2020 Water Plan: Climate and Water Fact Sheet:

Source: Environmental Quality Board.

The Minnesota Legislature has directed the Environmental Quality Board (EQB) to coordinate comprehensive long-range water resources planning and policy through a State Water Plan every 10 years (Minnesota Statues 103B.151, 103A.43, 103A.204). This plan fulfills the legislative mandate.

Purpose of the Plan:

The purpose of the 2020 State Water Plan is to establish a framework for aligning state agencies, legislative priorities, and local government policy, programs and actions for the coming decade. EQB developed this plan to set an agenda for tackling the stubborn and complex water problems that climate change will intensify for Minnesotans.

Principles Underlying the Water Plan:

- We have a responsibility to consider the needs of all natural systems, including wildlife and plants.
- We recognize the value of nature-based solutions.
- We recognize the interconnection between land use and water quality and quantity, as well as connections between air and water.
- We recognize that surface water and groundwater, while frequently discussed separately in this report, are interconnected and interdependent.
- We have a responsibility to consider the needs of downstream users.
- We acknowledge that our water resources, while abundant, are not evenly distributed or unlimited.
- We have a responsibility to address water injustices.
- We have a responsibility to welcome and support culturally diverse voices and different ways of knowing.

Water and Climate Change:

- All but two years since 1970 have been wetter and/or warmer than 20th century averages, and the 10 combined wettest and warmest years on record all occurred from 1998 onward.
- During 2019, more precipitation fell across the state than any other year on record back to 1895.
- Minnesota has experienced 11 mega-rains in the 20 years since 2000 (including one in July 2020), versus six in the 27 years from 1973 through 1999.
- Minnesota has warmed considerably, but mostly during nights and winter. Annual temperatures have climbed 2.9 °F since 1895, but winter low temperatures have increased by 6.1 °F.
- Climate model projections made specifically for Minnesota generally suggest we will see more precipitation by the end of this century, with continued increases in heavy rainfall and longer intervening dry spells.

Minnesotans Value Water:

- A 2018 University of Minnesota statewide survey of more than 1,400 residents affirmed that Minnesotans value clean water. More than 90% of Minnesotans surveyed believe drinking water is extremely important, with women tending to rate many values more highly than men.

Building Local Capacity/Engagement, Equity, and Education:

- Working with people is key to solving water challenges. It includes not only understanding environmental issues and natural systems, but also developing skills to address environmental problems as well as active participation in civic life for the benefit of the environment and others.

Tribal Nations, Water and Climate Change:

- The goals and strategies that appear in this report can all be strengthened with deliberate attention to the knowledge, priorities and needs of tribes in Minnesota.
    - government-to-government consultation with Tribal Nations
    - integration of tribal knowledge and expertise into state strategies and actions
    - collaboration with tribes to protect culturally important water habitats and species that are vulnerable to climate change