## Beaver Benefits Beavers are Water Wardens

Beavers engineer land and water when they create dams, ponds, and canals. These features increase water storage above and below the ground. When beaver dams slow water, it has more time to flow downward into the soils, recharging groundwater reserves. This creates three levels of water storage: the surface water, the hyporheic water (water flowing in the soils just under the surface), and the deeper groundwater that replenishes aquifers. Storing more water in the land benefits not only beavers but many other plants, animals, and humans.

## From droughts to floods

"Beavered" land slows down water, which helps regulate both low and high flows. During droughts, water is held in ponds and released slowly downstream, so streams are less likely to run dry. During floods, the many intricate canals and ponds can spread the water out over a larger area. This helps prevent water from rushing downstream all at once.

Beavers dig canals to connect their ponds to nearby food sources.

> Beavers excavate sediment to use in the dam, increasing how much water is stored in the pond.

Porous dams slow water but do not stop it completely, which helps keep streams flowing.

As water slows, gravity pulls it into the ground under and around the waterway — wetting the hyporheic zone.

**HYPORHEIC FLOW** 

Beaver wetlands improve connections between surface water and groundwater.



