JUDI DANIELSON CHAIR Idaho

> Jim Kempton Idaho

Frank L. Cassidy Jr. "Larry" Washington

> Tom Karier Washington

Steve Crow Executive Director



MELINDA S. EDEN VICE-CHAIR

Oregon

Gene Derfler Oregon

Ed Bartlett

John Hines Montana

Fax: 503-820-2370 Web site: www.nwcouncil.org

February 10, 2004

### **MEMORANDUM**

**TO:** Fish and Wildlife Committee

**FROM:** Bruce Suzumoto

**SUBJECT:** Update on mainstem implementation issues

### Summer spill

At the January 21 Council meeting in Skamania, Washington, federal agency representatives presented various 2004 summer spill operation alternatives and estimates of their revenue and fish impacts. The following tables summarize the results of their analyses.

	STATUS QUO: PLANNED (BIOP) 2004 SUMMER SPILL	
DAM	OPERATIONS (JUNE 20 THROUGH AUGUST)	
Bonneville	75 kcfs day; TDG cap (about 140 kcfs) night	
The Dalles	40% total river flow day and night	
John Day	30% total river flow day and night	
McNary	No voluntary spill	
Ice Harbor	45 kcfs day; TDG cap (in summer almost all river flow) night	
Lower Monumental	No voluntary spill	
Little Goose	No voluntary spill	
Lower Granite	No voluntary spill	

	ALTERNATIVES EVALUATED RELATIVE TO BIOP
1	No Spill in July or August
2	BiOp Spill in July Except Test 0 kcfs v. BiOp at BON / No Spill in August / No Spill at IHR
3	BiOp Spill in July Except Test 50 kcfs v. BiOp at BON / No Spill in August / No Spill at
	IHR
4	BiOp Spill in July / No Spill in August
5	BiOp Spill July - August 15 / No Spill at IHR
6	BiOp Spill July and August / No Spill at IHR

Telephone: 503-222-5161

Toll free: 800-452-5161

## Stocks included in the analysis

FALL CHINOOK		
Upriver Bright		
Priest Rapids & Ringold Springs Hatcheries		
Hanford Reach Natural		
Yakima River & Marion Drain		
Snake River Bright		
Listed Wild Snake River		
Unlisted Lyons Ferry Hatchery		
Unlisted Nez Perce and Big Canyon Hatcheries		
Mid-Columbia Bright		
Deschutes River		
Klickitat River		
Umatilla River		
Little White Salmon River		
SUMMER CHINOOK		
Upper-Columbia		

Estimated number of fall chinook adults loss under the different alternatives for a range of smolt to adult returns (SAR).

		ALTERNATIVES					
			Spill test	Spill test		BiOp	BiOp
			0 kcfs @	50 kcfs @	Bi-Op	Spill thru	Spill
	SAR	No spill	BON; no	BON; no	spill July;	Aug 15,	Except
		July-Aug	spill IHR;	spill IHR;	no spill	No IHR	IHR
			no spill	no spill	Aug	Spill	
			Aug	Aug			
	0.5	(6)	(3)	(3)	(2)	(1)	(1)
Listed	1.0	(12)	(6)	(6)	(4)	(2)	(1)
Listeu	2.0	(24)	(13)	(12)	(7)	(4)	(3)
	4.0	(48)	(26)	(24)	(15)	(8)	(5)
	0.5	(4,741)	(2,269)	(2,033)	(1,401)	(394)	(4)
Non-	1.0	(9,481)	(4,539)	(4,066)	(2,801)	(787)	(8)
Listed	2.0	(18,962)	(9,078)	(8,132)	(5,603)	(1,575)	(15)
	4.0	(37,925)	(18,156)	(16,265)	(11,206)	(3,150)	(31)

SPILL OPTION	SAVINGS COMPARED TO BIOP IN MILLIONS (50-YEAR AVERAGE)	SAVINGS RANGE COMPARED TO BIOP IN MILLIONS (LOW - HIGH)
No Spill July-Aug	\$77	\$55 - \$92
No IHR, No Aug, BON 0 v. BiOp	\$54	\$32 - \$64
No IHR, No Aug, BON 50 v. BiOp	\$51	\$30 - \$61
BiOp Spill in July, No August Spill	\$42	\$25 - \$50
BiOp Spill thru Aug 15, No IHR Spill	\$26	\$15 - \$32
BiOp Spill Except IHR	\$8	\$5 - \$11
Full BiOp Spill Jul-Aug	\$0	

- The federal SIMPAS and power cost analysis on summer spill was released for public comment on January 23, 2004 with comments due February 13, 2004. Federal agencies are viewing the analysis as a decision support tool to help look at varying impacts. The analysis was completed for 2004 operations.
- Discussions regarding the analysis, 2004 summer spill operations and possible offsets have been held at the Technical Management Team (TMT) and the Implementation Team (IT). Questions focused on the assumptions used in the models and offsets, the variability of the inputs and the risks associated with using the survival estimates.
- At the present time only a project survival spill test at Bonneville Dam is doable for summer 2004. BPA has agreed to purchase tags and fund a study if sufficient money is saved to cover the costs of a study from spill reductions.
- As of yet, no decision has been made regarding summer spill operations in 2004. There will be a Regional Executives' meeting March to discuss summer operations for 2004 and possibly beyond. After regional input, Federal executives are planning to make a final decision on summer spill operations in March 2004.
- CRITFC and the Nez Perce Tribe have submitted letters opposing reductions in summer spill (attached).

#### Libby and Hungry Horse reservoir operations

- The ISRP has completed a preliminary review of the Montana Fish Wildlife and Parks'
  research proposal to evaluate the effects of changes in reservoir operations on resident
  fish above and below Libby and Hungry Horse dams. Overall the review was positive
  and the ISRP is now requesting additional information from MFWP to complete their
  review.
- Discussions are being held at the CBFWA resident fish committee concerning this proposal. MFWP and ODFW are also jointly discussing the proposal.
- Bonneville released modeling results for changes in flow, reservoir elevations and revenue resulting from implementation the reservoir operations called for in the Council's mainstem amendments (attached). The results differ somewhat from the

Council staff analysis done last year probably due to updated hydro information used in the BPA analysis. Still aiming for a decision on Libby and Hungry Horse operations in March at the regional executives' meeting.

Ice Harbor removable spillway weir (RSW)

• The Corps budget for fish management construction and research was reduced from an estimated \$77 million to \$69 million. In spite of this, the Ice Harbor RSW is a high priority project and is schedule to move ahead toward a completion date of March 2005. The amount of funding allocated to the RSW in FY04 is \$5.7 million and the total cost of construction will be approximately \$13 million.

 $w:\bs\2004\council\ meetings\council\ meetings$ 

## **BPA** Analysis of Libby and Hungry Horse Council Mainstem Amendment Operation

<b>Mainstem Amendment Operation:</b> If	<b>BiOp Operation:</b> draft to 20' from full by
volume forecast is greater than 20th	August 31 in all years if needed to meet the
percentile, September 30 draft target is 10 feet	McNary flow augmentation target
from full, otherwise draft target is 20 feet	
from full on September 30.	

## 50-Year Modeling Results (Mainstem Amendment minus BiOp)

## MCN Flow Change (kcfs)

	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>
50yr Ave.	3.0	-8.7	-0.4
Min	-2.4	-19.7	-7.9
Max	11.2	3.2	4.2

## **Reservoir Elevation Change (feet)**

<u>Libby</u>	<u>Aug15</u>	<u>Aug31</u>	<u>Sep30</u>
50yr Ave.	0.0	5.2	6.1
Min	-10.9	-6.6	-7.1
Max	6.3	13.3	11.5
<b>Hungry Horse</b>	<u>Aug15</u>	<u>Aug31</u>	<u>Sep30</u>
50yr Ave.	2.7	7.9	6.5
Min	-10.7	-9.2	-10.0
Max	12.5	13.3	13.5

# **BPA Annual Revenue Change (\$millions)**

50yr Ave.	5.2
Min	-29.4
Max	41.5