

Merrick & Company designed a major raw water transmission system as part of a \$12 million new research complex referred to as the Northeast Anadromous Fish Research Laboratory (NAFRL) at Turners Falls, MA.

The water supply system consists of a diversion structure, a large-diameter reinforced concrete transmission pipe, and a rectangular concrete open-channel conveyance system.

The project included the following elements:

- 60 inch diameter RCP transmission pipe
- 4' X 8' rectangular concrete channel
- Concrete diversion structure
- Trash racks
- Automatic weir control gates
- Electric operated sluice gates
- Junction structures
- 300 cfs supply capacity

Merrick's services included surveying, geotechnical investigations, hydraulic engineering studies, concept plans, preliminary designs, final designs, CAD drawings, specifications, cost estimates, construction consulting, and closeout services.

The raw water transmission system diverts 300 cfs of water from the Connecticut River Power Canal to the NAFRL facility through both an underground reinforced concrete pipe water supply system and an at-grade concrete channel system. The water is utilized in the hydraulic laboratory to conduct full-scale modeling of prototype fish ladders for use in restoring the migration of anadromous fish for the Connecticut River system.

