

Beecher and Upper Lakes Rehabilitation District

Our Journey 2007-2015
Aquatic Invasive Species
Eurasian Milfoil (EWM)
April 23, 2015

About Beecher Lake

Name: Beecher Lake

Water body Area: 30 ACRES

Maximum Depth: 45 feet

Bottom: 5% sand, 5% gravel, 0% rock, **90% muck**

Water body Type: flowage

Hydrologic Lake Type: DRAINAGE

County: Marinette Region

Organizations: Beecher And Upper Lake Inland Protection District

Recreation: One Boat Landing

Fish: Panfish, Largemouth Bass and Northern Pike

Parks: One

Lake Health: Invasive Species - Banded Mystery Snail, **Eurasian Water-Milfoil**, Purple Loosestrife

Trophic Status: Mesotrophic

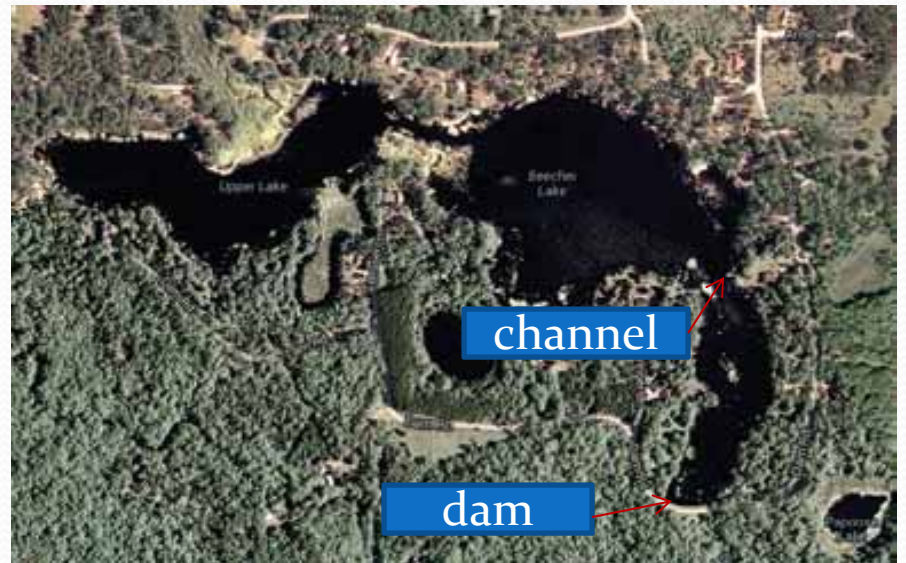
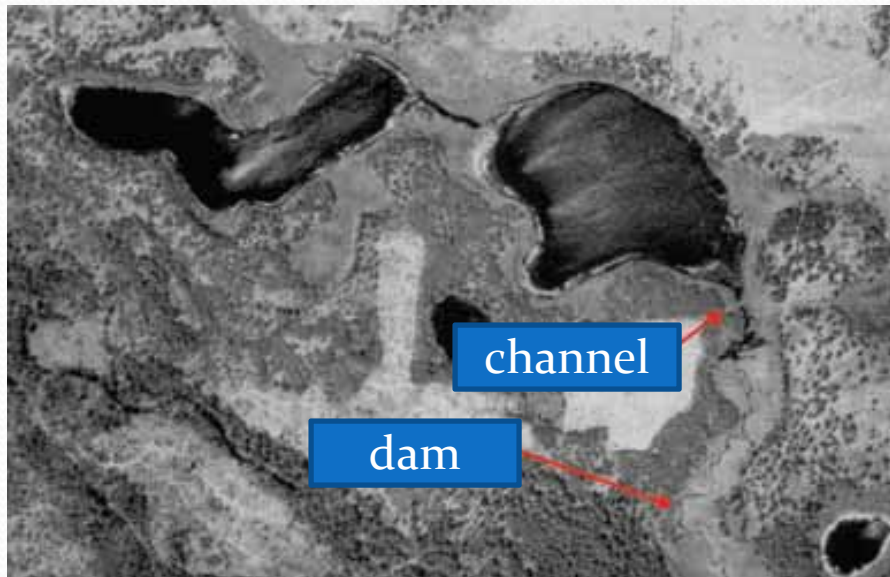
<http://beecherupperlakes.com/>



About Beecher Lake

1938

2012



Beecher and Upper Lake Work Summary 2007 and 2008

2007

- Eurasian Milfoil was discovered
- Last year of weed harvesting

2008

- Aquatic Plant Management Plan Grant
- Last Gypsy Moth Treatment
- WDNR recommended chemical treatment
 - 100% funded by Lake District



Eurasian Milfoil Background

- Reproduces through rhizomes, seeds and stem fragments which can spread easily and makes it hard to get rid of
- Grows rapidly
- Present in more than 400 Wisconsin Lakes



Eurasian Milfoil Background



- Dense growth can shade out native aquatic plants
- This has an effect on fish and water fowl dependent on nutrients and habitat provided by native plant communities
- Can have an effect on water quality and contribute to algal blooms
- No fun to swim or boat in!

Beecher and Upper Lake Work Summary 2009

- Aquatic Plant Management Plan
- Applied for and received a grant.
 - chemically treat
 - draw down lake



Beecher and Upper Lake Work Summary 2010

- Implemented and evaluated 2010 spring chemical treatment
- Built Siphons
- Implemented 2010 fall draw down
- Heavy rain event









Beecher and Upper Lake Work Summary 2011

- Evaluated 2010 drawdown
 - Unsuccessful due to significant rain event
- Strategic changes:
 - Move up start date
 - Complete drawdown by Mid-October
 - Anticipate 35 days to drawdown
 - Use pump/generator system
- Reviewed fish habitat (2005 and 2010)
 - Chip Long, Fish Biologist, Marinette County
- Implemented second draw down







Beecher and Upper Lake Work Summary 2012

- Monitored drawdown impact
 - Limited Success
 - Extensive muck & debris slowed water flow
 - Unseasonable early Spring/Hot Summer
 - Determined
 - Siphons - drawdown to 4.5 feet (goal 6ft.)
 - Lakes filled up quickly
 - Could reach drawdown mark if water flows
 - Controlled EWM in shallow areas (frost 4")
- Conclusion
 - Dredge to enable draw down
 - Modify the dam to allow drawdowns
 - Begin work on dredging grant



Beecher and Upper Lake Work Summary 2013

- Applied for an Aquatic Invasive Species grant to:
 - 1) Use winter drawdown as a Eurasian Milfoil management tool
 - 2) Minimize dependence on herbicides to control this invasive species
 - 3) Implement long term, effective controls in a cost effective manner
- Majority of a quorum of the District passed the resolution
- Requested Army Corp of Engineers approve dredging to enable draw down



Beecher and Upper Lake Work Summary

2014

Army Corp of Engineers Approved Dredging

AIS Grant Application Denied

- Reviewed unsuccessful dredging grant application
- Encouraged to reapply
- Increased match

WDNR Meeting

- Review chemical treatment history & results

Chemical Treatment

- Cost share - grants and Marinette County
 - 27 acres whole lake treatment

Annual Meeting

- Met with Brenda Nordin, WDNR and Chuck Druckrey Marinette County
- Unanimously approved resolution for District to fund 50% of grant



Beecher and Upper Lake Work Summary 2015

February

- WDNR EWM Conference
- Resubmitted Grant

March

- Successful - grant awarded

April

- Signed Grant Agreement
- Begin work on preparing to dredge to enable a drawdown.



Beecher and Upper Lake Work Summary

•Lessons Learned

- Stay connected.
- Identify resources and content experts.
- Think outside of the box.
- Develop a team approach
- Plan, do, study, act!
- Never, never, never give up.

Winston Churchill

Acknowledgment

Town of Beecher
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Resources
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