Sea to Sierra Train Tour

Emeryville, California to Reno, Nevada April 10-11, 2014

Topic: 11:09 a.m. Thursday, April 10 – Federal Water Deliveries and Policies

Introduction

- I am Louis Moore, a Public Affairs Specialist with the Bureau of Reclamation Mid-Pacific Region's Public Affairs Office for 21 years. I also spent 8 plus years in the Marine Corps as a Radio Operator and as an Interrogator-Translator.
- I have been married to Brenda for 26 years. She was in the Air Force. We have one son Joshua, who served in the Army and served 15 months in Iraq. He survived an Improvised Explosive Device (IED). Joshua is home and is doing well.

Bureau of Reclamation

- The Bureau of Reclamation is under Department of the Interior. It was authorized in 1902, by President Theodore Roosevelt. Reclamation covers the 17 western states and is best known for constructing dams, powerplants, and canals.
- These projects led to homesteading and promoted development of the West.
 Reclamation constructed more than 600 dams and reservoirs. A few of note are
 Hoover Dam on the Colorado River, in Nevada and Grand Coulee on the Columbia
 River in Washington and Shasta Dam on the Sacramento River in California in my
 Region.
- Reclamation is the largest wholesaler of water in the country. We deliver water to more than 31 million people and provides one out of five Western farmers (approximately140, 000) with irrigation water for 10 million acres of farmland that produce 60% of the nation's vegetables and 25% of its fruits and nuts.
- Reclamation is the second largest producer of hydroelectric power with 53 powerplants that provide more than 40 billion kilowatt hours, generating nearly a

billion dollars in power revenues and producing enough electricity to serve 3.5 million homes.

The Central Valley Project

- The Central Valley Project 's dams, powerplants, canals, and other facilities have the following purposes:
 - o Regulate rivers and improve flood control and navigation
 - o Provide water for irrigation and domestic use
 - Generate power
 - o mitigation, protection, and restoration of fish and wildlife
- The CVP reaches some 400 miles, from the Cascade Mountains near Redding in the north to the Tehachapi Mountains near Bakersfield in the south. It consists of 20 dams and reservoirs, 11 powerplants, and 500 miles of major canals, as well as conduits, tunnels, and related facilities.
- The CVP reservoirs store some 11,360 million acre-feet of water at full capacity.
- Annual deliveries to our contractors are about 7 million acre-feet of water for agricultural, urban, and wildlife use.

Interpreting the Water Supply Forecasts

For each Central Valley Project allocation announcement, each year two forecasts are issued for each contract type by location within the CVP. Unless otherwise specified, all runoff forecasts are based on runoff volumes that would occur naturally without any upstream influences.

 For the February through May period, the runoff volume estimates are based on the observed inflow to date and current snow pack measurements made at the end of each preceding month. Water users need to know what the different forecasts

- represent if they are to use the information appropriately when making operational decisions.
- The 90 Percent Chance of Exceedance Forecast (Dry or Conservative): There is a 90-percent chance that the actual runoff volume will exceed this forecast value, and there is a 10-percent chance that the actual runoff volume will be less than this forecast value.
- The 50 Percent Chance of Exceedance Forecast (Wet): There is a 50-percent chance that the actual runoff volume will exceed this forecast value, and there is a 50-percent chance that the actual runoff volume will be less than this forecast value. Generally, this forecast is in the middle of the range of possible runoff volumes that can be produced given current conditions.
- These forecasts represent the uncertainty inherent in making runoff predictions.
 This uncertainty may include sources such as unknown future weather conditions, the various prediction methodologies and the spatial coverage of the data network in a given basin.
- The forecasts are provided to water users to help make risk-based decisions. Water users can select the forecast corresponding to the level of risk they are willing to accept in order to minimize the negative impacts of having more or less water than planned for in a given year.
- Water users need to know what the different forecasts represent if they are to use the information appropriately when making operational decisions.

The 2014 Drought Years

• Reclamation's Initial 2014 Water Supply Allocation reflected the effects of entering a third year of dry conditions.

- The CVP allocation for Contract Year 2014 runs from March 1, 2014 February 28, 2015) and is forecast to be historically low. This low allocation is yet another indicator of the impacts the severe drought is having on California communities, agriculture, businesses, power and the environment.
- The California Department of Water Resources (DWR) reports that as of April 1, snowpack and precipitation in the Sierra Nevada continue to be far below normal, with the snow-water content statewide at 32 percent of average for this time of year. DWR's April Runoff Forecast indicates a critical water year for both the Sacramento and San Joaquin valleys.
- Reclamation began Water Year 2014 Sep. 30, 2014 with 5.1 million acre-feet of
 carryover storage in six key CVP reservoirs, which was 43 percent of capacity and
 75 percent of the 15-year average for October 1. As of April 7, 2014, the total
 storage in CVP reservoirs was 5.5 million acre-feet or 64 percent of the 15-year
 average.
- Reclamation determines the allocation of CVP water for agricultural, environmental, and municipal and industrial purposes based upon a conservative runoff forecast driven by critically dry hydrologic conditions, water quality requirements, flow objectives, relative priority of water rights and endangered species protection measures.
- Actual deliveries of water for 2014 are subject to the State Water Resources Control Board's (SWRCB) order of January 31, including any subsequent modifications and clarifications to the order. The order is in response to Reclamation's and DWR's request to relax certain water quality standards due to the limited water supply from the ongoing drought. To view the January 31 order, please visit:

http://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/docs/tucp/bd_change_order.pdf

- As drought conditions continue, putting further stress on limited water supplies,
 Reclamation continues to work with the SWRCB, DWR, NMFS, DFW, FWS and all contractors to effectively carry out project operations consistent with all applicable laws.
- Changes to hydrology and opportunities to exercise operational flexibility of the CVP are factors and conditions that influence allocations as the water year progresses.
- Water supply updates are made as appropriate and are announced and posted on Reclamation's website along with other water and drought related information at http://www.usbr.gov/mp/pa/water. Federal Water Deliveries and Policies.
- This year in particular has required some very difficult and unpopular decisions in regards to allocations. We have been working with our federal and State partners, along with local agencies, to find and develop alternative actions to help us deliver very-much-needed water resources and meet an ever growing demand for water.

Conclusion

Thank you for listening. My time is coming to a close. Are there any questions? You can always catch me later, if something comes to mind. Again, I am Louis Moore. Thank you.

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