

Chelan PUD Fish and Wildlife

An Overview of Project Survival and Hatchery Programs

Board of Commissioners Study Session:
June 12, 2006

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Presentation Outline

- Balanced Score Card
- Habitat Conservation Plan
- Passage Survival
- Hatchery



To be a premier Public Utility

Stakeholders

Protect Resources with Stakeholders
Regional relationships

Quality Services

Listen and Respond to Customers

Financial

Manage Financial Risks

Control Costs
Least cost tools

Maintain Adequate Revenue
Spill program

Internal

Manage our Assets and Natural Resources
Outcome Based Approach

Enhance Trust through Openness & Accountability

Enablers

Put Safety First

Make this a Great Place to Work

Ensure Knowledge Transfer

Encourage Community Involvement

Leverage Best Practices & Innovation



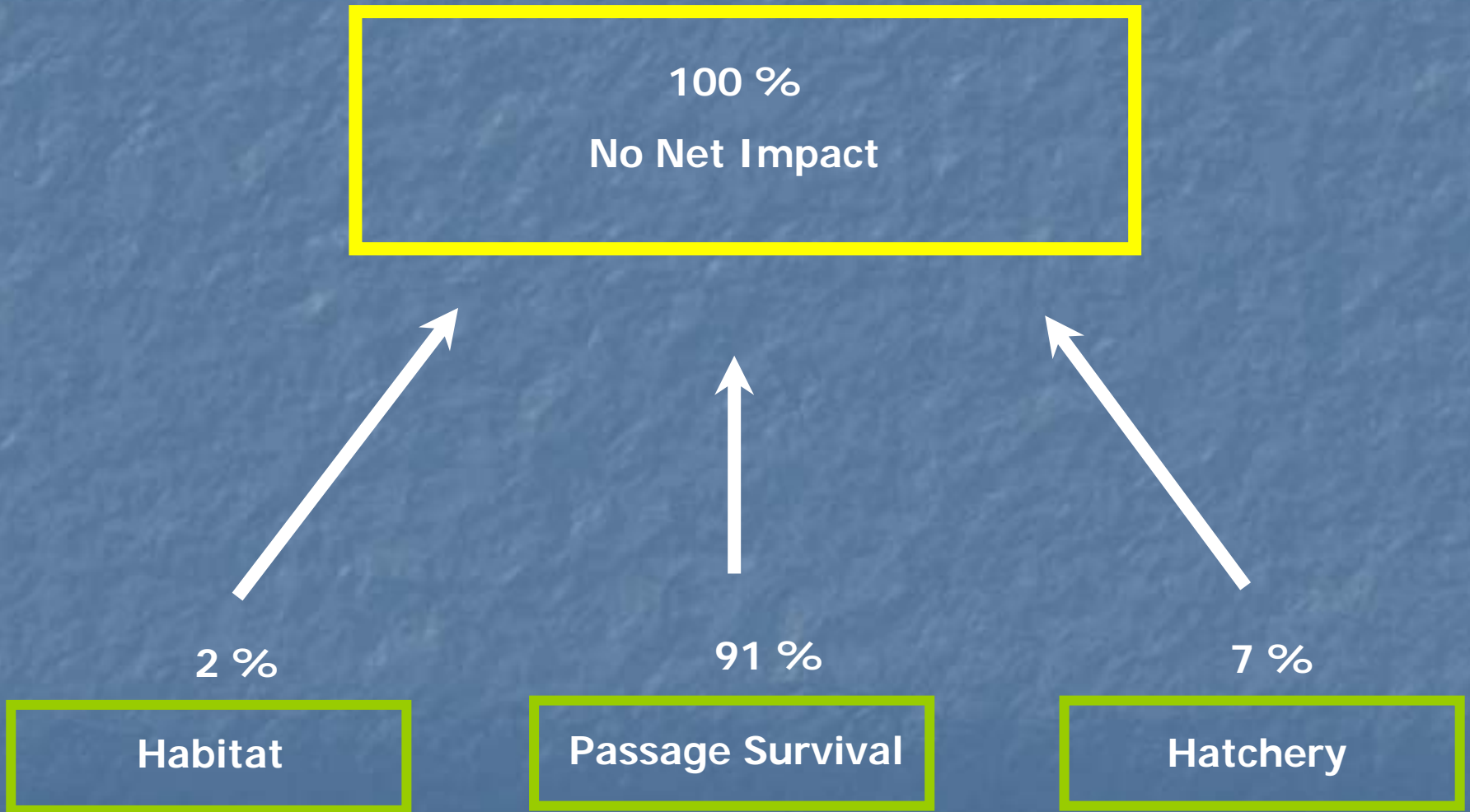
Habitat Conservation Plans

- Highest level of ESA protection with greatest level of flexibility for operations
- Long term certainty (50 years)
- Outcome based standards
- Manages risk

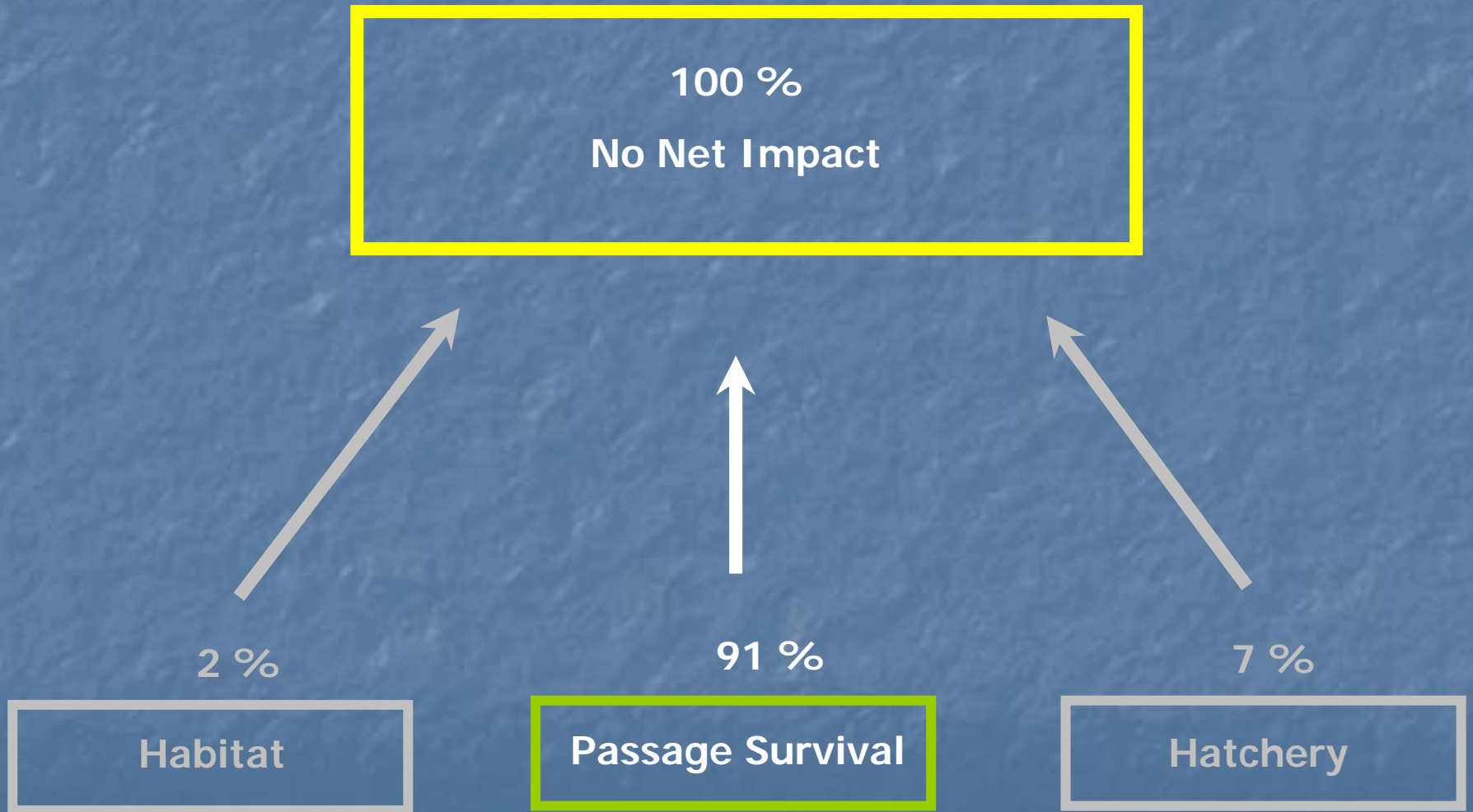
Habitat Conservation Plans

- Signed in 2002 by:
 - Chelan County PUD
 - National Marine Fisheries Service
 - U.S. Fish and Wildlife Service
 - Washington Department of Fish and Wildlife
 - Colville Confederated Tribes
 - Yakama Nation (April 2005)
- Ensures 50 years of protection for hydroelectric impacts to salmon and steelhead

Habitat Conservation Plans



Habitat Conservation Plans



Habitat Conservation Plans

Adult and Juvenile Combined Passage Survival (91 %)
(Juvenile standard – 93 %)

Survival Studies

Optimization

Habitat Conservation Plans

Passage Survival (91 %)
(Juvenile standard – 93 %)

Survival Studies

Rocky Reach Project Survival
Rock Island Project Survival

Optimization

Rocky Reach Spill/No Spill

Survival Studies

Rocky Reach Project Survival

Hydroacoustic Technology Inc. (HTI) and Skalski Statistical

- Species-Steelhead
- Measure progress to ensure current operations meet HCP goals
- If results consistent with last two years, will meet standards
- Meeting standard shows current operations for steelhead (bypass only, no spill) are safe
- Results due in October

Survival Study Results: Rocky Reach

Species	2002	2003	2004	2005	Average
Yearling CH Acoustic	NA	NA	92.9	91.1	92.0 (2-year ave.)
PIT Tag	NA	NA	92.6	NA	
Steelhead Acoustic	NA	NA	98.3	93.0	95.7 (2-year ave.)
PIT Tag	NA	NA	NA	99.0	
Sockeye Acoustic	NA	NA	83.5	89.2	86.4 (2-year ave.)
Sub-CH Acoustic	NA	NA	*	NA	

For presentation purpose only.

Survival Studies

Rock Island Project Survival

Hydroacoustic Technology Inc. (HTI) and Skalski Statistical

- Species-Steelhead and sockeye
- Measure progress to ensure current operations meet HCP goals
- If results consistent with last two years, will meet standards
- Meeting standard shows current operations for steelhead, sockeye, and Chinook yearling (20% spill) are safe
- Initial analysis of pros and cons of reducing spring spill

Survival Study Results: Rock Island

Species	2002	2003	2004	2005	Average
Yearling CH Acoustic	95.2	93.9	94.2	94.8	94.4 (3-year ave.)
PIT Tag	95.6	93.4	91.4	NA	93.5 (3-year ave.)
Steelhead Acoustic	NA	NA	96.6	91.5	94.1 (2-year ave.)
Sockeye Acoustic	NA	NA	98.5	95.3	96.9 (2-year ave.)
Sub-CH Acoustic	NA	NA	*	NA	

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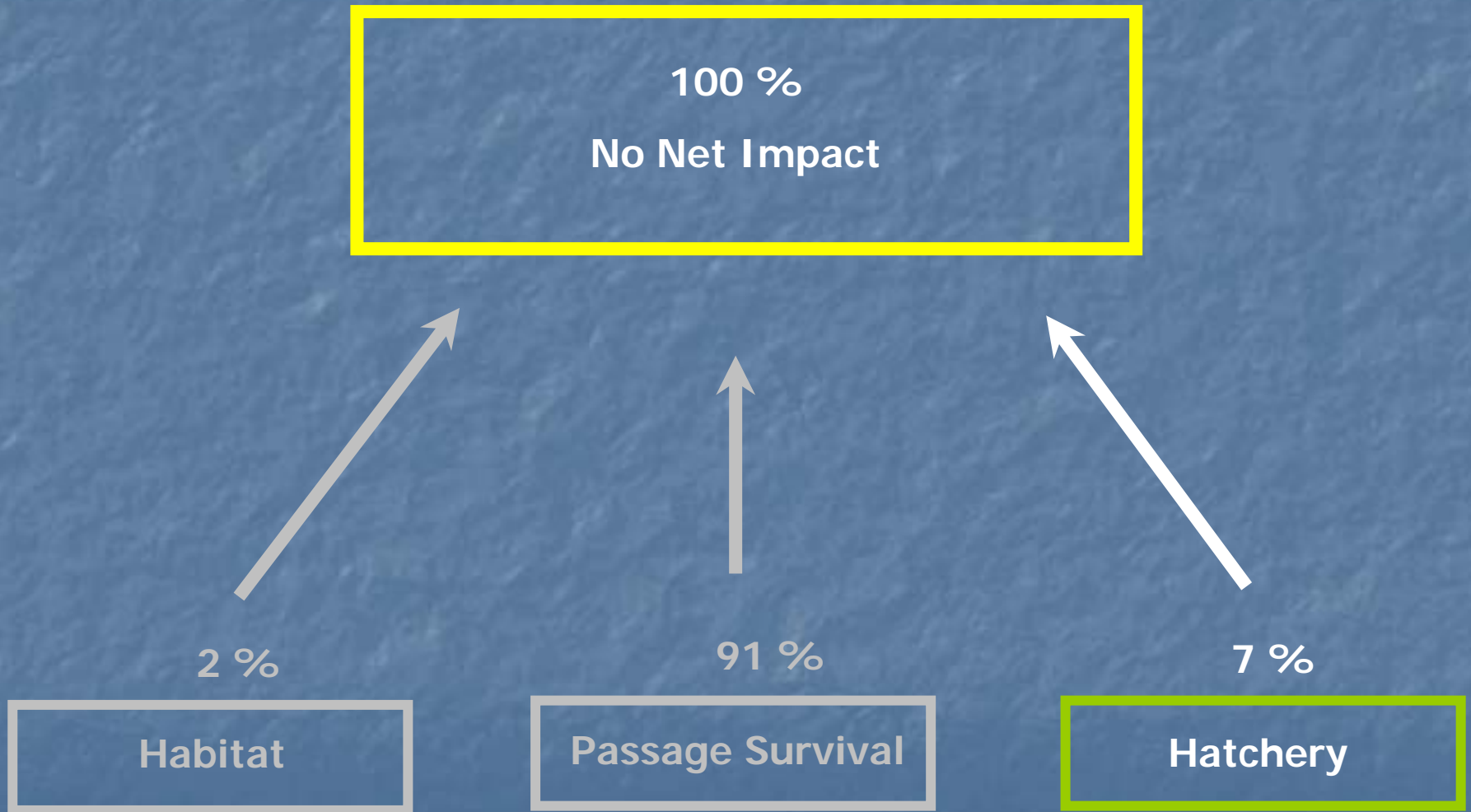
Optimization

Rocky Reach Spill/No Spill

Hydroacoustic Technology Inc. (HTI) and Skalski Statistical

- Species-Sockeye
- Test to determine impacts of spill on sockeye passage and survival
- Provide information to optimize generation while meeting survival goals
- Preliminary results due in October

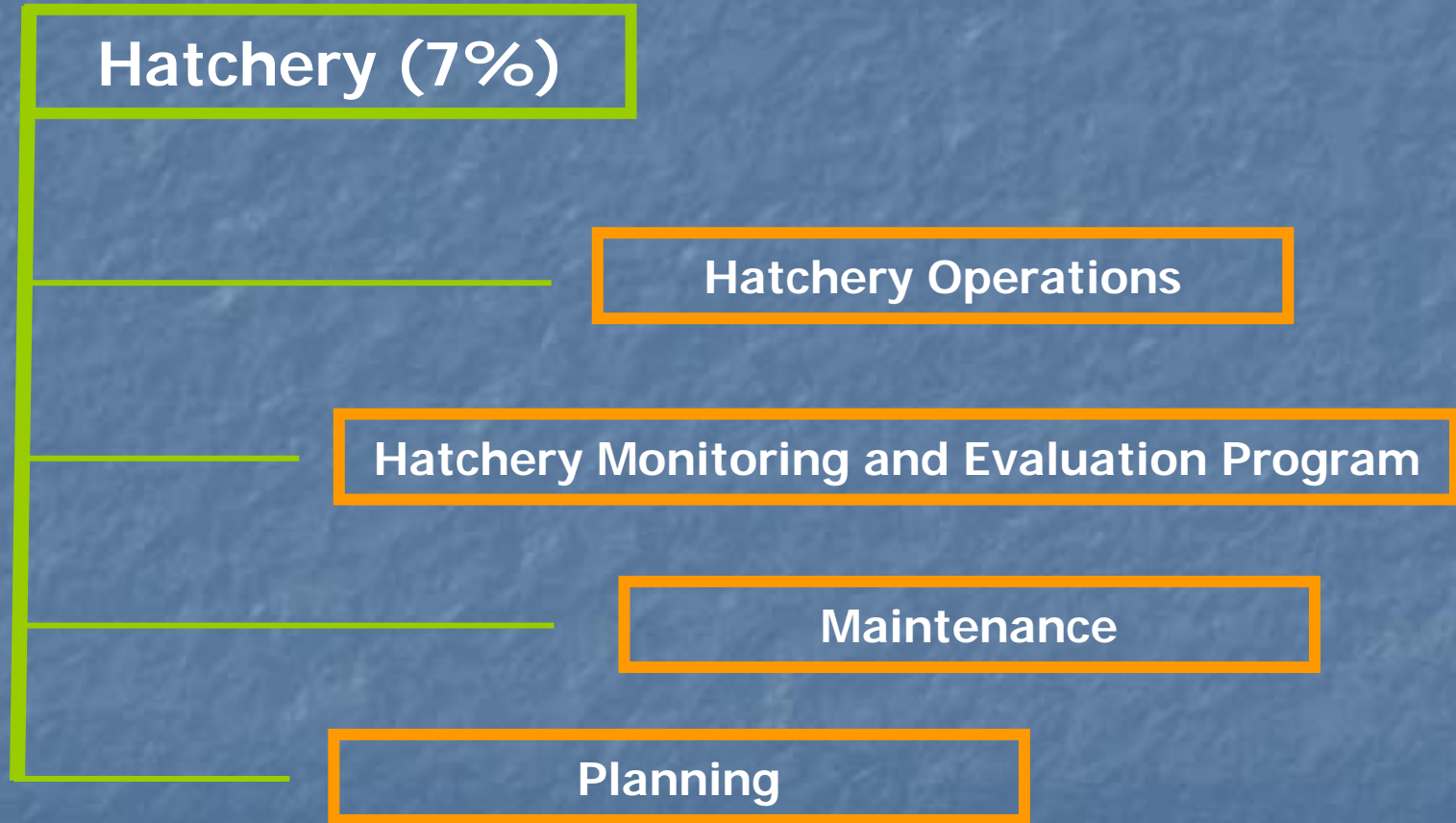
Habitat Conservation Plans



Purpose for Hatchery Discussion

- June 19, 2006 BOC Business Meeting
- Two resolutions
 - Hatchery Monitoring and Evaluation Program
 - Yakama Nation
 - Washington Department of Fish and Wildlife

Habitat Conservation Plans



Hatchery Operations

Washington Department of Fish and Wildlife

▪ Hatchery Facility Locations

- Eastbank Complex
- Rocky Reach Annex
- Chelan Falls



Hatchery Facility
Location MAP

▪ Species Raised

- Summer Chinook
- Spring Chinook
- Steelhead
- Sockeye
- Kokanee
- Cut throat
- Rainbow trout

Operator Selection

- ESA Section 10 Permit requirement
- Co-manager status protection

Hatchery Monitoring and Evaluation Program

Chelan County PUD

BioAnalysts, Inc.

Yakama Nation

Washington Dept. of Fish and Wildlife

The above entities were selected through a Request for Proposals for the Hatchery Monitoring and Evaluation Program.

Hatchery Monitoring and Evaluation Program

Chelan PUD

- Spawning ground surveys
 - Wenatchee River, Little Wenatchee River, White River, Icicle River, and Peshatin Creek
- Carcass surveys
 - Icicle River and Peshatin Creek
- Pit Tagging: Hatchery facilities and smolt traps
 - Monitor, Lake Wenatchee and Chiwawa River

Hatchery Monitoring and Evaluation Program

BioAnalysts

Board Approved: April 10, 2006

- Data collection
 - Chiwawa snorkel survey
 - Methow and Okanogan spawning and carcass survey
 - Data analysis and report writing
 - Attend coordination meetings; update annual work plan
 - Agreement duration: January 01, 2006 - May 1, 2011
 - Agreement not to exceed \$1,175,000
 - Year 1 expenditures not to exceed: \$245,000
 - Year 2-5 expenditures expected not to exceed: \$232,500*
- * Dependent upon annual work plan

Hatchery Monitoring and Evaluation Program

Yakama Nation

For Board Consideration: June 19, 2006

- Data collection
 - Steelhead; Summer Chinook
- Attend coordination meetings; update annual work plan

Hatchery Monitoring and Evaluation Program

Washington Department of Fish and Wildlife

For Board Consideration: June 19, 2006

- Data collection
 - Wenatchee spawning and carcass surveys (cost share: BPA)
 - Smolt trap operations (Monitor, Lake Wenatchee, Chiwawa)
 - Life history information
 - Creel surveys
- Attend coordination meetings; update annual work plan
- In hatchery monitoring

Habitat Conservation Plans

