



2016 AWWA – PNWS Conference: Idaho Drought Processes

Tim Luke, IDWR

May 4, 2016



Idaho Dept. of Water
Resources (IDWR)
Director Appointed by Governor

- Water rights administration
- Delivery of water/water rights
- Other regulatory functions
- Hydrology – Tech Services

Idaho Water Resource Board
(IWRB)
Members appointed by Governor
& confirmed by Senate

- Water planning
- Water projects & financing
- Water Bank
- Minimum stream flow water rights

Shared Staff



DROUGHT

HIGH AND DRY

Idaho's warm winter, light snowpack and early runoff mean that irrigators and others will have to draw down our cushion of reservoir water this summer



KIRSTEN STROUGH / Bureau of Reclamation

Old Man Winter seemed to be looking favorably on Idaho in late 2014, with early storms and above-normal snowfall. But in 2015, Mother Nature left Idaho high and dry. The southernmost part of the state has been hit the hardest, enduring the same warm, dry weather pattern that has California gasping in drought. Owyhee Reservoir, above, is only 26 percent full, and not expected to get any more runoff this year. The Bruneau River watershed is entering its fourth year of drought, coming off its driest three-year period since 1944. Statesman reporter Rocky Barker examines the state of our water and snowpack, and previews what's in store for the state. **DEPTH, D1**

► Also, the drought is having a major effect on animals and the ecosystem in the West. **D1**

Idahoans touched by breast cancer and wanting to fund research and fight for its prevention turn out for the annual Komen event. **A5**

IDAHO MOMENT

MOM, DAUGHTER SHOW OFF DOLLS

Photojournalist Katherine Jones brings you the story of two women, more than 5,000 dolls and one crowded house. **EXPLORE, E1**

'DEBT-FREE COLLEGE'

GROUP DRIVES DEMS' GOAL **A14**

IDAHO HISTORY

The Swiss and the Gem State **NEWS, A6**

ON THE WEB

VOTER GUIDE 2015

On May 19, Valley residents will elect school board members, library trustees and highway district representatives. They'll also decide the fates of six levies and bonds, including a possible new elementary school for Notus. Visit IDAHOSTATESMAN.COM/ELECTIONS for a guide to the candidates, or check our Statesman and Idaho Politics apps this week.

MOTHER'S DAY

Show us how you celebrated! Send photos and we'll post them in a festive online gallery. See our website for submission instructions.

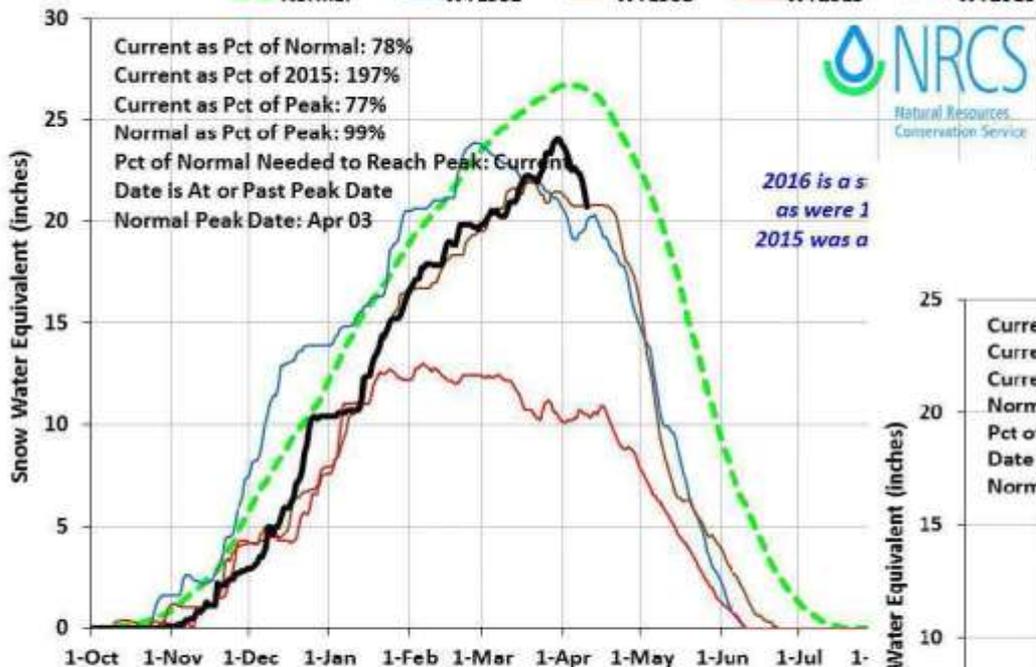
A BIG WEEKEND

Boise State held a massive graduation and the annual Race for the Cure had a massive turnout. Find photo galleries from both events.

Spokane Basin 2016 Snowpack Comparison Graph (9 sites)

Based on Provisional SNOTEL data as of Apr 10, 2016

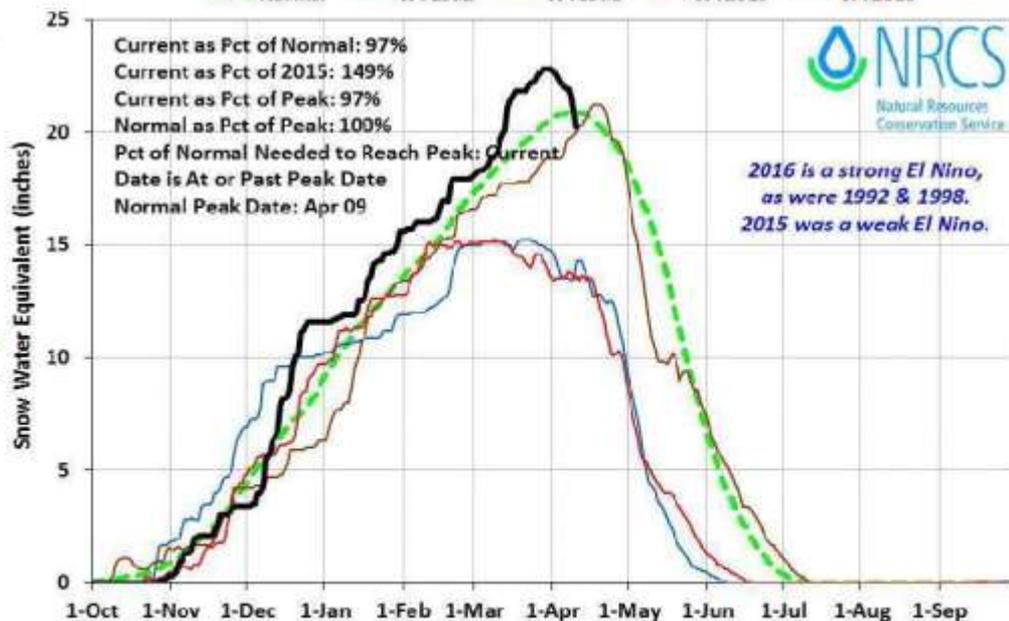
Normal WY1992 WY1998 WY2015 WY2016



Salmon Basin 2016 Snowpack Comparison Graph (22 sites)

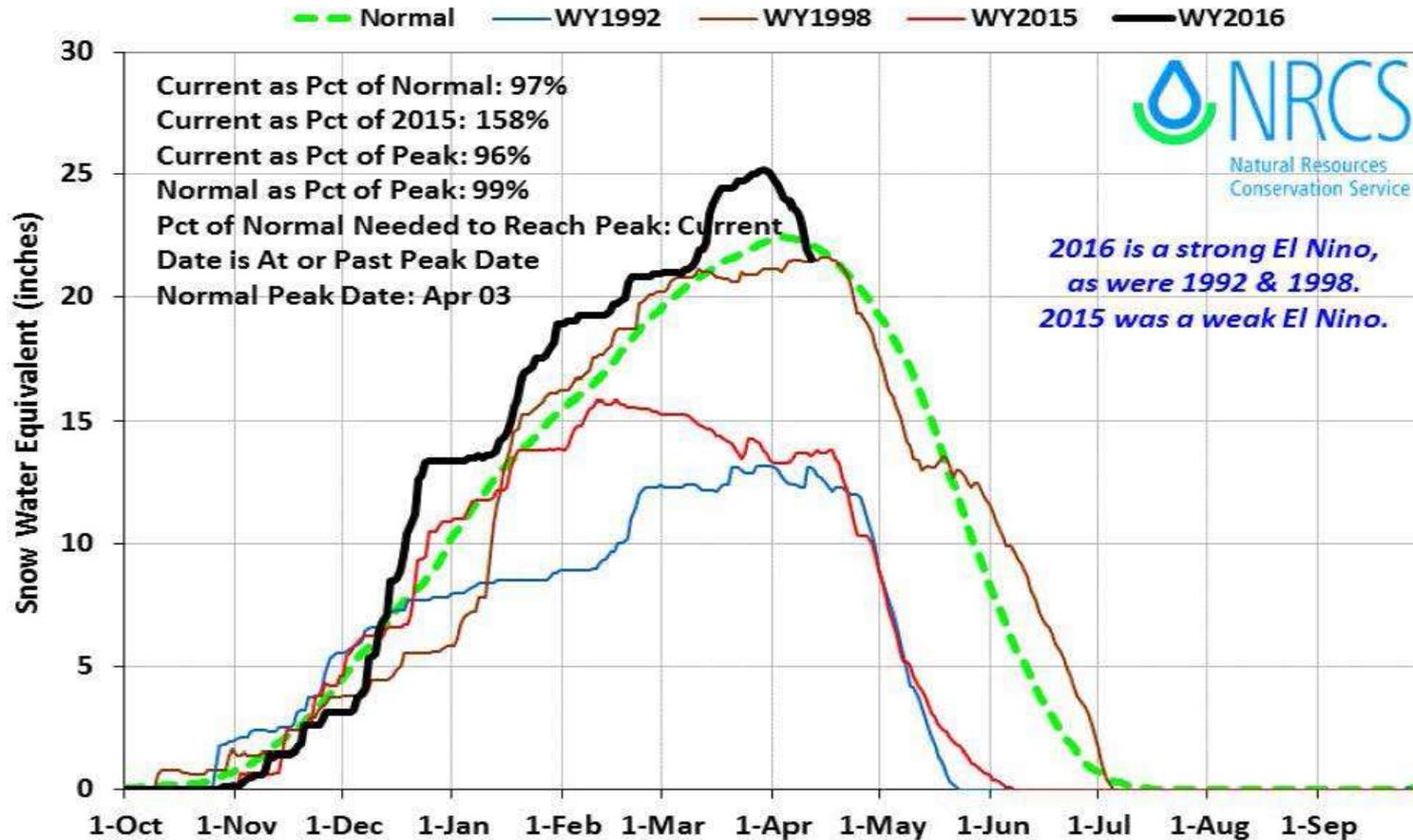
Based on Provisional SNOTEL data as of Apr 10, 2016

Normal WY1992 WY1998 WY2015 WY2016



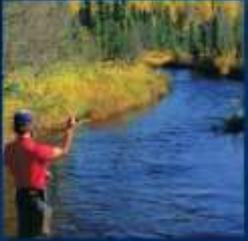
Boise Basin 2016 Snowpack Comparison Graph (10 sites)

Based on Provisional SNOTEL data as of Apr 11, 2016



Drought Processes

- Water Supply Committee
- Drought Declarations
- Idaho Drought Plan
- Sustainability Plan



Drought Planning – Idaho Water Supply Committee

- Chaired by IDWR
- Collect water supply data and information from various sources and agencies

NRCS

Weather Service

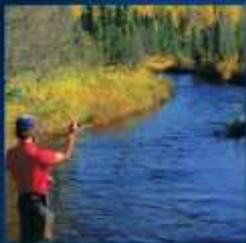
BOR

USGS

Idaho Power

Corps of Engineers

Others



Drought Planning – Idaho Water Supply Committee

- Disseminate water supply data and information to various places where it is needed

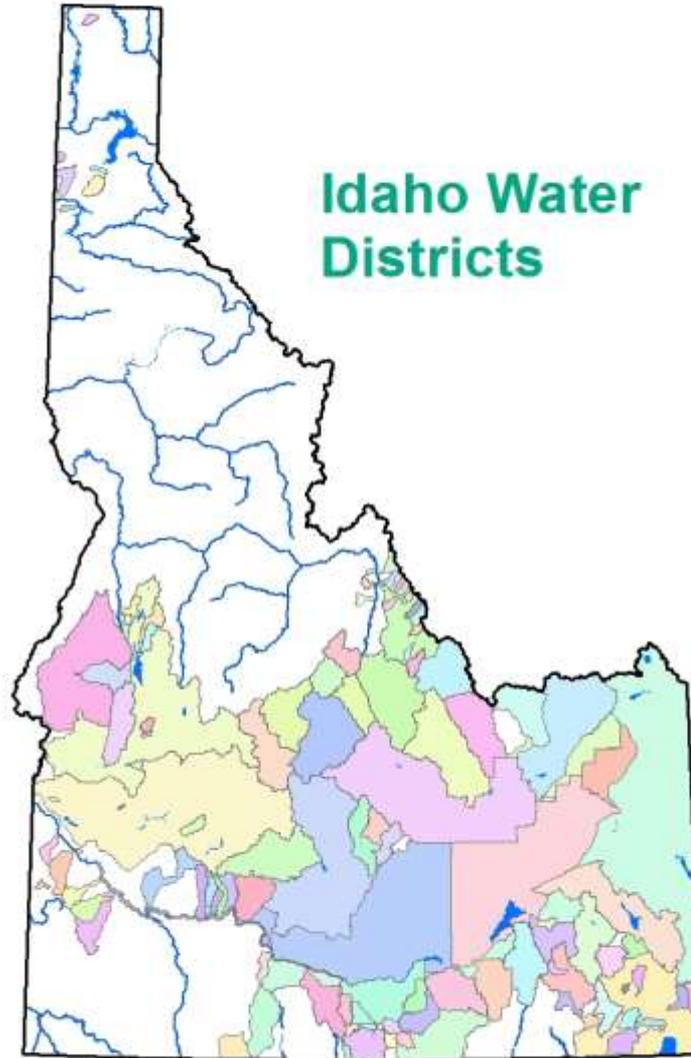
Water Districts/State Watermasters
Irrigation Districts/Canal Companies
Reservoir Operators
Cities
Media
General Public

Drought Planning – Idaho Water Supply Committee

- Provide water supply/drought information to those in the water-user community so they can make decisions to deal with drought
- Better informed water managers, canal managers, reservoir operators
- Minimize economic impacts from drought

Drought - Water Right Administration

- Prior-Appropriation water right system designed for water supply variability
- If not enough water to go around, an orderly system is in place to curtail water uses to match supply
- Idaho has strong system on water right administration – although conjunctive administration has introduced significant challenges



Drought Declarations

Legal Reference

- **Idaho Code § 42-222A (added in 1993)**
 - Upon declaration of drought emergency by IDWR Director & approval by Governor
 - Authorizes IDWR to allow temporary water right transfers or exchanges
 - Provides an expedited but temporary transfer or exchange process

Temporary Changes

- Changes in point of diversion, place of use, purpose of use
- \$50 application fee
- No advertising required

Temporary Changes

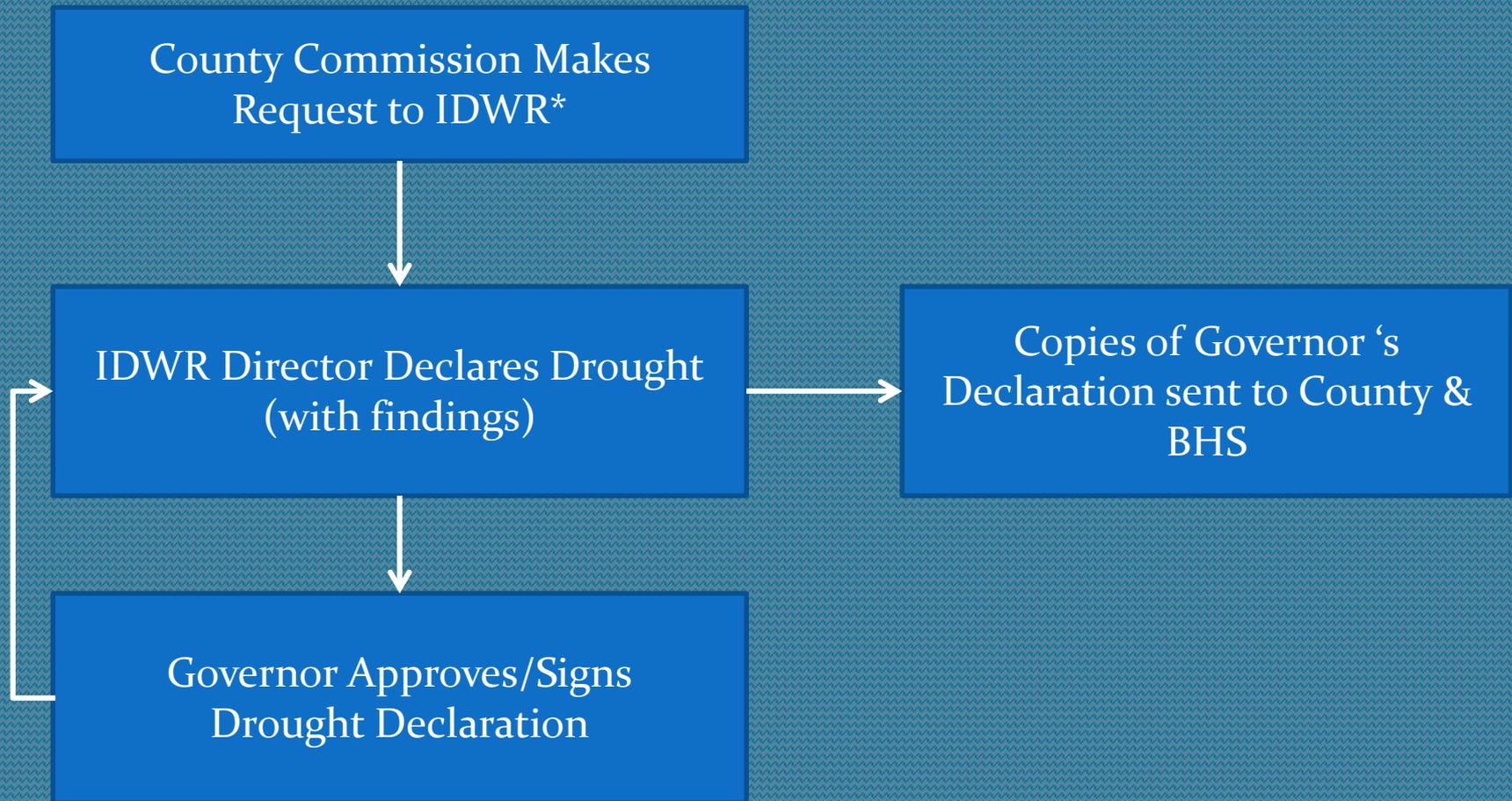
- IDWR not required to make findings needed in normal transfer process such as:
 - injury
 - enlargement
 - local public interest

Recipient assumes these risks

Temporary Changes

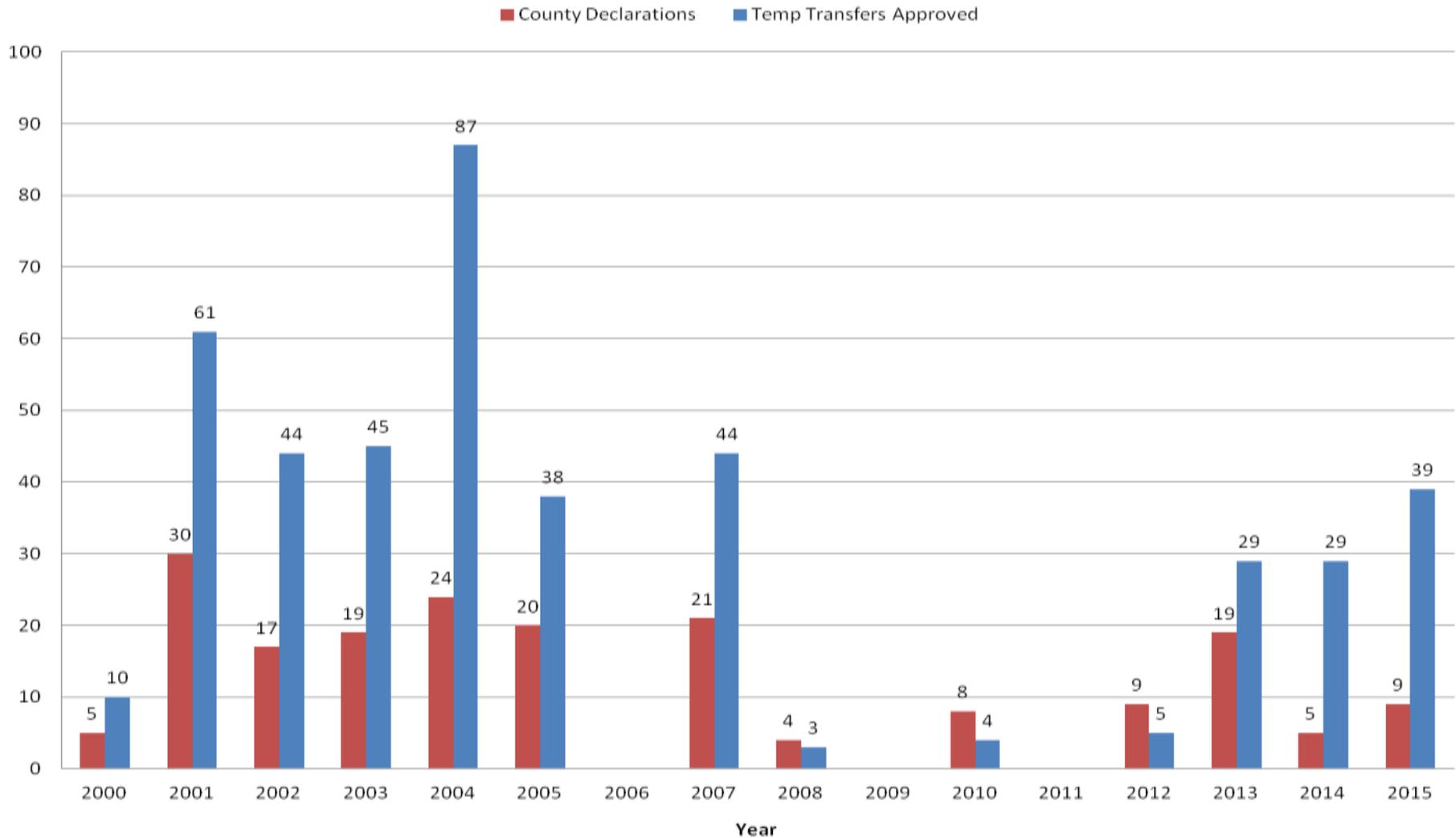
- Changes are to provide a replacement water supply for uses that normally have a full supply except for drought
- Expires at end of year or season

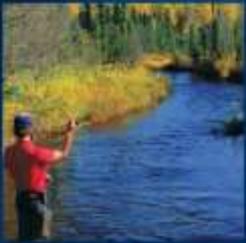
Declaration Process:



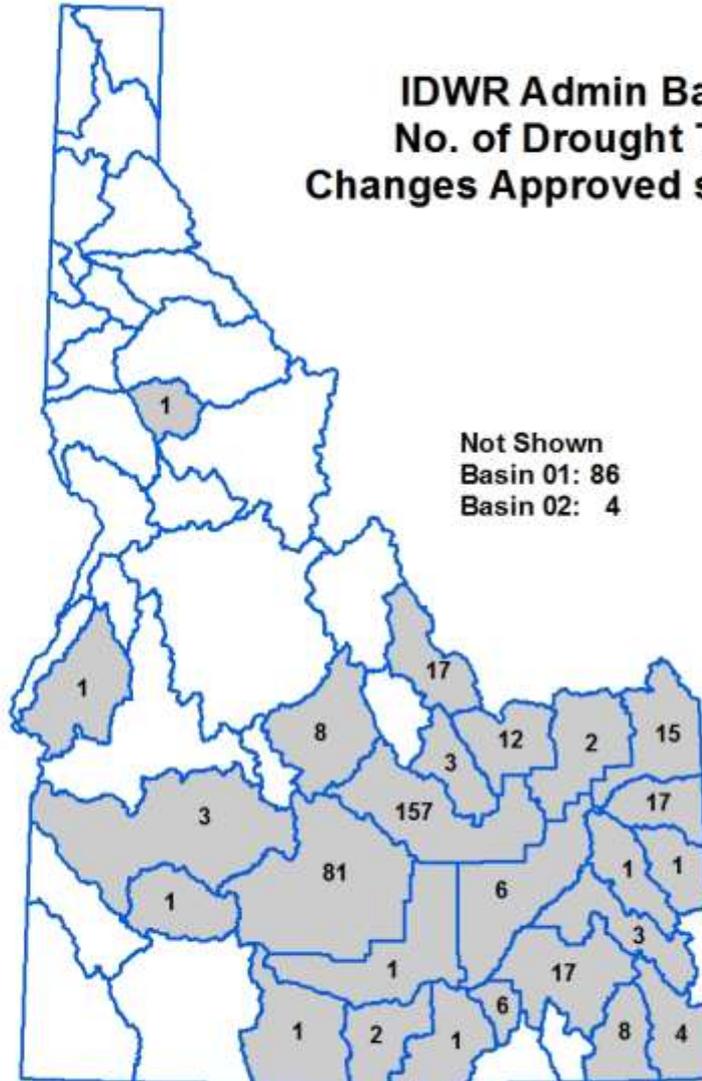
* County request not always based on need for temporary water right changes

County Drought Declarations and Temporary Changes by Year





IDWR Admin Basins No. of Drought Temp Changes Approved since 2001



Not Shown
Basin 01: 86
Basin 02: 4

Idaho Drought Plan

- Guidance/reference for managing water shortages
- Originally developed in 1990; Revised 1995, 2001
 - Plan maintained by Water Supply Committee
- Currently outdated
 - Next update will be initiated January, 2017
 - Evaluating other state plans in 2016

Idaho Draft Sustainability Plan

- Governor requests sustainability policy - 2012
 - sustain water supplies to satisfy current uses and meet future needs in accordance with State law and policy
- IWRB currently completing policy
 - Public release – May, 2016
 - Public hearings – summer, 2016
 - Adoption – November, 2016
 - Submit to 2017 Legislature – January, 2017

Idaho Draft Sustainability Plan

- Strategies
 - Inventory water supply, current uses & future needs
 - Develop plans to address state area supply shortages
 - Identify, prioritize and implement alternatives and projects to optimize supplies
 - Aquifer stabilization projects/efforts
 - Enhance water transfer mechanisms, policy, regulations
 - Identify water conservation measures
 - Enhance surface water storage supply
- Milestones are identified in policy

Idaho Draft Sustainability Plan

- Funding for Sustainability & on-going Aquifer Stabilization & Recharge:
 - 2014 - \$5 million of cigarette taxes to stabilization
 - 2015 - \$4 million one time for aquifer recharge
 - 2016 - \$5 million cigarette tax cont. through 2019
\$5 million additional from general funds
\$2.5 million one-time payment

ESPA Recharge for Aquifer Stabilization and Recovery – Costs & Timeline

- 200,000 AF/year average in 2019 (+/-)
- 250,000 AF/year average full build-out in 2025 (+/-)
- \$25M capital cost
- \$2-to-3M/year ongoing, for operations, maintenance, and replacements
- Schedule contingent on adequate resources (Cigarette Tax funds)

Storage Projects – Making Progress

Weiser-Galloway - new 750,000 AF reservoir

- Completed geotechnical studies, nearly complete with operational studies
- Received FERC preliminary permit
- Next items: Weiser River Trail relocation study, economics of flow augmentation exchange, define needed environmental studies

Island Park – enlargement of Island Park Reservoir by 30,000 AF

- Highest priority from Henrys Fork Basin Study
- Raise spillway by 3 feet
- Developing agreement with BOR
- Detailed Land impacts analysis
- Offset ESPA pumping; maintain Swan Falls minimum flows



Storage Projects – Making Progress

Arrowrock – enlargement of Arrowrock Reservoir by 300,000 AF

- Partnering with Corps of Engineers – flood control and water supply
- Study received federal funds from Congress
- Project may include channel conveyance as well as storage
- Draft Feasibility Report & EIS: Fall 2015
- Final Record of Decision: 2017



Questions?

