



# Oregon

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## Department of Fish and Wildlife

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### **SYSTEM OPERATIONAL REQUEST: #2001-ODFW-01**



• *This System Operational Request has been prepared and is submitted by the Oregon Department of Fish & Wildlife.*

**TO:** Brigadier General Strock    **COE-NPD**  
William Branch                    **COE-Water Management**  
Cindy Henriksen                 **COE-RCC**  
Doug Arndt                        **COE-P**  
Col. Randall J. Butler           **COE-Portland District**  
Lieut. Col. W.E. Bulen, Jr.     **COE-Walla Walla District**  
J. William McDonald           **USBR-Boise Regional Director**  
Steven Wright                   **Acting BPA-Administrator**  
Greg Delwiche                   **BPA-PG-5**

**FROM:** Christine Mallette

**DATE:** July 3, 2001

**SUBJECT:** Dworshak Operations

#### **SPECIFICATIONS:**

Beginning July 9 and continuing through at least August 31, 2001, release 10 Kcfs daily at Dworshak, as long as the decision by the Federal Executive Group to not provide summer spill is in effect.

Maintain temperature regulation at 48°F.

#### **JUSTIFICATION:**

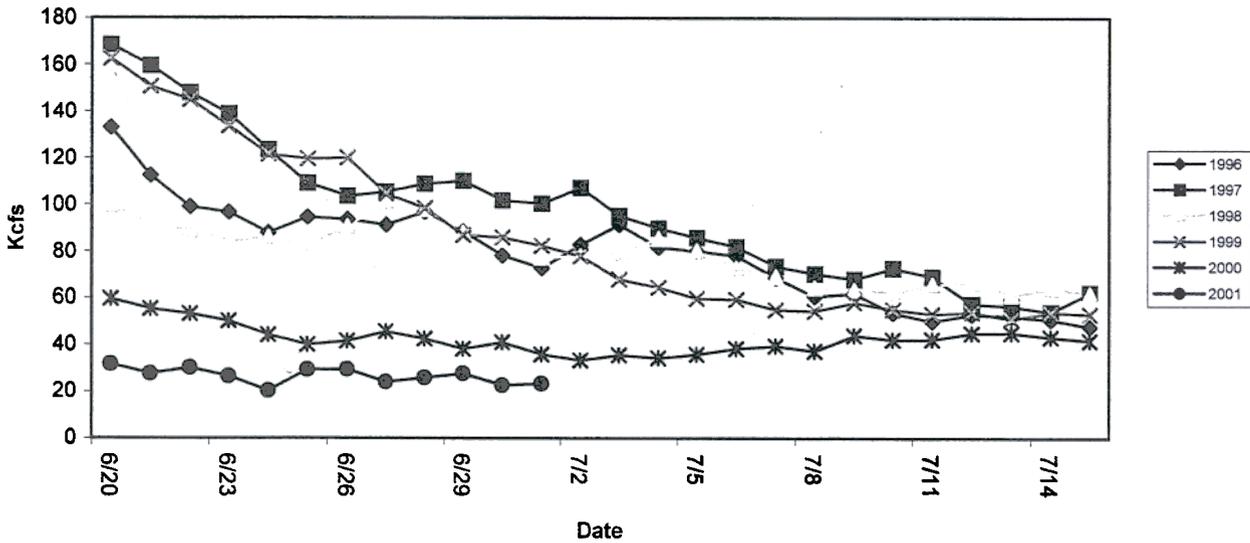
Research conducted by both National Marine Fisheries Service and the US Fish and Wildlife Service has concluded that flow augmentation from Dworshak Reservoir provides a significant survival benefit to juvenile migrating subyearling chinook salmon. This benefit accrues from both a reduction in the water temperature in Lower Granite Reservoir and an increase in flow. The temperature at the Lower Granite forebay monitor is indicating a daily average temperature of 68.9° F, with hourly readings as high as 73°F, increasing as anticipated based on weather conditions. Water quality modeling conducted by both the EPA and U.S. Army Corps of



Engineers has shown releases of cool water from Dworshak Reservoir can cool the water temperature in Lower Granite Reservoir.

In addition, flows at Lower Granite are far below the flow targets contained in the 2000 Biological Opinion. The following graph shows flows this year compared to the past five years. As seen in the graph the flows are considerably less than normally occur during this time period in more “near average” to “above average” years. Flows over the past five days averaged approximately 25 Kcfs.

### Lower Granite Flows



The migration of fall chinook from the lower Snake is well underway. Passage indices of subyearling chinook had shown a steady increase for the past several weeks. However, under the present flow regime the passage indices of subyearling chinook at Lower Granite Dam have steadily decreased over the past several days, a trend not usually observed at this time of the year based on past years' data. Based on this information it is imperative to continue flow augmentation from Dworshak.

Source: Fish Passage Center

Updated: 7/3/01 10:45

## Two-Week Summary of Passage Indices

\* See sampling comments <http://www.fpc.org/currentDaily/smpcomments.htm>  
 this means that one or more of the sites on this date had an incomplete or biased sample.

### COMBINED SUBYEARLING CHINOOK

Date	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MGN (INDEX)	JDA (INDEX)	BO2 (INDEX)	
06/19/2001	---	0	---	---	10,880	410	30	53	109,060	22,270	25,293	
06/20/2001	*	---	0	---	2	11,740	215	12	43	196,000	22,200	27,505
06/21/2001	*	---	0	---	0	12,300	264	68	52	157,250	11,440	---
06/22/2001	*	---	---	---	1	4,940	724	144	51	87,281	8,150	22,667
06/23/2001	---	---	---	---	---	12,160	1,584	60	122	188,200	8,760	28,218
06/24/2001	*	---	---	---	---	22,080	2,180	96	87	292,500	26,670	19,988
06/25/2001	---	---	---	---	0	7,180	610	60	217	500,000	35,800	18,419
06/26/2001	---	---	---	---	1	14,940	3,137	352	387	448,400	15,050	14,915
06/27/2001	---	---	---	---	0	11,940	2,151	90	520	491,100	54,350	23,832
06/28/2001	---	---	---	---	0	10,240	780	50	246	356,800	31,500	22,039
06/29/2001	---	---	---	---	0	6,620	600	84	243	327,697	22,150	28,503
06/30/2001	*	---	---	---	---	6,800	2,556	132	184	525,360	65,250	39,645
07/01/2001	---	---	---	---	---	4,140	1,485	196	200	665,200	28,100	19,842
07/02/2001	---	---	---	---	---	4,860	955	64	128	440,900	11,970	18,633
07/03/2001	---	---	---	---	---	---	---	---	---	---	---	---
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>140,820</b>	<b>17,651</b>	<b>1,438</b>	<b>2,533</b>	<b>4,785,748</b>	<b>363,660</b>	<b>309,499</b>	
<b># Days:</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>8</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>13</b>	
<b>Average:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>10,059</b>	<b>1,261</b>	<b>103</b>	<b>181</b>	<b>341,839</b>	<b>25,976</b>	<b>23,808</b>	
<b>YTD</b>	<b>1</b>	<b>1</b>	<b>13</b>	<b>31</b>	<b>337,560</b>	<b>22,643</b>	<b>9,542</b>	<b>4,287</b>	<b>5,677,187</b>	<b>446,535</b>	<b>1,609,637</b>	

\* See sampling comments <http://www.fpc.org/currentDaily/smpcomments.htm>

These data are preliminary and have been derived from various sources. For verification and/or origin of these data, contact the operators of the Fish Passage Data System at (503) 230- 4099