

Bear River Watershed Description



The Bear River Basin, located in northeastern Utah, southeastern Idaho and southwestern Wyoming, comprises 19,425 km² of mountain and valley lands. The Bear River crosses state boundaries five times and is the largest stream in the western hemisphere that does not empty into the ocean; instead it ends up in the Great Salt Lake. It ranges in elevation from 1,283 to nearly 3,962 meters. This landscape is unique in that it is entirely enclosed by mountains, thus forming a huge basin with no external drainage outlets. The Bear River is the largest tributary to the Great Salt Lake.

Throughout the basin, the agricultural lands and urban areas are located in valleys along the main stem of the river and its tributaries. In addition to these private lands, the Bear River watershed includes vast amounts of federal land (managed by the Bureau of Land Management and the U.S. Forest Service) and state lands that serve a range of natural and agricultural functions. Each of these uses generates unique impacts and demands on water resources.

Water Quantity

Major water uses in the Bear River Basin include agriculture, irrigation, power generation, recreation and municipal and industrial uses. The Bear River Commission was formed by compact in 1958 to allocate water use throughout the basin. The Bear River's average annual inflow to the Great Salt Lake is nearly 1.48 billion cubic meters. With this plentiful water supply, the Bear River Basin is one of the few remaining areas with a significant amount of developable water in the state of Utah. Bear River water will likely be developed to satisfy the growing needs of areas within and outside the basin. Planners project that with urban growth along the Wasatch front, primarily in Salt Lake, Davis, and Weber counties; there will be a need to import Bear River water in the next 20 to 30 years.

Water Quality

Currently, 52 streams and 9 lakes in the basin are listed on 303(d) lists of impaired waters in Idaho, Utah and Wyoming. (See water quality and pollutant sources list)

Eleven water quality management plans, known as Total Maximum Daily Loads (TMDLs), have been completed. An additional 42 TMDLs are being developed. According to the Environmental Protection Agency



(EPA), a TMDL is “a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards.”

Money from EPA 319 and USDA EQIP, as well as landowner matches and other programs, have been used to fund past and ongoing water quality projects throughout the watershed.

Water quality management in the Bear River Basin is complicated by the transboundary nature of the river. It meanders through three states and two EPA Regions with multiple jurisdictions and planning authorities. This has fragmented water quality improvement efforts. The ad hoc Bear River Water Quality Task Force (BRWQTF) was formed in 1993 to facilitate management of this multi-state watershed. The Bear River Commission created a water quality committee (WQC), which provides a more formal arrangement between the water quality heads of the three states. The BRWQTF now serves as unofficial staff to this committee. This has enhanced interstate communication and cooperation on water quality issues throughout the basin.

Water quality problems include:

- Sedimentation
- Nutrients
- Fecal coliform bacteria
- Low dissolved oxygen
- High water temperature

Pollutant sources include:

- Animal feeding operations
- Grazing
- Agriculture
- Wastewater treatment
- Degraded stream banks
- Urban development
- Roads
- Phosphate mining
- Oil and gas exploration
- Logging

The BRWQTF and WQC have identified the following needs for watershed management:

- Innovative and cost-effective water quality solutions
- A common source of merged datasets and planning tools
- A means to identify impacts and predict responses of program implementation within the basin

Subwatersheds

To learn more about the major subwatersheds within the Bear River Watershed or about the watershed collectively, click on the list below or on the map above.

[Bear River Watershed](#) (entire watershed)

[Bear Lake](#)

[Central Bear](#)

[Lower Bear-Malad](#)

[Middle Bear](#)

[Middle Bear-Logan](#)

[Upper Bear](#)