

Heminway Pond Dam Removal Project

(Steele Brook – Watertown, CT)

THE PREQUEL

Photo Summary of History and Early Phases of Project

November 2018

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(BWPLR WP&M)

Additional photos courtesy of: Chris Bellucci, Mike Beauchene, Steve Gephard & Chuck Berger



Connecticut Department of Energy and Environmental Protection

Back in 2002 ...

**The Town of Watertown, CT
was considering acquisition of
Heminway Pond Dam and impoundment
offered by owner, Siemon Company ...**

**The Town was interested in removing the dam and using the drained
impoundment area for public open space and recreation. Plans grew to include
extension of the Steele Brook Greenway along the western border.**

**The Town acquired the dam and impoundment ...
and began seeking funds to remove the dam ... and approached (then) CT DEP.**





Heminway Pond Dam (September 2002)

2002. 9. 19

Meanwhile ...

CT DEP's Water Quality Monitoring & Assessment program had identified an impairment impacting aquatic habitat in Steele Brook, just downstream of the dam.

This impairment, due to iron, manifests itself during warm, low flow periods as an orange-colored flocculation in the stream.

Potential sources of this impairment include: industrial & municipal discharges, landfills, remediation sites and groundwater impacts.





Looking upstream at Steele Brook toward dam from bridge at Echo Lake Road
Summer low flow conditions with iron flocculation (August 2002)

2002. 8. 28

An underwater photograph showing a fish swimming in a stream with very turbid, brown water. The fish is positioned in the center-right of the frame, facing left. The water is filled with fine, suspended particles, likely iron flocculation, which significantly reduces visibility. The background is a dark, mottled brown color. There is a small, dark object visible in the upper left quadrant of the image.

Steele Brook during summer low flow conditions with iron flocculation (August 2002)

2002. 8. 28

So ...

CT DEP's TMDL program concluded the best way to address iron impairment would be to remove Heminway Pond Dam and improve flow in Steele Brook.

**CT DEP decided to tackle the issue through its Nonpoint Source Management program and federal CWA 319 grant program. CT DEP contracted with USDA NRCS to work with the Town of Watertown to develop an :
EPA 9 Element Watershed Based Plan (FY06 \$).**

CT DEP's Inland Fisheries program strongly supported dam removal which would also benefit fisheries by restoring stream habitat and connectivity.





United States Department of Agriculture
Natural Resources Conservation Service

Steele Brook Watershed Based Plan Including Heminway Pond Dam Removal Feasibility Analysis



(Photo: USDA NRCS)

Prepared by the USDA Natural Resources Conservation Service

June 2009

Helping People Help the Land
An Equal Opportunity Provider and Employer

CT-TP-2009-1



United States Department of Agriculture
Natural Resources Conservation Service

CONNECTICUT

Steele Brook Watershed Heminway Pond Dam Removal Feasibility Analysis

Watertown, Connecticut



June 2009

Helping People Help the Land
An Equal Opportunity Provider and Employer

CT-TP-2009-2

In 2009, the Steele Brook Watershed Based Plan was completed which included an appendix entitled:
Heminway Pond Dam Removal Feasibility Analysis

Then ...

To assist the Town of Watertown in moving forward with removal of Heminway Pond Dam, CT DEP/(now) CT DEEP provided additional 319 grant funding to the Town for development of:

Heminway Pond Dam Removal Design (FY08 \$)

and assistance with:

Permitting and Preparation (FY12 \$)

The Town hired consulting firm, Princeton Hydro, to lead these projects. The Northwest Conservation provided education and outreach assistance.

The Town obtained permits from U.S. ACOE and CT DEEP.

U.S. EPA conducted Sec. 106 National Historic Preservation Act determination.





Meanwhile, the iron impairment persisted ...
Looking upstream at Steele Brook toward dam from bridge at Echo Lake Road (August 2016)

To make the project a reality ...

CT DEEP provided the Town of Watertown with a grant consisting of: 319 funds (FY13 \$, FY14 \$, FY15 \$ & FY16 \$) and State Supplemental Project Funds for: Heminway Pond Dam Removal ...

The Town retained Princeton Hydro to oversee the project and hired Dayton Construction Company to conduct the work.

Deconstruction of the dam and creation of the new Steele Brook channel through the former impoundment commenced July 2018.





Heminway Pond Dam was breached in July 2018 ...



... and the impoundment was slowly drained
(Looking upstream towards east bank of impoundment)



As the impoundment drained, all upstream flow from Steele Brook was directed to a tributary along the east bank of the former impoundment



Wooden plank staging was put in place along the western shore of the drained impoundment for access by heavy equipment (Looking south towards dam and east bank, along section where new channel to be created)



Drained impoundment, just above breached dam, looking towards east bank



Looking upstream and slightly west at drained impoundment



Looking upstream at drained impoundment, toward east bank



Dam deconstruction underway (October 2018)
(It turned out to be a much wetter construction season than normal with many rain events ...)



Excavation of new Steele Brook channel underway in dewatered impoundment along western shoreline
(Looking south towards east bank and former dam)

The story continues ...

Creation of the new Steele Brook channel: “before” and “after” flow release ...

(See two mini-PowerPoint presentations previously produced ...)

