

## **Economics/Operations Working Group**

February 12, 2003

9:00 am – 2:00 pm

USFS

810 State Route 20, Sedro Woolley, WA

### **Meeting Agenda**

#### **The Economics Working Group Mission Statement:**

*“To ensure that alternative project proposals, operations and emergency plans for the Baker River Project and its components provide for: 1. Public health and safety; and 2. Thorough analysis and evaluation of the economic costs and benefits (including non-market and economic impacts.)”*

#### **ITEMS**

1. Introductions
2. Review/revise minutes and agenda
3. Action Items
4. Presentation: Skagit County Avon Bypass by Dave Brookings, Skagit County
5. FERC call: Linda Lehman
6. Study Requests:
  - R-01 Low Flow Augmentation From Baker Project
  - R-02 Evaluation of Optimal Flood control Storage in Upper Baker Reservoir
  - R-03 Examination of Spawning and Incubation Flows in the Skagit River below the Baker Confluence during Brood year 2000.
7. PM&Es
  - 5.01 CZMA DOE
  - 5.02 Instream Flows and Water Rights
  - 5.03 Submerged Lands
  - 5.04 Reservoir Rule Curve (acquatics)
  - 5.05 Power Production (acquatics)
  - 5.06 Flood Control
8. Review of HYDROPS output example scenario
9. FERC Developmental Analysis example: Mark Killgore, PDEA, Berger Group
10. Prepare agenda for March 12th meeting at PSE office Mt. Vernon
11. Evaluate meeting

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## BAKER RIVER PROJECT RELICENSE

### Economics/Operations Working Group

**FEBRUARY 12, 2003**

9:00 a.m. through 2:30 p.m.

USFS Office  
810 State Route 20, Sedro Woolley, WA

## FINAL MEETING NOTES

### The Economics Working Group Mission Statement:

*"To ensure that alternative project proposals, operations and emergency plans for the Baker River Project and its components provide for: (1) Public health and safety; and (2) Thorough analysis and evaluation of the economic costs and benefits (including non-market and economic impacts.)"*

**Team Leader:** Lloyd Pernela (PSE), 425-462-3507; lloyd.pernela@pse.com

*Note: Please let the team leader know if you are unable to attend a meeting. If something comes up at the last minute, please call Lyn prior to the meeting. Lyn's cell phone is 425-890-3613.*

### PRESENT

Linda Lehman and Keith Brooks (FERC) by phone, Mark Killgore (Louis Berger Group), Jon Vanderheyden and Rod Mace (USFS), Bob Helton (interested citizen), Stan Walsh (Skagit Systems Cooperative), Ken Brettmann (Corps), Jerry Louthain (City of Anacortes, Skagit Co. PUD and Town Concrete), Dave Brookings (Skagit County Public Works Department), Gary Sprague (WA Dept. Fish & Wildlife), Chuck Howard, (Consultant), Lloyd Pernela, Joel Molander, Paul Wetherbee (PSE), Bruce Freet (Agreement Dynamics), Mary Jean Bullock, note-taker, and Lyn Wiltse, facilitator (PDSA Consulting Inc.)

### INTRODUCTIONS

Linda is FERC's liaison with our Economic/Operations Group. Paul is a hydrologist with PSE and will be working on models.

### DATES OF FUTURE MEETING DATES/LOCATION

March 12, April 9, May 14, June 11, July 9, August 13, September 10, October 8, November 12, December 10, 2003 at PSE Office, 1700 East College Way, Mount Vernon.

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## **Agenda for February 12, 2003 at USFS Office, Sedro-Woolley, WA**

**9:00 to 2:30 PM**

1. Introductions
2. Review/revise minutes and agenda
3. Action Items
4. Presentation: Skagit County Avon Bypass by Dave Brookings, Skagit County
5. FERC call: Keith Brooks and Linda Lehman
6. Flood teamlet:
  - Corps BA Upper Baker Flood Control, August 2000: Ken Brettman
7. Study Requests:
  - R-01 Additional flow releases for mitigation of water use
  - R-02 Evaluation of Optimal Flood Control Storage in Upper Baker Reservoir
  - R-03 Examination of Spawning and Incubation Flows in the Skagit River below the Baker Confluence during Brood year 2000
8. PMEs
  - 5:01 CZMA Consistency
  - 5:02 Additional flow releases for mitigation of water use
  - 5:03 Submerged Lands
  - 5:04 Reservoir Rule Curve (move to aquatics)
  - 5:05 Power Production (move to aquatics)
  - 5:06 Flood Control
9. Review of HYDROPS output an example scenario
10. Report on USFS HYDROPS review
11. FERC PDEA development analysis example: Mark Killgore, Louis Berger Group
12. Prepare agenda for March 12<sup>th</sup> meeting at PSE office in Mt. Vernon
13. Evaluate meeting

### **NEW ACTION ITEMS**

- ALL: Send Lloyd feedback by February 28, on Mark's draft economic considerations list.
- ALL: Review R-01 (Additional flow releases for mitigation of water use) for discussion at our March 12 meeting – Give feedback to Jerry.
- ALL: Review (optimal flood control storage) for discussion with our March meeting. Give feedback to Dave.
- Dave: Flood Study Plan. Get with Mark K., Ken, and others to work on study plan for R02.
- Keith: Issue on February 19<sup>th</sup> FERC's interpretation of the legal interpretation (preliminary analysis) on flood control, and how FERC would respond if the settlement agreement included a request to change the existing amount of flood storage [e.g. through Flood Control Act or amount in addition to Congressional authorization]. Also comment on which Act's trump FCA, etc.
- Lloyd: Send Keith distribution list of working group participants so he can send out his paper on Feb. 19.
- Lyn: Add estimated time frames to March agenda.

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## **PLAN FOR MARCH CROSS-RESOURCE WORKSHOP**

### *Prior to the Workshop*

A CD listing all the PME's that each research Working Group is considering along with a draft agenda for the March Workshop will be out by February 18<sup>th</sup>.

Participants will be asked to fill out a pre-workshop worksheet to consider how to resolve conflicts, etc. PSE will send out their proposal (with elements of Working Group PME's) for review on Feb. 26.

### *March 4, Tuesday (afternoon only)*

1:00-5:00 High level PME's presentations by a member of each Working Group (Cultural, Terrestrial, Aquatics, Recreation, Economics/Operations)

Jerry has graciously accepted our request that he do our presentation.

Probable Attendees: Jerry (presenter), Jon, Bob, Gary (not sure when he will arrive), Rod M., Lloyd

### *March 5, Wednesday (all day)*

Dee will begin with a review of the background of our process to date. She will then do a brief training session on interest-based negotiations to kick things off.

Then we will walk through PSE's Proposal, highlighting pieces that have cross-resource implications e.g. the proposed reservoir management regime. Joel Molander of PSE will explain how PSE came up with its reservoir management plan (share outputs from HYDROPS model runs, etc.)

Then we will split up into distinct resource areas to:

- Flag impacts on resource (add conflicts to lists already posted from Feb. Working Group meeting)

- List how it affects the organizational interests

- Report back to the larger group

Probable Attendees: Jerry, Jon, Bob, Gary, Rod M., Lloyd, Joel

### *March 6, Thursday (all day)*

- Finish PSE Proposal (pieces with cross resource implications)

- Review other PME's with cross resource implications

- Review (amended) list of conflicts

- Brainstorm to resolve conflicts

- Review (amended) list of conflicts

- Brainstorm to optimize synergies

- Plan next steps

Probable Attendees: Jerry, Jon, Bob, Gary, Rod M., Lloyd, Joel

After discussing the plan for the three-day workshop, some expressed concern that a "PSE proposal" feels positional rather than collaborative-interest based. Bruce explained the effort he saw by PSE in creating a proposal that pulled the group's PME's together and addressed the interests of each working group participant. Group concluded great care should be taken to ensure that people understand the background (PME-tie) to what is included in this "straw man." Lloyd pointed out that in the ICD and Scoping documents, PSE stated it would define PSE's proposed action thru collaborative process identifying

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desirable changes in the project. This is a first effort in defining group's collective preferred alternative. The process needs to identify quickly proposals for the PDEA.

Jerry will present the Economics/Operations group PME proposals on March 4<sup>th</sup>. It was also suggested that the each breakout group include members from all resource areas.

PMEs from this group will include 5.01 – CZMA Consistency; 5.02 – Additional flow releases for mitigation of water use; 5.03 Submerged Lands; and 5.06– Flood Control

### **FERC CALL: (Keith Brooks and Linda Lehman)**

Keith will draft a preliminary analysis of legal issues surrounding flood control within the context of the Baker River Project Relicensing Process. He will do this by February 19<sup>th</sup> and send it to all Working Group members for review. Group decided to use the term “flood control” and not “flood management.”

*Following inserted by Team Leader with review by Dave, Ken and Keith.*

- *FERC cannot reduce the current Baker flood control below that specified in-the 1977 congressional resolution. In general, specific legislation usually trumps general legislation. The 1977 Corps report 95-149 on Baker flood control report to Congress is clear and precise.*
- *Until changed by Congress, the current Corps flood control regime and compensation at Baker is permanent.*
- *To change from the current Corps flood control policy, the Corps would conduct appropriate studies and submit a request to Congress to adopt a new regime. [FERC's assessment is that there is not enough time for this in the context of relicensing– it would have to occur after License. Skagit County believes the work can be completed within the relicensing process.]*
- *FERC has no jurisdiction over the Corps.*
- *FERC can order additional Flood Control Storage beyond the current Corps 74k acre-feet as part of a settlement agreement, provided it is in the public interest and is consistent with resource balancing.*
- *The Corps has been responsible for their Baker flood control project's EA/BA. The Corps wrote the initial EA for Baker flood control and in 2000 conducted a BA of Upper Baker, a subsequent study on bull trout was done by USFW and Corps issued a supplement issued in 2001. Puget was not a party to the BA or other studies.*
- *PSE is responsible for the projects BA in relicensing except that portion that addresses Corps flood control.*

### **PMEs**

#### **5.01 CZMA Consistency.**

Lloyd distributed the paper Rod Sakrison put together on CZMA consistency. We agreed that this is a very helpful checklist of things we need to do to ensure compliance.

#### **5.02 Additional flow releases for mitigation of water use.**

Jerry explained that this PME refers to a relatively new regulation adopted by DOE relating to water rights and minimum instream flows for WRIA-3 and WRIA-4 Skagit River. The aim of this PME is to try to mitigate for this regulation which states that water supply could be interrupted.

The idea is for PSE to provide additional releases from the Baker River Project when the Skagit River at Mt. Vernon falls below minimum instream flow requirements.

This would mitigate for the amount of water taken out of the system that is subject to this regulation. This would make it possible for folks to have an uninterrupted water supply. The maximum amount we might mitigate for would be 200 cfs.

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PSE expressed concern about going forward with this PME (as an enhancement). They questioned the legality of the enhancement: (1) the current regulation specific excludes hydroelectric facilities and (2) no current DOE regulation links consumptive and non-consumptive water rights. These would require changes in DOE regulations. Also the minimum instream flow is set at mere 26% exceedance in critical months.

All will review this Study Request and PME for discussion this at our March meeting.

#### 5.03 Submerged Lands.

Lloyd will write up a PME addressing the ownership of the original Baker Lake and the Baker River bed.

#### 5.06 Flood Control.

Lloyd will write up a PME as a “place holder” reflecting the current License article.

PME’s to be included on the February 18th CD for the Economics Working group are: 5.01 – CZMA – Department of Ecology; 5.02 –Flow Augmentation; 5.03 Submerged Lands; and 5.06– Flood Control

### **STUDY REQUESTS**

#### R-01 Additional flow releases for water use mitigation.

See the discussion above under PME’s. Joel and Lloyd’s comments are incorporated as revisions.

#### R-02 Evaluation of Optimal Flood Control Storage in Upper Baker Reservoir

Dave incorporated the comments he received on this. All will review it and be ready to discuss next Steps at our March meeting. We agreed to move this to the Study Plan phase.

#### R-03 Examination of Spawning and Incubation Flows in the Skagit River below the Baker Confluence during Brood year 2000.

This provides an opportunity to study low season flows. This was tabled. Stan will follow up with PSE and we’ll discuss how to proceed at our March meeting.

### **HYDROPS MODEL REPORT**

Rod Mace reported that about 18 issues have been identified by Stetson Engineering re: the specifications they felt were necessary to do an adequate evaluation. Modifications are being made to the model to address 5 or 6 of those. Most of the remaining points now meet USFS analysis needs. Joel reported that they are aiming to have these revisions complete and tested by early March. They hope to also by that time to make sure it easily links with the model that R-2 is putting together. Gary reported that R-2 has not yet completed its high flow data collection (completing only 8 out over 20 transects during recent high flows) and that they are working to calibrate their model.

### **REPORT ON OLD ACTION ITEMS**

- ALL: Give Jerry feedback on Study Request R01: Additional Flow Releases for mitigation of water releases by January 17<sup>th</sup> so he can incorporate them and send out a new version of the request prior to our Feb. meeting. *Only Joel and Lloyd gave comments. Additional comments on the request and related PME can be given to Jerry prior to March meeting.*
- ALL: Give Dave feedback on Study Request R02: Evaluation of Optimal Flood Control Storage in Upper Baker Reservoir (Baker Lake) by January 17<sup>th</sup> so he can incorporate them and send out a new version of the request prior to our Feb. meeting.

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- ALL: Gave Stan feedback on Study Request R03: An examination of spawning and incubation flows in the Skagit River below the Baker confluence during brood year 2000 by January 17<sup>th</sup> so he could incorporate them and send out a new version of the request prior to our Feb. meeting.
  - Mark: By February 6, sent out draft outline of economic guidelines that Working Groups could use to do economic analysis of working group recommendations. No comments were received due to time constraints.

### **HYDROPS OUTPUT**

Joel distributed a sample scenario for a HYDROP's run to demonstrate our process of fleshing out viable alternatives. Scenario was defined using the HYDROPS MODEL Study Request form. Attached was the output from the run. This output format does yet not include model modifications made at the request of the Forest Service.

### **PRESENTATION OF SKAGIT COUNTY AVON BYPASS**

Dave showed us a video explaining the background of the Skagit River feasibility study and the recommendations of the Skagit Flood Risk Working Group. They are proposing a 5-mile (Westerly) diversion channel "the Swinomish Floodway" that could contain 80,000 cfs. The benefit/cost ratio of 4 to 1 is very favorable.

They are also looking at providing adequate channel capacity to pass the 100-year flood flow through the 3-bridge corridor. Dave distributed a letter from the Skagit County Board of Commissioners to Corps Colonel Graves expressing their concern re: current levels of flood control. This letter points out the benefits of Baker Project for flood control. He also distributed a list of flood issues and costs associated with various phases of this project.

### **FERC DEVELOPMENTAL ANALYSIS EXAMPLE**

Mark distributed a chapter from the Draft EIS for the Cowlitz River Project as an example of what we might include in our Developmental Analysis, noting that this was taken from a municipal utility as opposed to investor owned utility NEPA document.

He encouraged us to look at this along with the 14 points of economic consideration that he distributed at an earlier meeting.

He and Joel are working on putting together a template for Working Group members to use for economic analysis.

### **HANDOUTS (bolded handouts will be posted on the website)**

- Draft -Cross section workshop, Baker River Hydroelectric Project 2150
- Coastal Zone Management Act – DOE, January 31, 2003
- Draft PME – Additional flow releases for mitigation of water use. Prepared by Jerry Louthain, February 4, 2003
- Baker River Project Re-licensing Study Request. Study Title: Additional flow releases from the Baker River Project
- Draft Environmental Impact Statement – Cowlitz River Hydroelectric Project (No. 2016-044) Washington – Applicant: City of Tacoma
- Letter from the Skagit County Board of Commissioners to Colonel Ralph H. Graves, District Engineer (U.S. Army Corps of Engineers)

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- Skagit County, Washington Flood Issues – February 28, 2003

### **PARKING LOT**

- Forest Service Watershed Analysis
- New Baker EAP Inundation maps are available at end October 2002
- Consider who will be the number cruncher for this team: PSE? Other?
- GANNT chart with due dates, etc.
- Presentations:
  - Wild and scenic river 101 Jon Vanderheyden
  - Fisheries/Hydraulics 102
- How will we define and share economic analysis (methods, assumptions re: unit costs, etc.) across Working Groups

### **EVALUATION OF THE MEETING**

#### **Well-Dones**

- Lunches
- Phone seemed to work well
- Great participation
- Thanks to USFS for hosting
- Good discussion with FERC
- Dave's flood control presentation
- Got through a lot!

#### **Change for Next Time**

- Packed agenda
- Ran late

#### **What's Hot?**

- Flood control
- HYDORPS Model results
- Low Flow "thang"

#### **Summary of Studies to Share with Solution Team**

- R-01 –Low Flow Augmentation from Baker Project – Continuing discussion
- R-02-Evaluation of Optimal Flood Control Storage in Upper Baker Reservoir –Moved from Study Request to Study Plan
- R-03 –Examination of Spawning and Incubation Flows in the Skagit River below the Baker Confluence during Brood year 2000 – Tabled for discussion in March

### **TENTATIVE AGENDA FOR NEXT MEETING**

**March 12, 2003 at PSE Office, Mount Vernon, WA**

**9:00 to 2:00 PM**

9:00 - 9:05     Introductions

9:05 – 9:05     Review/revise minutes and agenda



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9:05 – 9:10 Review Action Items

9:15 – 10:45 Debrief of Cross Resource Workshop and review of Econ/Ops PMEs

- Review output and next steps from workshop
- Status of 5.01: CZMA Consistency, 5.02: Additional Flows for Mitigation of water use, 5.03: Submerged lands, and 5.06: Flood control
- Economic considerations
- Role of this Working Group in assisting with PDEA

10:45 – 11:00 Break

11:00 – noon FERC Conference call (Keith Brooks and Linda Lehman)

- Review of Keith's paper including his analysis of legal mandate and response if settlement agreement proposes alternative flood control regime
- Plan for next steps (Share with Solution Team, etc.)

Noon – 12:20 Lunch

12:20 – 12:45 Review Study Plan:

- R-E02-Evaluation of Optimal Flood Control Storage in Upper Baker Reservoir –study plan review.

12:45 – 1:10 Review Study Requests:

- R-E01 –Additional flow releases for mitigation of water use – Continuing discussion
- R-E03 –Examination of Spawning and Incubation Flows in the Skagit River below the Baker Confluence during Brood year 2000 – discussion tabled .

1: 10 – 1:30 HYDROPS Report

1:30 – 1:40 FERC Development Analysis Baker Project

1:40 – 1:50 Set April 9, 2003 agenda (at PSE Office in Mt. Vernon at USFS)

1:50 – 2:00 Evaluate Meeting

- What's hot?
- Studies report for Baker Solution Team