Water District 29 D, Lower Portneuf River and Tributaries

Annual Meeting March 12, 2018
Pocatello, ID
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Feedback to the IDWR from the 2017 curtailment included:

1. IDWR has singled out WD29D

2. IDWR did not provide sufficient notice of the curtailment and time for users to prepare with options

3. Ground water rights have been excluded from administration
Feedback #1 - “WD 29D has been singled out”

To be equitable with other water districts in Basin 29

- The Director has put a reprieve on the administration of water rights in WD29D in respect to priority dates on the Snake River in 2018

- WD29D will be administered in respect to the Snake River when all of the water districts in Basin 29 are ready to be included (inventory completed in WD 29H)

- Users should anticipate any time after the 2018 season. Exact date administration will begin has not yet been determined - IDWR will keep district updated
Why is the Portneuf River and its tributaries administered with the Snake River?

- WD29D is tributary to the Snake River - direct connection

- In the Snake River Basin Adjudication, General Provision Decree for Basin 29, there are no sources excluded from administration in the Snake River Basin

- All other water districts tributary to the Snake River are already being administered
Fundamental Principles of Water Delivery in Idaho

- Water delivery in Idaho (and most of the Western U.S.), is based on the Prior Appropriation Doctrine.

- Prior appropriation of water rights is in the Constitution of the State of Idaho, Article XV (15).

- Fundamental principles of the Prior Appropriation Doctrine
  - “Beneficial Use”
  - “First in Time is First in Right” (seniority)
Priority Date

• Every water right has a priority date – essential element

• Snake River Basin Adjudication completed with unified decree (8/24/2014) and priority dates are recorded.

• Priority date determines who gets water in times of a shortage

• Oldest priority (or senior) water rights are satisfied first and so on until there is no water left
CROSS-SECTION OF WATER RIGHT PRIORITY
WATER DISTRICT NO. 1
Priority dates delivered on the Snake River - Dry Year

Milner Reach - Year of Priority Date Being Delivered

Month/Day

3/1 4/1 5/1 6/1 7/1 8/1 9/1 10/1 11/1

Year


Average 10th Percentile (Very Dry)
Priority Dates delivered on the Snake River – Wet Year

Milner Reach - Year of Priority Date Being Delivered

- Average
- 90th Percentile (Very Wet)
Why is there curtailment when the reservoirs are full?

- The water stored in reservoirs is the water of an entity that owns a water right for storage.

- A storage water right has the same basic elements as other water rights, including a priority date but storage rights are typically filled during the non-irrigation season.

- Curtailment on the Snake River is based on the natural flow of the river and does not include the storage water rights.

- The owners of storage water rights, including the Idaho Water Resource Board, may rent water to users downstream for different purposes, including mitigation.
Feedback #2 – Users were not given sufficient notice and time to prepare with options

- Reprieve for 2018
- Notice that users should prepare for administration as early as next year.
- Collect all diversion and source information in 2018
  - Record keeping of the district is critical
    - Water users
    - IDWR
    - Quantify / document water use
Curtailment Alternatives

- Pre 1900 priority rights will not be curtailed with respect to the Snake River

- Curtailed water users wanting to continue to divert past the date of priority being administered downstream (“diverting out of priority”) may have some options to divert out of priority.
Curtailment options

- Rental Pool
- Water Supply Bank
- City
- Tribe
- Ground Water
Recommendations

- Understand how much water is needed
  - Measuring device required

- Explore all options

- Don’t wait until the last minute

- Work together with other users
Measurement Order in Water District 29D

Regulation – proper delivery of water

Watermaster
- Necessary component of reporting and recording diversion use
- Assure diversions are within water rights
- Curtail junior priority rights as necessary
- Watermaster in 29D has given feedback to IDWR and supports the need for measuring devices

Accurate information for diversions
- Annual distribution reporting
- Users considering curtailment options
- Actual water use in district
- Develop records to better understand surface and ground water connection
Typical Measurement Order Requirements

- For measurement purposes, may exclude:
  - irrigation uses/diversions $\leq 5$ acres
  - domestic/stock water uses, in-stream livestock & other small rights/uses (diversion rate $\leq 0.24$ cfs)

- All other rights/diversions are normally measured
Potential number of Rights & Diversions subject to Measuring Device Order.

- Of the 298 unique points of diversion within water district 29D
  - 144 unique water rights
  - 126 unique points of diversion
  - 93 unique water right owners
- 9 possible non-consumptive water rights with a diversion rate greater than 0.24 cfs
Measurement Requirements

Likely Scenario:

• Order to require installation of measuring devices:
  • Phase-in over one to two years

• Must install standard measuring devices as per IDWR standards
  • Open channel (weirs, flumes, doppler meters)
  • Closed conduit (magnetic flow meters)
OVERVIEW

Originally created to support the measurement of ground water on the Eastern Snake Plain Aquifer (ESPA), the Water Measurement program now functions statewide to establish, maintain, and implement state water measurement and reporting standards. IDWR works directly with water districts and water measurement districts to implement measurement requirements and programs within the state. Examples of these efforts include:

- closed conduit and open channel measurement methods
- diversion and control works for surface and ground water diversions
- automation, data logging, and telemetry of water diversion and measurement systems
- development and maintenance of reporting systems for water diversion measurements

Guidelines

Use the following guidelines and procedures to collect water measurement data and report that information to IDWR. Using these procedures provides a uniform measuring and reporting method within the State of Idaho, including within water districts. The information below also assists in measuring and reporting diversions pursuant to various water measurement orders issued by IDWR.

- Minimum Acceptable Standards for Open Channel and Closed Conduit Measuring Devices
- List of Approved Closed Conduit Flow Meters
- IDWR Water Measurement and Reporting Guidelines

ESPA Measurement Order

Final Order on Reconsideration Requiring Measuring Devices for Ground Water in Water Districts 31, 34, 100, 110, 120, 130, and 140 - July 22, 2016

Helpful Links

- Water Districts
- Water Measurement Districts
- Water Rights Accounting
- Eastern Snake Plain Aquifer Model
- 42-701 - General statutory requirement for water measurement and reporting in Idaho
WATER MEASUREMENT STRUCTURES

Weir blade
Sides
Crest

RECTANGULAR WEIR

CIPOLLETTI WEIR

STANDARD CONTRACTED WEIRS (UPSTREAM FACE)

90° V-NOTCH WEIR

Flow

SECTION A-A

Weir pool
Nappe

The Cipolletti or V-Notch Weirs may be similarly installed.

Figure 5-13. Standard contracted weir discharging at free flow. 103-D-1234
Parshall Flume
Feedback #3 – Ground Water has been excluded from administration

- IDWR will be starting the process of expanding districts in Basin 29 to include ground water.

- Process could start as early as this fall with ground water rights possibly incorporated by next spring.

- Ground water users will also be required to measure.

- Certain administrative conditions must occur before ground water rights are subject to priority regulation.
Summary - Moving forward in 2018 and beyond

- WD29D users should prepare for the administration of water rights in WD29D with respect to the priority dates being delivered on the Snake River.

- Users should expect to see a Measurement Order issued for the district.

- IDWR will be working to expand the water districts in Basin 29 to include ground water rights.
Questions and Discussion?