



PROPOSED ACTION FOR FCRPS OPERATIONS

2007 - 2017

BONNEVILLE POWER ADMINISTRATION

U.S. ARMY CORPS OF ENGINEERS

BUREAU OF RECLAMATION



THE PROPOSED ACTION IS:

- A Biological Assessment for the operation of the FCRPS for ESA-listed fish
- A separate BA prepared by the Bureau of Reclamation for its Upper Snake River projects
- A comprehensive analysis that looks at the combined effects of the FCRPS and Upper Snake actions
- All three documents submitted to NOAA Fisheries August 21, 2007



THE PROPOSED ACTION WILL CONTRIBUTE TO RECOVERY FOR LISTED FISH

- SR Spring/Summer chinook: good/fair
- SR Steelhead: A-Run good, B-Run uncertain – research and targeted habitat improvements
- UC Spring chinook: good
- SR Fall chinook: good
- UC Steelhead: fair
- MC Steelhead: good
- SR Sockeye: aggressive actions to avoid extinction



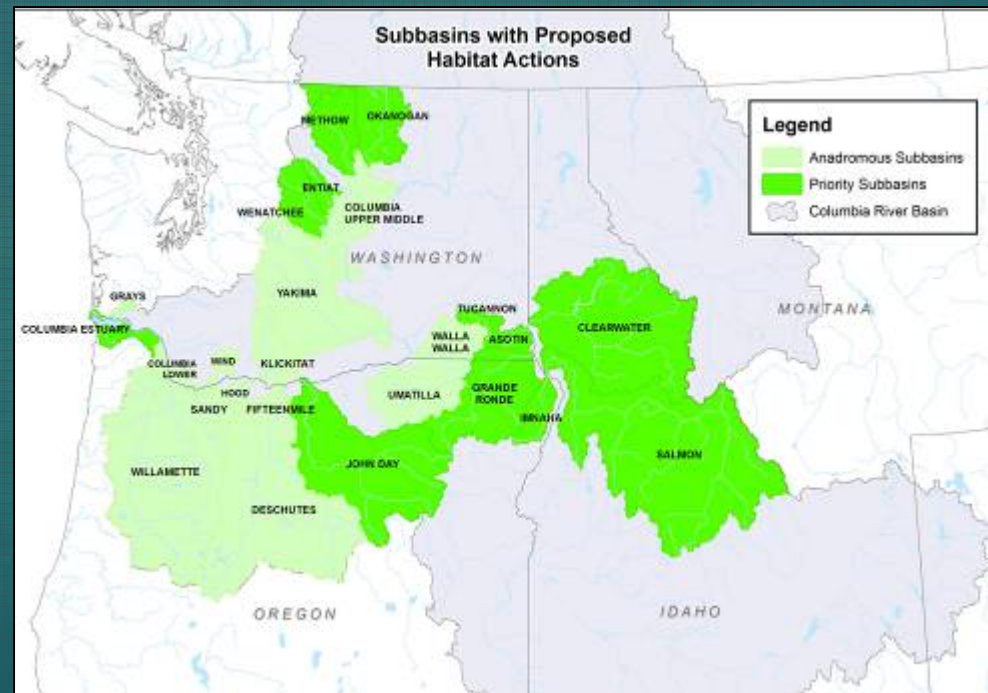
HYDRO IMPROVEMENTS OF \$500 MILLION OVER 10 YEARS

- Commitment to higher performance standards:
 - 96% average or better survival for spring migrants
 - 93% average for summer migrants
- Scheduled commitments to additional surface collectors (RSWs)
- Transport when the science shows it's best for fish
- Improved water management for flow augmentation

EXTENSIVE HABITAT PROGRAM TARGETS NEEDS OF THE FISH

Expand program with specific funding commitments:

- 2007-2009:
\$37 million/year
(75% increase over the
2000 BiOp)
- 2010-2017:
\$45 million/year
- Actions address limiting
factors, focus on species
and populations with the
greatest biological needs



The background of the slide is a dark teal color with a faint, semi-transparent image of a fish swimming underwater. The fish is positioned in the upper left quadrant, facing right. The title text is centered at the top in a light yellow, serif font.

OTHER IMPROVEMENTS IN THE PROPOSED ACTION

- Ensure all hatcheries advance ESA recovery: \$20-30 million for hatchery reform
- Safety net and conservation hatcheries: an additional \$30 million for upriver stocks;
- Selective harvest
- Aggressive predator management

BONNEVILLE DAM 1995-1999 ROUTE OF PASSAGE SURVIVAL ESTIMATES FOR YEARLING CHINOOK

Bonneville 2

B2 survival = 90%

Corner Collector
Survival = N/A

Spillway survival = 98%

Spillway

B1 survival = 90%

Bonneville 1

**Estimated
Dam Survival
91.7%**

Spring Spill Operations:
75 kcfs day/ 120 kcfs (Gas Cap) night

Route Specific
Survival Estimates
from PATH Report
and 2000 BiOp

BONNEVILLE DAM 2004 & 2005 ROUTE OF PASSAGE SURVIVAL ESTIMATES FOR YEARLING CHINOOK

B2 Bypass survival =
98.9%

B2 Turbine survival = 95.8%

Bonneville 2

Corner Collector Survival =
100.0%

Spillway survival =
92.0%

Spillway

Combined Turbine &
Sluiceway survival =
93.1%

Bonneville 1

**Estimated
Dam Survival
95.9%**

**Spring Spill Operations:
100 kcfs 24 hrs/day**

Counihan et al. Final
report by USGS

BONNEVILLE DAM 1995-2006 FISH PASSAGE IMPROVEMENTS

B2 Bypass Outlet Relocation-
moved ~2 mi downstream (2001)

Bonneville 2

Sea Lion Exclusion
Devices (SLEDS 2006)

Guidance efficiency
improvements (ongoing)

B2 Corner Collector (2004)

B2 Corner
Collector
(exit 2004)

Sea Lion Exclusion
Devices (SLEDS 2006)

Spillway

Spillway Flow Deflectors (2002)

Shift priority operations to B2 (2001)

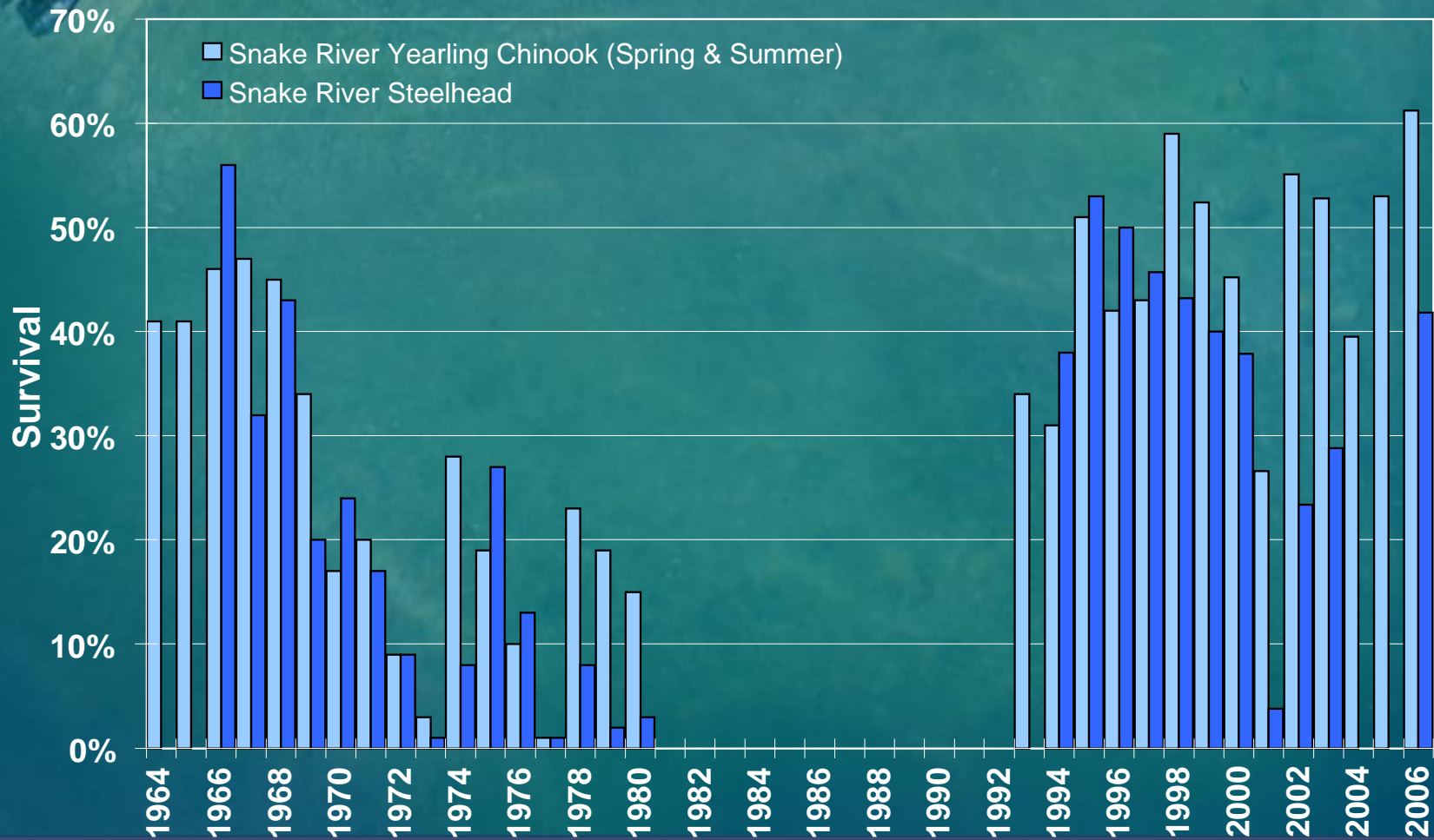
New Generation Turbines MGR's
(ongoing)

Sea Lion Exclusion
Devices (SLEDS 2006)

Bonneville 1



IN-RIVER SURVIVAL OF SNAKE RIVER CHINOOK SALMON AND STEELHEAD





SCIENCE-BASED APPROACH

- Comprehensive biological analysis for each listed stock and “population”
 - Historical trends
 - Current condition
 - Benefits of proposed actions in all Hs
 - Goal is trend to recovery
- Based on best available information from wide range of sources

SCIENCE-BASED APPROACH

(CONTINUED)

■ Proposed actions:

- Are based on collaborative development with sovereigns
- Use empirical information or best professional judgment to quantify benefits
- Address limiting factors
- Are performance based



ADAPTIVE MANAGEMENT

- Research, monitoring and evaluation to answer key uncertainties, refine and improve actions
- Annual progress reports and check-ins at 2009, 2012 and 2015
- “All H” contingency back-up plan if performance standards not met
- Regional oversight group with states and tribes



SCHEDULE

- Sept 6: Public release of proposed action
- Oct 31: NOAA produces draft BiOps
- Fall (TBD): Status conference with Judge
- Jan. '08 Final FCRPS/Upper Snake BiOps