



**Bonneville Power Administration
Integrated Program Review**

Technical Workshop # 5:

**FY 2009 Fish and Wildlife
Program Costs**

May 21, 2008



Fish and Wildlife Legal Mandates

1980 Northwest Power Act

"The Administrator shall use the Bonneville Power Administration Fund to protect, mitigate, and enhance fish and wildlife to the extent affected by development and operation of any hydroelectric project of the Columbia River and its tributaries."

**Non-Listed
Fish and
Wildlife**

Endangered Species Act 1995 and 2000 Biological Opinions

"Each Federal agency shall...insure that any action authorized funded, or carried out by such agency is not likely to jeopardize continued existence...of any endangered species or threatened species..."

**Listed
Anadromous
Fish**

**Resident
Fish**

Wildlife

Treaty and Non-Treaty Tribal Policy

BPA will consult with the Tribal governments prior to BPA taking actions, making decisions, or implementing programs that may affect Tribal resources.

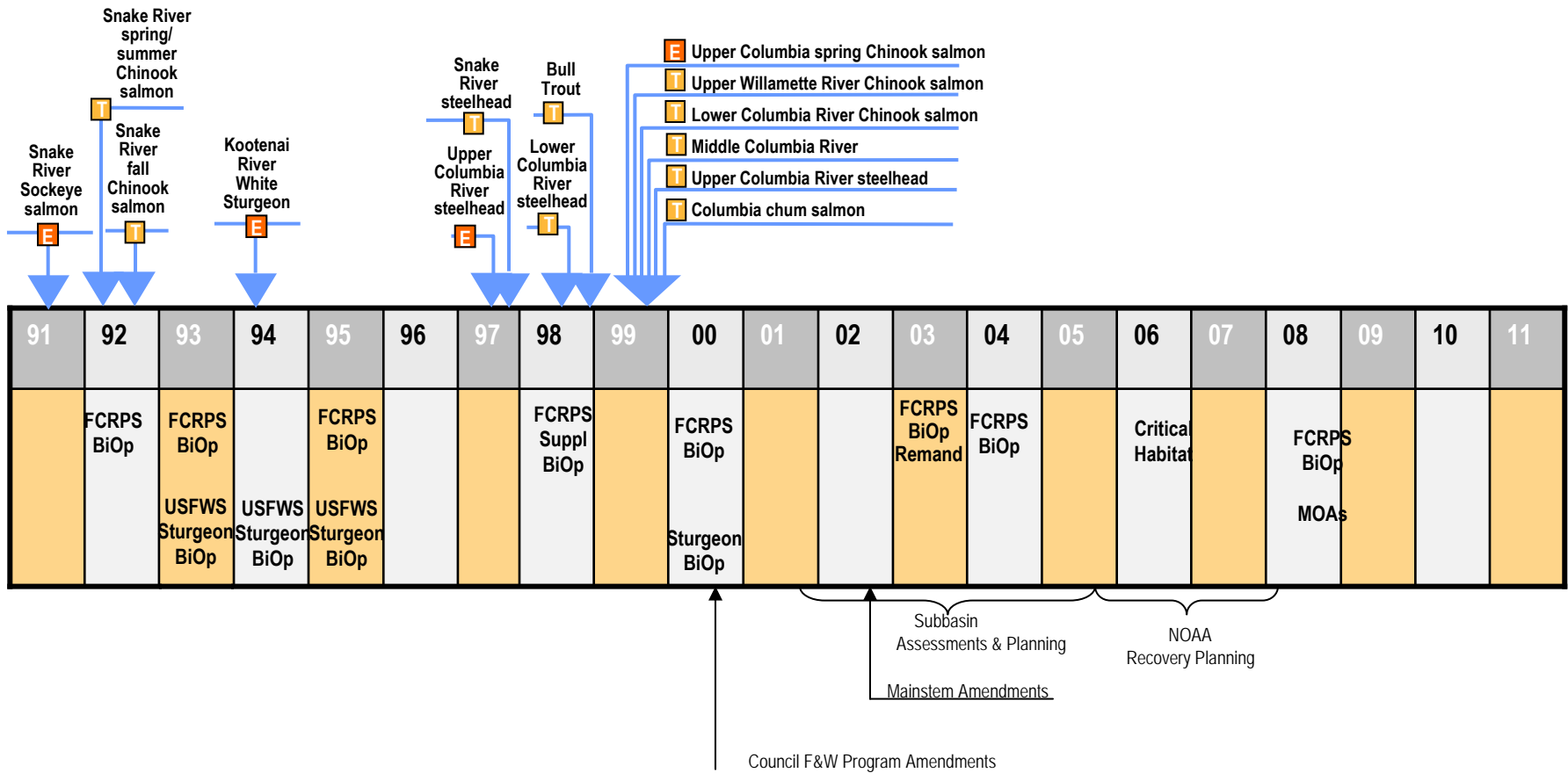


Financial Components of BPA's F&W Investments

- **Integrated program** – The expense and capital expenditures under the Council's Fish and Wildlife Program
- **Debt service** – The projected amortization, depreciation and interest payments for investments directly funded through BPA borrowing, as well as capital investments by the Corps and Reclamation funded by the U.S. Treasury and reimbursed by BPA.
- **Fish-related O&M** (“reimbursable expenses”) – The hydroelectric share of O&M and other non-capital expenditures for fish and wildlife activities by the Corps, Reclamation and U.S. Fish & Wildlife Service that are funded by the U.S. Treasury and reimbursed by BPA.
- **River operations** – The power production effects of river operations required by NOAA Fisheries and USFWS Biological Opinions.



Chronology of ESA-Related Processes





Chronology of FCRPS BiOp

- **2000 – BiOp finds “Jeopardy” with required off-site actions (RPAs).**
- **2001 – National Wildlife Federation challenges 2000 BiOp.**
- **2003 (June) – 2000 BiOp remanded to NOAA Fisheries; concern that off-site actions “not reasonably certain to occur.”**
- **2004 (Nov) – Revised BiOp released; reflects new Proposed Action and regulatory standard.**
- **2005 (June) – Judge Redden rules that “aggregate” effects of operations, dams’ existence, and other sources of mortality must be considered.**
- **2005 (Oct) – Judge Redden orders collaboration with sovereigns.**
- **2007 (May) – Following collaboration, action agencies release new Proposed Action.**
- **2007 (Sept) – Action agencies complete Biological Assessment and Comprehensive Analysis.**
- **2007 (Oct) – NOAA Fisheries releases new draft and opens public comment period.**
- **2008 (Jan) – Court sets May 5 deadline for final BiOp.**
- **2008 (May) – NOAA Fisheries publishes final FCRPS BiOp, concluding the litigation on the 2004 BiOp.**



New Columbia Basin Fish Accords

- Action agencies recently signed MOAs (Columbia Basin Fish Accords) with:
 - 1) three lower river tribes
 - 2) the Colville Tribe
 - 3) the State of Idaho
 - 4) the State of Montana
- Purpose to deliver biological benefits and funding stability for projects benefiting listed and non-listed fish
- BPA funding commitment of \$900 million for 10 years; 60 percent for new/expanded actions
- Signatories agree to not join any lawsuit on FCRPS and fish issues for the period of the agreement and support the BiOp and the Accords in the appropriate forums
- Withdrawal/early termination if material changes, after consultation



Relationship of Accords to Council Fish and Wildlife Program

- **F&W Program encompasses BPA's NW Power Act and ESA obligations**
- **Program amendment process – Accords submitted as amendment**
- **Accords reflect three types of projects relative to the Program:**
 - projects in the FY07-09 Council Program; MOA describes a long-term funding commitment
 - projects in the FCRPS BiOp; MOA describes a long-term funding commitment and targets biological results in the BiOp
 - New non-ESA projects
- **Science review:**
 - may explore expedited review
 - must obtain appropriate land use permits and regulatory clearances



Fish & Wildlife Direct Program

\$ in Thousands	Actuals		SOY	Rate Case Average	Rate Case	IPR	IPR	IPR
	FY 2006	FY 2007	FY 2008	FY 2007-09	FY 2009	FY 2009	FY 2010	FY 2011
Program Level Spending	137,900	139,500	143,000	143,000	143,000	200,000	230,000	236,000
Increase/Decrease *		1,600	3,500		0	57,000	30,000	6,000

* for FY 2006-2008, Rate Case FY 2009, 2010 and 2011, change is from the prior year. For FY 2009 Forecast, change is calculated from "Rate Case".

Program Background:

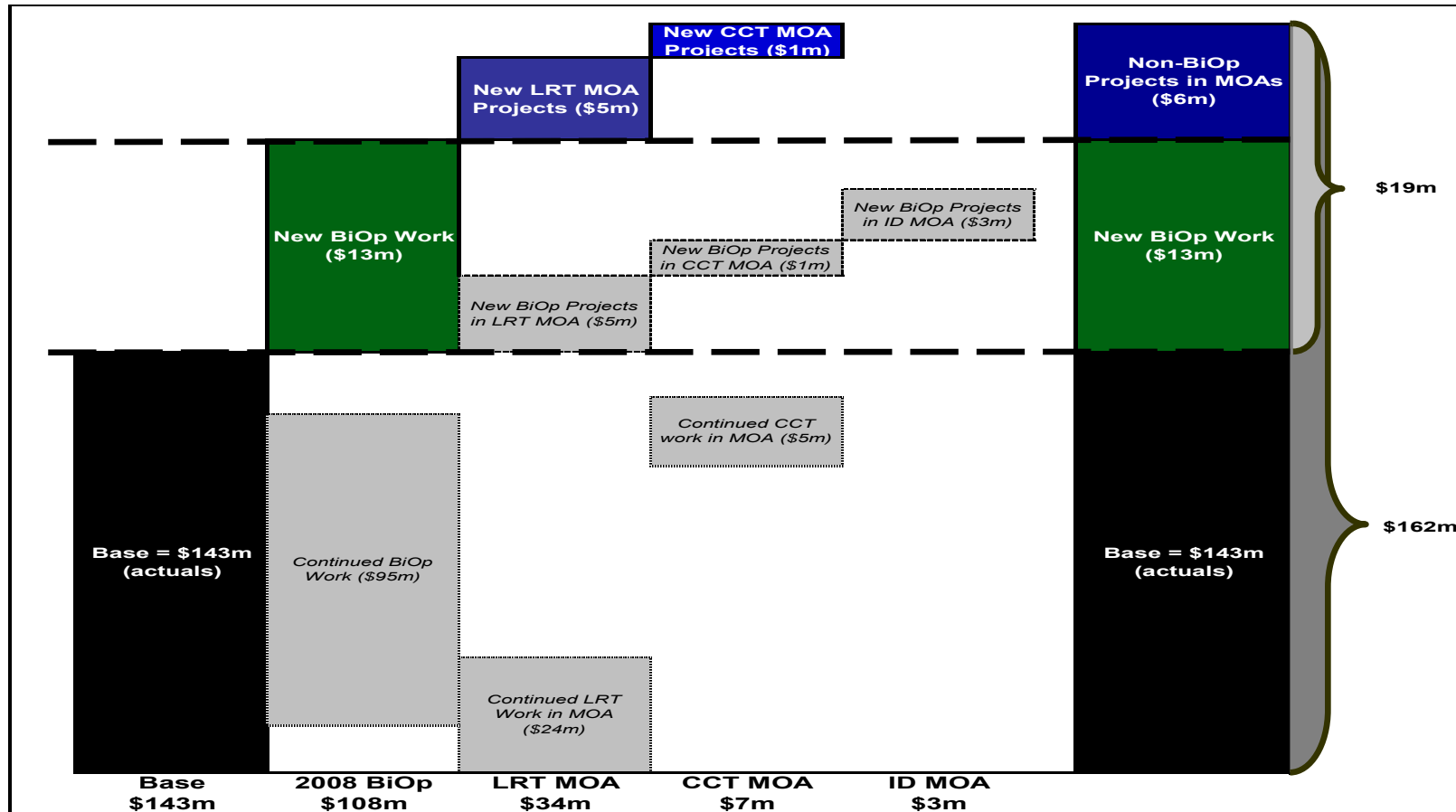
This program represents BPA's Direct Fish and Wildlife Program which manages projects intended to meet BPA's mitigation objectives under the Northwest Power Act, consistent with the Northwest Power and Conservation Council, as well as BPA's Endangered Species Act offsite fish and wildlife requirements under biological opinions from the U.S. Fish and Wildlife Service and National Oceanic and Atmospheric Administration (NOAA) Fisheries.

Drivers of Change:

- New Biological Opinions require increased costs for hydro system operations, habitat restoration, research, monitoring and evaluation.
- The 2008 Columbia Basin Accords, agreements with States and Tribes on Fish and Wildlife costs, include some costs necessary for implementing the Bi-Op, but also have incremental costs. These agreements benefit the agency and the region, by: moving key players from adversaries to partners, ending years of divisiveness; including accountability for results; including defined biological objectives, so that the actions will be measured for their effectiveness against those objectives; providing known costs which will mean more stable rates. The projects are expected to produce biological benefits and cost less than litigation.
- These increased costs are partially offset by 4(h)(10)(C) credits, which in essence reimburse BPA for the portion of these costs that are attributable to non-power purposes of the FCRPS.



FY08 Expense Estimates



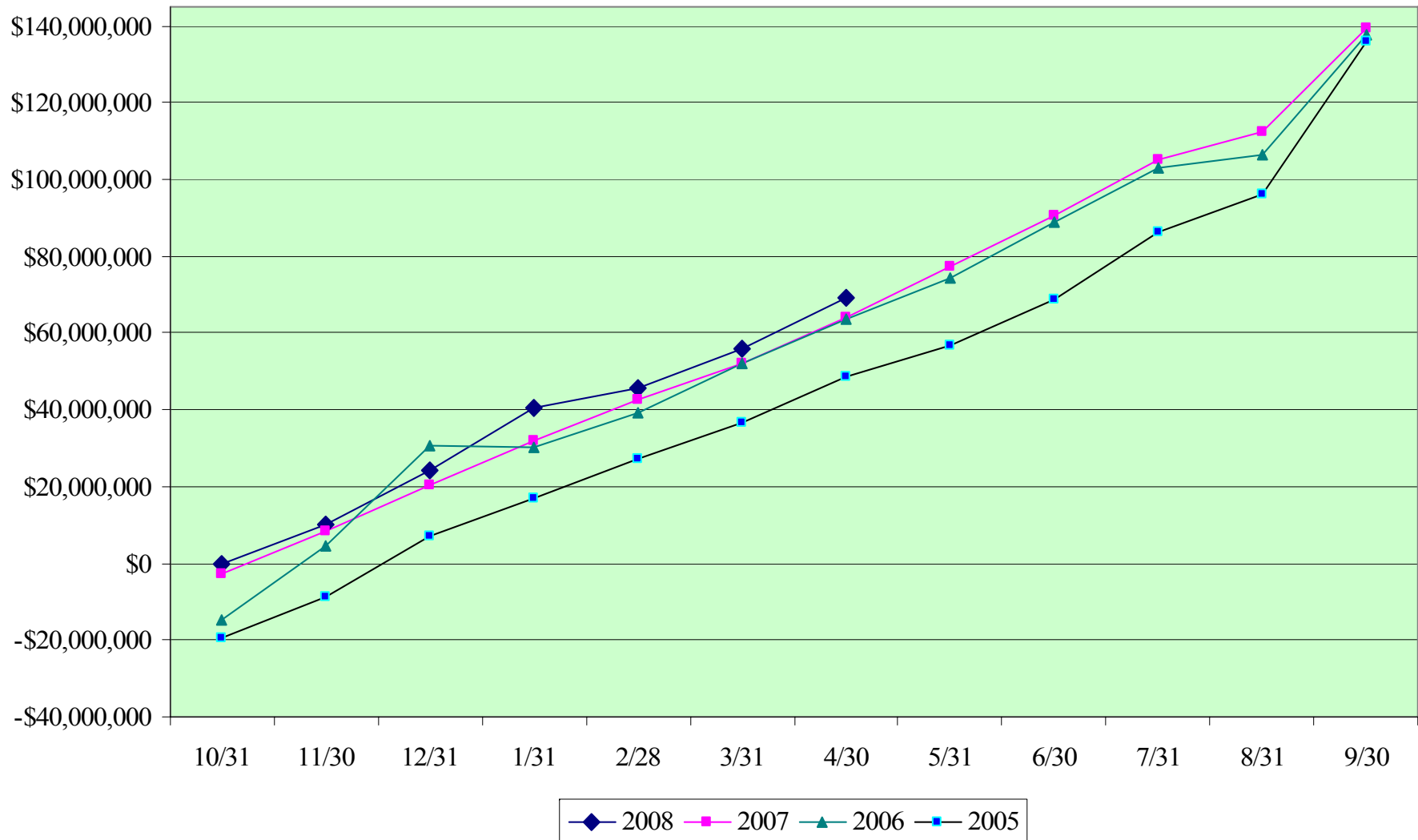
Assumptions

- Ramp-up results in spending on new BiOp and MOA work at 33% of planning levels



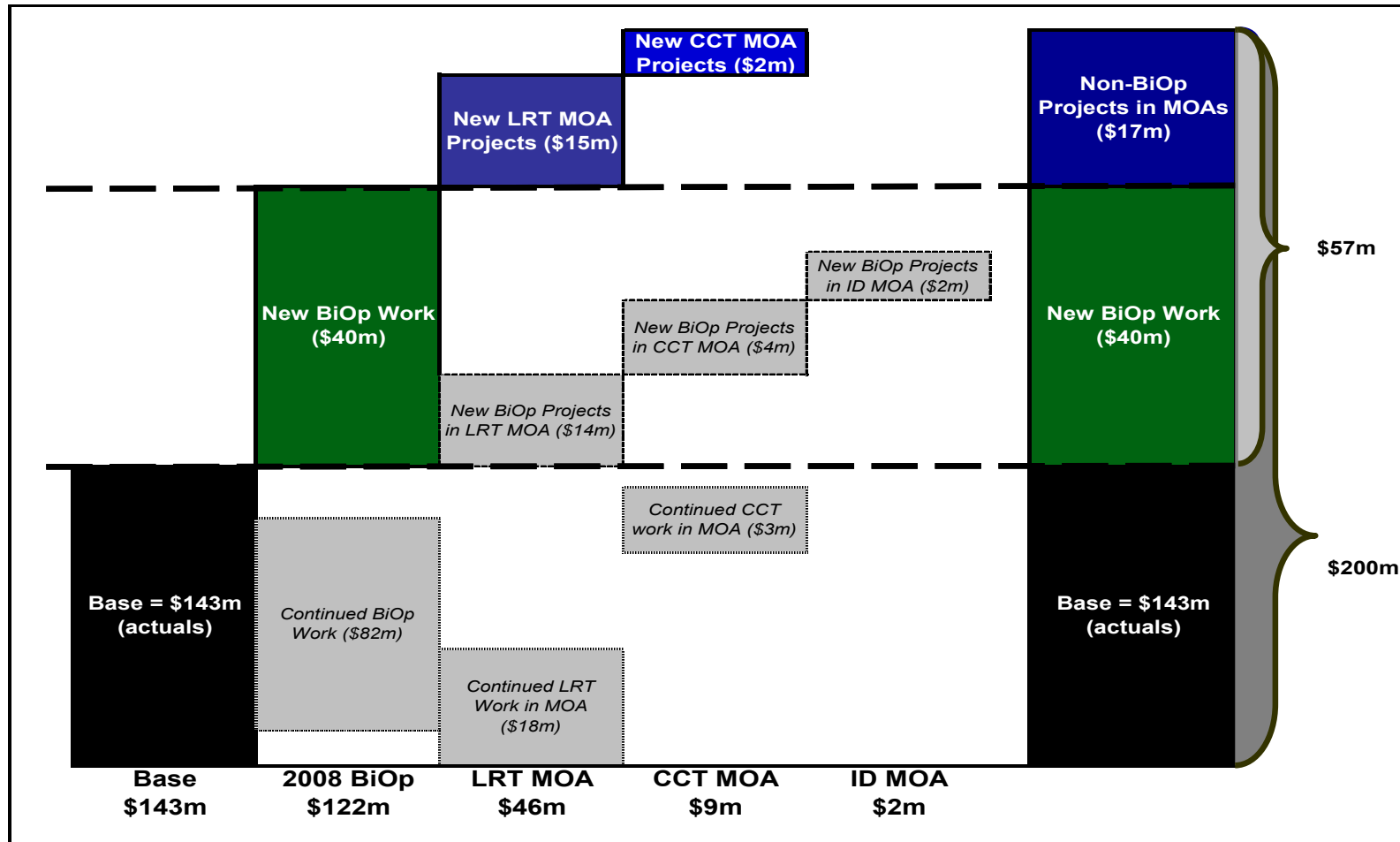
FY08 Spending to Date

Monthly Cost Comparison (Expense)





FY09 Expense Estimates

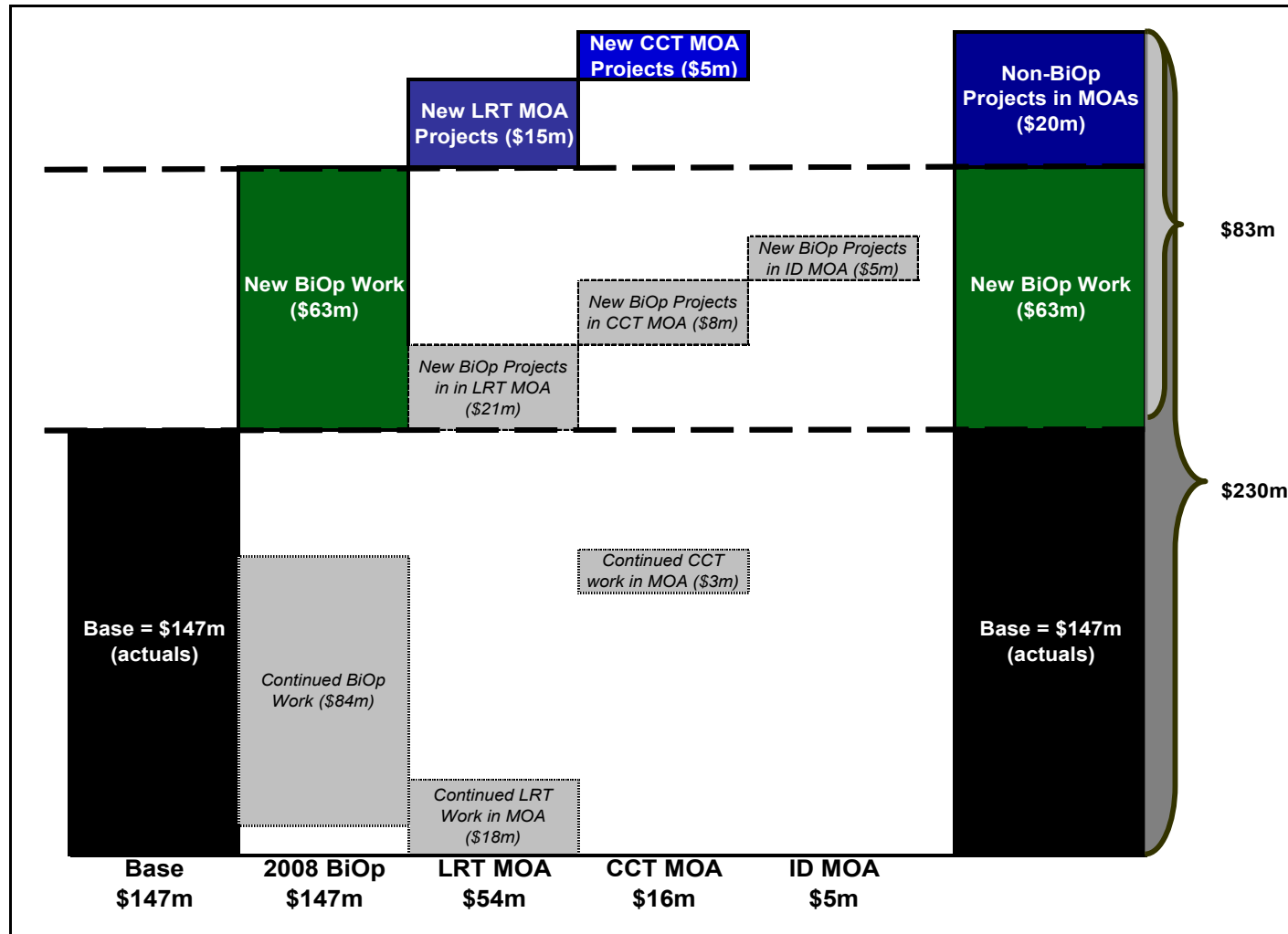


Assumptions

- Ramp-up result in spending on new BiOp and MOA work at 75% of planning levels



FY10 Expense Estimates

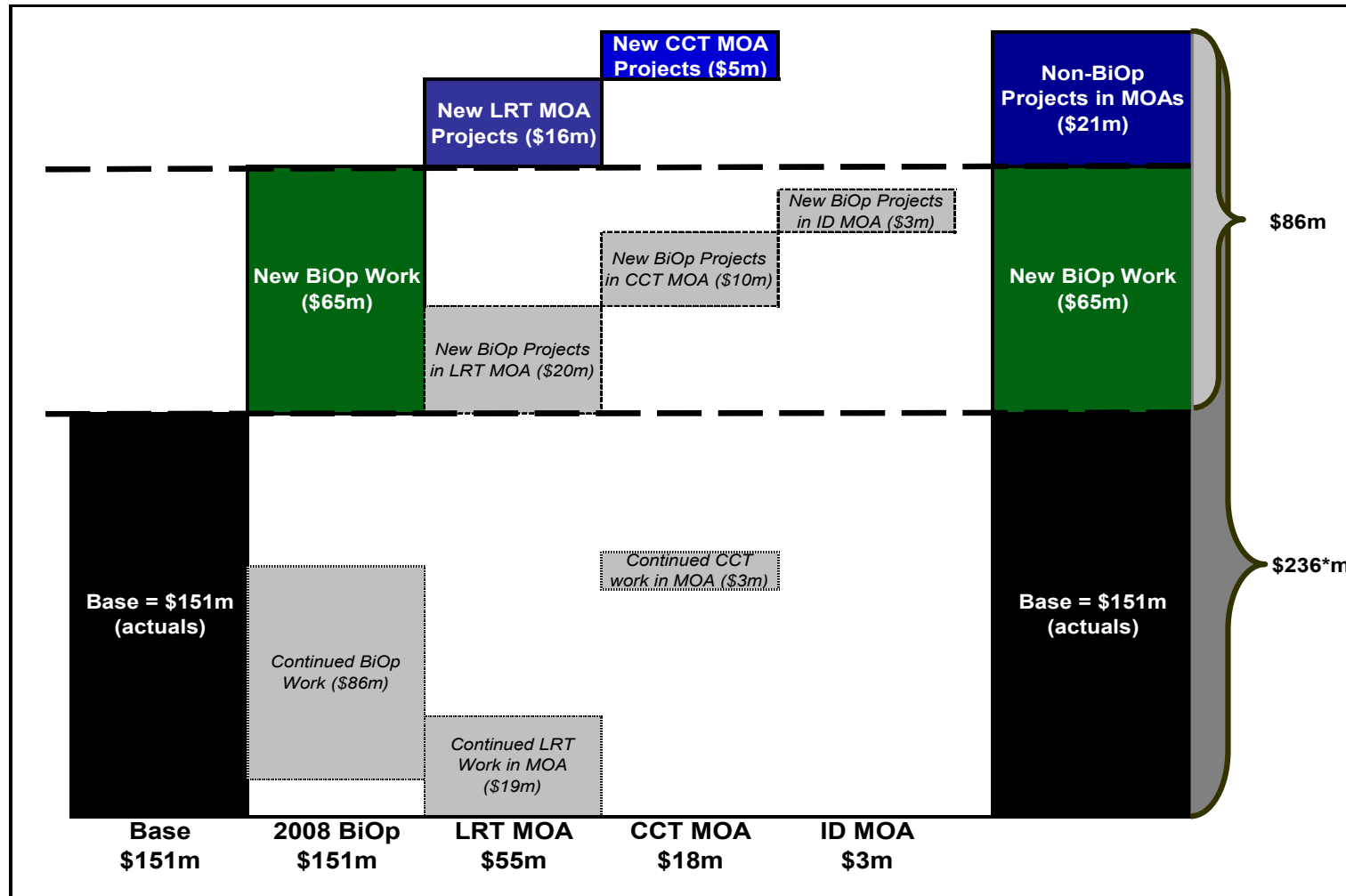


Assumptions

- Inflation applied to \$143 base and expansions at 2.5%



FY11 Expense Estimates



Assumptions: Inflation applied to \$143 base and expansions at 2.5%

*Note: Not \$ 237 due to rounding.



Fish & Wildlife Capital Expenditures

\$ in Thousands

Description	Actuals		SOY	Rate Case	IPR	IPR	IPR	IPR	IPR
	FY 2006	FY 2007	FY 2008	FY 2008-09*	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Fish & Wildlife	35,414	35,186	36,000	36,000	50,000	70,000	60,000	50,000	50,000
Increase/Decrease *		-228	814		14,000	20,000	(10,000)	(10,000)	0

*Change is calculated from the prior year. The "Rate Case Average" column is not used in calculations of increases and decreases.

Program Background:

This program represents BPA's Direct Fish and Wildlife Program which manages projects intended to meet BPA's mitigation objectives under the Northwest Power Act, consistent with the Northwest Power and Conservation Council, as well as BPA's Endangered Species Act offsite fish and wildlife requirements under biological opinions from the U.S. Fish and Wildlife Service and National Oceanic and Atmospheric Administration (NOAA) Fisheries.

Drivers of Change:

- New Biological Opinions require increased investment in fishery production facilities and tributary fishery passage facilities, and land acquisitions for wildlife and resident fish.
- The 2008 Columbia Basin Accords, agreements with States and Tribes on Fish and Wildlife costs, include some costs necessary for implementing the Bi-Op, but also have incremental costs. These agreements benefit the agency and the region, by: moving key players from adversaries to partners, ending years of divisiveness; including accountability for results; including defined biological objectives, so that the actions will be measured for their effectiveness against those objectives; providing known costs which will mean more stable rates. The projects are expected to produce biological benefits and cost less than litigation.



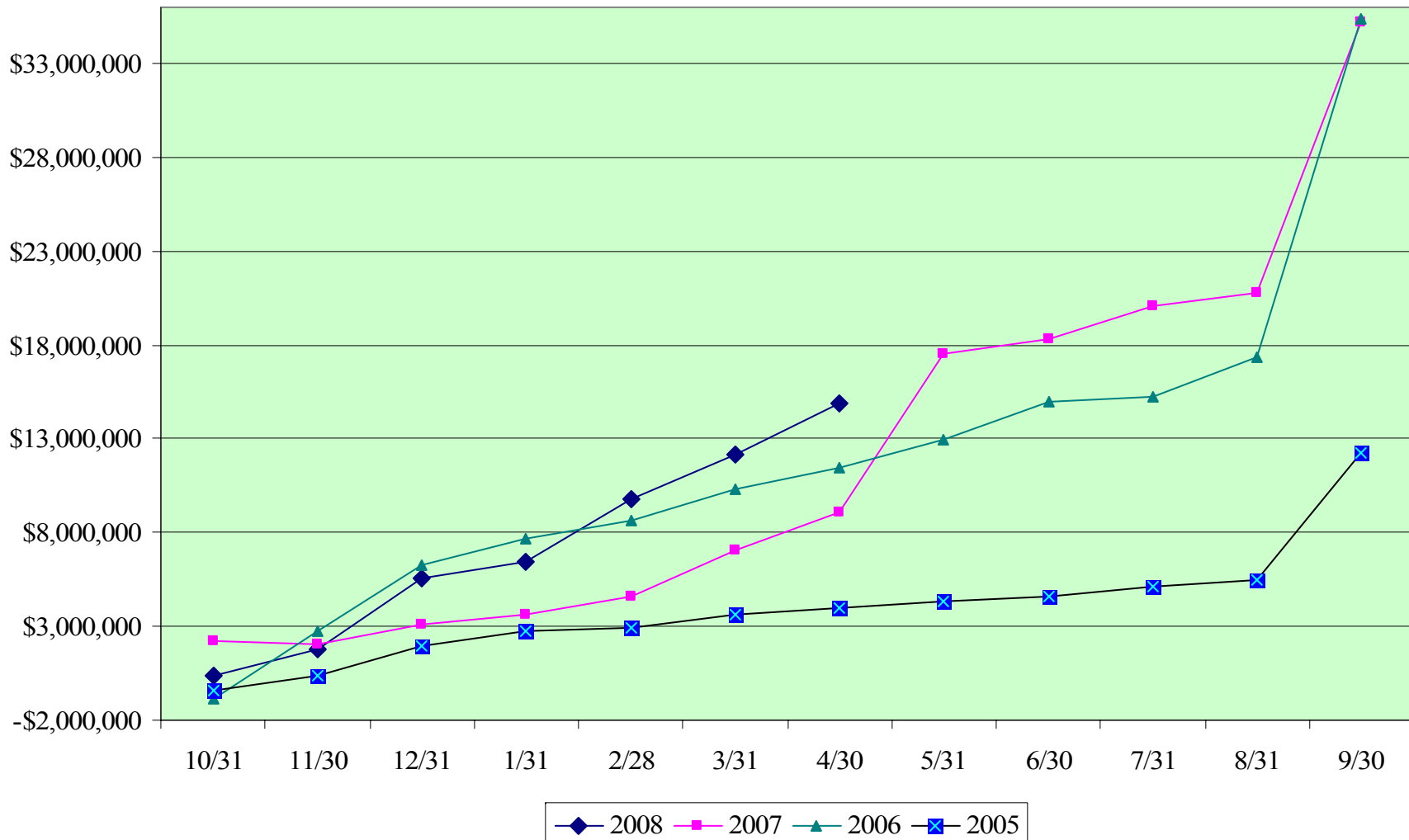
Fish Capital Projections - FY08-12

	2008 Budget	2009 Budget	2010 Budget	2011 Budget	2012 Budget	2013 Budget	2014 Budget	2015 Budget	2016 Budget	2017 Budget	Total Budget (08-17)
Colville MOA	\$ 2	\$ 14	\$ 17	\$ 12	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 45
Idaho MOA	\$ 2	\$ 5	\$ 6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13
LRT MOA*	\$ 9	\$ 14	\$ 25	\$ 25	\$ 14	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 102
Montana MOA	\$ -	\$ -	\$ 15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15
Willamette BiOp - Leaburg Separator	\$ -	\$ 2	\$ 5	\$ 3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10
Sub Total (A)	\$ 13	\$ 35	\$ 68	\$ 40	\$ 14	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 185
CCT - Existing (CHJ Hatchery)	\$ 1	\$ 14	\$ 17	\$ 11							
3LRT - Non-Hatchery Exist/Exp Cap	\$ 3	\$ 3	\$ 3	\$ 3	\$ 2						
3LRT - Exist/Exp Hatchery Capital	\$ 0	\$ 7	\$ 12	\$ 15	\$ 10						
NEOH	\$ 10	\$ 8	\$ 2								
Subtotal (Existing)	\$ 15	\$ 32	\$ 34	\$ 29	\$ 12						
Current Capital Budget	\$ 36	\$ 36				<u>Accum</u>					
Subtotal (A +\$20M**)	\$ 33	\$ 55	\$ 88	\$ 60	\$ 34	\$ 270					
IPR Proposal	\$ 36	\$ 50	\$ 70	\$ 60	\$ 50	\$ 266					
IPR Proposal as % of (A+\$20M)	108%	91%	80%	100%	147%	98%					
*assume \$10M pre-cap exp & \$20M of non-hatch cap is expensed											
**est. non-MOA portion of \$36M											



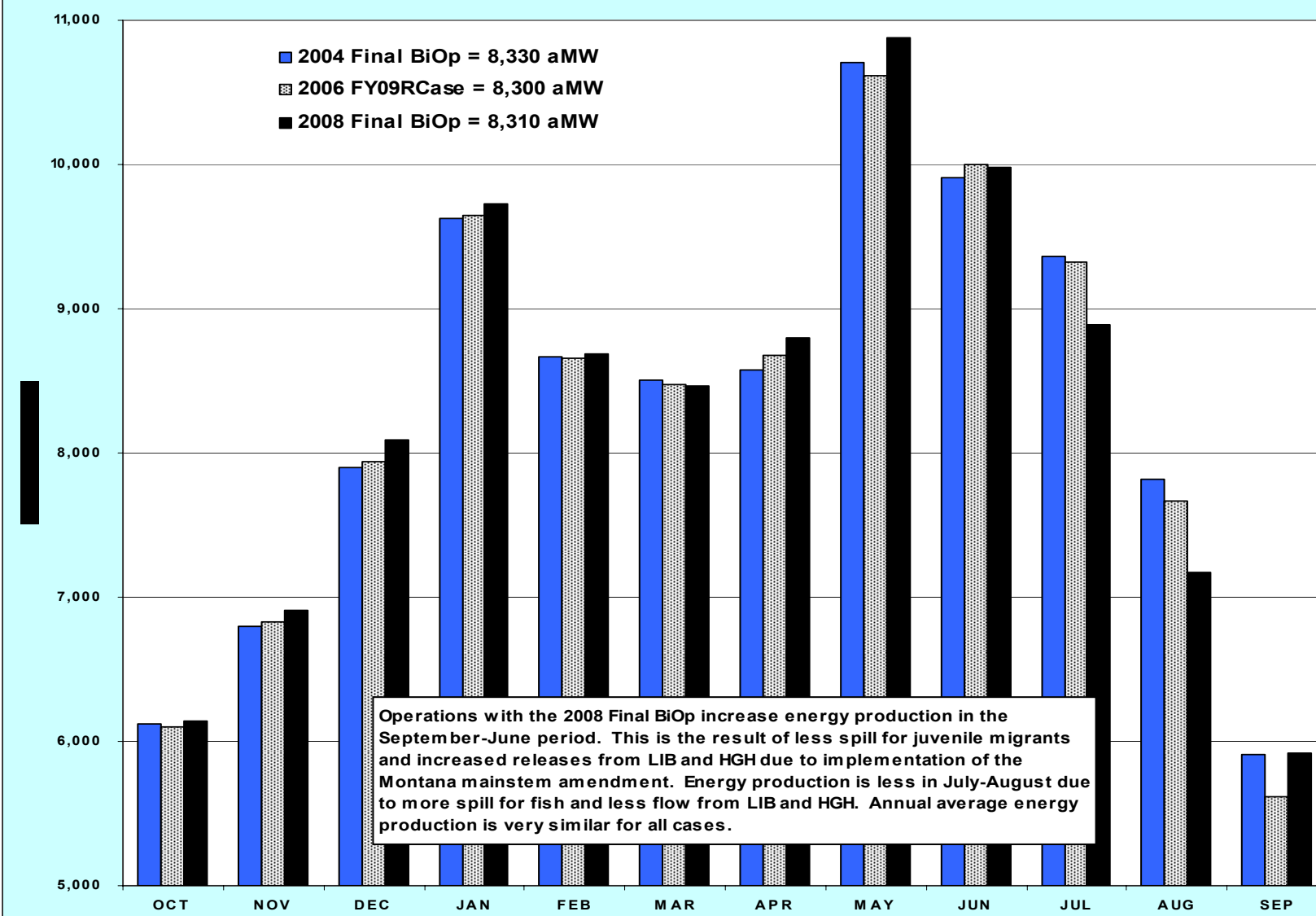
FY08 Capital to Date

Monthly Cost Comparison (Capital)





70-Year Average Hydro Energy Production - FY09 Assumptions



Operations with the 2008 Final BiOp increase energy production in the September-June period. This is the result of less spill for juvenile migrants and increased releases from LIB and HGH due to implementation of the Montana mainstem amendment. Energy production is less in July-August due to more spill for fish and less flow from LIB and HGH. Annual average energy production is very similar for all cases.



Lower Snake Compensation Hatcheries

- **Oregon**

- Lookingglass (Imnaha)
- Wallow (LSC,BC)
- Irrigon

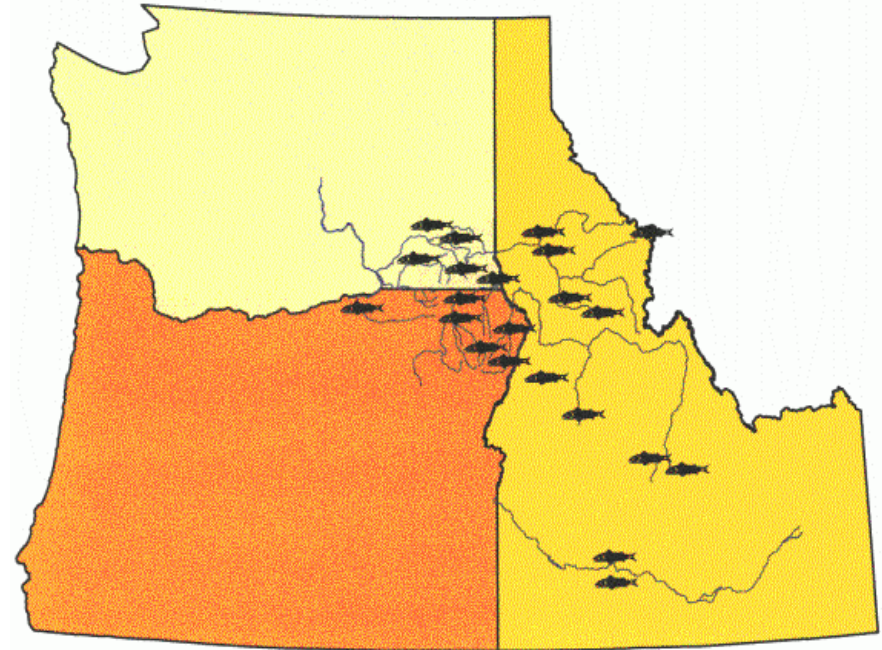
- **Washington**

- Lyons Ferry (Cotton & DP)
- Tucannon (Curl Lk)
- Snake River Lab

- **Idaho**

- Clearwater (CR, Red, Powell)
- Magic Valley
- Hagerman NFH
- McCall (S. Fork)
- Sawtooth (E. Fork)
- Capt J. - Pitt. & Big Canyon
- Dworshak (joint with COE)
- Idaho Fish Health Lab

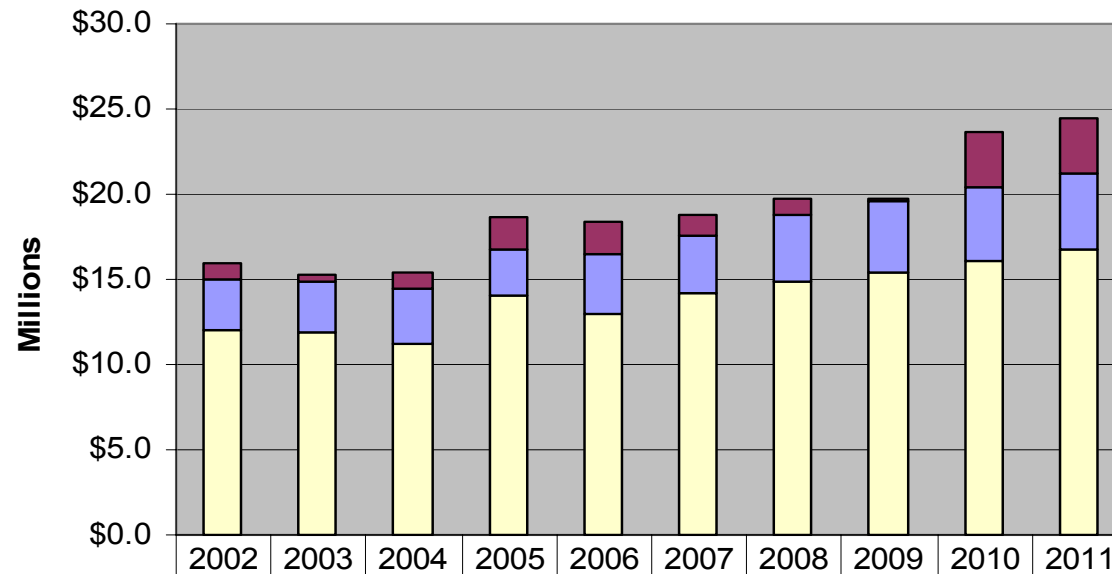
- 26 facilities including 11 hatcheries
- Present value of assets is \$265M
- 75% of facilities built in 1980's





Lower Snake Comp Plan Expenses

LSRCP Total Expenses for a Fiscal Years's Obligation

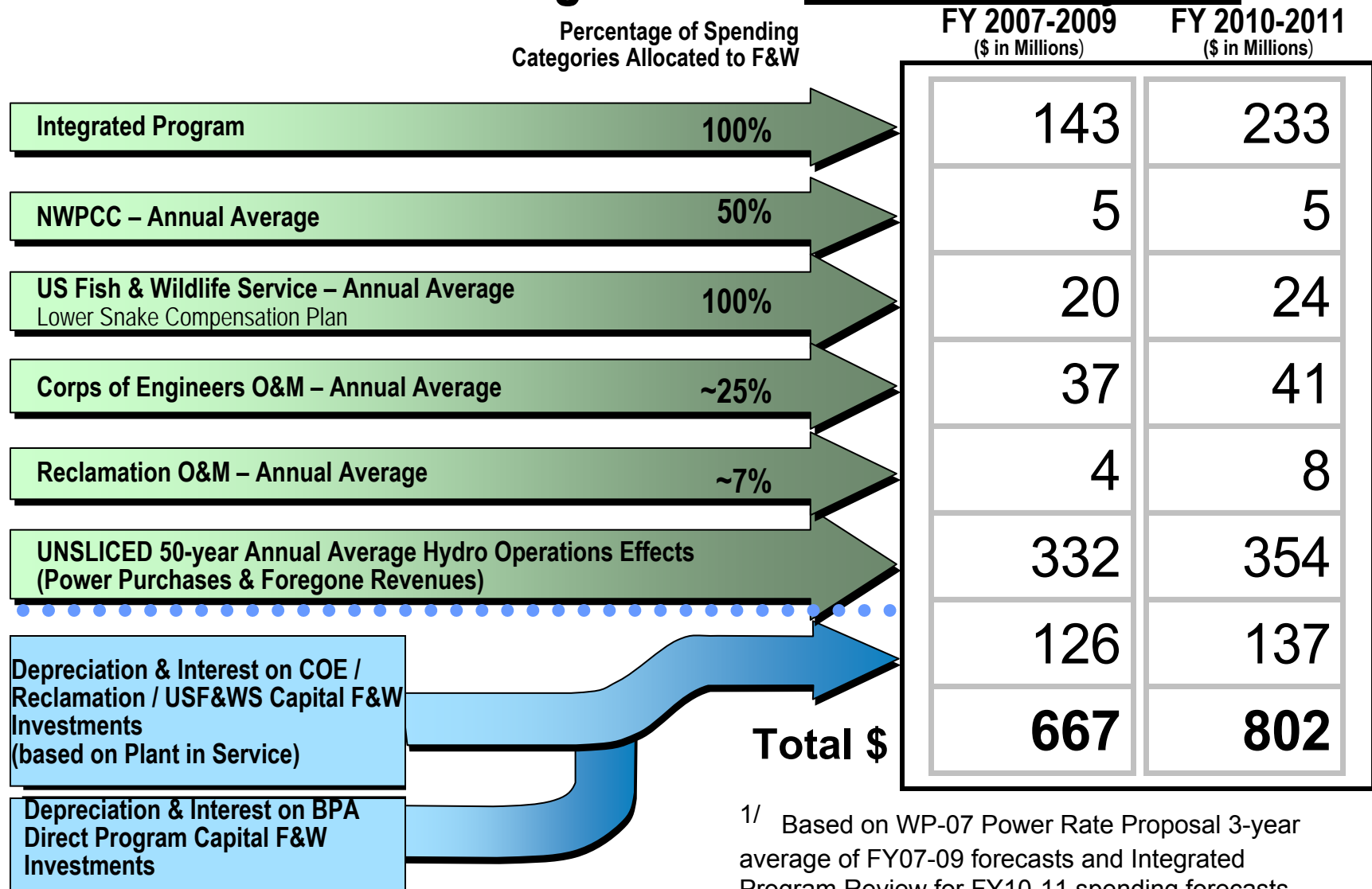


	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
■ NonRecurring Maintenance	\$1.0	\$0.5	\$1.1	\$1.9	\$2.0	\$1.1	\$1.0	\$0.1	\$3.2	\$3.2
■ Evaluation	\$2.9	\$3.0	\$3.2	\$2.7	\$3.5	\$3.5	\$4.0	\$4.1	\$4.3	\$4.5
■ Operations	\$12.1	\$11.9	\$11.2	\$14.1	\$13.0	\$14.1	\$14.8	\$15.4	\$16.1	\$16.8

- FWS believes FY 10 – 11 budget reflects realistic and reasonable effort to:
 - Address nonrecurring maintenance and equipment needs and
 - Control ongoing operation costs required to meet mitigation responsibilities.



BPA's Fish & Wildlife Program: Total Annual Average Cost to BPA Rate Payers ^{1/}



^{1/} Based on WP-07 Power Rate Proposal 3-year average of FY07-09 forecasts and Integrated Program Review for FY10-11 spending forecasts