




Potential Interactions between Beavers and Salmonids

Adapted from R Needham (2024)

KEY

-  Next stage in Atlantic salmon (*Salmo salar*) life cycle.
-  Next stage in Sea or Brown trout (*Salmo trutta*) life cycle.
-  Decision by trout parr (*Salmo trutta*) to either remain resident (brown trout) or become migratory (sea trout).

Positive

- Increased water quality
- Increased water storage

Negative

- Dam breaches & ponding inundate redds with silt
- Thermal Increase

Positive

- Beaver ponds settle solids, improving gravel quality downstream.
- Increased water storage

Negative

- Dam breaches & ponding inundate redds with silt.

Positive

- Rearing habitat created
- Thermal refuge
- Habitat complexity
- Increased prey resources
- Refuge from predators
- Increased water storage

Negative

- Predation pressure
- Loss of lotic habitat (AS)
- Dam breaches & ponding inundate redds with silt
- Thermal increase

**Parr may also defer migration to a later age, remaining resident and reassessing migration each subsequent year*

Positive

- Refuge from predators
- Increased water storage
- Habitat complexity

Negative

- Downstream migration impacted, especially at low flow.
- Impeded migration at dams increases risk of mortality (predation, stress & disease)

