Drought Annex
State of Oregon Emergency Operations Plan

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Oregon Office of Emergency Management
Oregon Water Resources Department

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Acronyms

DRC	Drought Readiness Council
NRCS	U.S. Natural Resources Conservation Service
NWPCC	Northwest Power and Conservation Council
OAR	Oregon Administrative Rule
OCCRI	Oregon Climate Change Research Institute
ODA	Oregon Department of Agriculture
ODEQ	Oregon Department of Environmental Quality
ODF	Oregon Department of Forestry
ODFW	Oregon Department of Fish & Wildlife
ODHS	Oregon Department of Human Services
OEM	Oregon Office of Emergency Management
OHA	Oregon Health Authority
ORS	Oregon Revised Statute
OWRD	Oregon Water Resources Department
OPRD	Oregon Parks and Recreation Department
OSMB	Oregon State Marine Board
PUC	Public Utility Commission
NDMC	National Drought Mitigation Center
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NWS	National Weather Service
USACE	U.S. Army Corps of Engineers
USBLM	U.S. Bureau of Land Management
USBOR	U.S. Bureau of Reclamation
USDA	U.S. Department of Agriculture
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WSAC	Water Supply Availability Committee

Purpose

The purpose of this annex is to establish a framework for the State of Oregon to conduct an effective, coordinated, and timely response that minimizes negative impacts resulting from severe drought conditions.

This incident annex describes the roles and responsibilities of state agencies during severe drought situations and serves as a companion document to the State of Oregon's Emergency Operations Plan.

This response document is supported by other drought mitigation and long-term water management strategies, such as the state's 2015 Natural Hazards Mitigation Plan and Oregon's 2012 Integrated Water Resources Strategy.

The Office of Emergency Management is primarily responsible for development of this plan, with significant input and contribution from the Water Resources Department, the lead agency for this hazard.

Planning Assumptions

- Drought is a normal, recurring feature of climate. It occurs almost everywhere, although its features vary from region to region, and defining it can be difficult.
- Changes in the timing of streamflow related to changing snowmelt have been observed and are likely to continue, reducing the supply of water for many competing demands and causing far-reaching ecological and socioeconomic consequences.
- Drought is a slowly developing – and often long-lasting – disaster, with cumulative impacts, making consistent and early monitoring and detection critical. Drought can adversely affect agriculture, community water supplies, industry, fish and wildlife, recreation, and other beneficial uses.
- During a drought, local jurisdictions should consider all water management tools available and routinely consult with water suppliers within the region.
- The initial responsibility for providing emergency water supplies rests with local jurisdictions.
- When local resources have been exhausted, additional assistance may be provided by state agencies.

Background

Types of Drought

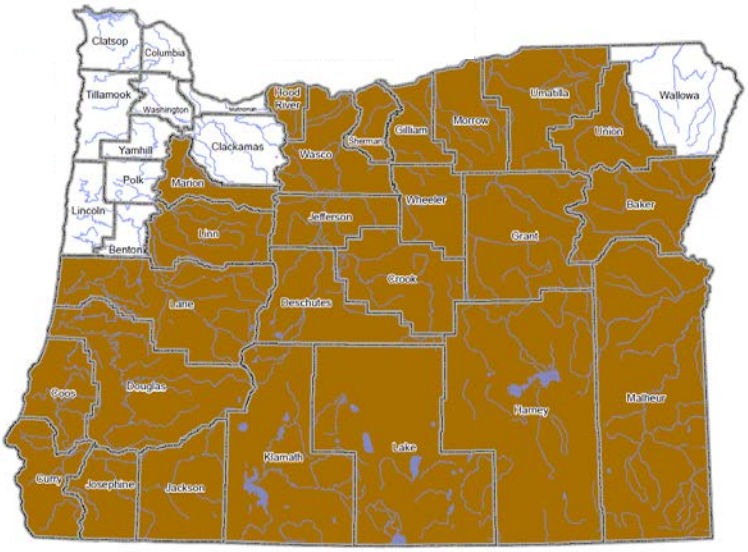
Droughts can generally be characterized by an increased demand or decreased supply of water. In the early 1980s, researchers with the National Drought Mitigation Center (NDMC) and the National Center for Atmospheric Research located more than 150 published definitions of drought. In order to simplify analysis, the NDMC now provides four different ways in which drought can be defined:

- **Meteorological** - a measure of departure of precipitation from normal. Due to climatic differences, what might be considered drought in one location of the state may not be the same in another location.
- **Agricultural** - refers to a situation where the amount of moisture in the soil no longer meets the needs of a particular crop.
- **Hydrological** - occurs when surface and subsurface water supplies are below normal.
- **Socioeconomic** - refers to the situation that occurs when physical water shortages begin to affect people.

Drought in Oregon

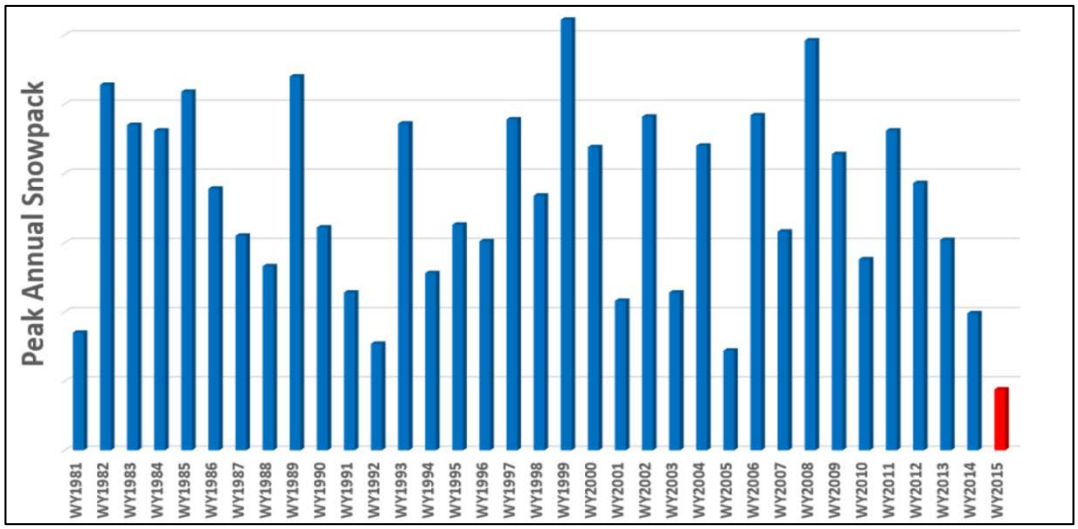
Drought is a common and frequent occurrence in Oregon. The droughts of 1976-1977, 1992, 2001-2002 and 2015 were felt statewide. The drought of 2015 was especially challenging. By September, 25 counties were under a state drought declaration. This was particular difficult for areas that had experienced drought conditions during the previous two years.

Figure 1: 2015 Drought Declarations



Record warm temperatures during 2015 contributed significantly to water supply shortages throughout the state. Warm temperatures led to a winter with record-low or near-record-low snowpack, contributing to dry soils and vegetation, as well as lower than normal streamflows and peak runoff occurring earlier in the year. Figure 2 below provides a historical look at the 2015 snowpack compared to previous years.

Figure 2: Peak Annual Snowpack (Water Year 1981 – 2015)

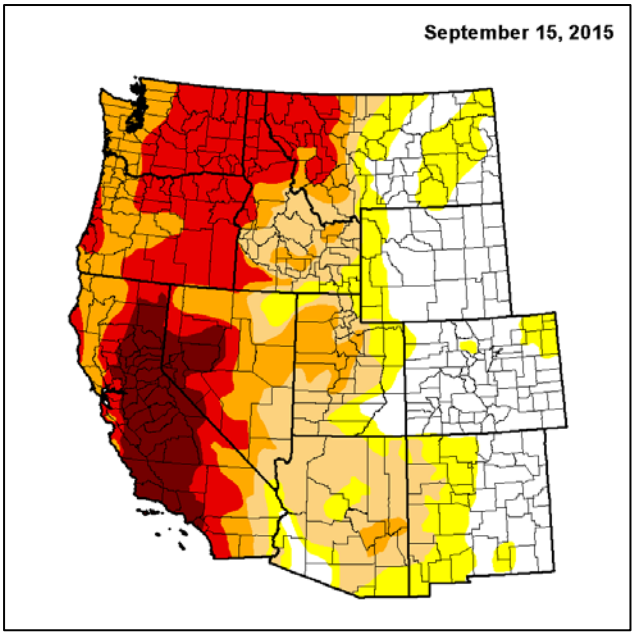


Source: NRCS Snow Survey Program

For much of southern Oregon, 2015 was the second or third year of drought, and the impacts continued to intensify. However, the extent and severity of this year's drought exceeded the two previous years for the state as a whole. Drought conditions affected agriculture, community water supplies, recreation, fisheries and wildlife, and contributed to a very active wildfire season.

Many parts of Oregon experienced a dry and hot spring and summer, with periods of record-high temperatures, especially in western and northeast Oregon. Overall, it was the hottest June on record for most of Oregon and one of the hottest Julys on record. The meteorological summer— June through August—was also the hottest on record for many locations, with cities such as Portland, Salem, Eugene, Roseburg, Medford, and Klamath Falls setting new temperature records.

Figure 3: U.S. Drought Monitor



Due to these severe conditions, Governor Kate Brown issued an Executive Order in July 2015 directing state agencies to reduce water use at all state-owned facilities and to update the state's emergency response plan for drought, the incident annex to the state's emergency operations plan. Previous versions of the annex were completed in March 1988, February 1991, June 1993, June 2001, and September 2002.

Early Drought Monitoring & Preparedness

Determining Drought

Oregon Revised Statute (ORS) Chapter 536 identifies authorities available during a drought. To trigger specific actions from the Water Resources Commission and the Governor, a "severe and continuing drought" must exist or be likely to exist. Oregon relies upon two inter-agency groups to evaluate water supply conditions, and to help assess and communicate potential drought-related impacts. The Water Supply Availability Committee (WSAC) is a technical committee chaired by the Water Resources Department. The other group—the Drought Readiness Council—is a coordinating body of state agencies co-chaired by the Water Resources Department and the Office of Emergency Management.

Water Supply Availability Committee – The Water Supply Availability Committee consists of state and federal agencies that meet early and often throughout the year to evaluate the potential for drought conditions. If drought development is likely, monthly meetings occur shortly after release of NRCS Water Supply Outlook reports for that year (second week of the month beginning as early as January) to assess conditions. Participating members of the WSAC include representatives from the following agencies:

- Oregon Department of Agriculture
- Oregon Department of Forestry
- Oregon Office of Emergency Management
- Oregon Water Resources Department (Chair)
- NOAA-National Weather Service and Northwest River Forecast Center
- USDA-NRCS Snow Survey Program
- U.S. Army Corps of Engineers
- U.S. Geological Survey

Water Supply Forecasts

Several state and federal agencies monitor water supplies and track potential drought conditions. The National Weather Service, for example, provides hydro-meteorological, snow cover, and other available data from the SNOTEL network operated by the NRCS. The network provides snow depth, snow water equivalent, and temperature data for high elevation sites.

The NRCS issues a monthly "Water Supply Outlook" report detailing current and forecasted streamflow information, snowpack, precipitation, and reservoir data for each major river basin in Oregon. Data for the report is provided by the Oregon Water Resources Department, U.S. Geological Survey, the National Weather Service and other cooperators.

The following are indicators used by the Water Supply Committee for evaluating drought conditions:

- Snowpack
- Precipitation
- Temperature anomalies
- Long range temperature outlook
- Long range precipitation outlook
- Current streamflows and behavior
- Spring and summer streamflow forecasts
- Ocean surface temperature anomalies

(El Nino, La Nina)
- Storage in key reservoirs
- Soil and fuel moisture conditions
- NRCS Surface Water Supply Index

Through the Water Resources Department, the WSAC communicates the status of drought conditions to local, state, and tribal agencies, and their designated emergency management points-of-contact. During a severe drought, local emergency managers should coordinate closely with water providers (municipal and irrigation), OWRD field staff, and other water users. Representatives from city, county, and tribal governments are encouraged to attend WSAC meetings for pertinent information on local conditions and potential courses of action.

The Committee is also responsible for providing updates and reports on conditions to the Drought Readiness Council.

Drought Readiness Council – The Drought Readiness Council (DRC) is an advisory body of state agencies involved with natural resources management, public health, or emergency services. The Council relies on information provided by the Water Supply Availability Committee to assess how conditions may affect various sectors across the state, including instream and out-of-stream uses.

A primary role of the Drought Readiness Council is to review local requests for assistance and make recommendations to the Governor regarding the need for a state drought declaration. The Council is generally responsible for ensuring coordination among state agencies and will help water users and others access drought-related information and assistance programs.

The DRC is co-chaired by Water Resources Department and the Office of Emergency Management. Altogether, the DRC includes senior-level staff from the following:

- Oregon Climate Change Research Institute
- Oregon Department of Agriculture
- Oregon Department of Energy
- Oregon Department of Environmental Quality
- Oregon Department of Fish and Wildlife
- Oregon Department of Forestry
- Oregon Health Authority's Drinking Water Program
- Oregon Office of Emergency Management (co-chair)
- Oregon Water Resources Department (co-chair)

Drought Declaration Process

The legal authorities for drought mitigation and response functions are found in ORS 536.700 - 536.780 and Oregon Administrative Rules (OAR) Chapter 690, Division 19. The Governor, through the request of a local jurisdiction, can declare an emergency under ORS 401.165.

Under ORS 536.740, the Governor has authority to declare that a severe, continuing drought exists, or may exist, in any (or all) of the drainage basins in Oregon. Based on that declaration, the Governor or the Oregon Water Resources Commission can also direct state agencies and political subdivisions to implement a water conservation plan or water curtailment plan. Additionally, ORS 536.750 states that a drought declaration by the Governor allows the Water Resources Department to provide existing water right holders with access to temporary water management tools, described in OAR 690-019.

More serious conditions may require further action, including a declaration of emergency as defined under ORS 401. When requesting a declaration of emergency by the Governor, local governments must first conduct response operations to the full extent of their capability, as defined by local statutes and more fully described in emergency operations plans. As a part of that response, local governments must have exhausted all local resources including requesting assistance through mutual aid, intergovernmental agreements, and private contracts. Assistance through this process is most applicable when the severity of the drought causes or threatens widespread loss of life, injury to person or property, human suffering or financial loss—in other words, agricultural or socioeconomic droughts.

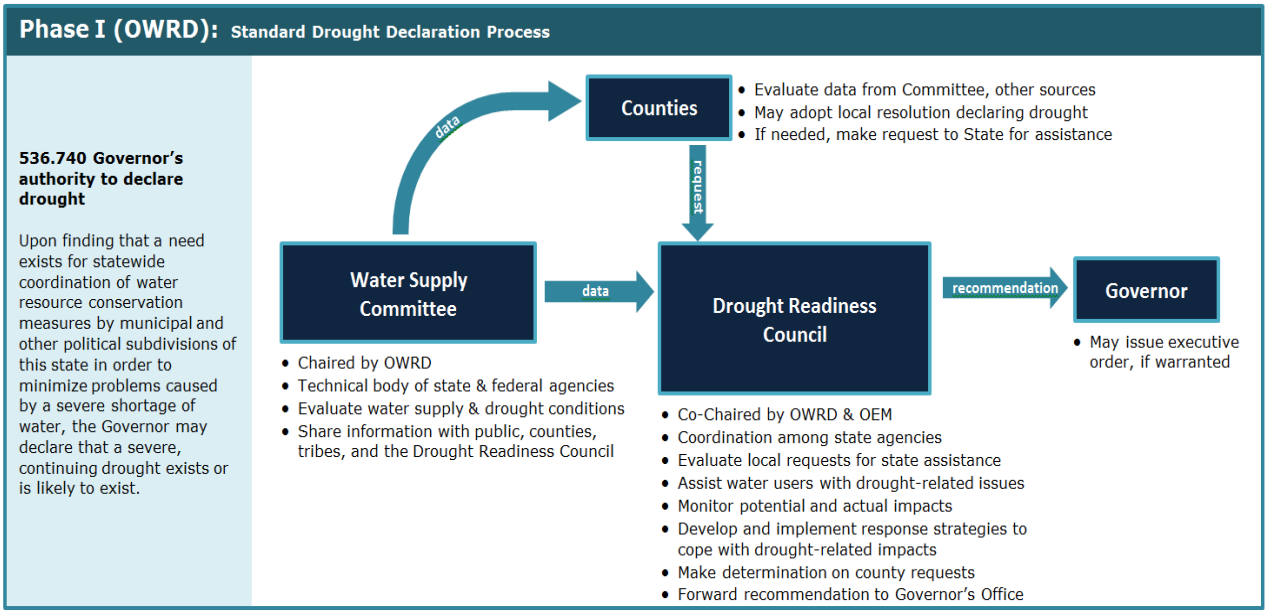
Together, these sections of statute and rule provide a framework with graduated series of policy tools for responding to drought. Typically, state drought declarations of either kind expire at the end of the calendar year; if conditions persist through the winter and spring, affected jurisdictions would request new drought declarations.

The first step in the drought declaration process begins at the local level, where emergency managers consult with local water providers and WRD regional staff members. This consultation may lead to a local governing body adopting a resolution or ordinance declaring a drought within its boundaries.

If conditions persist, the next action is to request access to temporary water right tools, or state agency coordination and assistance, or both. For this, cities or districts must appeal to the county that the majority of their area lies within. That county may then make a written request for a state declaration of severe and continuing drought. The Water Supply Availability Committee plays a key role in evaluating water supply conditions related to such a request (see Figure 4 below). After

reviewing the county request, the Drought Readiness Council makes a recommendation to the Governor.

Figure 4: Standard Drought Declaration Process



If water supply conditions deteriorate to the point of a severe water emergency, for example, where drinking water supplies are threatened and state resources are needed to respond, then an emergency declaration under ORS 401 can be triggered. A part of that local declaration must be a request for a state declaration of emergency. This state declaration allows much broader action than the water right tools available under ORS 536, including the deployment of people and equipment from any state agency deemed necessary.

All requests for assistance following an emergency declaration should be made by local emergency management staff members on behalf of their jurisdiction through the Oregon Emergency Response System (OERS)[1]. Like many emergency management response scenarios, maintaining a secure and effective drinking water supply requires a very wide variety of goods and services, depending on the specific circumstances at the time of the incident. Therefore, agencies that maintain such equipment, or information about private-sector service providers, are best able to keep their own directories current and accurate. Combined with a single point for resource requests, this ensures efficient handling of requests. OEM acts as a coordinator to establish which of the potential agencies is capable of responding to the request, and if no state resources are available, the request can be promptly made to federal or private resources based on the requirements indicated.

[1] http://www.oregon.gov/omd/oem/pages/tech_resp/oers.aspx

Federal Declaration Process

Several federal assistance programs become available when a federal drought designation is issued. Federal drought designations are automated using the U.S. Drought Monitor and are administered d differently than drought declarations issued by the Oregon Governor. Federal declarations are conducted under the authority of the U.S. Secretary of Agriculture and are distinct from Presidential disaster declarations.

An Oregon county receives a federal drought designation when any portion of the county meets the "severe" drought intensity value for eight consecutive weeks as determined by the U.S. Drought Monitor. In addition, any county can be designated when a portion of its area has an "extreme" or higher drought intensity value at any time during the growing season. Counties that are contiguous to federally declared counties are also eligible for federal drought assistance.

State Response: Agency Roles & Responsibilities

Systematic coordination and effective communication among local, state, federal, and tribal governments is a fundamental component of the state's drought response. Water management is conducted through a number of plans and policies, many of which directly or indirectly address drought response or other water supply strategies. In its response, state agencies will rely upon other partners and governments, actively seeking their input and involvement when severe drought indicators are present.

State and local Natural Hazard Mitigation Plans, local Water Management and Conservation Plans, curtailment plans, and federal storage operational procedures all fill essential roles in this intergovernmental coordination.

Many state agencies will provide some level of assistance during a drought, primarily through existing agency programs and resources. Some agencies can provide personnel and/or equipment, while others offer knowledge, expertise, or technical assistance. State agencies or institutions with drought-related responsibilities are described below. As mentioned earlier, federal partners are key for providing meteorological and hydrologic data to assess water supply conditions, whereas others can provide drought relief through financial assistance or planning programs.

Oregon Department of Agriculture

- Participates in the Water Supply Availability Committee and the Drought Readiness Council.
- In conjunction with the USDA, may provide analysis of the impact of the drought upon agriculture.
- Coordinates with the USDA on emergency drought relief for agricultural users.

Oregon Department of Energy

- Participates in the Drought Readiness Council.
- Monitors and provides estimates of the impact of the drought on electric power generation capability and expected power supplies.

Oregon Department of Environmental Quality

- Participates in the Drought Readiness Council.
- May provide information on potential water quality impacts.
- In conjunction with the Department of Fish and Wildlife, may make yearly operational recommendations regarding reservoir releases for instream flow purposes.
- Monitors and advises on actions to reduce pollutant discharges into streams, lakes, and estuaries.
- Contact and track communications with National Pollutant Discharge Elimination System (NPDES) permittees in areas with declared drought emergencies and in areas affected by low flow conditions.

Oregon Department of Fish and Wildlife

- Participates in the Drought Readiness Council.
- Adjusts fishing opportunities to prevent “wasting" of game fish.
  - Liberalize fishery for a limited period.
  - Adjust the timing or location of hatchery fish stocking.
  - Selective fishing and hunting restrictions and changes.
  - Restrict access for fishing and hunting related to wildlife concerns.
- Take advantage of drought outcomes to manage invasive species.
  - Conduct eradication actions for invasive species.
  - Recommend to land managers that native plants be actively used to rehabilitate habitat after wildfires.
- Educate the public about actions they can take to reduce drought-related impacts on fish, wildlife and their habitat.
  - Distribute advisories and work with media to inform public on risks, voluntary actions, and management changes that are applicable during drought.
- As resources allow, provide feed and water at strategic points for wildlife.
- Attempt to minimize wildlife-human conflicts as wildlife move to areas with water and food.

Oregon Department of Forestry

- Participates in the Drought Readiness Council.
- Provides information on forest fuel moisture levels, wildfire activity, and prescribed fire activity.

- Provides estimates on expected wildfire risk for the current year.
- Provides information to forest landowners on conditions that warrant limiting access.
- Maintains up-to-date lists of potable water vendors and transporters.

Oregon Department of State Lands

- If warranted, provide emergency authorizations for removal or fills within rivers and streams for such activities as "push-up dams" or excavation to allow free flow of water.

Oregon Governor's Office

- Acts as a liaison to the Drought Readiness Council.
- May act as a convening body during severe drought situations.
- Drafts executive order declarations for Governor's consideration.

Oregon Health Authority (Drinking Water Program)

- Participates in the Drought Readiness Council.
- Provides technical guidance on the disinfection of emergency water containers and transport equipment as well as emergency treatment of water.
- Provides, in coordination with the Water Resources Department, information on drought-related impacts to any public water supplies.
- Provides information on best practices for water hauling from one public water system to another.

Oregon Infrastructure Finance Authority

- Provides information to business and industry on federal and state loan programs that may become available.
- Coordinates with funding agencies to deliver infrastructure financing to local communities.
- Provides financing for planning and technical assistance to improve water system efficiency and resilience to drought.
- Provides design and construction financing to improve water, sewer, and storm water system infrastructure.

Oregon Office of Emergency Management

- Co-chairs the Drought Readiness Council and maintains coordination with the Water Supply Availability Committee.
- Receives requests from local governments for emergency assistance under ORS 401.
- Advises the Governor and drafts state emergency declarations under ORS 401.
- Advises the Governor and drafts requests for a Presidential declaration.

- If necessary, coordinates and administers services related to a Presidential declaration.

Oregon Water Resources Department

- Chairs the Water Supply Availability Committee and co-chairs the Drought Readiness Council.
- Receives requests from local governments for drought assistance under ORS 536.
- Advises the Governor and coordinates state drought declarations under ORS 536.
- Administers the distribution of water and enforces the prior appropriation system of water rights.
- Protects the interest of the State relative to instream flows for fish and wildlife, recreation, or water quality needs.
- Provides, in conjunction with U.S. Geological Survey, the Natural Resources Conservation Service, National Weather Service, Northwest River Forecast Center, State Climatologist, and other state and local agencies, information on the drought, its expected severity, and its potential impact on water users.
- May assist individual water users in analyzing their water supply situation and identifying alternate water sources.
- Monitors groundwater conditions and estimate the effects of the drought on groundwater and related water users; provide technical assistance to groundwater users.
- Expedites the issuance of temporary water use applications pursuant to OAR 690-019.
- Assists in water curtailment and conservation planning and may require water curtailment and/or conservation plans, as necessary.
- Maintains a dedicated website to disseminate information on drought conditions, available resources, and other relevant information.

Communications

The Oregon Water Resources Department will be the lead state agency for coordinating and communicating information regarding water supply shortages. This includes providing information to the public and the news media, as well as tribal governments and local jurisdictions for assessing drought impacts in their communities. Much of this information will be disseminated through the Water Resources Department website.

However, many federal partners also play an important communication role, providing much of the technical data and information regarding seasonal forecasts and various water supply outlooks.

Other state agencies will also contribute information or guidance, such as the Oregon Department of Fish and Wildlife, Oregon Parks and Recreation Department, Oregon State Marine Board, and the Oregon Department of Forestry. These agencies, for example, will inform the public of any fishing restrictions, parks-related closures or operational changes, boater and recreational access to

waterbodies, and any fire-related restrictions, closures, or general information. State agencies will develop or routinely update their communications plan to help prepare for and alleviate drought-related risks.

Data, Water Right Tools, & Federal Assistance

When considering the need for drought-related assistance, local and tribal governments can rely on a number of informational resources to make this determination. Those resources are noted below.

⇒ Local government assistance:	OWRD, OEM, DRC
⇒ Drought conditions:	OWRD, WSAC
⇒ Snowpack:	NRCS
⇒ Streamflows and groundwater levels:	OWRD, USGS
⇒ Reservoir storage:	USBOR, USACE, NRCS, local operators
⇒ Weather observations or forecasts:	ODF, NWS, OCCRI
⇒ Soil moisture levels:	NRCS, ODF
⇒ Forest fire risk:	ODF, USFS, USBLM
⇒ Drinking water supplies:	PUC, USACE, OHA, local water utilities
⇒ Agricultural drought impacts:	ODA, USDA, local irrigation districts
⇒ Fish and wildlife habitat impacts:	ODFW, USFWS
⇒ Water quality:	ODEQ, USGS, OHA
⇒ Recreation impacts:	OPRD, Travel Oregon, OSMB, USACE
⇒ Socio-economic impacts:	OHA, ODHS, Business Oregon
⇒ Power production impacts:	NWPCC, PUC, ODOE

Drought Permits & Water Right Transfer Options

Oregon Administrative Rule Chapter 690-019 provides mitigation activities appropriate during extraordinary drought situations. These rules were developed to mitigate problems which may develop during years when water supplies are inadequate.

A state-issued drought declaration allows the Water Resources Department to offer certain temporary tools to existing water right holders in a drought-declared county. These tools are available through an expedited review process, reduced fee schedule, and are intended to be short-term authorizations, not long-term solutions to deal with frequent or recurring water supply shortages. These emergency tools include:

⇒ Temporary Drought Permits:
An approved drought permit allows a water user to temporarily replace water not available under an existing water right. The most common drought permit allows the use of groundwater as an alternative to an existing surface water right.

⇒ Temporary Transfers:
A water user can apply to change the type of use, place of use, or the location of the diversion under an existing water right.

⇒ Temporary Instream Leases:
Once approved, a water user can convert all or a portion of a water right to an instream use for a period of one year or the term of the drought declaration, whichever is shorter.

⇒ Temporary Substitutions:
Any person holding both a primary water right originating from a surface water source and a supplemental right from a groundwater source may apply to temporarily use the supplemental right instead.

⇒ Special Option Agreements:
A water-right holder can enter into an agreement that authorizes the use of water at locations, from points of diversion, and for uses other than those described in the water right. Typically, the agreement remains in place until terminated by the parties, and provides additional water-supply options in times of drought.

⇒ Temporary Exchange of Water:
The Water Resources Commission has authority to approve a temporary exchange of existing rights, such as using stored-water instead of a direct-flow surface-water right.

⇒ Human Consumption or Stock Water Use Preference:
The Water Resources Commission has authority to grant a temporary preference to water rights for human consumption and/or stock watering uses. The Water Resources Commission must approve temporary administrative rules instituting the preference.

Federal Assistance Programs

Several emergency drought programs exist at the federal level. Programs for farming and ranching operations are administered by the U.S. Department of Agriculture through the Farm Service Agency, USDA Rural Development, and the Natural Resources Conservation Service. The U.S. Small Business Administration provides loans to businesses, including non-profit organizations. The U.S. Bureau of Reclamation also offers grants for drought resiliency planning and project implementation. Links to those programs can be found in the following section.

Online Resources

Drought Conditions & Forecast Information

⇒ NRCS Water Supply Forecasts:
http://www.wcc.nrcs.usda.gov/wsf/

⇒ NRCS Oregon Surface Water Supply Index:
http://www.nrcs.usda.gov/wps/portal/nrcs/detail/or/snow/waterproducts/?cid=stelprdb1244919

⇒ NWS Northwest River Forecast Center:
http://www.nwrfc.noaa.gov/ws/index.html?version=20150727v1

⇒ NWS Long-range Forecasts (temperature and precipitation):
http://www.cpc.ncep.noaa.gov/products/predictions/long_range/seasonal.php?lead=3

⇒ U.S. Drought Monitor:
http://droughtmonitor.unl.edu/Home/StateDroughtMonitor.aspx?OR

⇒ U.S. Geological Survey's WaterWatch (real-time streamflow comparisons):
http://waterwatch.usgs.gov/index.php?r=or&id=ww_current

⇒ U.S. Seasonal Drought Outlook (Climate Prediction Center):
http://www.cpc.ncep.noaa.gov/products/expert_assessment/sdo_summary.php

Drought Permitting & Transfer Resources

⇒ Drought Mitigation Rules (Division 19):
http://www.oregon.gov/owrd/law/docs/law/oar_690_019.pdf

⇒ Drought Application Forms:
http://www.oregon.gov/owrd/Pages/wr/drought_assistance.aspx

Drought Planning

⇒ EPA's Incident Annex Checklist for Water and Wastewater Utilities (June 2015):
http://www.epa.gov/sites/production/files/2015-06/documents/drought_0.pdf

⇒ NIDIS National Drought Mitigation Center:
http://drought.unl.edu/

⇒ OWRD Water Management & Conservation Planning (Division 86):
http://arcweb.sos.state.or.us/pages/rules/oars_600/oar_690/690_086.html

⇒ OWRD Guidebook for Water Management and Conservation Planning (March 2015):
http://www.oregon.gov/owrd/docs/wmcp_guidebook.pdf

⇒ OWRD Model Curtailment Guidance (February 2005):
http://www.oregon.gov/owrd/wr/docs/model_curtailment_ord.pdf

Federal Assistance

⇒ Bureau of Reclamation:
http://www.usbr.gov/drought/

⇒ Farm Service Agency (USDA):
http://www.fsa.usda.gov/programs-and-services/disaster-assistance-program/index

⇒ Natural Resources Conservation Service (USDA):
http://www.nrcs.usda.gov/wps/portal/nrcs/detail/mt/home/?cid=nrcseprd334210

⇒ Risk Management Agency (USDA):
http://www.rma.usda.gov/news/currentissues/drought/

⇒ Small Business Administration:
https://www.sba.gov/content/drought-disaster-assistance

Other Online Resources

⇒ OWRD Water Well Handbook (June 2015):
http://www.oregon.gov/owrd/pubs/docs/Well_Water_Handbook.pdf

⇒ OWRD Groundwater Resources for Landowners (e.g. locate a well driller):
http://www.oregon.gov/owrd/Pages/GW/landowner_resources.aspx

⇒ OWRD Drought Website:
http://www.oregon.gov/owrd/Pages/wr/drought.aspx

⇒ Oregon Emergency Response System (OERS):
http://www.oregon.gov/omd/oem/pages/tech_resp/oers.aspx

⇒ OEM Emergency Operations Plan:
http://www.oregon.gov/OMD/OEM/Pages/plans_train/EOP.aspx

⇒ OHA Drought and Health:
http://public.health.oregon.gov/Preparedness/Prepare/Pages/PrepareForDrought.aspx