

Natural Solutions to Shoreline Problems on Inland Lakes

**A slide show with nine different shoreline
case studies.**

Enjoy!

Presented by:

**MICHIGAN STATE
UNIVERSITY
EXTENSION**

Example 1

Problem:
Annual damage from ice push.
Solution:
Buffer strip of long-rooted native shoreline plants.



Summer 2007

Example 1



Summer 2008

Example 1



Summer 2009

Example 2

Problem: Wave flanking from neighboring sea walls.

Solution: Vegetated bio-log.



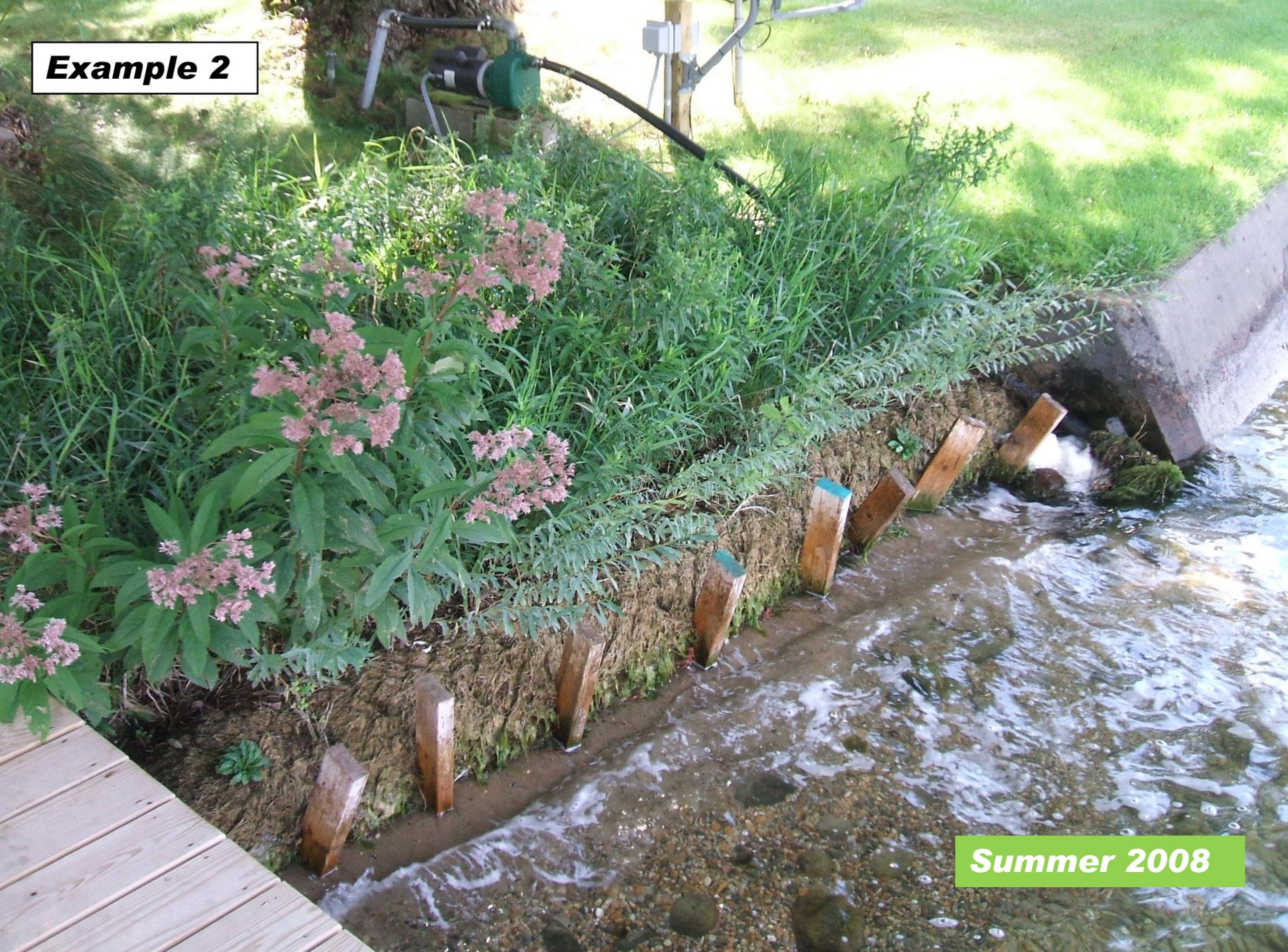
Summer 2007

Example 2



Spring 2008

Example 2



Summer 2008

Example 3



Problem: Wave flanking from neighboring sea walls.

Solution: Vegetated bio-log with gravel and topsoil fill.

Spring 2006

Example 3



Spring 2006

Example 3



Summer 2007

Example 4



Problem:

Undercutting and erosion/lack of shoreline habitat

Solution:

Native plantings w/ vegetated bio-log wave breaker.

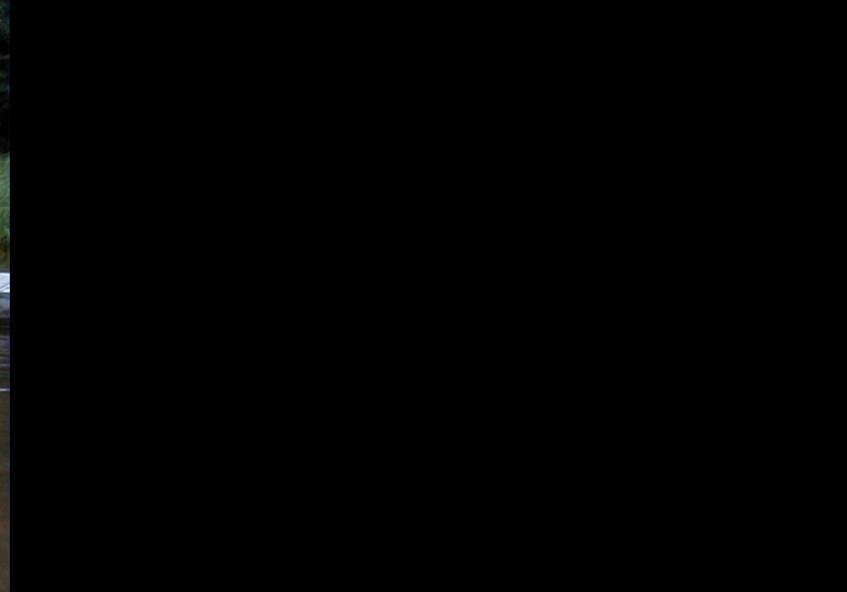
Spring 1999

Example 4



Summer 2000

Example 4



Summer 2002

Example 5



Problem: Lack of shoreline habitat

Solution:

Native buffer strip and aquatic plantings w/ biolog wave breaker.

Summer 2006

Example 5

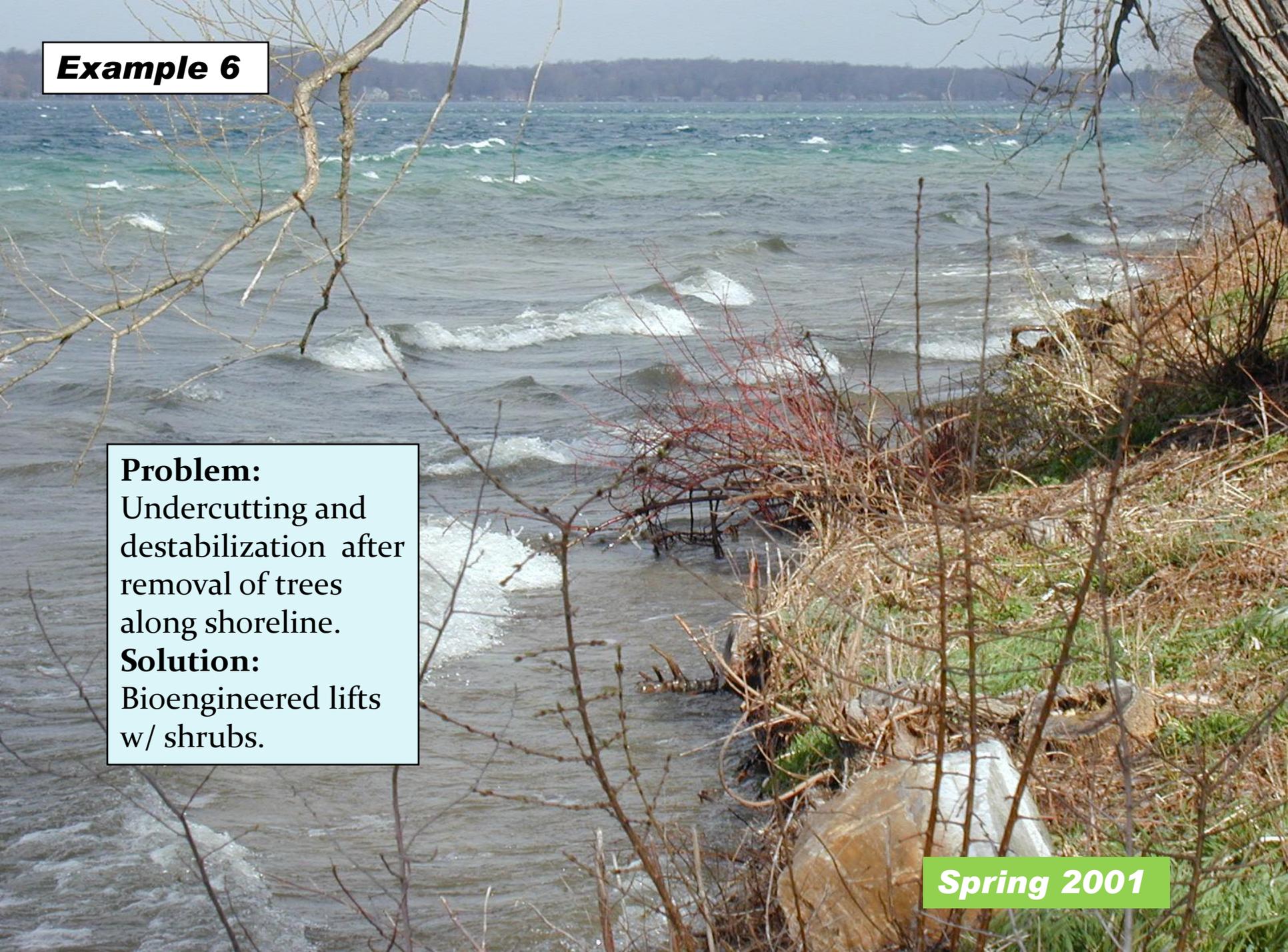


Summer 2006

Example 5



Summer 2007



Example 6

Problem:

Undercutting and destabilization after removal of trees along shoreline.

Solution:

Bioengineered lifts w/ shrubs.

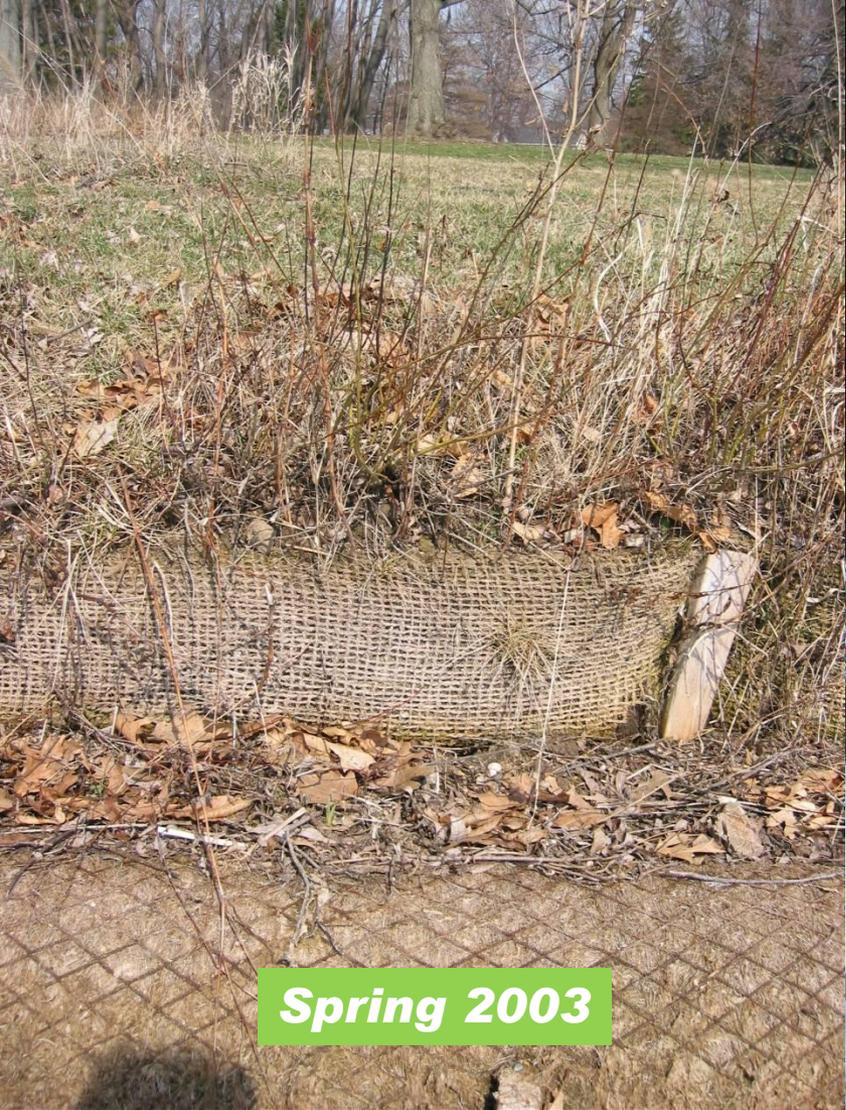
Spring 2001

Example 6



Spring 2002

Example 6



Spring 2003



Summer 2003

Example 6



Summer 2005



Summer 2007

Example 7

Problem:
Undercutting and
destabilization after
removal of trees
along shoreline.

Solution:
Bioengineered live
fascine w/ shrubs.



Spring 2001

Example 7



Spring 2002

Example 7



Summer 2003

Example 7



Summer 2005



Example 8

Problem: Eroding bank after removal of trees along shoreline.

Solution:
Bioengineered live crib wall w/ shrubs.

Spring 2001

Example 8



Spring 2002

Example 8



Spring 2002

Example 8



Summer 2005

Example 9



Problem: Eroding shoreline due to removal of native vegetation.
Solution: Native plants and seeding into fill protected with erosion control blanket. Coir log wave break.

Spring 2007

Photo courtesy JF New

Example 9



Summer 2008

Example 9



Fall 2008

Thanks for watching!

www.shoreline.msu.edu

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