

# Chelan PUD/Ecology Water Storage Opportunities

Presentation to the  
Columbia River Policy Advisory Group

9/9/09

# Introduction

- Purpose: Work with WDOE to identify, study and implement projects that provide multiple benefits to the region.
- Investigate high value projects that take into account the “triple bottom line”:
  - Environmental-Increased summer flows, non-GHG emitting energy sources.
  - Social-Provide water to out-of-stream users.
  - Economic-Low cost renewable generation sources.

# Introduction Cont.

- Potential WDOE/Chelan PUD agreement structure:
  - Incorporate shared benefits to provide maximum value to the region
  - Create a model to provide sustainable water storage funding.
  - Poolraise at Rocky Reach, water storage opportunities, Rock Island (Impacts from Wanapum)

# Project Area



# Rocky Reach Poolraise

- Details
  - Seasonal Operation
    - Operate at new elevation  
September – July
    - Water available for release  
July – September
    - Critical flow periods
  - Provide up to 28,000 acre-feet
  - Multiple Benefits
    - Increased summer in-stream flows
    - Additional water for out-of-stream uses
    - Renewable generation
- Project Challenges
  - Cultural Resources
  - Impacts to land owners
  - ESA Listed Plant Species- Ute Ladies' Tresses
  - Anadromous fish

# Other Water Storage

- Details
  - Various Locations
  - Seasonal operation
  - Opportunities for small footprint projects (10,000-30,000 acre-feet)
  - Multiple benefits
    - Increased summer in-stream flows
    - Additional water for out-of-stream uses
    - Additional renewable generation
    - Renewable energy integration
- Project Challenges
  - Cost
  - Small environmental footprint
  - Ringtop Reservoirs

# Wanapum Poolraise Impacts

- Details

- Will quantify impacts of Wanapum poolraise on Rock Island

- Challenges

- Fishway operations
- Impacts to new units
- Other unique challenges due to previous encroachment

## Proposed Next Steps/Cost/Schedule

Project	Activity	Cost	Time Frame
Rocky Reach	Ute Ladies' Tresses Study	\$50,000	Q4 2009-Q2 2010
Rocky Reach	Appraisal Study	\$250,000	2010
Other storage opportunities	Appraisal Study	\$180,000	Q4 2009-Q1 2010
Rock Island Impacts	Appraisal Study	\$225,000	Q4 2009-Q1 2010
	<b>Total</b>	<b>\$705,000</b>	

# Questions?

- Contact Information

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