Why remove or modify dams?

DEPARTMENT OF NATURAL RESOURCES



Dams throughout Minnesota are being removed or modified into a stone rapids as a means of restoring stream health. This approach restores the natural flow of the river, allows the fish community to migrate upstream, provides spawning habitat, removes the drowning hazard, and provides recreational opportunities.

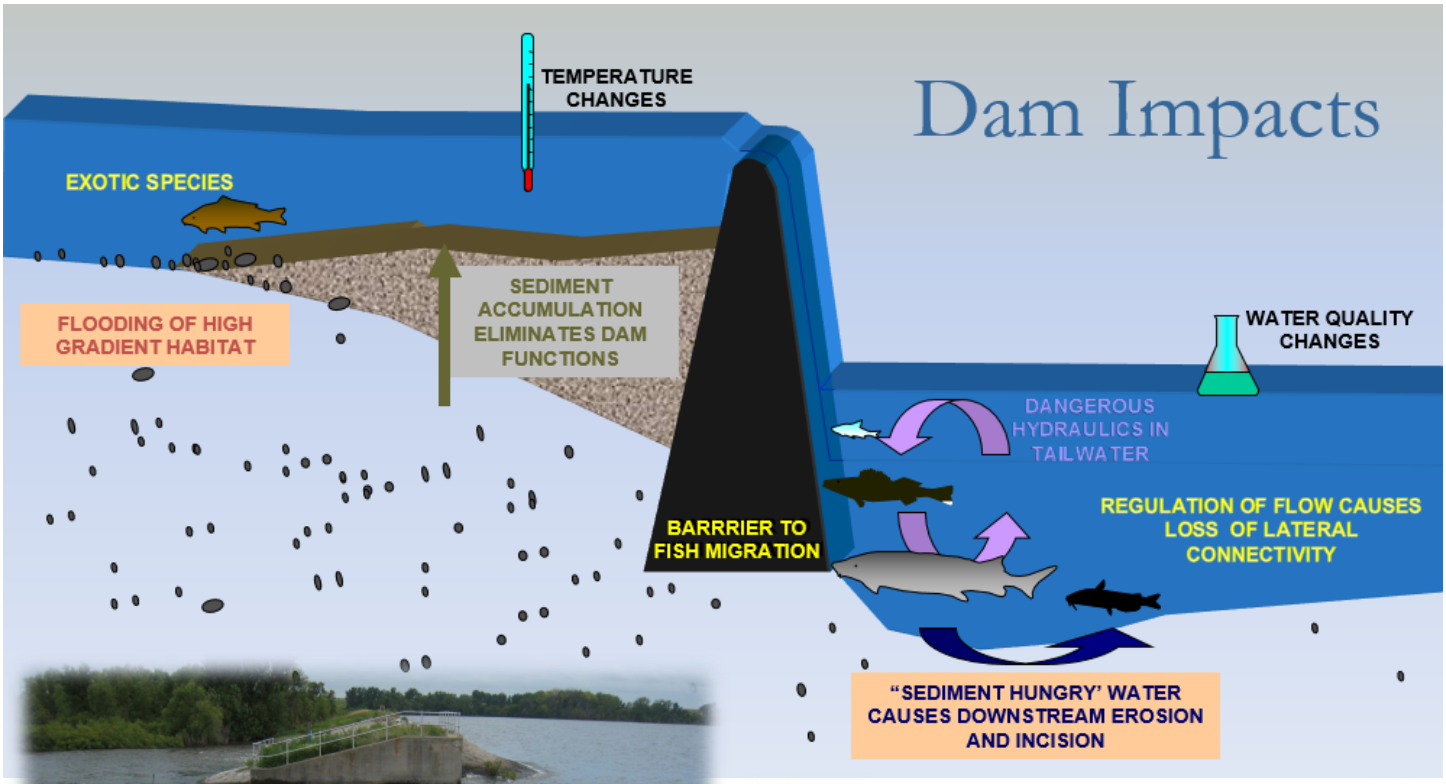
STREAM HABITAT PROGRAM

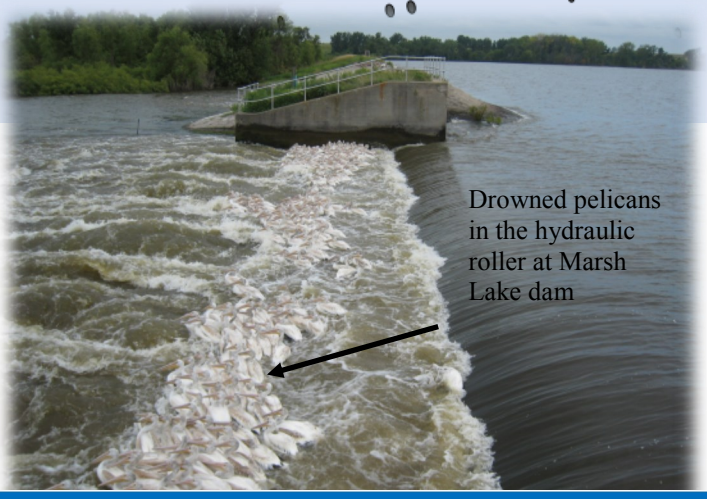
Website:
www.mndnr.gov/eco/streamhab



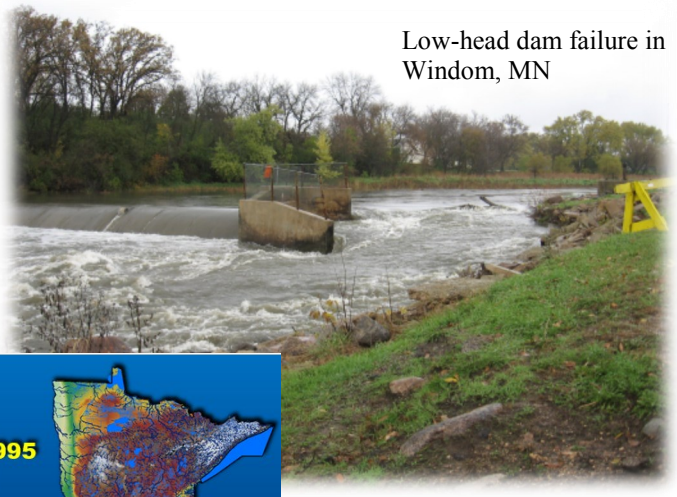
There are numerous reasons for dam removal or modification:

- The rollers below dams are drowning machines.
- The reservoirs behind dams slowly fill with sediment which continuously decreases the storage capacity of the reservoir.
- Reservoirs retain water pollutants such as nitrate, phosphorus, and mercury.
- Dams alter free flowing river ecosystems into low flow lake-like ecosystems, which is bad for the riverine community. {for example, blue-green algae blooms are twice as frequent in reservoirs than undammed rivers.}
- By 2020, 85% of U.S. dams will be near the end of their operational lives (FEMA 1999) as the average life span of a dam is 50 years (Assoc. of State Dam Safety Officials).
- Dams are very costly to maintain and repair and are a liability.
- Dams were typically built over natural rapids or falls, which inundated and buried crucial spawning habitat where faster flowing, oxygen-rich waters keep developing eggs clean and oxygenated. {native fish species such as lake sturgeon migrate hundreds of miles to spawn in this type of habitat}
- Dams block movement and migration of fish, which are also the hosts that distribute immature mussels.

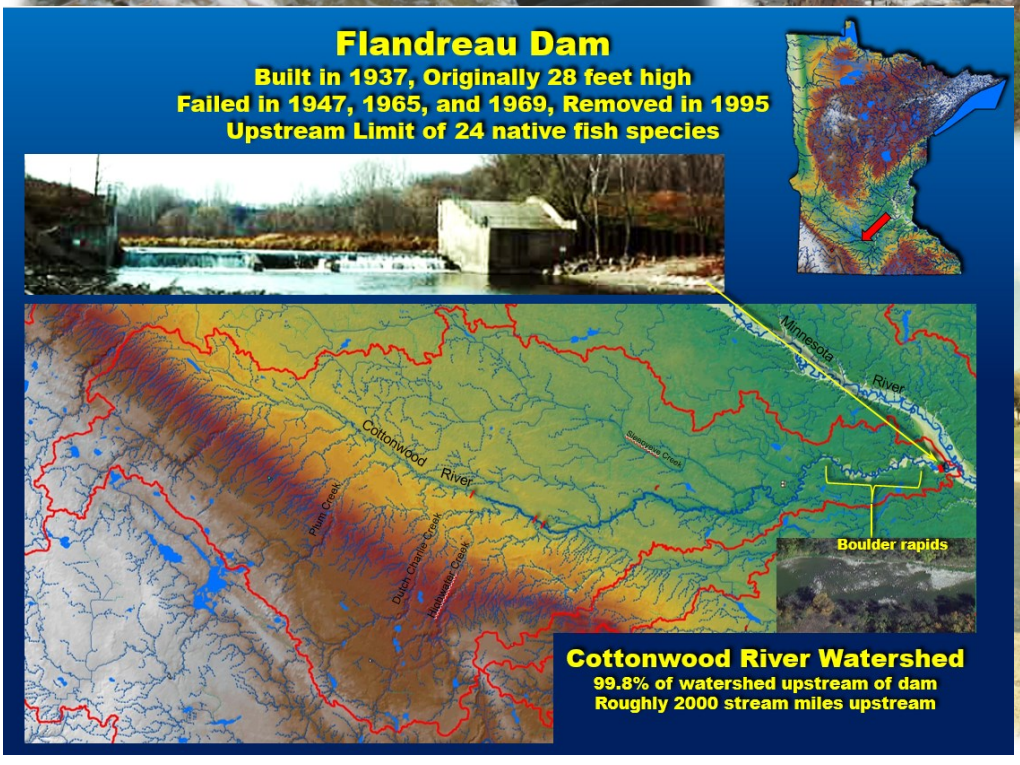




Drowned pelicans in the hydraulic roller at Marsh Lake dam



Low-head dam failure in Windom, MN



Midtown Dam caused at least 19 drowning deaths until it was converted to a rock arch rapids in 1998

