

Wyhee
Irrigation District

Operating Agencies

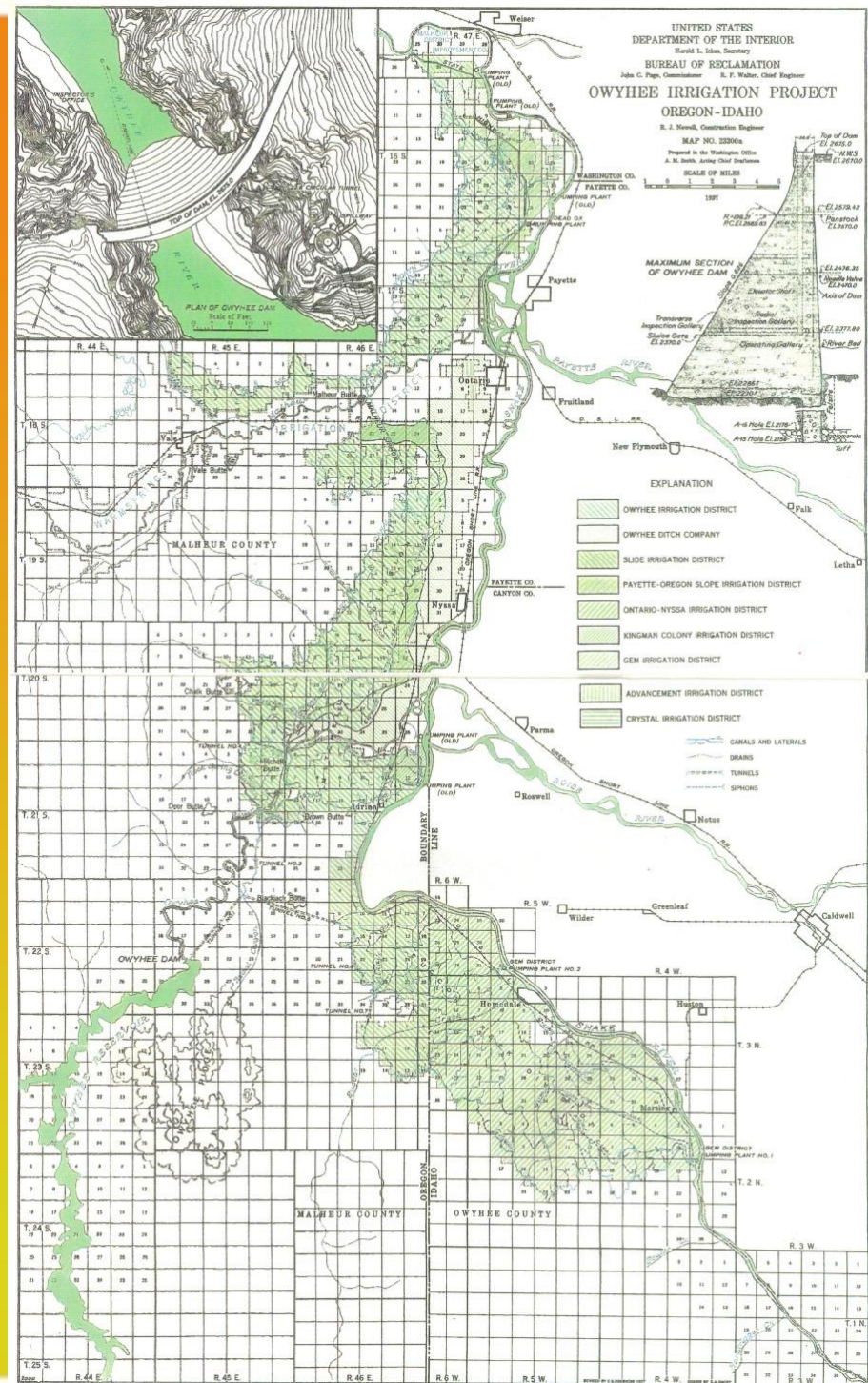
Project works, except Owyhee Dam and related works which were retained and operated by the Bureau of Reclamation, were transferred to the water users in 1952 for operation and maintenance.

Owyhee Dam is now operated by the Owyhee Irrigation District in cooperation with the South Board of Control.

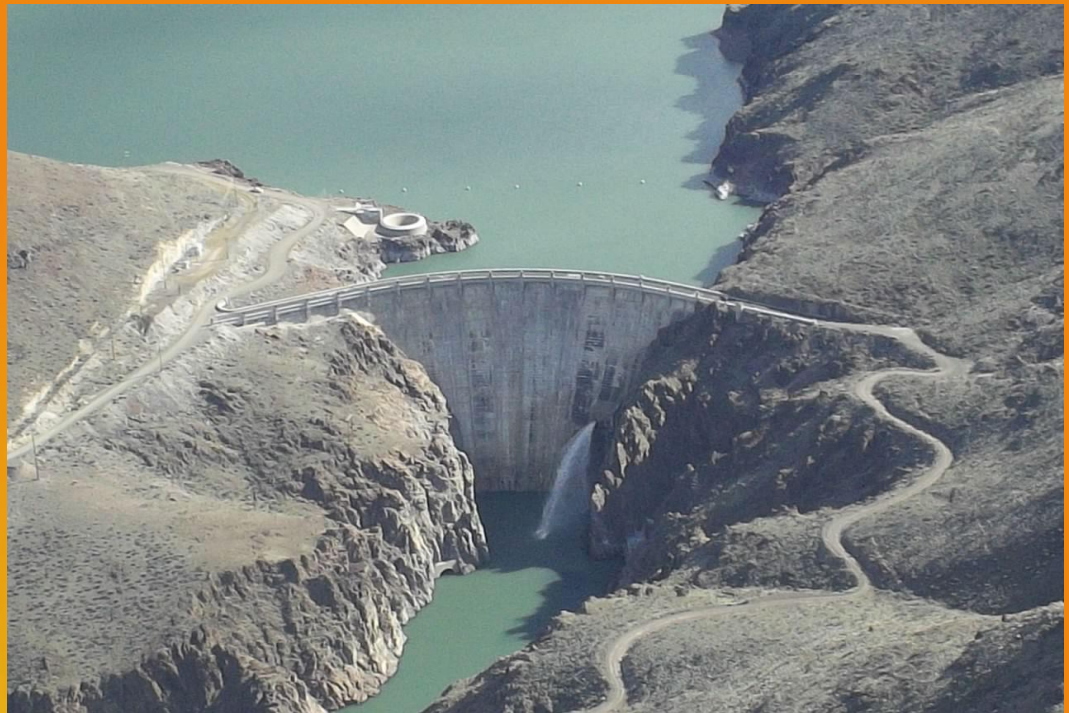
Contract between Parties

Joint Committee:
Owyhee Irrigation District
South Board of Control

Old Owyhee Improvement District
Senior water right holder
Natural flow right
Storage right



The Owyhee Dam



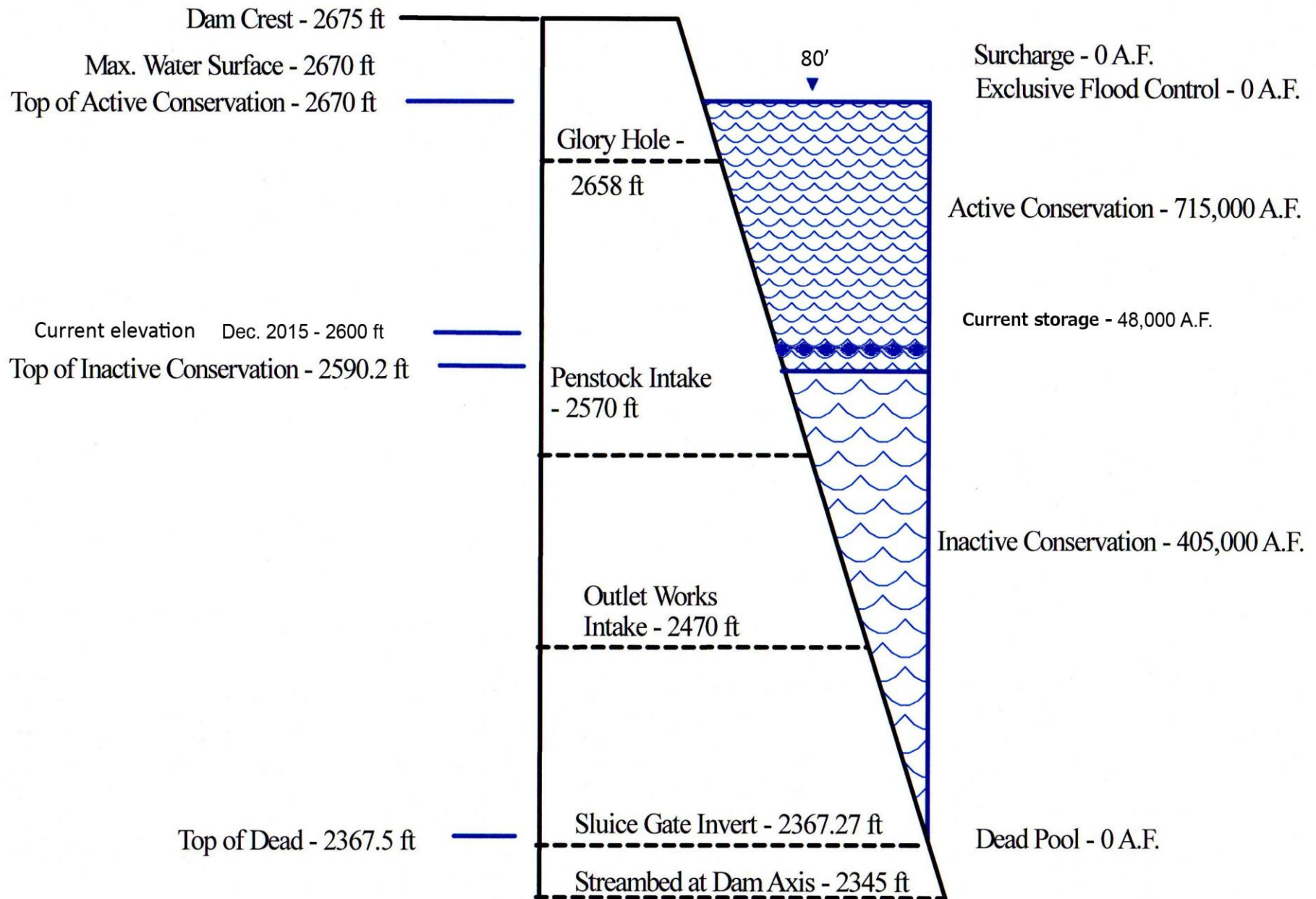
Owyhee Dam is a concrete, thick-arch structure which was designed to carry about three-fourths of the water load by arch action, and the remainder by gravity action.

The dam rises 417 feet above foundation in the river section, and 530 feet above the low point of the excavated fault zone. The arch section is 623 feet long, and a gravity tangent extends 210 feet to the right abutment.

The total capacity of Lake Owyhee is 1,120,000 acre-feet (active 715,000 acre-feet).



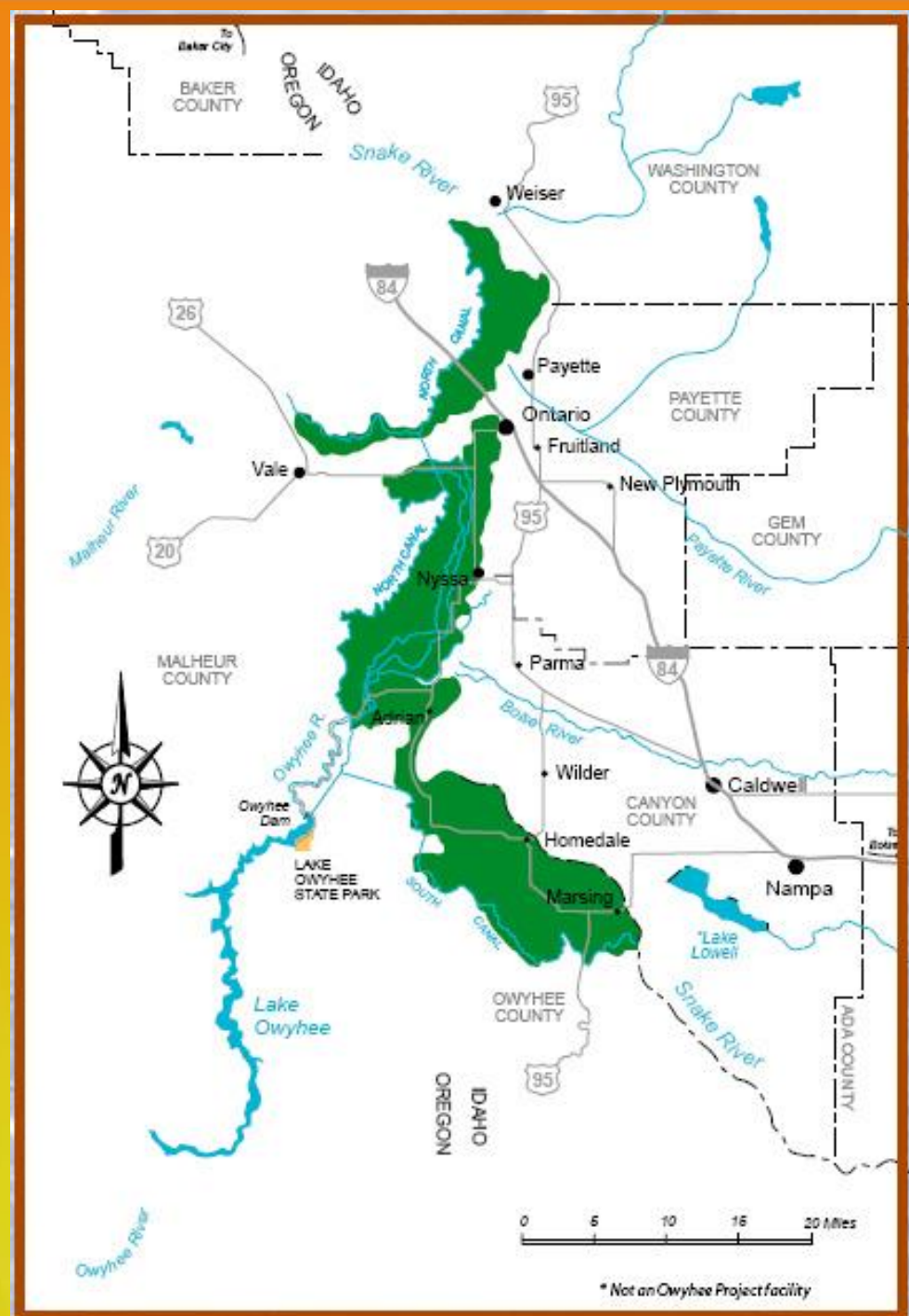
OWYHEE DAM

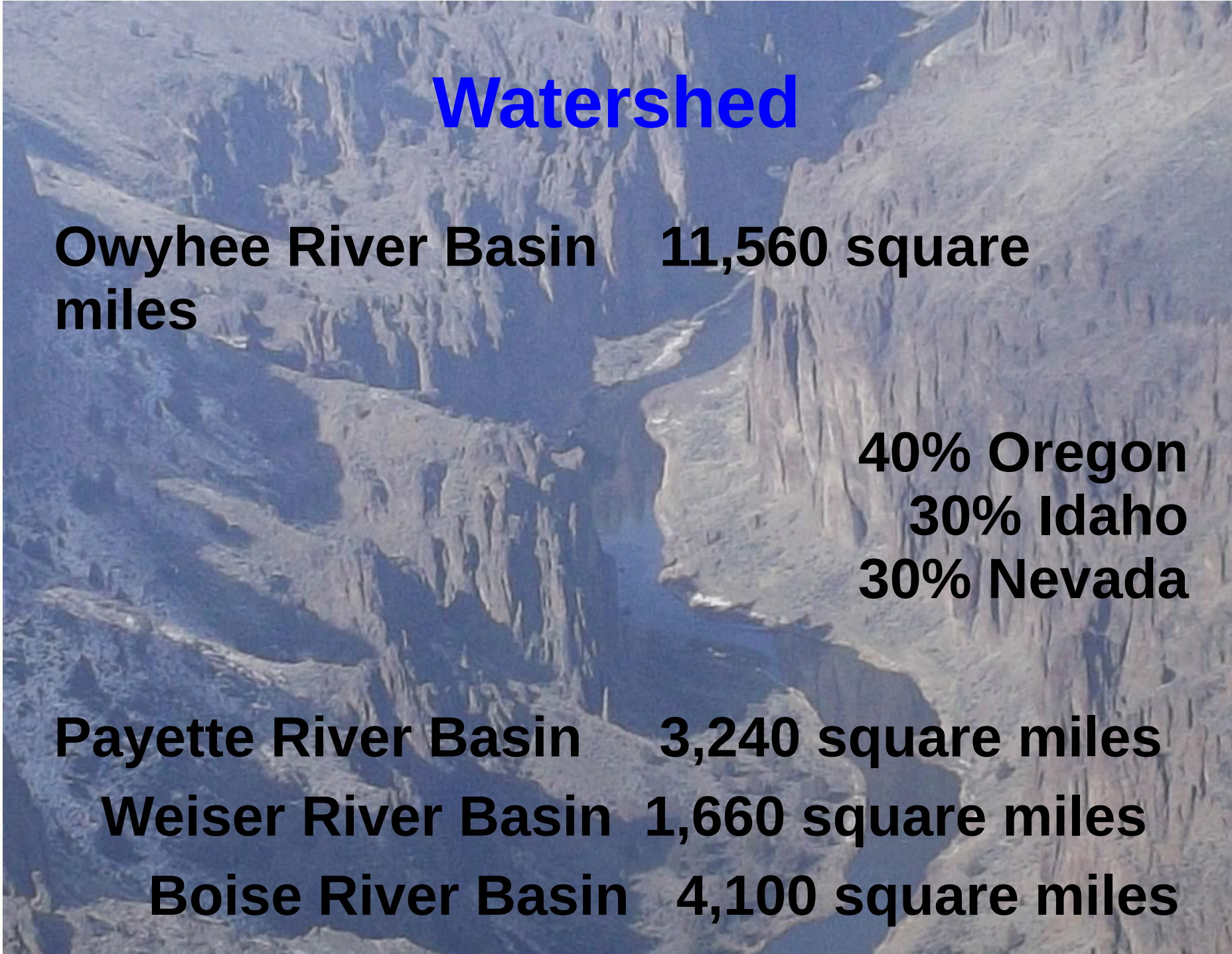


- **Owyhee Irrigation**
67,266.8 acres
- **South Board** 44,828
acres
- **Old Owyhee Ditch**
12,740 acres

Total 124,834.8 acres

**About 72 percent of the
lands are in Oregon, and
28 percent in Idaho**





Watershed

Owyhee River Basin 11,560 square miles

**40% Oregon
30% Idaho
30% Nevada**

Payette River Basin 3,240 square miles

Weiser River Basin 1,660 square miles

Boise River Basin 4,100 square miles

BLUE MOUNTAIN SPRING

LAKE CREEK R.S.

ROCK SPRINGS

Map Legend

- ▲ SNOTEL Site
- ☆ City
- Watershed
- Streams, Lakes, & Rivers
- ☀ Climate Data
- ☷ Soil Moisture/Temperature Data
- Manual Measurement Site

Ontario

Malheur River

Owyhee River

SOUTH MTN.

MUD FLAT

Oregon Idaho
Nevada

LAUREL DRAW

FAWN CREEK

BIG BEND

JACK CREEK UPPER
JACKS PEAK

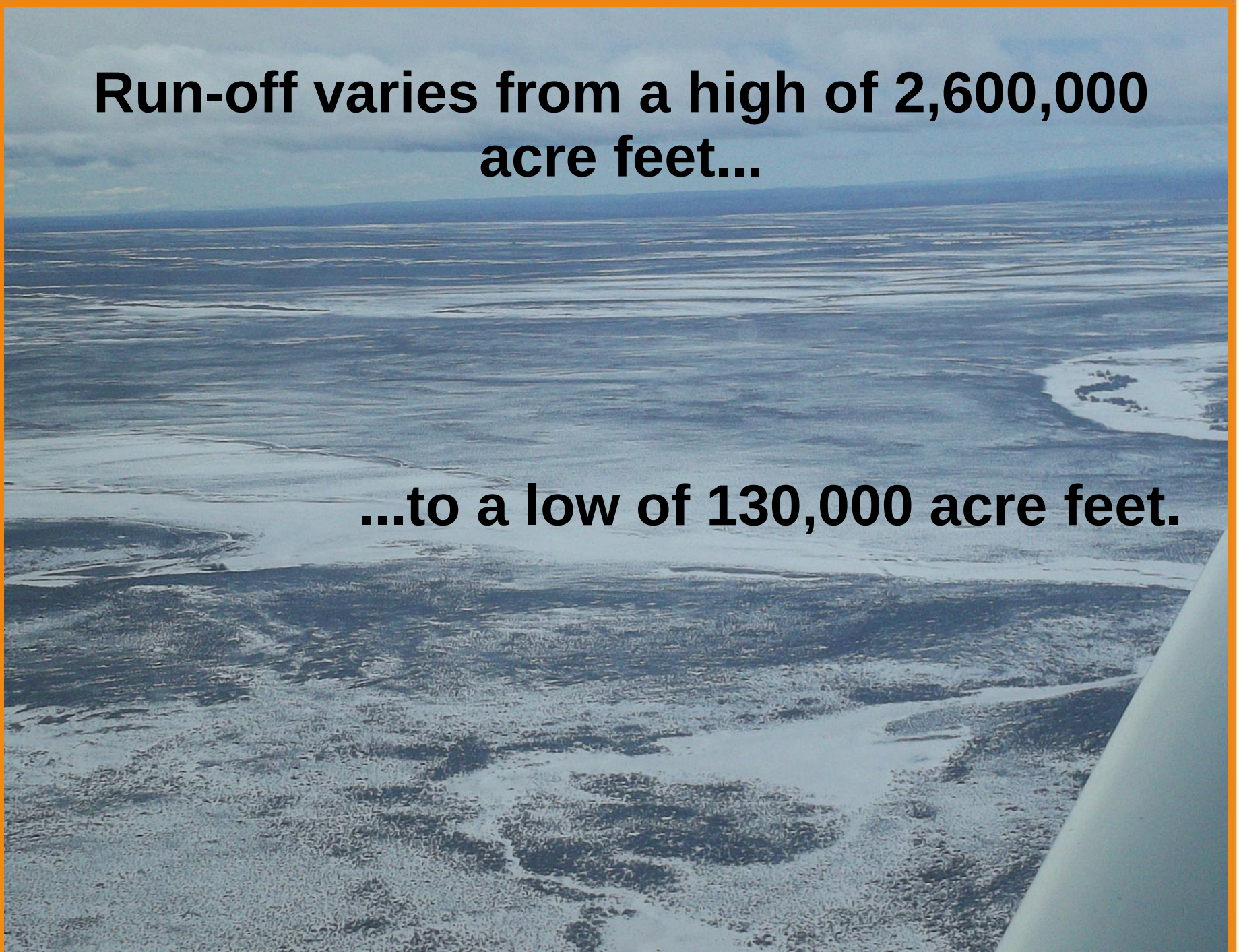
TAYLOR CANYON



0 20 Miles

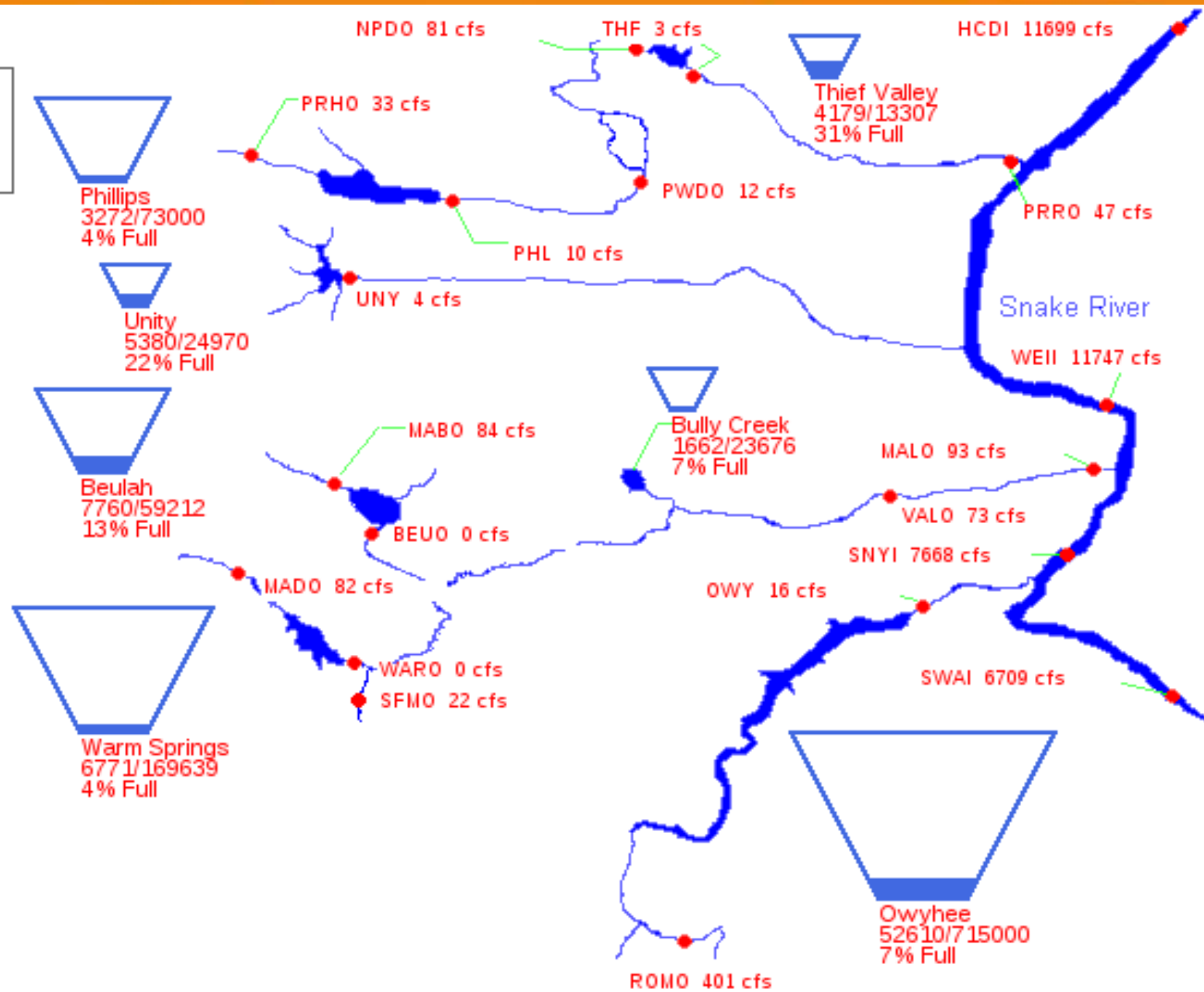
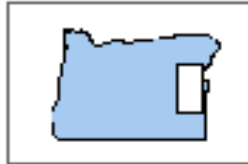
**Run-off varies from a high of 2,600,000
acre feet...**

...to a low of 130,000 acre feet.



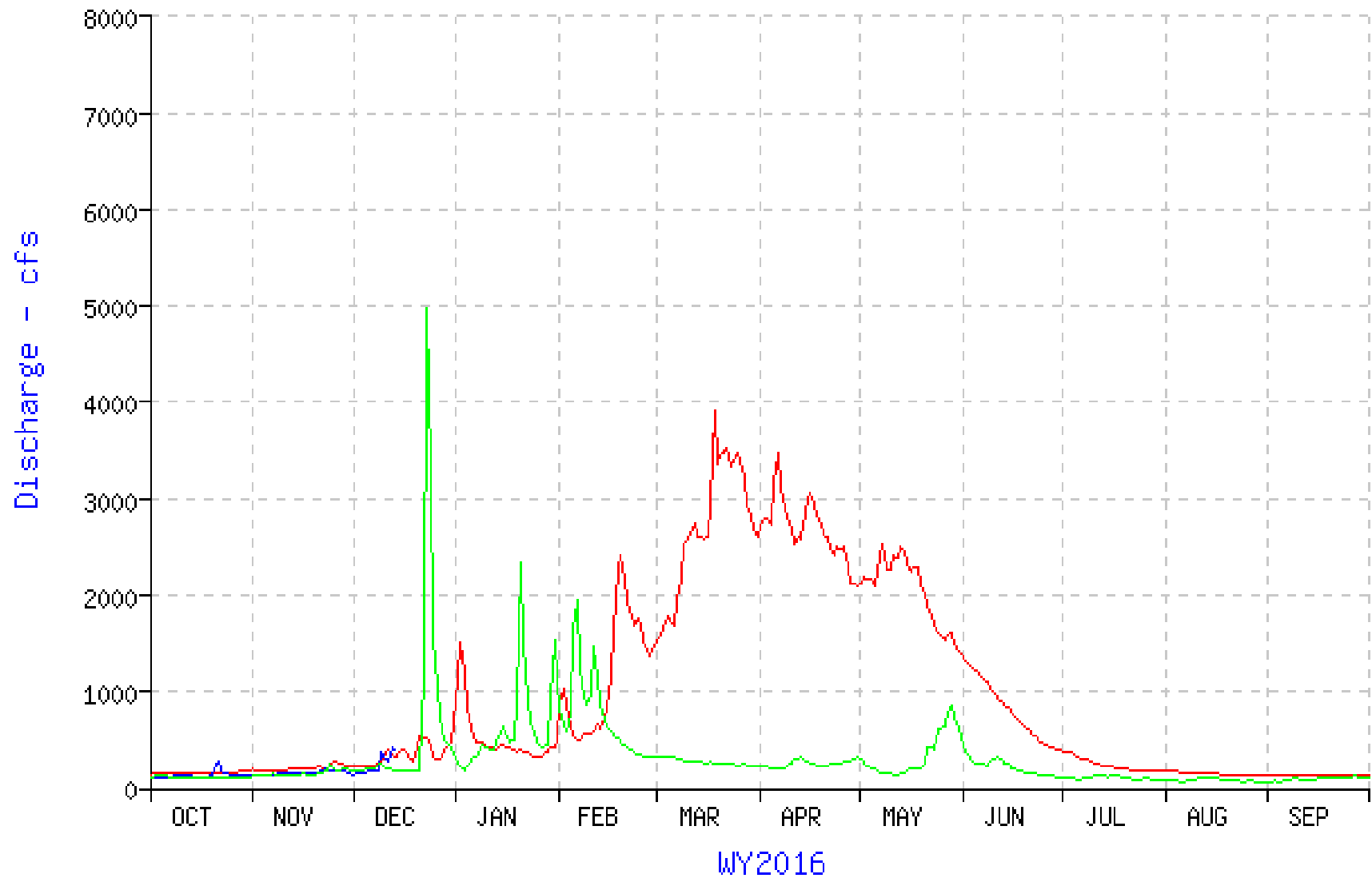
USBR.gov Hydromet

12/13/2015



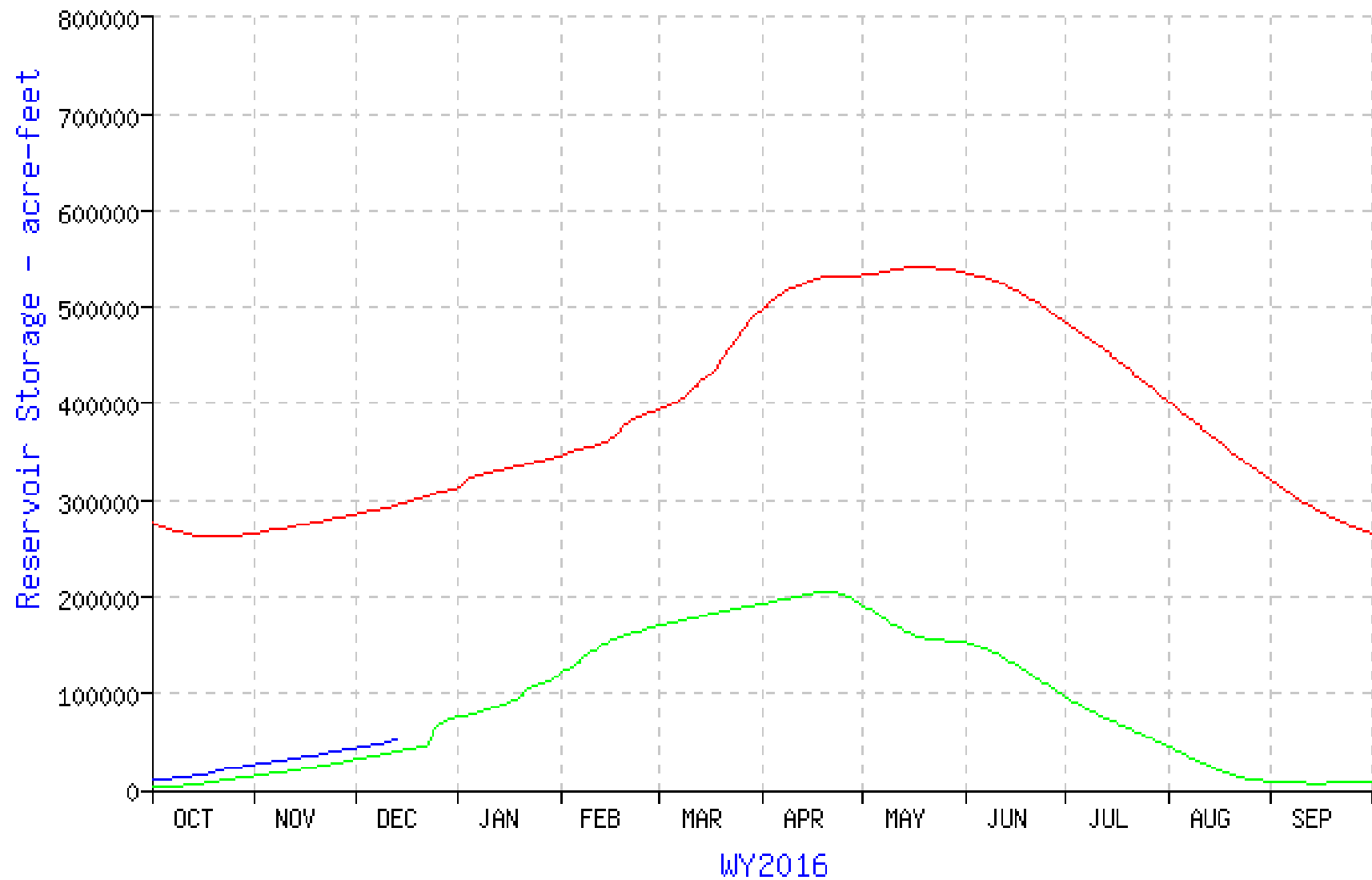
Owyhee River near Rome

- Current Year
- Previous Year
- Average



Lake Owyhee

- Current Year
- Previous Year
- Average

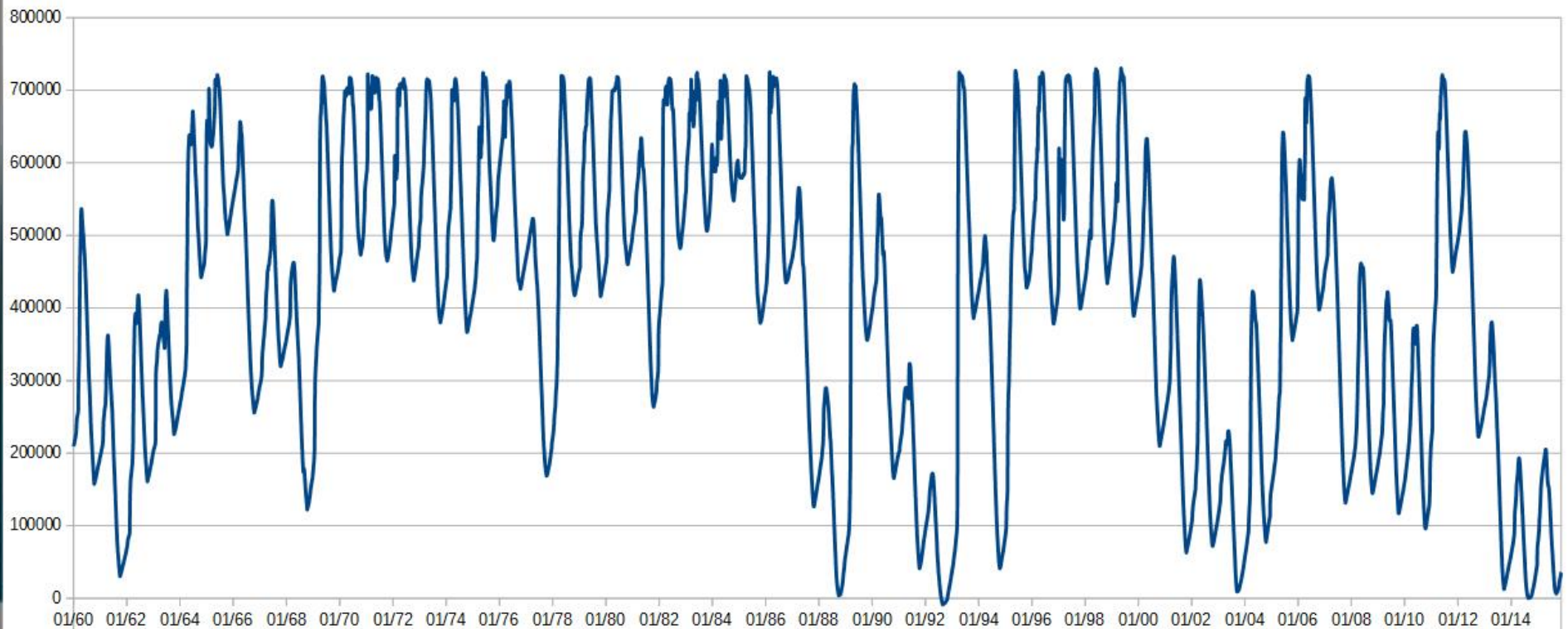


Facing the Unknown

“Operating by tradition”

For 77 years these Districts have operated without much thought of a drought. In the history of these operations there have only been 4 extremely dry years, but these desiccated times were separated by long periods in between, ***never before have we seen consecutive arid years like we have been subject to since 2013.***

Reservoir Levels 1960-2015



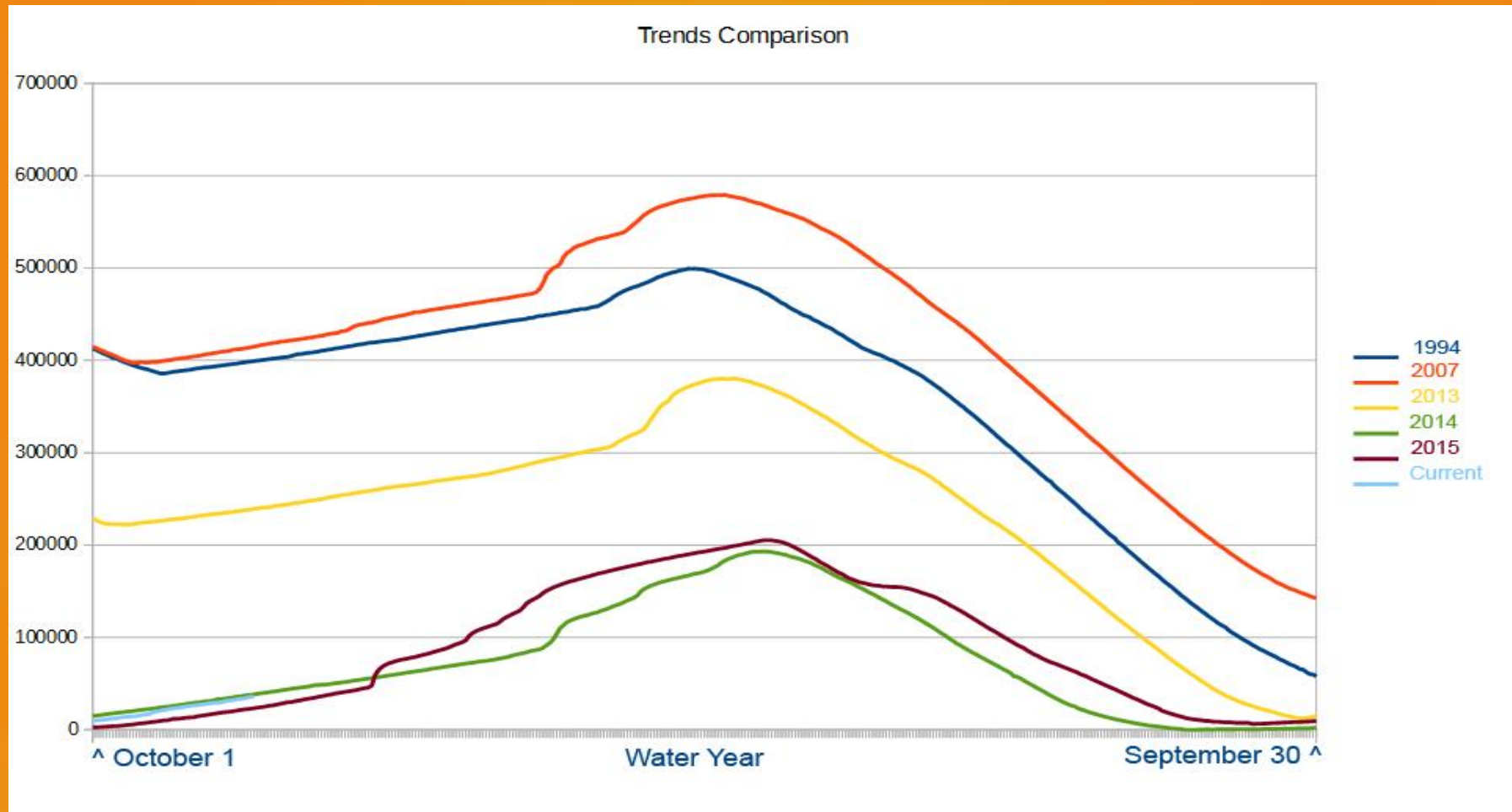
Water Allotment

2012 4 acre feet per acre - plus excess

2013 3 acre feet per acre - no excess

2014 1.3 / 1.5 / 1.7 (season ended July 16th) - (lost pressure needed to deliver water)

2015 1.3 / 1.5 / 1.6 (season ended September 11) - (May rains extended the short season)



What has the drought changed?

- Hold off as long as possible the start date.**
- Once water is released it must be used. Demand.**
- Delivery changes 7 days a week**
- Daily uploading of water use data**
- Dunaway pumping plant running full season**
- Warmer water temperatures , increased aquatic growth**
- Extended off season and growth of vegetation in the canals**
- Lack of recycled water. Little or no return water.**
- Lack of hydroelectric generation**

CHARGING CANAL SYSTEM

**RELEASE WATER FROM THE DAM... HOLD OFF
AS LONG AS POSSIBLE THE START DATE.**

- 28 miles & 26 hours with 130cfs to Lockett Gulch spill...
- 26.5 miles & 30 hours from Lockett Gulch to Jacobsen gulch spill with 100cfs...
- 22 miles & 31 hours form Jacobsen Gulch to the end with 25cfs.
- Total of **87 hours to charge main canal.**
- 523.5 miles of laterals & pipelines that take approximately **another 600 hours to charge.**

7,000 – 10,000 acre feet to fully charge the system

What has made the Biggest Difference?

“District goals years ahead of the drought”

- **Water Conservation Efforts**
- **Canal Linings**
- **Gravity pressure pipelines**
- **Conversion from flood to sprinkler**
- **Micro irrigation - drip**
- **Canal automation checks, gates, flow monitoring sites, spillways**
- **Daily use , grower water usage access by internet**
- **Computerized water accounting system**
- **Updating water measurement**

Drought Declaration

- Provides flexibility regarding water rights
- Allows water allotment transfers
- Emergency irrigation well drilling
- Temporary pumping from other water sources

“Only by working harmoniously in cooperation with other individuals or groups of individuals and thus creating value and benefit for them will one create sustainable achievement for oneself.”

“What the human mind can conceive and believe the mind can achieve.”

“In what do I truly believe?”

According to Hill 98% of people had few or no firm beliefs and this alone put true success firmly out of their reach.



Jay Chamberlin - Project Manager

Owyheerirrigation.org

Questions

So, you think your water rates are too high?



Many people complain about the prices they are paying for the high-quality water they get from their taps. NDRWSA hopes the following information will help put things in perspective. Below are calculations of the prices we would pay per gallon for some of the many products we use on a regular basis:

Iced tea: 16 ounces at \$1.55 = \$12.40 per gallon
Fruit juice: 16 ounces at \$1.59 = \$12.72 per gallon
Sports drink: 20 ounces at \$1.75 = \$11.20 per gallon
Diet soft drink: 20 ounces at \$1.55 = \$9.92 per gallon
Domestic beer: 12 oz at \$2.50 = \$26.67 per gallon
White Out: 7 ounces at \$1.49 = \$27.26 per gallon
Brake fluid: 12 ounces at \$2.19 = \$23.37 per gallon
Mouthwash: 1.5 ounces at \$1.05 = \$89.61 per gallon
Liquid antacid: 12 ounces at \$6.35 = \$67.76 per gallon
Liquid cold medicine: 6 ounces at \$5.15 = \$109.91 per gallon
Gasoline: 1 ounce at \$.0214 = \$2.74 per gallon
Bottled water: 20 ounces at \$1.89 = \$12.10 per gallon
Tap water: 128 ounces at \$.0023 = \$.0023 per gallon

Yes, that's right -- \$12.10 for a gallon of bottled water. Compare that to the average cost of tap water, which is \$.0023 per gallon! And, since the bottled water industry isn't regulated like public water systems, those buying it typically don't even know where it comes from or what's in it. Think about that the next time you turn on your tap and fill up your glass!