

MEMORANDUM FOR THE RECORD

**TITLE** - 16BLU01 Ramp Rate  
**DATE** - 15 March 2016  
**PROJECT**- Blue River Dam  
**RESPONSE DATE** - 30 March 2016

**Description of the problem**

Ramp rates of -0.26 and -0.30 feet per hour were observed on 10 March, 2016 between 18:00 and 20:00 below Blue River Dam. The criterion for down-ramping at night detailed in the Biological Opinion for the Operation of Willamette Valley projects is -0.1 feet per hour, thus, ramp rates deviated from criteria as much as 2 inches during a flow decrease made at the dam (Total Stage Change  $\approx$  -3.5 inches).

**Dates of impacts**

10 March, 2016

**Expected impacts on fish**

Ramp rate criteria are primarily designed to prevent fish stranding (usually fry).

**Comments from agencies**

-----Original Message-----

From: Anne Mullan - NOAA Federal [mailto:anne.mullan@noaa.gov]  
Sent: Monday, March 21, 2016 3:16 PM  
To: Walker, Christopher NWP  
Cc: Stephanie Burchfield - NOAA Federal  
Subject: [EXTERNAL] Re: MFR - Blue River ramp rate (16BLU01, Notification to Services) (UNCLASSIFIED)

Hi Christopher,  
NMFS has no comment on the Blue River Dam ramp rate deviation.  
best, Anne

Please email or call with questions or concerns.  
Thank you,

Chris Walker  
NWP Operations Division Fishery Section  
503.808.4316  
[Christopher.E.Walker@usace.army.mil](mailto:Christopher.E.Walker@usace.army.mil)