

# How can we improve Water Quality in the Deschutes Basin?

Partners are collaborating in the basin to address water quality issues, but there's a lot of work to do.

This graphic shows current and potential influences on water quality, how they impact water quality, and metrics to track these issues. Importantly—it illustrates **what support is most needed and where it might be most impactful.** We recognize that climate change affects Deschutes Basin water quality, but we focused this graphic on local influences and impacts to water quality to prompt on the ground solutions.

## Lake Billy Chinook

INFLUENCES	IMPACTS	KEY METRICS
<ul style="list-style-type: none"> <li>Round Butte Dam &amp; SWW</li> <li>Upstream water quality</li> <li>Agriculture</li> <li>Rural residential</li> <li>Recreation &amp; facilities</li> <li>Fisheries</li> <li>Invasive species</li> <li>Fire</li> </ul>	<ul style="list-style-type: none"> <li>Algal blooms</li> <li>Altered flows</li> <li>Altered habitat</li> <li>Erosion</li> <li>Food web impacts</li> <li>Nutrient cycling</li> <li>Pollutants</li> <li>Sediments in water</li> </ul>	<ul style="list-style-type: none"> <li>Algal toxins</li> <li>Chlorophyll</li> <li>Dissolved oxygen</li> <li>pH</li> <li>Temperature</li> </ul>

## Metolius River

INFLUENCES	IMPACTS	KEY METRICS
<ul style="list-style-type: none"> <li>Fire</li> <li>Rural residential</li> <li>Declining springs</li> <li>Invasive species</li> </ul>	<ul style="list-style-type: none"> <li>Erosion</li> <li>Lower river flows</li> <li>Sediments in water</li> </ul>	<ul style="list-style-type: none"> <li>Dissolved oxygen</li> <li>Nutrients</li> <li>Temperature</li> <li>Turbidity</li> </ul>

## Upper Deschutes River

INFLUENCES	IMPACTS	KEY METRICS
<ul style="list-style-type: none"> <li>Upstream dam operations</li> <li>Municipalities/ Rural residential</li> <li>Agriculture</li> <li>Fire</li> <li>Invasive species</li> </ul>	<ul style="list-style-type: none"> <li>Altered flows</li> <li>Altered habitat</li> <li>Erosion</li> <li>Habitat loss</li> <li>Pollutants</li> <li>Sediments in water</li> </ul>	<ul style="list-style-type: none"> <li>Dissolved oxygen</li> <li>Nutrients</li> <li>pH</li> <li>Temperature</li> <li>Turbidity</li> </ul>

## Lower Deschutes River

INFLUENCES	IMPACTS	KEY METRICS
<ul style="list-style-type: none"> <li>Upstream dam operations</li> <li>Upstream water quality</li> <li>Agriculture</li> <li>Fire</li> <li>Municipalities/ Rural residential</li> <li>Recreation &amp; facilities</li> <li>Invasive species</li> </ul>	<ul style="list-style-type: none"> <li>Algal blooms</li> <li>Altered flows</li> <li>Altered habitat</li> <li>Erosion</li> <li>Pollutants</li> <li>Sediments in water</li> </ul>	<ul style="list-style-type: none"> <li>Chlorophyll</li> <li>Dissolved oxygen</li> <li>Nutrients</li> <li>pH</li> <li>Temperature</li> </ul>

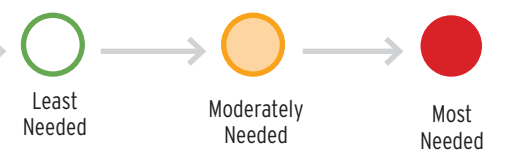
## Lake Simtustus

INFLUENCES	IMPACTS	KEY METRICS
<ul style="list-style-type: none"> <li>Pelton Dam</li> <li>Agriculture</li> <li>Recreation &amp; facilities</li> <li>Invasive species</li> <li>Fire</li> </ul>	<ul style="list-style-type: none"> <li>Algal blooms</li> <li>Altered flows</li> <li>Altered habitat</li> <li>Erosion</li> <li>Food web impacts</li> <li>Nutrient cycling</li> <li>Pollutants</li> <li>Sediments in water</li> </ul>	<ul style="list-style-type: none"> <li>Algal toxins</li> <li>Chlorophyll</li> <li>Dissolved oxygen</li> <li>Nutrients</li> <li>pH</li> <li>Temperature</li> </ul>

## Crooked River

INFLUENCES	IMPACTS	KEY METRICS
<ul style="list-style-type: none"> <li>Agriculture</li> <li>Upstream dam operations</li> <li>Loss of riparian</li> <li>Municipalities/ Rural residential</li> <li>Fire</li> <li>Invasive Species</li> </ul>	<ul style="list-style-type: none"> <li>Altered flows</li> <li>Sediment in water</li> <li>Pollutants</li> <li>Erosion</li> <li>Altered habitat</li> </ul>	<ul style="list-style-type: none"> <li>Dissolved oxygen</li> <li>Nutrients</li> <li>pH</li> <li>Temperature</li> <li>Turbidity</li> </ul>

WHAT KIND OF SUPPORT IS MOST NEEDED?



### CURRENT SOURCES OF SUPPORT

The Pelton Round Butte Fish Committee including PGE, CTWS-BNR, DEQ, ODFW, USFS, TU and NFS, created this graphic to holistically summarize water quality in the basin.

To contact any member of the Fish Committee, email [deschutes.passage@pgn.com](mailto:deschutes.passage@pgn.com) Visit [prbfishcommittee.com](http://prbfishcommittee.com) to learn more.

MONITORING	HABITAT IMPROVEMENT	FUNDING	PLANNING, OUTREACH & COORDINATION	NUTRIENT REDUCTION	FLOW RESTORATION
DRC UDWC CRWC OWRD DEQ PGE MDWC CTWS USGS ODA USFS	DLT UDWC CRWC ODFW USFS TU MDWC CTWS BLM	NRCS PGE OWEB CTWS OWRD DEQ Irrigation Districts	DBWC DRC CRWQP PGE CTWS CRWC MDWC UDWC Soil & Water Conservation Districts Irrigation Districts	CRWC CRWQP NRCS MDWC Soil & Water Conservation Districts Irrigation Districts	DRC Irrigation Districts

### SUPPORTING AGENCIES & ORGANIZATIONS

BLM	Bureau of Land Management
CRWC	Crooked River Watershed Council
CRWQP	Crooked River Water Quality Partnership
CTWS	Confederated Tribes of Warm Springs
DBWC	Deschutes Basin Water Collaborative
DLT	Deschutes Land Trust
DEQ	Department of Environmental Quality
DRC	Deschutes River Conservancy
MDWC	Middle Deschutes Watershed Council
NFS	Native Fish Society
NRCS	Natural Resources Conservation Service
ODA	Oregon Department of Agriculture
ODFW	Oregon Department of Fish & Wildlife
OWEB	Oregon Watershed Enhancement Board
OWRD	Oregon Water Resources Department
PGE	Portland General Electric
TU	Trout Unlimited
UDWC	Upper Deschutes Watershed Council
USFS	United States Forest Service
USGS	United States Geological Survey