



Beaver–Wetlands Feedback Mechanisms Yellowstone National Park

Evaluating the Costs and Benefits of the impacts of The American Beaver

Plants

- s Dryland species
- s Coniferous trees

Fish

- r Water temperatures
- r Obstacles to migration

Property

- r Roadway flooding
- r Agricultural flooding
- r Damage to ornamental trees
- r Browsing upon agricultural plants

Hydrology

- r Damage from dam failures

- Costs - Known or Perceived



Plants

- r Water
- r Nutrients
- r Sediments
- r Canopy

Fish

- r Temperature gradient
- r Nutrients
- r Invertebrates
- r Aquatic vegetation
- r Nesting habitat

+ Benefits +

Birds

- r Nesting habitat
- r Cover
- r Invertebrate prey diversity
- r Vertebrate prey diversity
- r Plant foods

Mammals

- r Plant foods
- r Cover
- r Prey diversity

Hydrology

- s Stream turbidity
- s Bank erosion
- s Stream velocity
- r Wetlands
- r Groundwater recharge
- r Stream persistence

r = Impact is generally increased s = impact is generally decreased