

**BPA Comments on the ODEQ and WDOE**  
***Evaluation of the 115 Percent Total Dissolved Gas Forebay Requirement***  
October 6, 2008

**Introduction**

BPA appreciates the opportunity to comment on Washington Department of Ecology and the Oregon Department of Environmental Quality's draft "Evaluation of the 115 Percent Total Dissolved Gas Forebay Requirement" report. BPA has already coordinated technical comments on this paper with the USACE. The USACE submitted these comments to the AMT on October 6, 2008. The purpose of BPA's separate comments document is to highlight several issues and points that BPA feels are of importance for ODEQ and WDOE to consider.

**Corps studies have demonstrated that the forebay gages as currently configured accurately reflect the TDG levels in the dominant aquatic habitat of the hydroelectric dams. BPA supports the Corps findings.**

- As the lead entity for FCRPS operations and TDG research, the Corps has performed numerous studies since the mid-1990s regarding its FCRPS projects and fish passage measures needed to enhance survival. These collaborative efforts included the Division and District offices of the Corps, the Engineering Research and Development Center, the Water Quality Team, and several contractors in the Anadromous Fish Evaluation Program. The research has demonstrated that the forebay gages are representative of conditions present, despite the presence of environmental variables that commonly occur throughout the river.
- State development of the TDG TMDLs for the Columbia River relied on the Corps research and the collaborative efforts of the Regional Forum's Water Quality Team.

**Comparison of Federal and Fish Passage Center Spill Analyses**

Two differing spill volume analyses, one by the COE and BPA and the other by the Fish Passage Center, provide the most pertinent differences in information submitted to the AMT. The vastly different volumes of spill increases demonstrated by these analyses "set the stage" for the dissimilar results regarding juvenile survival found in subsequent analyses.

There are two primary differences between the COE/BPA analyses and the FPC analysis:

- 1.) Involuntary spill is removed from the FPC analyses. This is a *modification* of the actual operation that occurred in the years the FPC analyzed, in so much that involuntary spill occurred in those years. Indeed, involuntary spill occurs in all but the lowest of water years. The COE and BPA analyses incorporated the reality of involuntary spill.
- 2.) The FPC ignores 2008 FCRPS BiOp spill operations. NOAA Fisheries has approved this spill regime (with substantial input from the region) and has found that it will avoid jeopardy to listed salmonids and put them on a trend towards

recovery. The Action Agencies are legally obligated to follow NOAA's 2008 FCRPS BiOp spill regime.

- Because the FPC analysis uses different spill regimes and removes involuntary spill it vastly overstates the amount of “fish spill” that would occur in the FPC’s Scenarios C and D.
- The FPC’s overstatement of spill volumes occurs in two operational circumstances:
  - The first is under conditions when flow is *greater than* turbine or market capacity.
    - In the COE and BPA analyses this flow passes a dam as involuntary spill.
    - In the FPC’s analyses there is no involuntary spill, so any spill is automatically derived from flow that is assumed to otherwise be used to generate electricity and therefore becomes voluntary “fish spill.”
  - The second is when flow is *less than* turbine or market capacity.
    - The COE and BPA analyses use the spill regime delineated by NOAA Fisheries in the 2008 FCRPS BiOp.
    - The FPC replaces these required spill operations with an unspecified spill operation in Scenario C, and with a 24/7 spill to the gas cap operation in Scenario D.
- In conclusion, the only way to achieve the very high spill volumes in the FPC’s Scenarios C and D is by ignoring the reality of involuntary spill in circumstances where flow is greater than turbine or market capacity, and by altering the 2008 FCRPS BiOp spill regime *in addition to* removing the 115% forebay TDG standard in circumstances when flow is less than turbine or market capacity. Altering spill operations is precisely the sort of “management decision” that WDOE and ODEQ have said is not under their purview.