

COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

June 15, 2011

FACILITATOR'S SUMMARY NOTES

Facilitator: Robin Gumpert

The following notes are a summary of issues that are intended to point out future actions or issues that may need further discussion at upcoming meetings. These notes are not intended to be the “record” of the meeting, only a reminder for TMT members.

Operations Review

Water Supply/System Operations – Steve Barton, COE, reported on the latest water supply forecasts and conditions. He noted that the June final forecast showed continuing high water supply, with The Dalles April-August at 135% of normal; Lower Granite April –July at 156% of normal; and Grand Coulee April-September at 126% of normal. Actual precipitation so far in June, he reported, showed the following: Above Grand Coulee – 163% of normal; above Ice Harbor – 197% of normal; and above The Dalles – 170% of normal. The snow line throughout the basin was hovering around 4,000-6,000 feet, and many parts were showing residual runoff volumes higher than their ‘normal’: Libby had 60% residual volume; Hungry Horse 51%; Grand Coulee 54%; Dworshak 33%; Micah 76%; Arrow 68%; and the Basin above The Dalles 48%.

Steve said a system flood control operation was in effect for Vancouver, which was .6’ above flood stage. Some minor flooding had also occurred in other parts of the Basin. The COE would stay cautious with its refill operations give the high residual volumes, and Steve suggested the system would remain operating to flood control over the next 7-10 days.

Reservoirs – John Roache, Reclamation, reported on projects. Hungry Horse was at elevation 3521.14’ and filling, with 8 kcfs outflows. Discharges were cut back for two days to offset high elevations at Columbia Falls. Grand Coulee was at elevation 1251.9’ and operating “controlled refill” about 2-3 feet per day under system flood control guidance. The project will likely fill after 7/4. Steve Barton reported on COE projects. Libby was at elevation 2395.5’ with 54.6 kcfs in and 25.3 kcfs (full powerhouse) out. Bonners Ferry was just below flood stage and sturgeon volume accounting was underway. Three sturgeon were seen above Ambush Rock indicating they are staging high. High waters make the gauges inaccessible so more information about the location of the sturgeon will be known when the water recedes. Albeni Falls was at elevation 2064.1’ with 124.4 kcfs in and 117.6 kcfs out. Lake Pend Oreille was above flood stage and some localized flooding had occurred below the lake. Dworshak was at elevation 1570.2’ with 23.4 kcfs in and 6.7 kcfs out. Daily average outflows were 188.9 kcfs at Lower Granite; 323.1 kcfs at Priest Rapids; 494.8 kcfs at McNary; and 499.2 kcfs at Bonneville. All projects exceeded their spring flow objectives.

Fish – Cindy LeFleur, Washington, reported on adult passage. The end of the Spring Chinook count was today (6/15); so far the total count was 203,000, and close to the pre-

season forecast. 66,000 jacks had been counted, and this number was much higher than the pre-season forecast. Sockeye counts at Bonneville were about 1,000. Summer Chinook counts, which began on 6/1, were so far well above the 10-year average. The timing of sockeye adults was tracking closely with last year, though the size of the run as compared with last year remains to be seen. Paul Wagner, NOAA, noted the Little Goose Dam powerhouse outage that occurred earlier this spring did not seem to delay adult fish passage at Little Goose Dam. . Dave Statler, Nez Perce Tribe, reported that adult lamprey counts are very low, just 461 total to date at Bonneville. Paul Wagner also reported on the juvenile migration. The yearling Chinook and steelhead migration was very near the end. Subyearling counts were 15,000 to 30,000 per day at Lower Granite. Juvenile lamprey passage was very low in the Snake River, 5,000 at McNary and 1,000 at John Day. Counts were also very low at Bonneville but without screens installed at powerhouse two counts are expected to be relatively low.

Paul also shared the latest gas bubble trauma report. The main issue, he said, is at Rock Island, as this has been the place that GBT has been consistently high (21%) and included rank 1 and 2 level trauma.

Water quality – Laura Hamilton, COE, reported that TDG levels were high throughout the Columbia Basin due to the high flows. In May, the TDG exceedances were associated with high runoff and flood control, or damaged monitoring equipment that could not be accessed safely for repaired until the high flows recede. During the last two weeks of May the lower Columbia exceeded the ‘7Q10 flow’ criteria at many of the projects. Table 2 of the May TDG instance report identifies these events with an ‘N/A’, and Table 3 provides the daily average flows recorded at each project. These general conditions are persisting into June. Portland District reports USGS will be repairing the damaged monitoring equipment at Bonneville tailwater (CCIW) once spill drops below 235 kcfs and the damaged equipment can be safely accessed. In the meantime as reported last month an analog from the next monitoring station downstream at Warrendale (WRNO) will be used to estimate the CCIW TDG saturation.

Power system – Nothing to report.

Other – Steve Barton, COE, reported that units 1-5 at Little Goose are back on line, and unit 6 will be back by the end of July.

SOR 2011-C-1

Tom Lorz, CRITFC/CTUIR, shared the tribes’ request for special operations to support the treaty fishery. The dates for the fishery are 6/16-18 and 6/20-23 and the tribes requested that the COE hold Bonneville, The Dalles and John Day pools to within a 1.5’ range, minimizing fluctuations to the extent possible during the fishery.

Steve Barton, COE, responded that John Day would be kept to a 1.5’ range, and a teletype issued would list the 1.5’ range as a soft constraint at the other two projects since given the high flows, it will be challenging to meet these criteria. That said, the COE will do what it can to meet the request when possible.

Tom said he would pass on the fishery counts when available.

Next Meeting, 6/22 (Conference Call): Placeholder as Needed

Participants should check the TMT website on the afternoon of 6/21 for an update on agenda and/or cancellation of this meeting, which will be determined by the TMT.

Next Face to Face Meeting, 6/15

The agenda will be developed over the next week. Suggested agenda items should be shared with Steve Barton, Doug Baus or Robin Gumpert.

Columbia River Regional Forum
TECHNICAL MANAGEMENT TEAM OFFICIAL MINUTES

June 15, 2011

Notes: Pat Vivian

1. Introduction

Today's TMT meeting was chaired by Steve Barton, COE, and facilitated by Robin Gumpert, DS Consulting. Representatives of BPA, Washington, Idaho, CRITFC/Umatilla, Montana, BOR, COE, NOAA, the Nez Perce Tribe and others attended. This summary is an official record of the proceedings, not a verbatim transcript. Questions or comments should be directed to the TMT chair.

2. Operations Review

a. System flood control. The operations review, typically last on TMT agendas, was moved up today because flood control operations are in the spotlight with flows at a sustained high, Barton said. Precipitation in June was much higher than average, and the June final water supply forecast remains high. Water supply forecasts for several individual projects are above average:

- The Dalles, April-August – 135% of average
- Grand Coulee, April-September – 126% of average
- Lower Granite, April-July – 156% of average

The RFC forecast assumed precipitation in June would be average but it turned out to be much higher:

- Above Grand Coulee – 163% of average
- Snake River above Ice Harbor – 197% of average
- Above The Dalles – 170% of average

A few locations have had near-normal or slightly below normal precipitation in June. The Cascades in Washington and the Willamette valley are at 82-93% of normal. The Columbia basin above Castlegar, BC, is at 80% of normal.

In addition to high flows, the basin still has a lot of snow pack yet to run off, Barton reported. As of June 12, several projects were still holding significant amounts of their water volume forecast for April-August:

- Libby – 60% of residual volume
- Hungry Horse – 51% of residual volume
- Grand Coulee – 54% of residual volume
- Dworshak - 33% of residual volume
- Mica – 74% of residual volume

- Arrow – 68% of residual volume
- Above The Dalles – 48% of residual volume

All of this means high flows can be expected to persist into July, shifting the hydrograph about 3 weeks later into summer, Barton said. Vancouver is currently at 16.6 feet elevation, 0.6 feet above flood stage and slowly dropping, Vancouver is expected to remain above flood stage for the next 7-10 days. There is also minor to moderate flooding in western Montana, northern Idaho, and central Washington.

The hydro system is currently about 55% full, and the COE is monitoring closely how fast that space fills on a daily basis, Barton said. If reservoir space disappears too rapidly, the COE might increase the controlled flow at Vancouver. As a measure of how carefully the COE has managed the unusual water supply this year in the Columbia basin, releasing natural flows would have raised the Vancouver elevation by an estimated 8 feet above where it is now.

b. Reservoirs. John Roache (BOR) and Barton reported on individual projects. Hungry Horse is at elevation 3,521.14 feet, with discharges of 8 kcfs and filling. Inflows remain high. Refill usually occurs around the end of June or early July, but this year refill is expected in mid to late July. A recent decrease in discharges successfully prevented the Flathead River from going to flood stage.

Grand Coulee is at elevation 1,251.9 feet, filling rapidly at a rate of 2-3 feet per day. Flood control operations will most likely continue until at least the end of June with refill occurring after the 4th of July. Yesterday the project spilled 86 kcfs; spill is expected to continue through June. Once elevation 1,265.5 feet is attained, Coulee can spill over the drum gates. Gas levels below Coulee are still high, although Chief Joseph has been doing a good job of stripping the gas downstream.

Libby is at 2,395.5 feet elevation, operating at full powerhouse with 25.3 kcfs releases. Flows peaked at 68 kcfs a few days ago and are now at 54.6 kcfs. Current releases are being counted as part of the required 1.2 maf sturgeon volume, with a third to half of the sturgeon volume already released. Bonners Ferry has been just below flood stage for the past week.

Dave Statler, Nez Perce, asked whether the flood control guidance listed on the TMT website regarding Libby would be updated for June. No, Barton replied, but STP projections will reflect any controlled flow objectives for the Columbia system, as well as local flood control operations at headwater projects. Jim Litchfield, Montana, asked for more details on the sturgeon operation. There are 3 fish high in the system, but data from the monitoring devices aren't available because the monitoring devices are under water, Scott Bettin, BPA, replied. Barton said the COE will continue to operate Libby at full powerhouse for at least the next few days, possibly until the sturgeon pulse is exhausted.

Albeni Falls inflows are 124.4 kcfs and the project is releasing 117.6 kcfs. Current elevation is 2064.1 feet. With full pool at 2,062.5 feet, Lake Pend Oreille is above flood stage. Dworshak is at 1,570.2 feet and refilling, with about 30 feet to go. Inflows are 23.4 kcfs and daily average discharges are 6.7 kcfs.

Lower Granite flows are 188.9 kcfs, with a prior week average of 192.5 kcfs. The weekly average for the season is 135.1 kcfs, well above the seasonal objective of 100 kcfs. Priest Rapids flows are 323.1 kcfs, with a prior week average of 301.3 kcfs. The weekly average for the season is 221 kcfs, well above the 134 kcfs seasonal objective.

McNary flows are 494.8 kcfs, with a prior week average of 491.6 kcfs. The weekly average for the season is 361.1 kcfs, exceeding the seasonal objective of 260 kcfs. Bonneville flows are 499.2 kcfs, with a weekly average of around 500 kcfs over the past three weeks.

b. Fish. Adults: The spring Chinook run ends as of today, according to harvest fishery managers' accounting, Cindy LeFleur, Washington, reported. As of yesterday a total of 203,000 spring Chinook passed Bonneville. This year brings a strong jack return of 66,000 fish, reminiscent of the 88,000 jack return a few years ago. The revised forecast of upriver spring Chinook is around 220,000 fish, exceeding the preseason forecast of 198,000 fish. Tomorrow harvest fishery managers will begin counting upper Columbia summer Chinook. LeFleur pointed out that the COE ends its spring Chinook counts on June 1 whereas harvest fisheries managers end their spring Chinook counts on June 15, so this disparity should be taken into account when reviewing data.

Yesterday's sockeye count was 1,000 fish, LeFleur reported. Last year was a banner year for sockeye at Bonneville, with 30,000 fish passing. Adult passage delays at Little Goose Dam did not seem to result from the recent powerhouse outage. Passage of adult lamprey at Bonneville is poor, with only 461 lamprey passing to date, Statler noted. High flows may make it more difficult for adult lamprey to migrate upstream.

Juveniles: Yearling chinook and steelhead smolt passage are all but done, Paul Wagner reported. Less than 1,000 smolts per day have been passing Lower Granite and Lower Monumental, while approximately 4,000 per day have been passing Little Goose. Subyearling passage is now underway, with 15-30,000 fish passing daily over the past few weeks at Lower Granite and Little Goose, and approximately 50,000 fish passing daily at McNary. Lamprey passage on the Snake River is very low. Additionally, daily juvenile passage on the Columbia is low with 5,100 passing McNary and 1,350 passing John Day on July 14.

GBT: According to the FPC site, the rates of GBT occurrence in some areas are relatively low, for example, 1.3% at Bonneville on June 14, nothing at

Lower Granite on June 9. However the incidence of GBT was 13% at Little Goose on June 13. Wagner explained that Rank 1 on the graph indicates a low incidence of symptoms, while a fish with Rank 4 GBT symptoms is not expected to recover.

c. Power. There was nothing to report today.

d. Water Quality. Laura Hamilton, COE, showed TMT the spill data for June, posted to the TMT page. There are exceedances everywhere in the system due to high levels of spill, with readings up to 142% at Grand Coulee. There has also been a high incidence of “7Q10” flows in June, which means flows exceed the 7-day average that can be expected to occur once every 10 years. Flows above this 7Q10 limit are no longer subject to state water quality standards, thus they are not counted as exceedances. Statler asked whether 7Q10 calculation is based on an average daily flow or a peak flow on a given day. It’s a 24-hour average flow, Hamilton replied.

3. SOR 2011 C-1 Treaty Fishery

Tom Lorz, CRITFC/Umatilla, presented the SOR linked to this item on today’s agenda. Like tribal fishery SORs presented in previous years, this one requests 1.5-foot operating bands in the Bonneville, The Dalles and John Day pools. The fishery is scheduled to run from 6 am, June 16, to 6 pm, June 18, and from 6 am, June 20, to 6 pm, June 23. Lorz acknowledged that 1.5-foot operating bands will be difficult to maintain given system conditions and said the tribes will appreciate whatever the COE can do to limit fluctuations during the fishery. Barton replied that John Day has a 1.5-foot operating band anyway, but the 1.5-foot request has been placed on Bonneville and The Dalles as a soft constraint given the volatile flow situation. Lorz will report back to TMT when the fishery is finished.

4. Next Meeting

A conference call placeholder was scheduled for June 22. The next regular TMT meeting will be on June 29.

Name	Affiliation
Jim Litchfield	Montana
John Roache	BOR
Laura Hamilton	COE
Doug Baus	COE
Lisa Wright	COE
Paul Wagner	NOAA
Steve Barton	COE
Kim Johnson	COE

Phone:

Tony Norris	BPA
Cindy Lefleur	Washington
Russ Kiefer	Idaho
Tom Lorz	CRITFC/Umatilla
Scott Bettin	BPA
Shane Scott	PPC
Tim Heizenrader	Centaurus
Bruce McKay	consultant
Barry Espenson	CBB
Margaret Filardo	FPC
Dave Benner	FPC
Bill Rudolph	NW Fish Letter
Tom Le	Puget Sound Energy
Doug Vine	Thompson Reutters
Alex Cibarra	Grant PUD
Dave Statler	Nez Perce