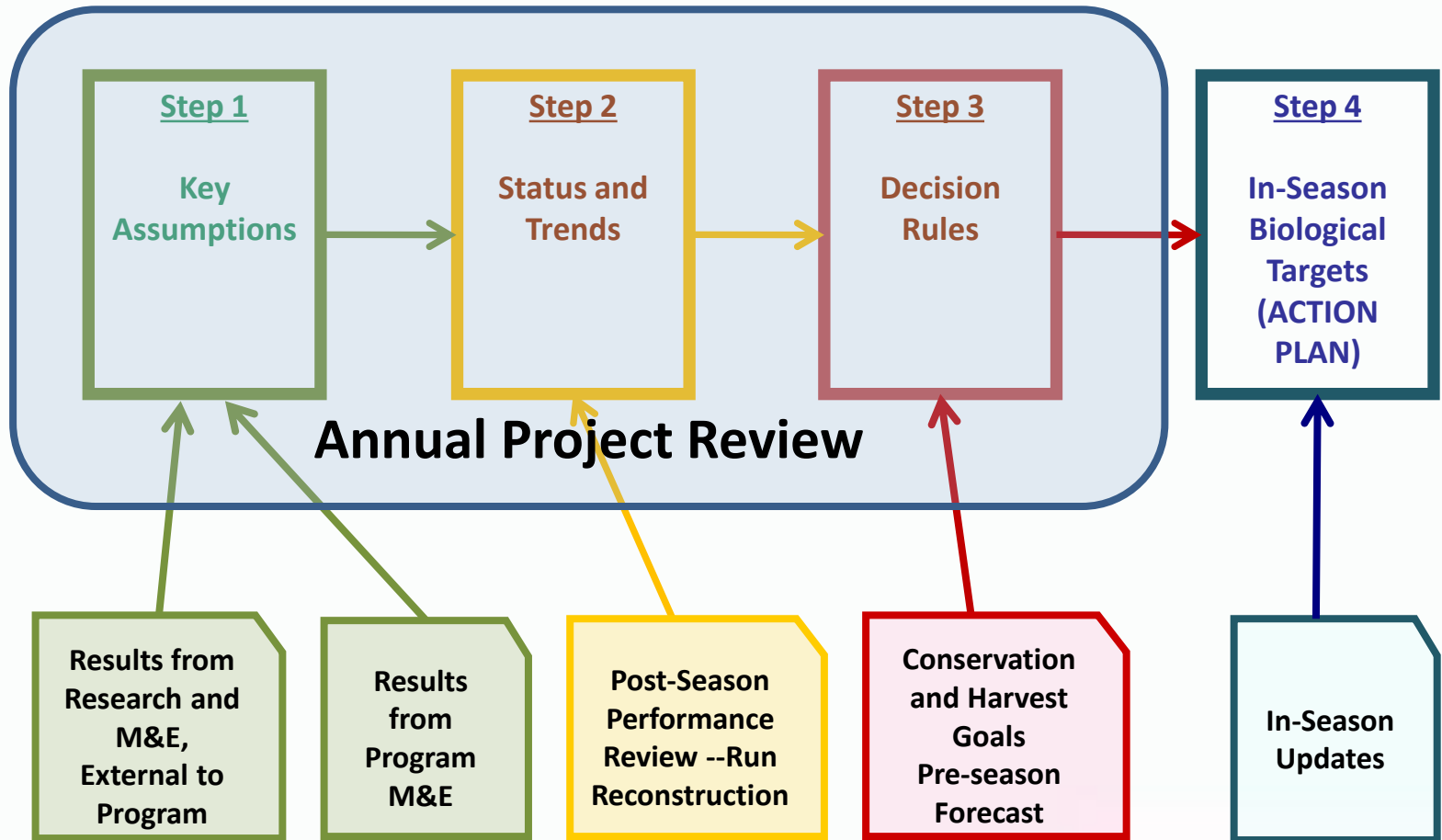


APR – ANNUAL GOALS

- **Identify key assumptions**
- **Set biological targets**
- **Establish decision rules**
- **Adopt action plan**

APR PROCESS

ANNUAL DECISION MAKING PROCESS





IN-SEASON IMPLEMENTATION TOOL

- **Spreadsheet-based**
- **Population by population**
- **Incorporates monitoring and evaluation data**
- **Status and trends data**
- **Attend our separate workshop**
 - **See Mark afterwards to sign up**

2014 COWLITZ COMPLEX HATCHERY PRODUCTION PLAN



Where we're at and how we got there

- Guiding plans
- Status and trends
- Decision points for each population
- Tools available
- Final production plan



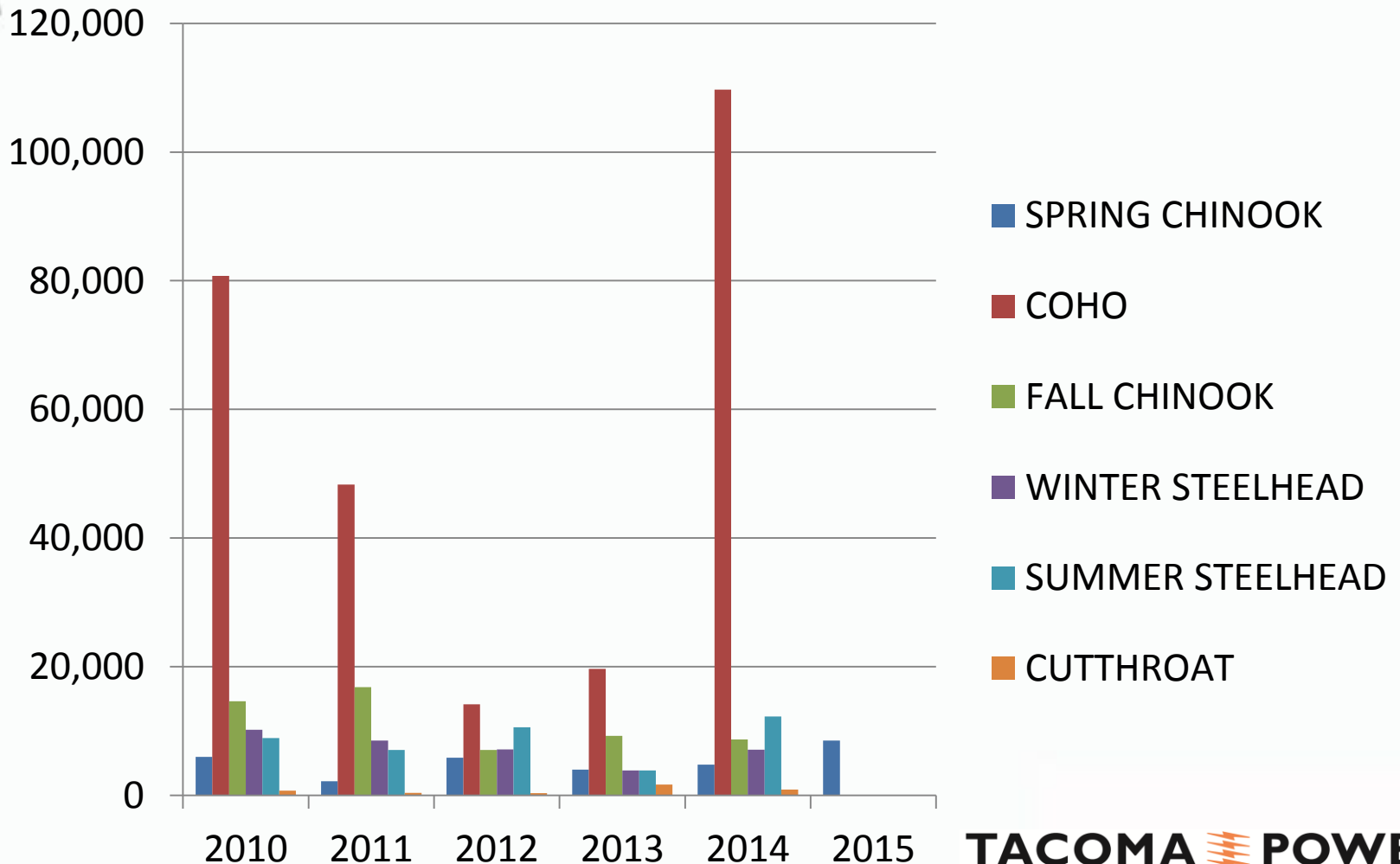
GUIDING PLANS

Maximize hatchery production within limits established by the:

- **Cowlitz River Hydroelectric Project Settlement Agreement (SA)**
- **Fisheries and Hatchery Management Plan (FHMP) Updates**
- **WDFW Fishery and Hatchery Reform Policy**
- **Lower Columbia Salmon and Steelhead Recovery Plan**

STATUS AND TRENDS

CSH adult returns 2010 - 2015





DECISION POINTS FOR EACH POPULATION

How the FTC made choices in 2014:

- **Received input from WDFW advisory (Ad Hoc) group**
- **Identified limits to the program size**
- **Complete analysis of program size options**
- **Final production plan for 2014 proposed in the Annual Project Review (APR) process**
- **Fisheries Technical Committee (FTC) adopted 2014 final production plan**



TOOLS AVAILABLE

Parameters/data that help determine management decisions:

- ✓ **Natural population size**
- ✓ **Size of smolts released**
- ✓ **Natural-origin fish used in hatchery programs (pNOB)**
- ✓ **Acclimation facilities**
- ✓ **Weirs**
- ✓ **Hatchery-origin (HOR) removals**
- ✓ **Fisheries (harvest rates)**



STEPWISE PROCESS

- **Target releases by hatchery population**
- **Run NOR adult population estimates through decision rules for each hatchery population**
- **Deduct for credits from natural smolts from Cowlitz Falls and Mayfield Dam**
- **Adjust species production to meet the 650-lb. total production cap**

DECISION RULES – FALL CHINOOK

Decision Rules for Lower Cowlitz Fall Chinook

For NOR less than

711

Minimum
Production

1,100,000
400,000

Smolts-Integrated and
Smolt-Segregated

For NOR greater
than

1,659

Maximum
Production

1,100,000
2,400,000

Smolts-Integrated and
Smolts-Segregated

2014 NOR
prediction

3,000

2014
Production

1,100,000
2,400,000

Smolts-Integrated and
Smolts-Segregated

DECISION RULES - COHO

Decision Rules for Lower Cowlitz Coho

For NOR less than

990

Minimum
Production

1,200,000
978,000

Smolts-Segregated and
Smolt-Integrated

For NOR greater
than

1,535

Maximum
Production

2,404,009
978,000

Smolts-Segregated and
Smolts-Integrated

2011 NOR
prediction

977

2014
Production

1,200,000
978,000

Smolts-Segregated and
Smolts-Integrated



2014 FINAL PRODUCTION PLAN

Changes in fish released due to implementation of FHMP

Species	Before 2011 FHMP Update	2014 APR
Fall Chinook	4,800,000	3,500,000
Spring Chinook	900,000	1,796,781
Coho	2,800,000	2,178,000
Winter-run steelhead	660,000	637,733
Summer-run steelhead	550,000	625,000
Cutthroat	160,000	100,682



2015 COWLITZ COMPLEX DRAFT HATCHERY PRODUCTION PLAN

➤ **Where we're at and how we got there**

- Guiding plans
- Decision points for each population
- Final production plan



GUIDING PLANS

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PUBLIC INPUT



What looks good?



What else would you like to see?

2015 HATCHERY PRODUCTION PLAN

Changes in fish released due to implementation of FHMP

Species	Before 2011 FHMP Update	2014 APR	2015 APR (DRAFT)
Fall Chinook	4,800,000	3,500,000	3,500,000
Spring Chinook	900,000	1,796,781	1,796,899
Coho	2,800,000	2,178,000	2,178,000
Winter-run steelhead	660,000	637,733	647,000
Summer-run steelhead	550,000	625,000	↑ 650,000
Cutthroat	160,000	100,682	100,599



PUBLIC INPUT



What looks good?



What else would you like to see?



NEWS YOU CAN USE

➤ **WDFW update**

- New rules going into effect July 1
- Three-fish limit
- Two-pole endorsement area
- Barbed hooks allowed in July 2015 and June/July 2016



NEWS YOU CAN USE

- **Spring Chinook return**
- **Cowlitz Falls Fish Facility update**
- **Drought year: Impact on water flows**
- **Cowlitz River fish collector**
- **Summer-run steelhead recycling**

COWLITZ RIVER FISH COLLECTOR

- Research vessel
- 40 feet long
- 22,000 lbs.
- Performing lower Cowlitz River monitoring study on juvenile fall Chinook





SUMMER-RUN STEELHEAD PROGRAM

Weirs put in lower Cowlitz tributaries to:

- Monitor impacts from hatchery steelhead
- Prevent hatchery summer-run steelhead from comingling with wild winter-run steelhead
- Continue large hatchery program for summer-run steelhead

➤ Currently located in four tributaries (Salmon Creek weir removed):

- Ostrander Creek
- Delameter Creek
- Olequa Creek
- Lacamas Creek

➤ Weirs monitored seven days a week

RECYCLE SUMMMER-RUN STEELHEAD?

Maiden Stray Rate	Recycle Stray Rate	Number Fish Recycled
2%	0.5%	6,700
2%	1%	3,300
2%	1.5%	2,200
2%	2%	1,600
2%	4%	800



NEWS YOU CAN USE



2015 summer-run steelhead recycling study

- June 15 – Aug. 15
- Up to 3,300 fish
- All fish will be anchor-tagged
- Get involved: Return anchor tags; encourage others to do so as well!

WRAP-UP



➤ Next steps

- See Mark to sign up for In-Season Implementation Tool (ISIT) model workshop
- Join us: Upper Cowlitz River Basin meeting in September

➤ Meeting survey

➤ Stay in touch

- Provide your contact information and visit tacomapower.com for updates