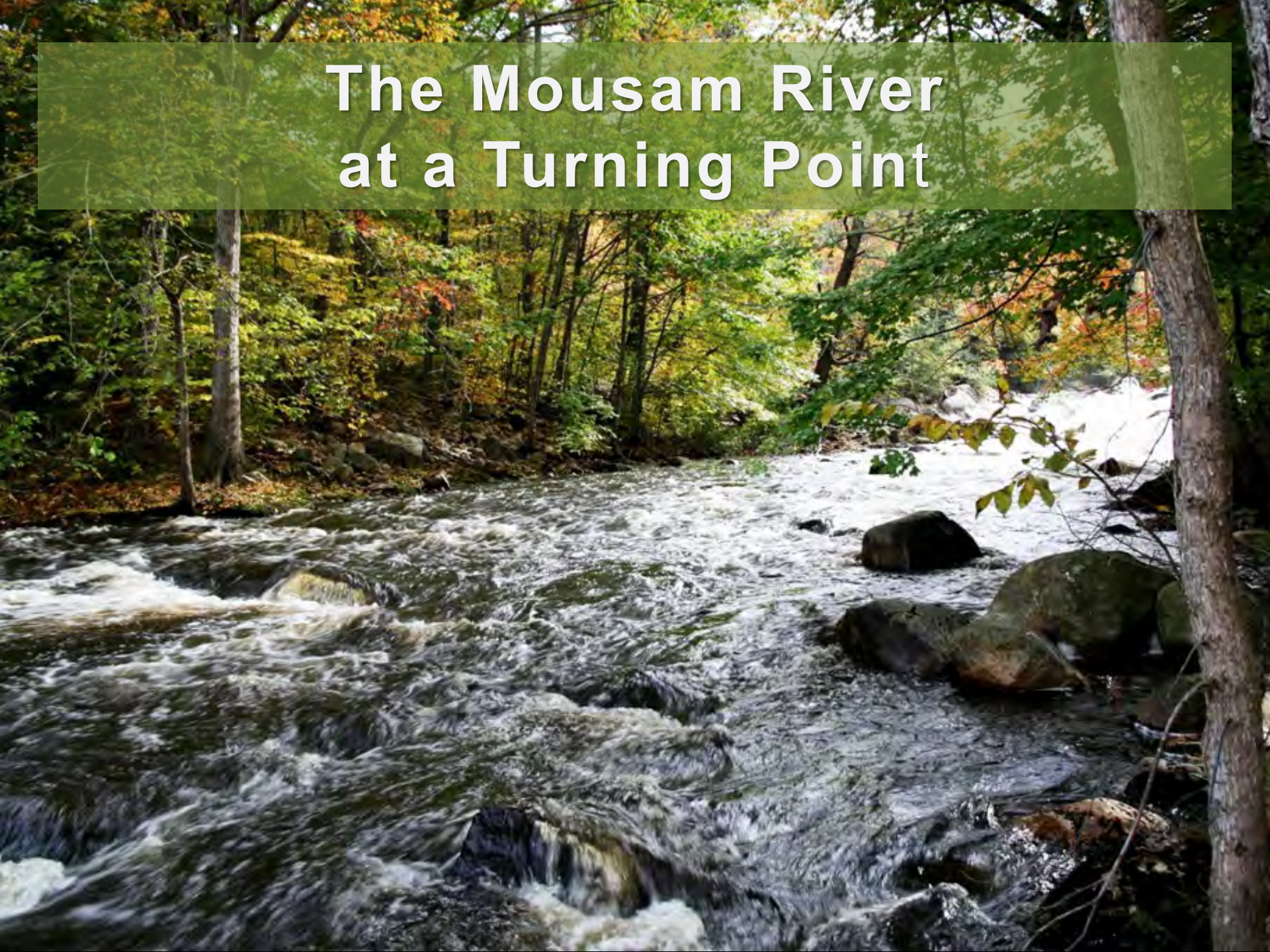


The Mousam River at a Turning Point



The Mousam is one of the most heavily dammed rivers in Maine

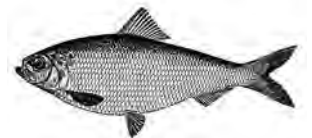
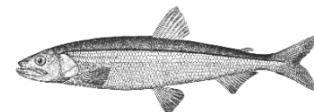
The Mousam is the only major river system completely lacking fish passage

The loss of sea-run fish, poorly connected habitat, and artificial impoundments have severely impacted the health of the watershed



Why the Mousam is a High Priority Candidate for Restoration

- **The Mousam River Watershed contains a diverse array of habitats and ecosystem types of statewide and regional significance and supports numerous unique plant and animal species**
- **The Mousam has an extensive stream network and contains substantial brook trout habitat**
- **Large portions of the Mousam are relatively undeveloped, contain a well-forested riparian zone, and are characterized by sand-gravel aquifer geology**
- **There is a substantial amount of conservation land –local, state, and federal – along the lower river and estuary**



“The Mousam River has an excellent potential for supporting a significant commercial fishery for anadromous alewives. The current lack of production of alewives in York County and the large demand for this resource for lobster bait makes development of commercially significant alewife runs a high priority for this area. The Mousam... is considered a major candidate for an alewife restoration program.”

- Lew Flagg, Maine Department of Marine Resources, 1979



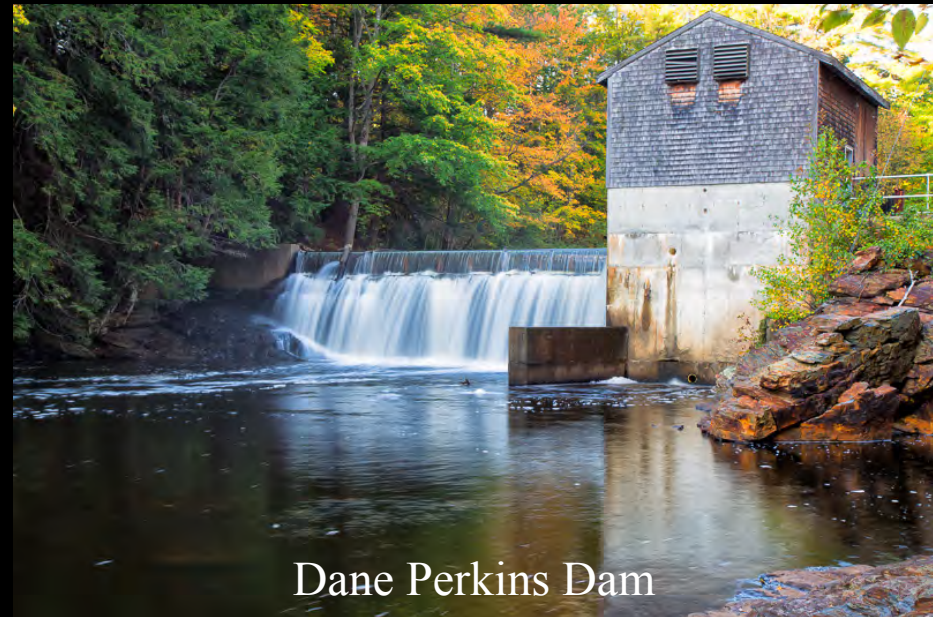


Photo by Ken Janes

KLPD and Dams

- KLPD owns three hydropower dams on the Mousam River
- Federal license expires in 2022 (after 40 years)
- KLPD initiated a public discussion in 2013 regarding the future of the dams
- 2015: No private companies interested in the dams

2015: Hydropower Facility Alternatives Assessment Report

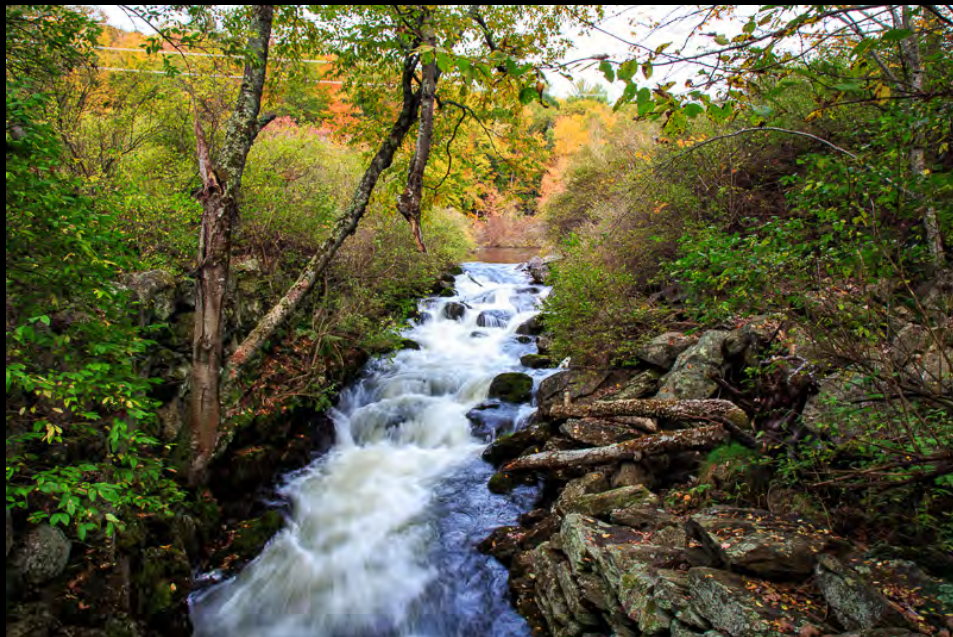


Dane Perkins Dam

KLPD and Dams

- Relicensing process will likely cost about \$1 million (studies, consultants, attorneys)
- Substantial additional costs related to capital expenses for dam repairs/upgrades, fish passage, canoe portages, etc.
- Increased long-term O&M and personnel costs





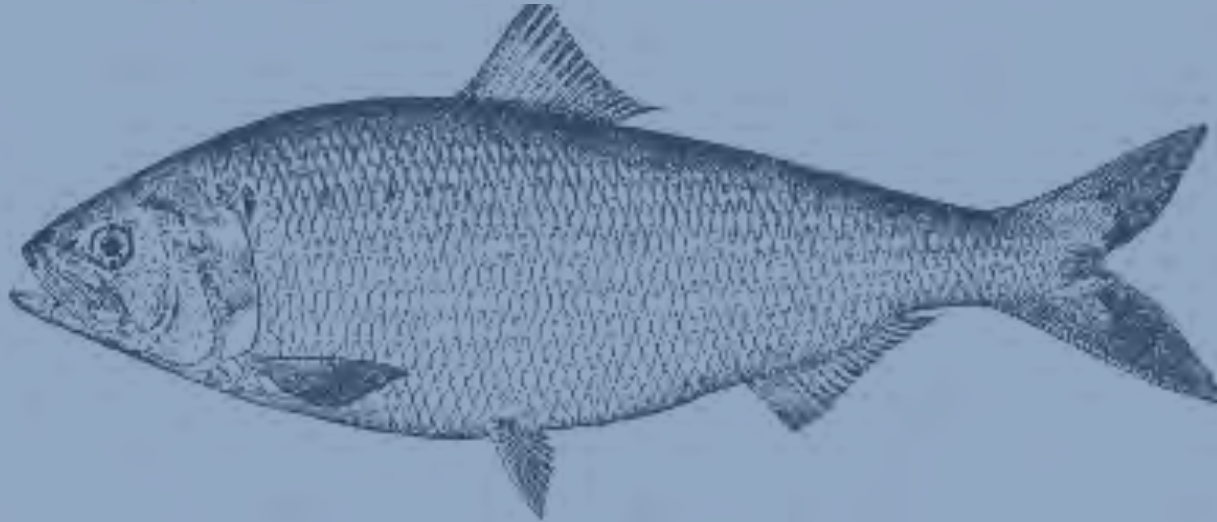
Dam Economics

- **Wright Pierce projected that KLPD's cost to generate electricity would be \$0.25/kWh for hydropower, compared to about \$0.09/kWh or less for solar.**
- **\$0.25/kWh would be the highest rate for electricity on Maine's mainland.**
- **The current cost of power that KLPD purchases off the New England grid is about \$0.09/kWh)**

Dam Economics

- **Relicensing the dams and bringing them to modern standards (e.g., fish passage) will cost \$16.9 Million.**
- **This estimate was produced by experts at Wright Pierce and then confirmed by GZA Environmental, two engineering consulting firms with extensive experience in hydropower.**
- **Dam removal is estimated at \$2.55 Million, a substantial portion of which could be covered by federal and private funds.**

A fully accessible Mousam River has the potential to produce annual returns of about 727,000 alewives, 340,000 bluebacks, and 56,000 American shad*



* Wells Reserve Preliminary Analysis

- North America has the greatest temperate freshwater biodiversity on earth
- North America's aquatic ecosystems are among the most threatened in the world
- 39% of our freshwater and diadromous fish species are imperiled
- Habitat degradation, fragmentation, and loss are the primary threats to aquatic species and ecosystems

