#### PLP&T proposed reintroduction of Beavers into the wildlife sanctuary wetlands SE area of E-rock

Reintroducing beavers in areas like Palmer Lake along Monument Creek in the eastern end of E-Rock in the wetlands/floodplain can offer several benefits.

- 1. **Beavers are natural ecosystem engineers.** They build dams that create wetlands, which can improve water quality, recharge groundwater, and provide habitats for many species.
- 2. They also help **control flooding** by slowing water flow.
- 3. Additionally, beaver activity can support biodiversity and help maintain a healthy ecosystem.

Reintroducing beavers to the E-Rock Monument Creek area of Palmer Lake, Colorado, might have some challenges and potential drawbacks:

- 1. Agricultural Impact: Beaver dams can flood agricultural lands, affecting crops and livestock. (Not an issue at this location)
- 2. Infrastructure Damage: Beavers might build dams near roads, bridges, or other infrastructure, leading to potential damage and costly repairs. (Not an issue at this location)
- **3. Water Management**: In areas with specific water management needs, beaver activity could complicate water flow and reservoir management. (Not an issue at this location)
- **4. Ecological Balance**: Introducing beavers might disrupt the existing ecosystem, potentially affecting other species and plant life.
- **5. Human Safety**: There may be concerns about beaver-human interactions, especially if beavers build dams near populated areas.
  - Balancing these concerns with the ecological benefits is essential for making an informed decision.

The following are diseases that can be transmitted from beavers to people. Understanding these diseases and how they are transferred can help you avoid exposure.

#### Rabies

### (Penetrating Wound Transmission)

Rabies is a disease that affects the nervous system of animals and humans. It is caused by a virus present in the saliva and brain/spinal cord of infected animals. The rabies virus is usually transmitted through the bite of a rabid animal.

Only mammals are susceptible to rabies. Animals most likely to transmit the disease in the United States include bats, coyotes, foxes, raccoons and skunks.

## Rabies in Humans Giardiasis

(Fecal-oral Transmission)

Giardiasis, popularly known as beaver fever, is caused by the microscopic parasite called Giardia lamblia. The infection occurs in many animals including beavers (hence its nickname), as well as cows, other rodents, and sheep. Animals are believed to play a role in keeping infections present in an environment.

Giardiasis is transmitted via the fecal-oral route with the ingestion of cysts. Primary routes are personal contact and contaminated water and food. The cysts can stay infectious for up to three months in cold water.

# Stream restoration evolves to include beaver imitation, gets boost from Colorado Legislature

by Moe Clark | Sep 13, 2023 | Restoration, Water Legislation, Water Quality, Water Supply

Excerpts from the article:

"What these researchers were showing was that, well, there's actually a better way to do this. You mimic beaver."

Beaver dams have been shown to retain sediment and nutrients, as well as heavy metals, which can improve water quality.

An example of a low-tech, process-based method would be to install posts vertically into a creek bed to catch wood and debris floating downstream, mimicking natural log jams. This can jumpstart a beaver's home. In other cases, structures that mimic a beaver dam, called a beaver dam analog, are installed in the stream to slow the flow of water to allow it to pool and rehydrate the soil.

For minor restoration projects defined in the bill, a person or group does not need to go to water court, obtain water rights or get a plan of augmentation, according to Romero-Heaney. Projects established before August 2023 are also "grandfathered in" meaning they are presumed to not impact water rights and can move forward.

Since 2021, the <u>Colorado Natural Heritage Program</u> at Colorado State University has hosted a <u>state-adapted version of the beaver assessment tool</u> for the perennial stream network in Colorado.

This map shows the historic beaver dam use of North Monument and Monument Creek from the Reservoirs to points south (the Fountain Creek Watershed). **Very interesting and the area we are considering in E-rock has significant beaver history.**