

1.3 Modifications to the 2008/2010 RPA

In the course of conducting this supplemental consultation, NOAA Fisheries concludes that it is appropriate to make certain revisions to the 2008/2010 RPA to address the currently available scientific information. The sections referenced below discuss these revisions in detail. The corresponding original RPA action descriptions for the actions in this table are hereby modified with these new descriptions for purposes of future RPA implementation.

Table 1.3-1. 2014 Supplemental Opinion modifications to the 2008/2010 RPA.

RPA Action No.	Description	Modified RPA Language	Location in 2014 Supplemental Opinion
29: Table 2	Spill Operations to Improve Juvenile Passage	See Revised RPA Action 29 Table 2 in Figure 1.3-1 below.	Section 3.3.1.1
30: Table 3 and Table 4	Juvenile Fish Transportation in the Columbia and Snake Rivers	<p>Table 3 is no longer in effect. Instead the Action Agencies will continue transport operation at Snake River collector dams according to the following criteria and schedule (See Section 3.3.3.4 Juvenile Transport and IP RPA Action 30 for more details):</p> <p style="padding-left: 40px;">Annual Review of Information</p> <ul style="list-style-type: none"> □ Data on fish survival, adult returns, current year river conditions, and water supply forecast will be reviewed with RIOG each year to determine the best operation for the fish. <p style="padding-left: 40px;">Transport Start Date</p> <ul style="list-style-type: none"> □ TMT will review the results of transport studies annually and provide an annual recommendation on how to operate the juvenile transport program to achieve the goal of transporting about 50% of juvenile steelhead. □ Planning dates to initiate juvenile transport at Lower Granite Dam will be April 21 to April 25, unless the Corps adopts a recommendation by TMT that proposes a later start date (No Later Than May 1) and accompanying alternative operation in their annual recommendation to achieve the goal of transporting about 50% of juvenile steelhead. □ Transport will begin up to 4 days and up to 7 days after the Lower Granite start date at Little Goose and Lower Monumental dams, respectively. □ Transport will continue until approximately September 30 at Lower Monumental and through October 31 at Lower Granite and Little Goose dams. <p>Table 4 is no longer in effect. Transportation operations have ceased at McNary Dam (Section 3.3.3.4 Juvenile Transport and IP RPA Action 30).</p>	Section 3.3.3.4
31	Configuration and Operational Plan Transport Strategy	<p>McNary Dam will no longer be considered in the Configuration and Operational Plan Transportation Strategy.</p> <p>Transportation operations have ceased at McNary Dam (Section 3.3.3.4 Juvenile Transport and IP RPA Action 30).</p>	Section 3.3.3.4
32	Fish Passage Plan	The Action Agencies will no longer consider transport at McNary Dam in the development of Transportation Strategy Configuration and Operation Plan	Section 3.3.3.4

RPA Action No.	Description	Modified RPA Language	Location in 2014 Supplemental Opinion
38	Pile Dike Removal Program	<p>RPA Action 38 is no longer required.</p> <p>Based on the available information, it is not possible to determine whether the removal of pile structures would actually provide survival benefits to juvenile salmon and steelhead. All survival benefit units attributed to this program in the Action Agencies' 2007 Biological Assessment will now be acquired by implementing additional projects under RPA Action 37.</p>	Section 3.2.3
43	Northern Pikeminnow Management Program	<p>The Action Agencies will continue to annually implement the base program and continue the general increase in the reward structure in the northern pikeminnow sport-reward fishery consistent with the increase that started in 2004.</p> <p>The Action Agencies will fund and update northern pikeminnow exploitation and consumption models using best available information including a range of estimated inter and intra-specific compensation, as needed, to more accurately estimate salmonid survival benefits of the NPMP.</p> <p>The Action Agencies will evaluate the feasibility of using improved electrofishing methods to meet the current monitoring goals while reduce take of ESA listed salmonids.</p> <p>The Action Agencies will evaluate the effectiveness of focused removals of northern pikeminnow at Columbia and Snake River Dams to investigate the cost and benefits of dam angling in increasing juvenile salmonid survival.</p> <p>Implementation Plans, Annual Progress Reports, and Comprehensive RPA Evaluations</p> <p>NPMP actions will be described in future Implementation Plans.</p> <p>Annual progress reports will describe actions taken, including:</p> <ul style="list-style-type: none"> □ Number of pikeminnow removals □ Estimated reduction of juvenile salmon consumed □ Average exploitation rate □ Effectiveness of focused removals at mainstem dams □ Results of periodic program evaluations (including updates on age restructuring and compensatory responses) <p>NPMP actions taken will be summarized in future Comprehensive Evaluation Reports)</p>	Section 3.5.1
46	Double-crested Cormorant Predation Reduction	<p>The FCRPS Action Agencies will develop a cormorant management plan (including necessary monitoring and research) and implement warranted actions to reduce cormorant predation in the estuary to Base Period levels (no more than 5,380 to 5,939 nesting pairs on East Sand Island).</p> <p>Implementation Plans (and planned completion dates)</p> <ul style="list-style-type: none"> □ Environmental Impact Statement (EIS)/Management Plan will be completed by late 2014 □ Record of Decision will be issued late 2014 □ Actions will begin to be implemented in 2015 <p>Annual Progress Report</p> <ul style="list-style-type: none"> □ Progress will be documented in the Action Agencies' annual implementation reports 	Section 3.5.2

RPA Action No.	Description	Modified RPA Language	Location in 2014 Supplemental Opinion
48	Other Avian Deterrent Actions	The Corps will monitor avian predator (terns, cormorants, and gulls) activity and continue to implement and improve avian deterrent programs at all lower Snake and Columbia River dams. This program will be coordinated through the Fish Passage Operations and Maintenance Team and included in the Fish Passage Plan (Section 3.5.2 Terns and Cormorants and IP RPA Action 48).	Section 3.5.2

Table 2. Proposed Spring and Summer Project Voluntary Spill Operations.¹

Project	Proposed 2014 BiOp Spring Spill	Spring Planning Dates	Proposed 2014 BiOp Summer Spill	Summer Planning Dates
Bonneville	100 kcfs	4/10-6/15	95 kcfs and 85 kcfs / 121 kcfs	6/16 ² -8/31
The Dalles	40%	4/10-6/15	40%	6/16 ² -8/31
John Day	April 10-April 27: 30% April 27-June 15: 30% and 40% ^{2/}	4/10-6/15	June 16-July 20: 30% and 40% July 20-August 31: 30%	6/16 ² -8/31
McNary	40%	4/10-6/15	50%	6/16 ² -8/31
Ice Harbor	April 3-April 28: 45 kcfs/Gas Cap April 28-May 30: 30% and 45 kcfs / Gas Cap	4/3-5/31	June 1-July 13: 30% and 45 kcfs/Gas Cap June 13-August 31: 45 kcfs / Gas Cap	6/1 ³ -8/31 ⁴
Lower Monumental	Gas Cap (~27 kcfs) (bulk pattern)	4/3-5/31	17 kcfs	6/1 ³ -8/31 ⁴
Little Goose	30%	4/3-5/31	30%	6/1 ³ -8/31 ⁴
Lower Granite	20 kcfs	4/3-5/31	18 kcfs	6/1 ³ -8/31 ⁴

¹ Voluntary spill operations and planning dates may be adjusted (increased or decreased) for research purposes or through the adaptive management process (to better match juvenile outmigration timing, and/or to achieve or maintain performance standards).

² Transitions from spring to summer spill have changed from July 1 to June 16 based on updated run timing of subyearling fall Chinook salmon. For further information see the 2007 FCRPS Biological Assessment, Attachment B.2.1.1, Section 3.5 (USACE et al. 2007a).

³ The 2014–2018 IP leaves it to NOAA Fisheries to develop alternative criteria for determining the spring to summer transition dates. NOAA plans to base this decision on the estimated 95% passage date of wild spring juvenile migrants (yearling Chinook salmon and steelhead smolts) or combined hatchery and wild smolts for sockeye salmon) at Lower Granite Dam. The spring to summer spill transition at Lower Granite Dam will be based on this 95% passage estimate, and would occur no earlier than June 1. The transition date at Little Goose Dam, Lower Monumental Dam, and Ice Harbor Dam will be staggered to factor for fish travel time from Lower Granite Dam to these projects. The stagger will be based on in-season river flow conditions and a calculation of water travel time between Lower Granite Dam and the other dams. See Section 3.3.1.1 of the 2014 Supplemental Biological Opinion.

⁴ Beginning August 1, curtailment of summer spill may occur first at Lower Granite Dam if subyearling Chinook collection counts fall below 300 fish per day for 3 consecutive days (beginning July 29, 30, and 31 for August 1 curtailment). Using the same 300 fish criterion, the curtailed spill would then progress downstream with each successive dam on the Snake River, with spill at Little Goose Dam ending no earlier than 3 days after the termination of spill at Lower Granite Dam, and ending at Lower Monumental Dam no earlier than 3 days after the termination of spill at Little Goose Dam assuming the 300 fish criterion has been met at those projects. Spill would be curtailed at Ice Harbor Dam no earlier than 2 days after Lower Monumental Dam, without use of the 300 fish criterion. Spill will end at 0600 hours on the day after the necessary curtailment criteria are met. If after cessation of spill at any one of the Snake River projects on or after August 1, subyearling Chinook collection counts again exceed 500 fish per day for two consecutive days, spill will resume at that project only. Thereafter, fish collection count numbers will be reevaluated daily to determine if spill should continue using the criteria above (300 fish per day) until August 31.

Additionally, in any year where natural-origin adult returns of Snake River fall Chinook salmon are equal to or less than 400 fish, summer spill in the following year would continue at Snake River projects through August 31, even in years where subyearling Chinook counts fall below the 300 fish per day for three consecutive days as stated above. See Section 3.3.1.1 of the 2014 Supplemental BiOp.

Figure 1.3-1. RPA Action 29 revised Table 2. Table 2 has been revised to reflect currently proposed operations and decision criteria.