

INTEGRATED SUMMARY TABLE FOR VARIOUS SCENARIOS BASED ON 2002 AVERAGE YEAR HYDROLOGY 6/4/2009

Resource Parameters / Indices	Description of Parameter	Scenario Name									
		Test Scenario #1		Test Scenario #3		Test Scenario #4		Scenario #5		Scenario #6	
		Base Case <i>(Ver. 05/06/2009)</i>		Run-of-River @ 1984 <i>(Ver. 02/5/2009)</i>		Forebay Elevation at or below 1984 feet <i>(Ver. 05/13/2009)</i>		Forebay Fluctuation Between 1984 and 1994 - No Other Operational Constraints <i>(Ver. 05/06/2009)</i>		Run-of-River @ 1994 <i>(Ver. 03/18/2009)</i>	
		Scenario Description									
		Maximum and minimum forebay pool elevation of 1,994 feet NAVD88 ³ and 1,974 feet with summer pool restriction, respectively ² .		Maintain forebay pool elevation at 1,984 feet.		Maximum and minimum forebay pool elevation of 1,984 and 1,974 feet, respectively. If inflows are less than 10k cfs, maximum forebay pool of 1,980 feet.		Maximum and minimum forebay pool elevation of 1,994 feet and 1,984 feet.		Maintain forebay pool elevation at 1,994 feet.	
Operations											
Power Generation	<i>On-Peak³ (MWh) / Offpeak⁴ (MWh) hourly energy</i>	2,987,706	1,122,799	2,288,360	1,702,616	2,759,917	1,153,154	2,945,753	1,182,268	2,394,113	1,778,586
Difference in Power Generation	<i>Difference in On-Peak and Off-Peak (MWh) vs. Base Case: MWh Gain in "blue" and MWh Loss in "red" and " () "</i>			(699,346)	579,817	(227,789)	30,355	(41,953)	59,469	(593,593)	655,787
2007 Energy Revenue	<i>On-Peak³ (\$) / Offpeak⁴ (\$) hourly revenue using actual 2007 prices</i>	\$163,808,490	\$48,909,351	\$120,429,080	\$69,654,410	\$149,699,734	\$49,424,855	\$160,368,761	\$50,947,173	\$126,078,901	\$72,826,229
Difference in 2007 Energy Revenue	<i>Difference in On-Peak and Off-Peak Revenue (\$) vs. Base Case: Revenue Gain in "blue" and Revenue Loss in "red" and " () "</i>			(\$43,379,410)	\$20,745,059	(\$14,108,756)	\$515,504	(\$3,439,729)	\$2,037,822	(\$37,729,589)	\$23,916,878
Wildlife											
Goose Nest - Land-bridging Metaline Island	<i>Total number of days without land-bridging during critical goose nesting period (critical nest period March 15 - May 15, inclusive)⁵</i>	54		55		46		62		62	
Goose Nest - Flooding Metaline Island	<i>Number of days from start of critical goose nesting period without water surface reaching lowest nest elevation surveyed in 2007 (critical nest period March 15 - May 15, inclusive)⁵</i>	32		62		62		32		32	
Recreation											
Boat Ramp Access Boundary Forebay / Metaline Park	<i>Number of hours boat ramp is accessible (greater than 3 feet submerged) during daylight hours (May 25 through September 4)⁶</i>	1,396	1,438	0	948	0	903	1,401	1,438	1,442	1,442
Fish and Aquatics											
Potential Thermal Refugia Area Four Tributary Deltas	<i>Average refugia area (10,000 ft²) and average daily minimum refugia area (10,000 ft²) summed for Flume, Sullivan, Linton, and Sweet creeks from June 30 through September 20</i>	8.0	5.2	4.6	4.4	4.0	3.2	8.2	5.4	9.9	9.8
Tributary Access - Thermal Period Three Tributary Deltas	<i>Percent of time (%) foreset at Sullivan, Sweet, and Sand Creek is exposed and percent of time (%) foreset exposed when tributary flow is expected during the thermal period (June 30 - Sept. 20)</i>	1.6	0.4	2.5	0	16	2.3	0	0	0	0
Tributary Access - Bull Trout Potential Migration Period Three Tributary Deltas	<i>Percent of time (%) foreset at Sullivan, Sweet, and Sand Creek is exposed and percent of time (%) foreset exposed when tributary flow is expected during the Bull Trout potential migration period (Sept. 30 - Nov. 30)</i>	0.6	0	0.8	0	9.6	0.6	0	0	0	0
Stranding Index for SMB Fry Upper Reservoir Reach	<i>Mean daily weighted channel width (ft) and average daily fluctuation (ft) from July 1 through October 31</i>	346	196	19	25	219	67	323	126	<1	0.2
Stranding index for MWF Fry Upper Reservoir Reach	<i>Mean daily weighted channel width (ft) and average daily fluctuation (ft) from Feb 16 through Aug 15</i>	76	28	6.8	8.4	38	11	76	18	<1	0.3
Trapping index for SMB Fry Upper Reservoir Reach	<i>Total area (10,000 ft²) from July 1 through October 31</i>	2,730		720		2,962		2,069		54	
Trapping index for MWF Fry Upper Reservoir Reach	<i>Total area (10,000 ft²) from February 16 through August 15</i>	1,157		590		1,077		982		148	
Effective Spawning for SMB Upper Reservoir Reach	<i>Transect-weighted, reach-averaged ESI width (ft) and ESI/PSI ratio⁷ from May 15 through July 31</i>	13	0.52	15	0.60	14	0.56	13	0.54	20	0.83
Effective Spawning for MWF Upper Reservoir Reach	<i>Transect-weighted, reach-averaged ESI width (ft) and ESI/PSI ratio⁷ from October 15 through January 15</i>	336	0.68	434	0.95	400	0.89	358	0.70	545	0.99
WUA for Adult CTT - Upper Reservoir Reach - Summer Curve	<i>Average daily minimum channel width (ft²/ft) and average daily fluctuation (ft²/ft) for Spring (April 1 through June 29) and Fall (September 21 through October 31) periods⁸</i>	392	102	377	3.7	345	29	407	98	499	6.5
WUA for Adult CTT - Upper Reservoir Reach - Winter Curve	<i>Average daily minimum channel width (ft²/ft) and average daily fluctuation (ft²/ft) for winter (November 1 to March 31) period</i>	135	133	129	2.2	111	18	143	139	226	8.5
WUA for Adult BT - Upper Reservoir Reach - Summer Curve	<i>Average daily minimum channel width (ft²/ft) and average daily fluctuation (ft²/ft) for Spring (April 1 through June 29) and Fall (September 21 through October 31) periods⁸</i>	385	78	371	3.8	345	22	399	73	469	6.0
WUA for Adult BT - Upper Reservoir Reach - Winter Curve	<i>Average daily minimum channel width (ft²/ft) and average daily fluctuation (ft²/ft) for winter (November 1 to March 31) period</i>	173	131	160	3.3	137	23	186	132	296	12
WUA for Periphyton Upper Reservoir Reach	<i>Average channel width (ft²/ft) and average daily fluctuation (ft²/ft) for September</i>	320	50	299	4.8	262	39	353	45	404	0.6
WUA for BMI Canyon Reach	<i>Average channel width (ft²/ft) and average daily fluctuation (ft²/ft) for September</i>	92	37	112	0.4	104	24	101	37	122	0.5
WUA for BMI Upper Reservoir Reach	<i>Average channel width (ft²/ft) and average daily fluctuation (ft²/ft) for September</i>	499	56	491	3.0	443	30	568	77	659	3.6

Notes:
1 - All elevations are in feet NAVD88. (NAVD88 = NGVD29 + 4 feet)
2 - Summer pool restriction: maintains forebay water surface elevations above 1,984 feet NAVD88 from 0600 through 2000 hours; at night during the summer (2000 through 0600 hours) maintain forebay water surface elevation above 1,982 feet NAVD88 from the Friday before Memorial Day weekend to the Tuesday after Labor Day.
3 - On-peak hours from hour ending (HE) 0700 through 2200 Pacific Time, Monday through Saturday (16 hours per day), six days per week excluding holidays.
4 - Off-peak hours from HE 2300 through 0600 Pacific Time, Monday through Saturday; all 24 hours on Sunday and holidays.
5 - Total number of days during critical goose nesting period is 62.
6 - Total number of possible daylight hours is 1,442.
7 - Effective Spawning Index (ESI) is the width representing the portion of PSI width that remains inundated for the duration of the incubation period. Potential Spawning Index (PSI) is the width representing the portion of the transect with suitable depth and substrate for the spawning adults.
8 - Periods exclude values when average daily mainstem temperatures exceed 18°C.