

# 2018 IFC Drought Workshop

## Western Regional State's Drought Review

Jonathan Kohr - Habitat Biologist  
Washington Department of Fish and Wildlife  
Yakima, WA (509) 457-9306  
[Jonathan.kohr@dfw.wa.gov](mailto:Jonathan.kohr@dfw.wa.gov)



07/21/2015 17:30

# Drought (emergency) to save fish?





Home > Planning > Drought Plans > State Drought Plans

Login

## State Drought Plans

### About State Drought Planning

- [Types of Plans](#)
- [References](#)

### Current State Drought Plans

Below you will find information on state drought plans.

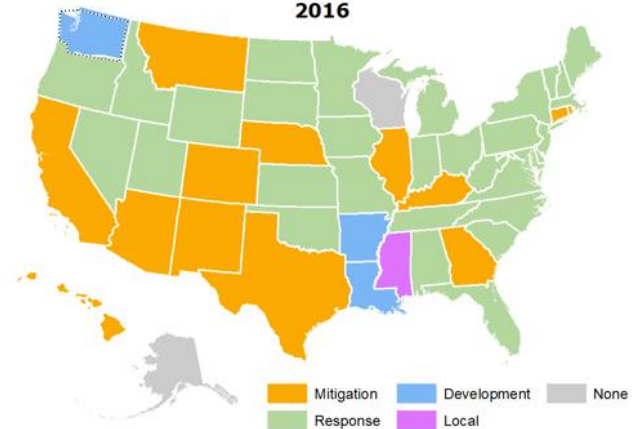
- [List of current state drought plans](#)
- [Get all information for one current state plan](#)
- [Find plans that use one or more triggers/indicators](#)

### Historical State Drought Plans

Below you will find information on previous state drought plans that are no longer in use.

- [Get all drought plans for one state](#)
- [Get all available information for one historical state drought plan](#)
- [View the archive of state drought plan status maps \(1981 - present\)](#)

### Status of State Drought Plans 2016



The information displayed on this map is from an evaluation based upon a set of [established criteria](#).

# NDMC - Drought Plan Definitions

- **Response plan** - A response plan is focused on short-term actions or guidelines to help reduce the immediate threat of drought.
- **Mitigation plan** - Mitigation plans based on drought risks addressed before a drought occurs to reduce future drought impacts.
- **Development/revision** - Applies to states that are in the process of developing a plan, OR states that have a response plan and are in the process of creating a mitigation plan.
- **No plan** - An official drought plan document is not available or does not exist.

# Status of Western State's Drought Plans

| <b>Plan types</b>        | <b>States</b> |    |    |    |    |    |
|--------------------------|---------------|----|----|----|----|----|
| Response                 | ID            | NV | OR | UT | WY |    |
| Mitigation               | AZ            | CA | CO | HI | MT | NM |
| Development/<br>Revision | WA            |    |    |    |    |    |
| No Plan                  | AK            |    |    |    |    |    |

# Washington

- Past plan from 1992 - Drought Declaration (< 75% normal snowpack and undue harm)
- Plan updated in 2017 based on 2015 experiences, including moving to a two-stage drought response (an ‘advisory’ and ‘emergency’ stage) and pre-staging to expedite projects
- Water Supply Availability Committee (WSAC)
- Includes Governor’s Office, WDOE, DOH, Dept. of Ag., WDFW, DNR, Employment Security, Energy Office, GA, Local Gov’ts, Counties, USBoR, USGS, BPA, Army Corp....many others
- Numerous emergency fish and flow related projects fish/gold dredging restrictions

# Alaska

**Notify water management agency, DNR, and request temporary water authorizations be suspended.**

- Used successfully on a couple of occasions during prolonged hot, dry spells to suspend temporary water withdrawals.

**Halt water withdrawals authorized by ADF&G Fish Habitat Permits.**

- In 1975 for a short period of time during winter exploration along the North Slope.
- Brought attention to the need to protect critical overwintering fish habitat.
- Records indicate it was contentious and resulted in an intensive, multi-agency response.

# Arizona

## Arizona has been in a declared drought since 1999

- There is limited multi-agency coordination, but mostly a monitoring for drought perspective
- Arizona's governor implemented the Arizona Water initiative in 2015 that established the Governors Water Augmentation Council
  - Desalination and Water Re-use (toilet to tap)
- Colorado River collaboration with Nevada and California to maintain Lake Mead elevations
  - To the state of Arizona are the first to be curtailed under the “Law of the River” body of water laws governing the river.
- There is no attempt at the ADWR level to curtail water use during times of drought.
  - Streams are allowed to be entirely diverted



# California

## General Actions

- Voluntary drought initiative
- Voluntary actions during periods of elevated water temperatures
- CDFW requests property owners to report waterfowl mortality
- Funding for drought response actions through CDFW Grants
- Public outreach regarding drought and wildlife topics
- Streamline domestic water tank storage (CDFW and SWB)
- Emergency water conservation regulations for timber harvesting

## Examples of Direct Actions

- Aquatic stressor monitoring
- Fish rescues
- Hatchery improvements
- Drought-related restoration projects

# Colorado

**Follows the National Drought Mitigation Center outlines the following “operational definitions of drought”:**

- 1. Meteorological drought** - Meteorological measurements are the first indicators of drought
- 2. Agricultural drought** - Agriculture is usually the first economic sector to be affected by drought
- 3. Hydrological drought** - When precipitation is reduced or deficient over an extended period of time, this shortage will be reflected in declining surface and subsurface water levels
- 4. Socioeconomic drought** affect people, individually and collectively (supply and demand of an economic good)

# Hawaii

## Plan

- Focused on drought mitigation actions
- The limiting factor for mitigation is funding
- Severe droughts a few times since 2000
  - Impacts mainly to the agriculture and wildland fire sectors

## Lessons Learned

- Establish a drought stakeholder network with access to decision makers BEFORE drought occurs
- Drought monitoring is very important (pre-and-post)
- Active drought mitigation can reduce impacts during drought

# Montana

## **Basin Closures and Restrictions**

- Due to droughts the last ½ of the 1980s, a large portion of Montana was closed or restricted to new appropriations

## **Local Voluntary Drought Plans**

- Local stakeholders formed groups to for voluntary drought response plans

## **Candidate Conservation Agreements**

- Water users following an approved water management plan

## **Additional Actions**

- Appeal to water users to reduce water use
- Purchase Stored Water for Instream Flow
- Pursue enforcement of water rights in situations where administration of water rights is not presently occurring
- Water right leasing or purchase with temporary or permanent instream flow conversion

# Findings

## Commonalities

- Drought declarations – most states
- Agency Coordination Key
- Drought Mitigation Projects
- Address Needs of Fish, Farms, People

**What worked** – Voluntary water savings, Fishing and gold-dredging windows, water acquisition, mitigation projects

**What didn't** – Voluntary water savings (education), mandatory non-use, timing and availability of funding, difficulties in monitoring efforts

# Thank you for this opportunity!

**Find More Information From:**

- IFC members
- National Drought Mitigation Center

<http://drought.unl.edu/>