CENWP-OD 10 April 2014

## MEMORANDUM FOR THE RECORD

Subject: Final minutes for the 10 April 2014 FPOM TDA Split Flows Task Group meeting.

The meeting was held in the Columbia Room at CRITFC. In attendance:

Last	First	Agency	Office/Mobile	Email
Baus	Doug	USACE-RCC	503-808-3995	Douglas.m.baus@usace.army.mil
Benner	Dave	FPC		dbenner@fpc.org
Chockley	Brandon	FPC		
Conder	Trevor	NOAA		Trevor.conder@noaa.gov
Cordie	Bob	NWP-TDA		Robert.p.cordie@usace.army.mil
Fredricks	Gary	NOAA	503-231-6855	Gary.fredricks@noaa.gov
Kiefer	Russ	IDFG		
Klatte	Bern	USACE-NWP	503-808-4318	Bernard.a.klatte@usace.army.mil
Kostow	Kathryn	ODFW		Kathryn.E.Kostow@state.or.us
Lorz	Tom	CRITFC		lort@critfc.org
Lut	Agnes	BPA		axlut@bpa.gov
Mackey	Tammy	NWP	503-961-5733	Tammy.m.mackey@usace.army.mil
Petersen	Christine	BPA		chpetersen@bpa.gov
Sears	Sheri	Colville Tribes		sheri.sears@colvilletribes.org
Stansell	Robert	NWP-FFU		
Rerecich	Jon	NWP	503-808-4779	Jonathan.g.rerecich@usace.army.mil
VanDyke	Erick	ODFW		erick.s.vandyke@state.or.us
Wills	David	USFWS		David_wills@fws.gov
Wright	Lisa	NWD-RCC		Lisa.s.wright@usace.army.mil

Kiefer, Sears, called in.

## April birthdays include: Medina and Cordie

HAPPY BIRTHDAY!

- 1. Documents provided for this meeting.
  - 1.1. Fredricks' 2013 4-9 TDA Fall Spill Test Review word document
  - 1.2. TDA Fisheries'
    - **1.2.1.** TDA split flow 13 NL passage excel spreadsheet
    - **1.2.2.** FFU93 SPLLATTR word document
    - **1.2.3.** *SPILLTDA95* pdf.
    - **1.2.4.** *TDA split flow ACOE ladder use data* excel spreadsheet
    - **1.2.5.** TDA split flows Burke et al The Dalles and John Day powerpoint presentation

## 2. Action Items.

**2.1. Rerecich-** tags and study expansion. Can antennas be in the choke points and the entrance?

- **2.2. Stansell-** further refine the study proposal.
- **2.3.** Lut- will BPA support a test beginning 1 September? What amount is agreeable?
- **2.4. Klatte** week of 14 July may be an opportunity to visit ERDC to test spill patterns.
- **3.** Fredricks talked through his memo. He is proposing a test with spill between 10-30kcfs. Rerecich said there may be 400 tags available for a test. Cordie said the tags would help determine if 25,000 fish are too many in the ladder. If the forecast is correct, there will be a lot of fish moving through the system this year. Fredricks said it would be wise to have a plan to test and implement should we have the right conditions.
- **4.** What is considered crowded at TDA? There are three constriction points at TDA. Exit, count window, and 180 bend. Fredricks anticipates the trigger for TDA would be less than BON because of the ladder size and the fact that there is only one effective ladder at TDA. Fredricks and Cordie said they used M. Bell's equation for fish densities and came up with about 120K fish. Fredricks added that NOAA criteria also has adjustments made for each degree above 50F. Fredricks said this is really up to Cordie. Is the ladder too crowded? What tools do we have to use if TDA Fisheries determines the ladders look crowded or fish do not appear to me moving?
- **5.** Can spill redistribute fish? What makes fish favor TDA-E? Do the fish run the thalweg?
  - **5.1.** What spill volume and pattern would be appropriate? Stansell said if we can get a spill test, FFU can look at it and check with fish counts. Stansell said two blocks tests in September would give seven replicates, which isn't a lot. He would prefer two months, September and October. Blocks should be 48 hours. Ideally we would have 24 hour spill rather than 12 hour/0 hours within a 24 hour period.
  - **5.2.** Stansell gave fair warning that fish counts are variable and he isn't sure how many replicates would be needed to get to statistical significance. We might not get there. Lut asked what the definition of success would be. Fredricks said our goal is to reduce crowding.
  - **5.3.** Lut asked how we protect fallback. Stansell said this is why RT would be helpful. Fredricks said this is where smaller openings might be more appropriate than the larger openings we use for juvenile passage. Conder noted that this might change our trigger; we might find we have to weigh fallback v. crowding.
  - **5.4.** Use PIT tag detection as well to supplement RT fish.
- **6.** Develop a draft FPP change form to address splitting flows between the powerhouse and the spillway when fish numbers exceed an agreed upon threshold (similar to the guidance for BON for splitting flows).