

## Abbreviated Meeting Notes

### Water District 01

#### Upper Snake River Advisory Meeting, April 8<sup>th</sup>, 2015

*Notes: This meeting was held jointly in the Idaho Department of Water Resources (IDWR) Eastern Regional Office and State Office, with participants free to join either location to participate in person. There was also an option to connect into the meeting remotely via conference call and GoToMeeting.*

1. **Introductions were made and an attendance list was circulated. The following people were in attendance:**

|                       |                               |
|-----------------------|-------------------------------|
| Gary Spackman (IDWR)  | Tony Olenchiak (WD01)         |
| Brian Patton (IDWR)   | Craig Chandler (WD01)         |
| Cynthia Clark (IDWR)  | Rob Keller (WD01)             |
| Wesley Hipke (IDWR)   | Mike Beus (USBR)              |
| Roger Chase (IWRB)    | John Hildreth (USBR)          |
| Walt Poole (IDFG)     | Roland Springer (USBR)        |
| Jon Bowling (IPCO)    | Gail McGarry (USBR)           |
| Sarah Higan (IPCO)    | Mary Melima (USBR)            |
| Peter Anderson (T.U.) | Lynn Tominaga (IGWA)          |
| Brian Olmstead (TFCC) | Marie Kellner (ICL)           |
| Louis Zamora (TFCC)   | Bob Geddes (IFB)              |
| Jay Bariogi (TFCC)    | Norm Semanko (IWUA)           |
| Dale Swenson (FMID)   | John Simpson (Barker Rosholt) |
| Steve Howser (ASCC)   | Hal Anderson (IWE)            |
| Lyle Swank (WD01)     | Dave Tuthill (IWE)            |

2. **Mike Beus, with the United States Bureau of Reclamation (USBR or Bureau):**

Mike reported that the Upper Snake Reservoir system as a whole was at 87% capacity. Mike looked at the forecast and precipitation since the start of the year with the following summary. The January forecast was 109% (4,130 KAF) and the precipitation for that month was 78% of average. February forecast was 101% (3,625 KAF) and the precipitation for the month was 77% of average. The first week of February saw good precipitation, however, the last three weeks were dry. The dry period continued into March with the forecast decreasing to 95% (3,256 KAF) and the precipitation was 41% of average. The April forecast is 78% (2,515 KAF).

Mike also compared this year's snow pack for lower and higher elevations compared to previous years. For both lower and higher elevations, the current year was compared to other El Nino years – 2005, 2007, and 2010. For lower elevations, Mike looked at the Lewis Lake Divide SNOTEL site (elevation 7,850 ft). The snowpack for 2010 was the lowest for most of the year when compared to the other years. Currently for this year, the snowpack is slightly above the 2010 trend. During the 2010 year the snow melted out later in the year providing for fuller reservoirs, little flood and overall better water supplies. The Togwotee Pass SNOTEL site (elevation 9,580 ft) was used for the higher elevation comparison. Most of the year has been above the previous years, however, the curve has flattened out the last eight weeks due to the very dry conditions. The recent melt may or may not be the major melt for this year.

When comparing the storage for the Upper Snake System the graphs show that the current year is approaching the 2010 levels. In 2010, the reservoirs filled with latter snowmelts even though the snow pack was low especially in the lower elevations as noted earlier. For the year 2007 conditions started out better, however, the system drained out without the later snowmelts. Currently the storage in the system is close to the 2007 and 2010 levels.

Jackson Lake fill is on track or slightly higher than previous years. Flow out of Jackson Lake is predicted to stay constant at 500 cfs keeping the 200,000 af of space that can be filled by snowmelt. Jackson Lake is predicted to fill with a chance of flood releases depending on precipitation.

Palisades Reservoir fill is slightly above previous years. Flows from Palisades will be increased from 4,500 cfs to 4,700 cfs. The flows are likely to increase out of Palisades to 5,700 cfs in a few days to meet demands and American Falls Reservoir has space to fill. With a 78% forecast, they are predicting that the space in Palisades Reservoir will be needed. Flow out of Palisades will be increased if Heise unregulated flows are greater than 20,000 cfs. The unregulated flows at Heise are expect greater than 20,000 cfs since only four years did not have flows greater than 20,000 cfs. In past Heise unregulated flows exceeded 20,000 cfs with less than a 78% forecast.

American Falls Reservoir is delivering flows and currently is not filling. The reservoir is on track with past fill curves but will likely flatten out until run-off depending on demand. Mike went on to relate that it is hard to predict if the water diverted for recharge would have made a difference. If there is a change in precipitation could have possible have diverted more for recharge. With El Nino years, it is not uncommon to have wet springs.

Mike also related that they have had unprecedented early diversions (300% over average for this time of year). Spring weather conditions will affect amount of spring run-off and amount of diversions.

3. **Lyle Swank, Water District 01 Water Master:**

Lyle noted there has been record demands this season. Demands will be increasing as the next set of canals start diverting. Harrison canal is predicting to turn on next week. Lower Dry Bed will likely be later as there is still work is being done to the canal. However, no official orders have been requested yet. Currently 2,000 cfs is being diverted at Blackfoot. The current monthly snow report is matching 2012 and 2013, relatively dry years.

4. **Jon Bowling, Idaho Power:**

Jon related that Idaho Power was showing the snow water equivalent above Brownlee at 55% and 48% for the Colombia. On March 28, 29 and 30 the adjusted average flows at the Murphy Gage on the Snake River were below the 5,600 cfs limit, the limit was dropped to the 3,900 cfs "irrigation season" limit on April 1<sup>st</sup>. The Kings Hill gage is below 5%. Crews are doing a lot of measuring to quantify the shifts on the system, in general the reach gains are low. Idaho Power is showing 18 feet below full and flood control is at zero at full pool.

Jon also provided a brief summary on cloud seeding relating that there were good storms for cloud seeding early on, however, the storms dropped off after mid January. The areal portion of the program will be in operation until April 16<sup>th</sup>. A more detail summary will be provided at the end of the season.

5. **Wesley Hipke, IDWR – Recharge Update:**

Wesley provided a brief update on the winter season managed recharge from October 27<sup>th</sup>, 2014 to March 23<sup>rd</sup>, 2015. During this period, over 75,000 acre-feet (af) were recharged. Most of the recharge occurred in the Lower Valley portion of the ESPA (61,068 af). The remainder (14,165 af) was recharged in the Upper Valley. The Idaho Water Resource Board's (Board) water right above American Falls Reservoir (AFR) was only in priority from Feb. 16<sup>th</sup> to Mar. 4<sup>th</sup>. During this period time when the Board's recharge water right for 1,200 cfs was in priority in the Upper and Lower Valleys that close to the Boards' limit was diverted for recharge. The complications to recharging in the Upper Valley is largely a result of the high degree of variability in the volume of flows available and duration of the flows. Staff are going to be working this next year in developing the procedures and processes to enable the Board to be able to take full advantage of these opportunistic flows when they occur. The accomplishment in the Lower Valley this past season was recharging throughout the winter. The Board's goal is to develop greater diversion capacities in the Lower Valley to take advantage of a significant volume of surface water base flow that is available for recharge over the winter months. In the Upper Valley 84% of the water available to recharge was diverted, however, in the Lower Valley only 23% of the water available was diverted.

In previous years (from the fall of 2009 through the spring of 2014), an average of over 67,000 af/year was recharged (over 33,000 af/yr below AFR and over 34,000 af/yr above AFR). In the 2014-2015 season over 75,000 af was recharged significantly above the average especially considering that three of the five past seasons had significant spring runoffs that were used for managed recharge. When compared to the last two seasons over 75,000 af is a significant improvement over the 2012-2013 and the 2013-2-14 seasons (21,129 af and 10,585 af, respectively). The success of this season was a result of a lot of combined effort from the canal companies and irrigation districts, USBR, Water District 01 and IDWR staff.

Lynn Tominaga asked what the volume of water would be available for augmentation. Mike Beus replied that at this time approximately 100,000 af would be available.

Norm Semanko asked what needed to be done to reach the Boards goals in 3 to 5 years. Brian Patton responded that the Board is working on numerous projects to expand capacity on the Lower and Upper valleys. A significant amount of focus is currently on the Lower Valley where the greatest potential is given the consistent surface water base flow that is available to recharge.

Bob Geddes asked what monitoring was in place to determine the effect recharge was having on the aquifer. Brian Patton replied that IDWR currently has over 1,000 groundwater monitoring points in the ESPA combined with numerous stream flow monitoring points to assist in the assessment of managed recharge on the ESPA. This information will be combined with site-specific water quality and quantity monitoring to assess the localized impacts of managed recharge.

Bob Geddes also asked how the Boards 1999 Water Rights played into the future. Brian Patton replied the Board's goal is be able to have the recharge capacity to diver all of the approximately 1,200 cfs on their current recharge water right. In addition, the Board is actively pursuing more junior recharge water rights to ensure that if the water is available it can be diverted to assist in stabilizing the ESPA.

6. **New Business:**

The group discussed the timing for the next meeting. It was decided to set the next meeting on Wednesday May 21<sup>st</sup> (5/21) at 1:30 pm. (Due to conflicting schedules this meeting was moved to June 4<sup>th</sup> (6/4) at 1:30 pm.)