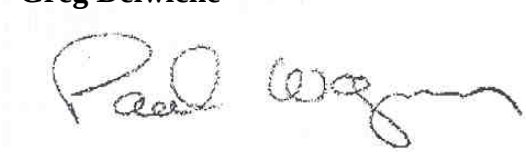
SYSTEM OPERATIONAL REQUEST: #2007-5

The following State, Federal, and Tribal Salmon Managers have participated in the preparation and support this SOR, Oregon Department of Fish and Wildlife, Washington Department of Fish and Wildlife, Idaho Department of Fish and Game, NOAA Fisheries, US Fish and Wildlife Service, Shoshone-Bannock Tribes, and the Columbia River Inter-Tribal Fish Commission.

TO:	**Brigadier General Gregg F. Martin**	**COE-NWD**
	James D. Barton	**COE-Water Management**
	Cathy Hlebechuk	**COE-RCC**
	Witt Anderson	**COE-P**
	Col. Thomas E. O'Donovan	**COE-Portland District**
	LTC Anthony Hofmann	**COE-Walla Walla District**
	J. William McDonald	**USBR-Boise Regional Director**
	Stephen J. Wright	**BPA-Administrator**
	Greg Delwiche	**BPA-PG-5**



FROM: Paul Wagner Chairperson, Salmon Managers

DATE: April 26, 2007

SUBJECT: Bonneville Dam Operations for Spring Creek Hatchery Release on May 1, 2007

SPECIFICATIONS:

1) The Salmon Managers listed above request the Action Agencies to operate the units at Bonneville Second Powerhouse equipped with gap closure devices, at the low end of the 1% efficiency range. This operation should be implemented beginning at 0001 hours on May 2 and continue for 72 hours, or longer, if the majority (95%) of Spring Creek Hatchery fish continue to pass the project.
2) If mortality rates in the sample at any time meet, or exceed 2%, spill should be increased from the 100 Kcfs to the level of the gas cap spill.

JUSTIFICATION:

Thus far this season there have been two releases of subyearling tule fall Chinook from this hatchery. Both releases have been detected at the Bonneville sampling facility with mortality rates significantly higher than normally observed. The last release on April 12 was detected at the monitoring facility beginning at 0645 on April 13th. A sub-sample taken after two hours of collection (7 am to 9 am) found 10% mortality in the 1,232 fish sample. The FPAC met

and requested that the units at Bonneville Second Powerhouse equipped with gap closure devices operate at the low end of the 1% efficiency range. Subsequent to this change, the mortality rates decreased for the remainder of this hatchery group passage.

A third release of 3.5 million subyearling tule fall Chinook is scheduled for May 1, 2007. The survival of this release is of particular concern given the unexpected mortality incurred by the March and April releases. While it is not specifically known that the modifications made to the units equipped with gap closure devices are causing the mortality of the Spring Creek fish, it would be prudent to implement this small change to the project operations prior to the arrival of this third release of fish.

Juvenile Bypass Mortalities for releases from Spring Creek NFH, 2001-2007

	Average Mortality		
	March	April	May
2006	0.2%	0.1%	0.4%
2005	0.4%	0.3%	0.2%
2004	0.1%	1.7%	0.3%
2003	0.7%	0.1%	0.0%
2002	2.0%	0.3%	0.3%
2001	0.1%	0.1%	—
average	0.6%	0.4%	0.2%

		range
2007	March	
	5.1%	(1.6 - 11.7)
	3.6%	(2.3 - 4.5)
2007	April	
	2.4%	(0.0 - 7.8)