Healthy Lakes: How to Build, Fund & Implement a Project





Agenda

- Welcome
 - Introductions & goals
 - Resources
 - Background
- Healthy Lakes Overview
- 5 Best Practices technical descriptions
- Grant Application & Administration
- The Social Science



Resources

- www.healthylakeswi.com
- Future workshops
- Patrick's Professional
- Shoreland

Landscaper Training



CONTACTS			
Dave Ferris	Burnett County	(715) 349-2186	dferris@burnettcounty.org
Pat Goggin	UW-Ext Lakes	(715) 365-8943	pgoggin@uwsp.edu
Jane Malischke	WDNR	(715) 635-4062	jane.malischke@wi.gov
Tom Onofrey	Marquette County	(608) 267-3036	tonofrey@co.marquette.wi.us
Carroll Schaal	WDNR	(608) 261-6423	carroll.schaal@wi.gov
Pamela Toshner	WDNR	(715) 635-4073	pamela.toshner@wi.gov
Your local DNR Lake Biologist or Environmental Grants Specialist.			

Healthy Lakes Lean Government Team



THANK YOU to everyone who provided feedback, including the many partners who completed a customer survey and commented during the public review of proposed DNR guidance.

Additional contributors include: Cheryl Clemens, Karen Engelbretson, John Haack, Dave Kafura, Amy Kowalski, Jesha LaMarche, Flory Olson, Tim Parks, Bret Shaw, Shelly Thomsen, Scott Toshner, Bone Lake Management District, Maine Lake Smart Program, and Vermont Lake Wise Program.



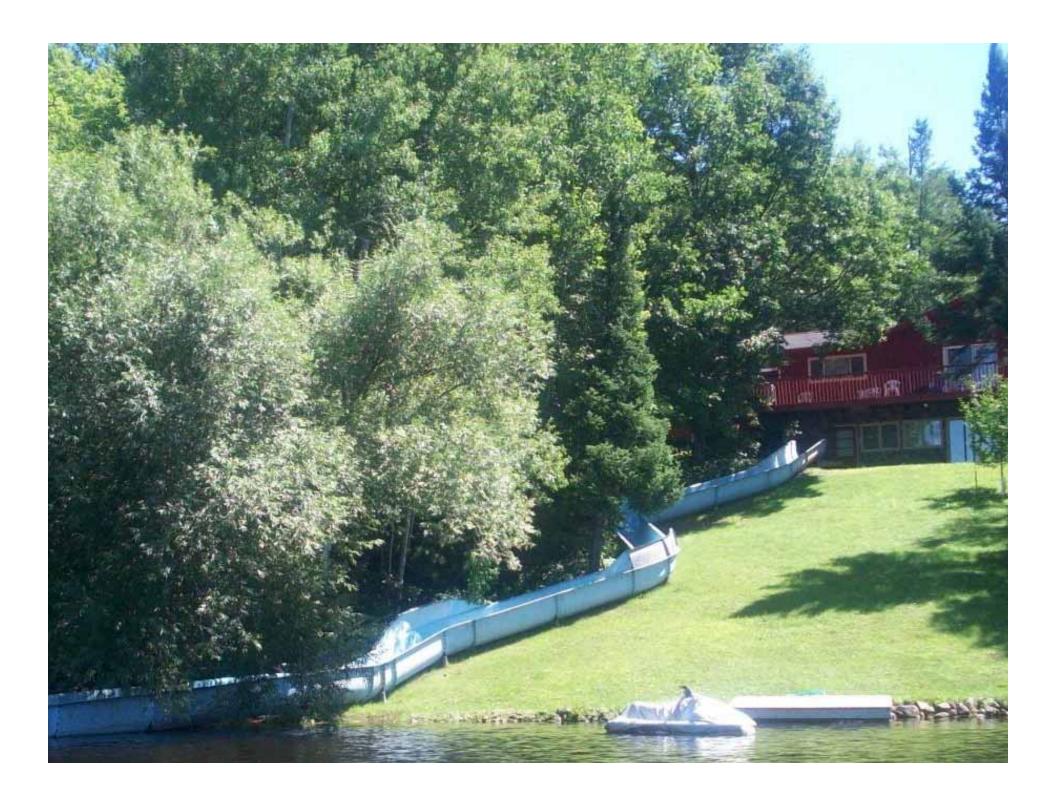
Background

- > 15,000 lakes
- \$2.3 billion economic impact from fishing alone, tourism & property taxes
- Two primary threats to our lakes are water quality declines and habitat loss
- Poorer shoreland conditions = poor habitat = poor water
- We all love lakes and have a role in protecting, improving, and restoring them
- What can we do easily to encourage better shoreland conditions?
- Healthy Lakes is one way to do so. Building off existing grants & lessons learned from citizen champions, at DNR, from other agency partners and other states



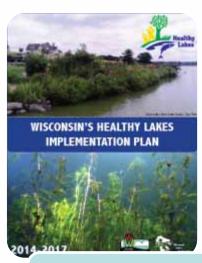






Wisconsin's 2014-2017 Healthy Lakes Implementation Plan

<u>Goal:</u> protect and improve the health of Wisconsin lakes by increasing lakeshore property owner participation in habitat restoration and runoff and erosion control projects.



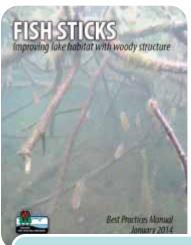
Statewide Plan

Implementation focus



Fact Sheets

- 5 Best Practices
- Funding & Admin FAOs



Technical Guidance

More project installation detail

Wisconsin's 2014-2017 Healthy Lakes Implementation Plan

Do it yourself



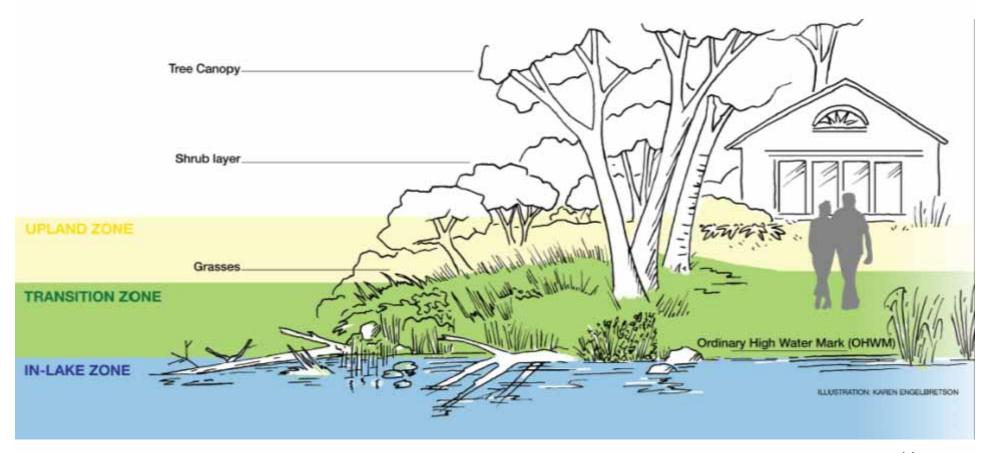
Apply for grant funding

Integrate into local planning efforts



Green Lake, Green Lake County (Lisa Reas)

Wisconsin's 2014-2017 Healthy Lakes Implementation Plan



Healthy Lakes project participation is voluntary. 11

Healthy Lakes Best Practices



Healthy Lakes isn't for everyone or everywhere.

Not intended for complex sites where engineering design/review needed

http://www.uwsp.edu/cnr-ap/UWEXLakes/Documents/resources/healthylakes/RunoffGuide.pdf

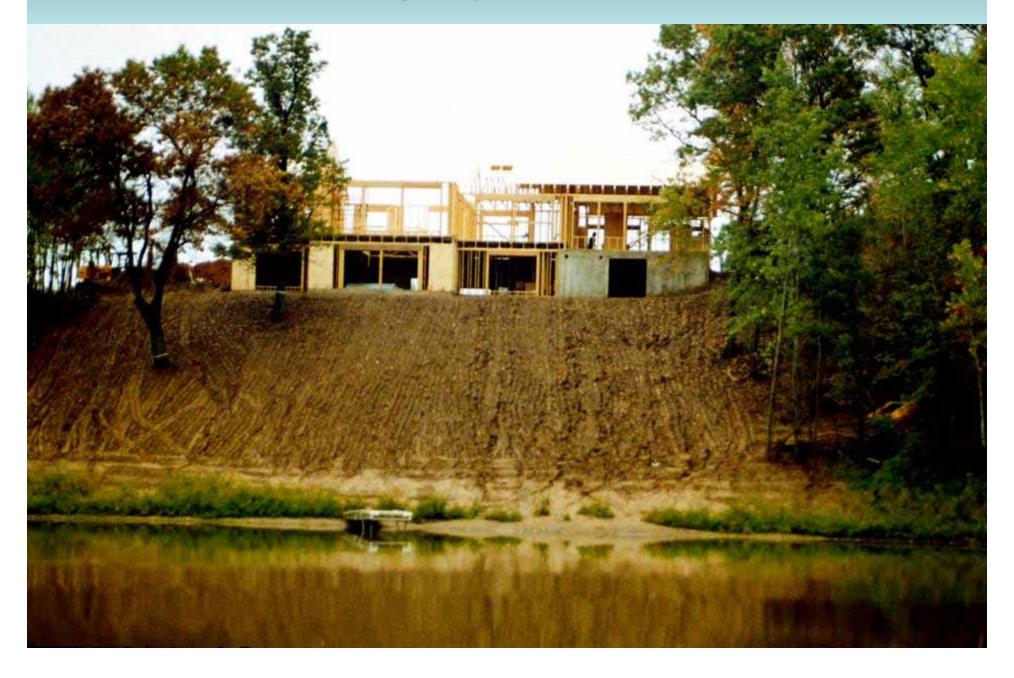
http://healthylakeswi.com/resources/

- Construction occurs on slopes >20%.
- More than 20,000 square feet are cleared.
- More than two acres drains to an eroded area.
- Severe gully erosion (at least one foot deep) is present.
- You are not comfortable implementing solutions on your own.

NOT for steep slopes



NOT for largely cleared parcels



NOT for >2 acres draining to eroded area



NOT for severe gullies



Practice #1: Fish Sticks



Practice #1: Fish Sticks



Pewaukee Lake, Waukesha County (Tom Koepp)

• Commit to no-mow or 350 ft² native planting at the base









State of Wisconsin Department of Natural Resources dnr.wi.gov

HABITAT STRUCTURE - FISH STICKS

General Permit Application Checklist (11/2013)

GENERAL PERMIT APPLICATION INSTRUCTIONS

To apply for this General Permit, submit all of the required information listed below. A complete submittal with detailed plans will allow us to make a decision about your permit application. Permit processing review times begin when the application is received by the Department and is determined to be complete.

Please note that you are responsible for obtaining all necessary local (e.g. city, town, village or county) and U.S. Army Corps of Engineer permits or approvals in addition to any applicable state permits prior to commencing any work at the project site.

The Department offers the opportunity to apply electronically for all waterway and wetland permits. The Water Permits portal page can be found at http://dnr.wi.gov/PermitsWater/

Informational Requirements:

- Application form. A complete, signed application form "Water Resources Application for Project Permits (WRAPP)" (Form# 3500-53) http://dnr.wi.gov/files/PDF/forms/3500/3500-053.pdf.
- Application fee. Checks should be made payable to "Wisconsin DNR." A list of fees can be found at http://dnr.wi.gov/topic/waterways/Permits/PermitProcess.html.
- Site maps which clearly illustrate the location and perimeter of the project site, and its relationship to nearby water resources (e.g. lakes, rivers, streams, wetlands), major landmarks and roads.
- Photographs that clearly show the existing project area. Remember that too much snow cover or
 vegetation may obscure important details. If possible, have another person stand near the project area for
 size reference.
- Project plans and specifications reflecting the General Permit Eligibility Standards as listed in the projectspecific checklist below. If your project does not meet all of the eligibility standards, you will need to apply for an Individual Permit.
- 6. Electronic documents. If you are applying on paper, all documents listed above must also be submitted in an electronic format, either by enclosing a disk with your application materials, providing a link to an ftp site, or by other electronic methods. If possible, please create a separate file for each component of the application (i.e., forms, photos, maps, plans, etc.). Each file must be less than 15 megabytes in size, and the total size of the files combined must be less than 30 megabytes.

If you are applying electronically, you may be prompted for some of these items separately during the electronic submittal process.

Don't Forget! Additional Requirement:

 An applicant who applies for coverage under this general permit for the placement of fish sticks must indicate in the application materials whether you will allow, as part of your permit coverage, to let new fish sticks sites on the same lake to be afforded coverage under your general permit at a later date with no additional fee required.

HABITAT STRUCTURE – FISH STICKS

General Permit Application Checklist

http://dnr.wi.gov/topic/waterw ays/documents/PermitDocs/ GPs/GP6-FishSticks.pdf

Practice #2: 350 ft² Native Plantings



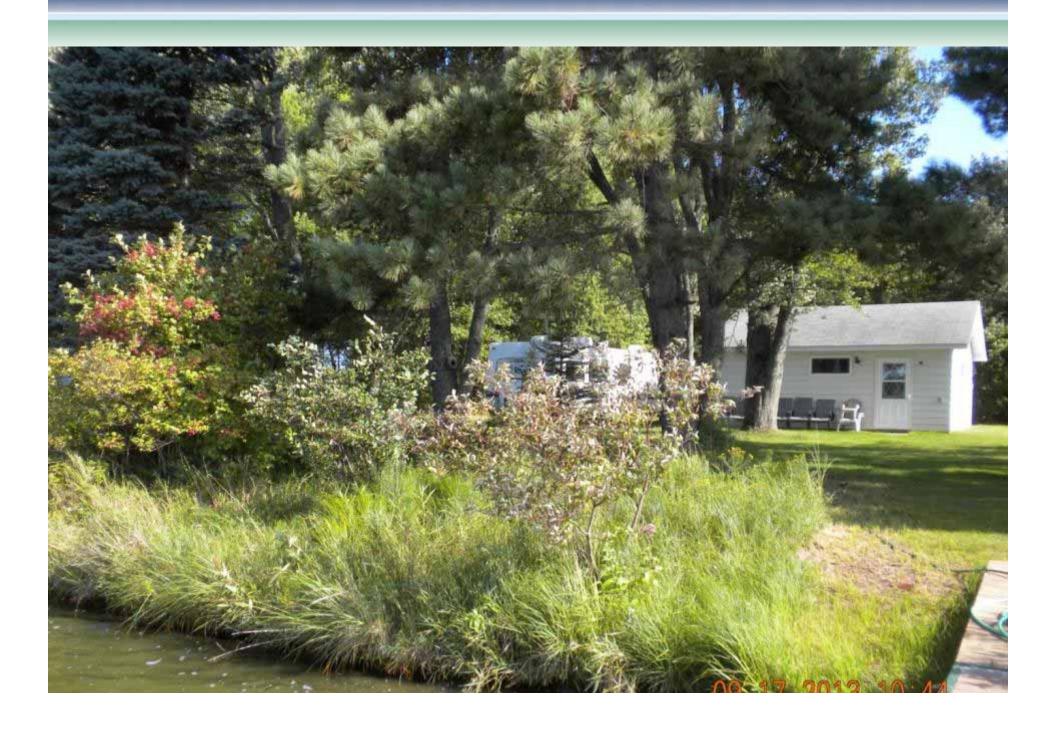
(Robert Korth)

Healthy

• 350 contiguous ft² at least 10 feet wide

• One 350 ft² native planting per property per year



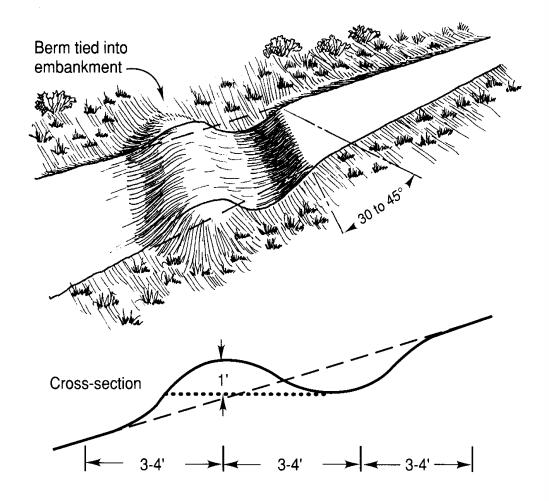


Practice #3: Diversion



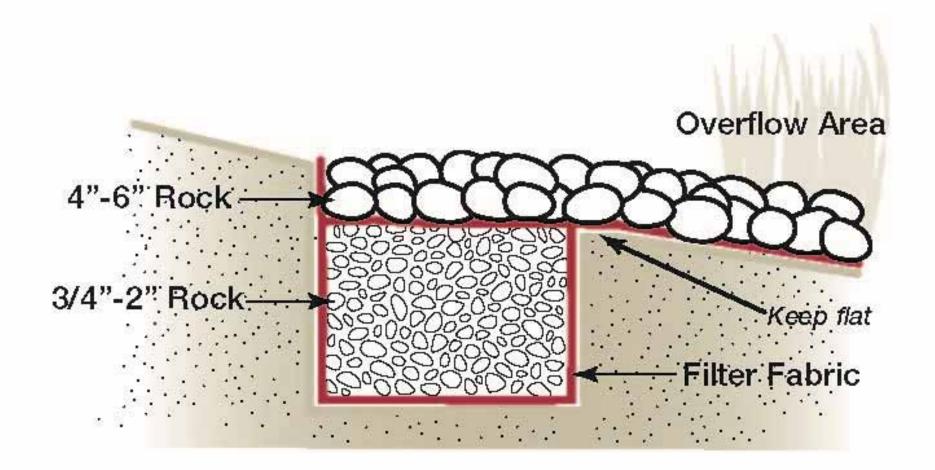
Drainage path

Pathway and Driveway Diversions



Practice #4: Rock Infiltration







Practice #5: Rain Garden

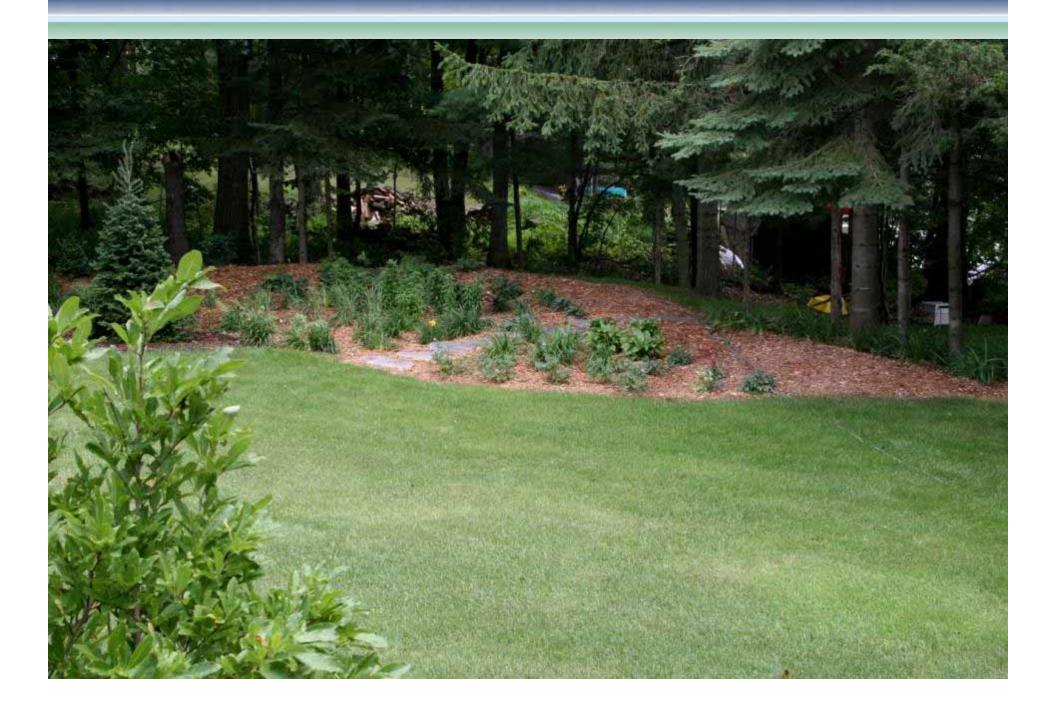


> 12% Slope

What is a Rain Garden?

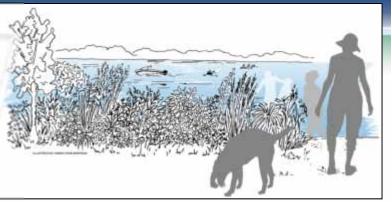


- Shallow depression (6 inches to 1 foot deep)
- Capture runoff from roofs, driveways, and lawns





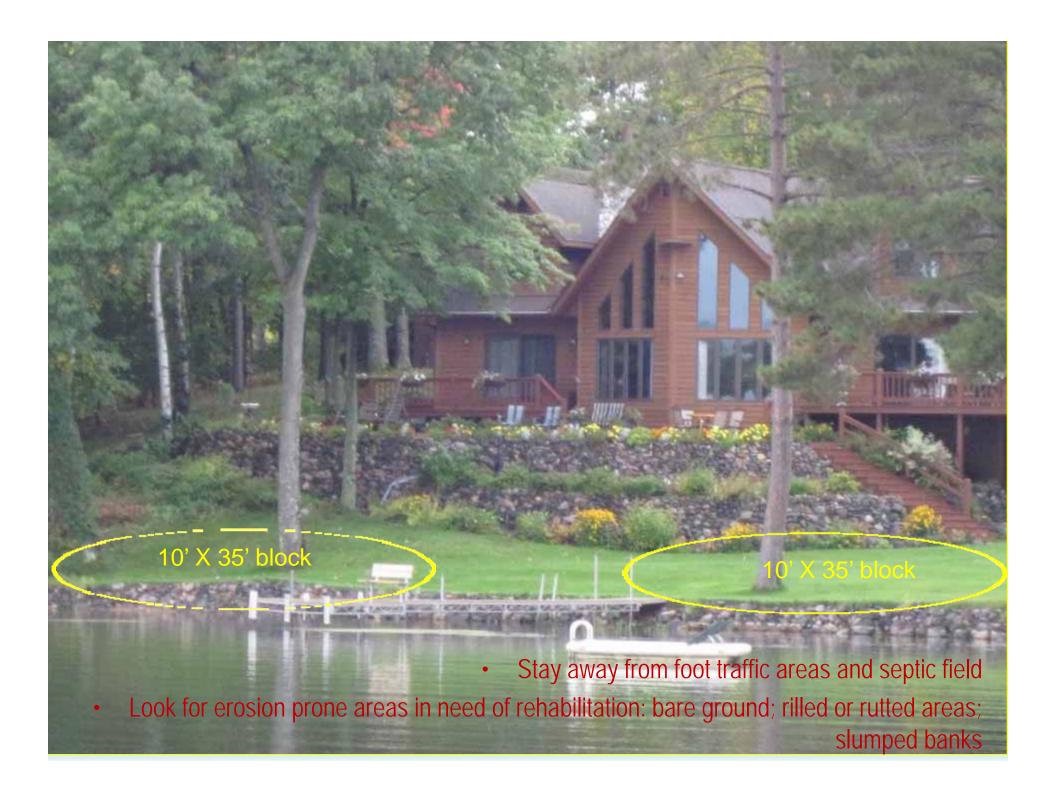






Practice #2: 350 ft² Native plantings

Consult the <u>native</u> <u>planting guide</u> on our Healthy Lakes web pages for siting ideas, planning and design help, and template plant lists



Healthy Lakes Grants

- Annual deadline February 1
- \$25,000 state cap with up to 10% of it for technical assistance and project management
 - 75/25% state/sponsor match
 - Eligible sponsors, including qualified lake associations, lake districts, counties and other local government units, may apply on behalf of multiple landowners
 - Standard 2-year grant agreement
- Each best practice capped at \$1000 state share
- 10-year contract with standard operation & maintenance details described in grant agreement
 - Grant sponsor develops and administers contract that landowner signs
- Self-reporting or site visits on 10% of projects annually

Lake Protection Grant Lake Management Plan Implementation Category

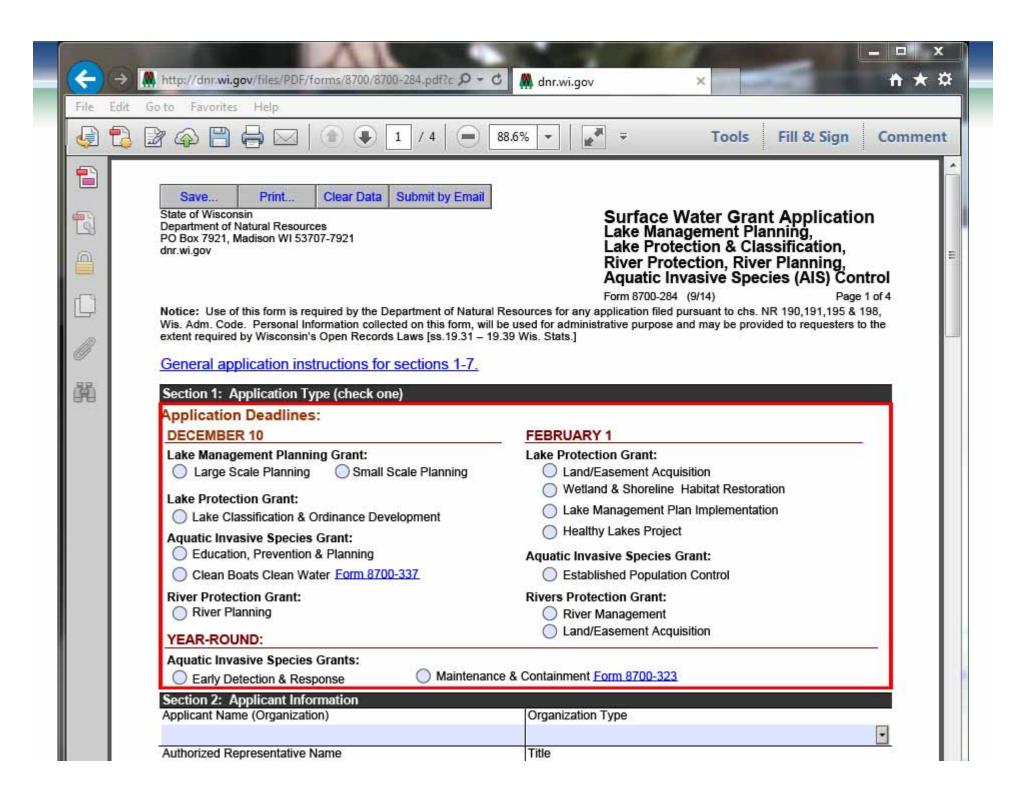
 Purpose of grant category – provide funds for implementation of Dept. approved recommendations in a plan to improve lakes & lake ecosystems

o Lake specific Lake Management Plan

County Land & Water Resource Management Plan

Wisconsin's Healthy Lakes Management Plan

RESOLUTION #
Resolution of Clean Lake
County ofWashburn
WHEREAS , _ <i>Clean</i> Lake is an important resource used by the public for recreation and enjoyment of natural beauty; and
WHEREAS,Clean Lake Association recognizes the importance of the quality and health of Wisconsin's lakes to its citizens and local economies; and
WHEREAS , the quality and health of Wisconsin's lakes is directly related to the quality and condition of their shorelands; and
WHEREAS , the <i>_Clean Lake Association</i> recognizes the need for an implementation plan to protect and improve lake shorelands; and
WHEREAS , the Wisconsin's Healthy Lakes Implementation Plan is a statewide implementation plan which identifies best practices for the protection and improvement of lake shorelands including habitat restoration, runoff and erosion control best practices; and
WHEREAS, adoption of the said Wisconsin's Healthy Lakes Implementation Plan enables a grant applicant to be eligible for grant funding through the Wisconsin Lake Protection Grant Program, Healthy Lakes Project;
NOW, THERFORE, BE IT RESOLVED thatClean Lake Association hereby adopts the Wisconsin's Healthy Lakes Implementation Plan and will use the plan to guide the implementation of best practices to protect and improve the quality and health of lake shorelands and Wisconsin's lakes.
Adopted this day _01 of August, 2015 By a vote of: in favor,against,abstain
BY:Jane Doe Secretary/Clerk of
Clean Lake Association



Lake Management Plan Implementation Healthy Lakes Project Application Surface Water Contact Plans Implementation

Application Instructions

Surface Water Grant Application Lake Management Planning, Lake Protection & Classification, River Protection, River Planning, Aquatic Invasive Species (AIS) Control

iblication Evbe:	Lake Dretection	Crant Healthy Lak	roo Drojoot		
		Grant – Healthy Lak	•		
	owner and Practice	Information (Provide a p	parcel map showing p	property location of all partic	apating landowners.)
Name of Lake					
Landowner Name			Parcel Numb	per	
					l
Has the landowner s	signed a participatio	n pledge? O Yes	○ No		
Practices to be Ins			<u> </u>		
Zone 1: In-lake	Cost	Zone 2: Transition	Cost	Zone 3: Upland	Cost
Fish Sticks		Native Planting		Rain Garden	
	š	Diversion Practices	\$		\$
		Diversion Fractices	\$	Diversion Practices	\$
				Rock Infiltration Prac	\$
Provide a parcel ma	ap showing parope	erty location of all partic	cipating landowners	5.	
		-			
Products and Deliv	erables				
Signed Conserva	ation Commitment w	/ completed installation c	hecksheet & O&M p	lan	
Pre and Post pro	ject installation phot	tographs			
Summary of othe	er education activitie	s			
= -		ote the Lake Heath Initiat	tive project		
_ , ,					
Data to be Collecte and as explained in			rting requirements a	s defined in the Conservat	tion Commitment
and as explained in	tile grant application	i guidance.			
Pole of project in p	Janning and/or ma	nagement of lake			
Role of project in p	lanning and/or ma	nagement of lake			
	_	_	pted? If so, identify l	how the plan was adopted	Ŀ
	_	mentation Plan been adop	pted? If so, identify l	how the plan was adopted	l:
Has the Statewide H	lealthy Lakes Implen	mentation Plan been adop		how the plan was adopted	Ŀ
Has the Statewide H	lealthy Lakes Implen	mentation Plan been adoption):		how the plan was adopted	Ŀ
Has the Statewide H	lealthy Lakes Implen	mentation Plan been adoption):		how the plan was adopted	l:
Has the Statewide H	lealthy Lakes Implen	mentation Plan been adoption):		how the plan was adopted	l:
Has the Statewide H By resolution (pro Through a local p	lealthy Lakes Implen	mentation Plan been adoption):		how the plan was adopted	l:
Has the Statewide H By resolution (pre Through a local p Other – Specify:	lealthy Lakes Implen	mentation Plan been adoption):		how the plan was adopted	l:
Has the Statewide H By resolution (pre Through a local p Other – Specify:	lealthy Lakes Implen	mentation Plan been adoption):		how the plan was adopted	i:

Participation Pledge (optional)



HEALTHY LAKES PARTICIPATION PLEDGE

I/we Mr. and Mrs. Lake-Lover pledge to participate in Wisconsin's Healthy Lakes initiative. More property owners implementing the suggested best practices over time may eventually add up to significant success and healthier lakes for current and future generations.

I/We pledge to work with DNR Lake Protection Grant sponsor Healthy Lakes Association to install the following best practice(s) to restore fish and wildlife lakeshore habitat and/or prevent storm water runoff and erosion. (check practices to be installed on the property)

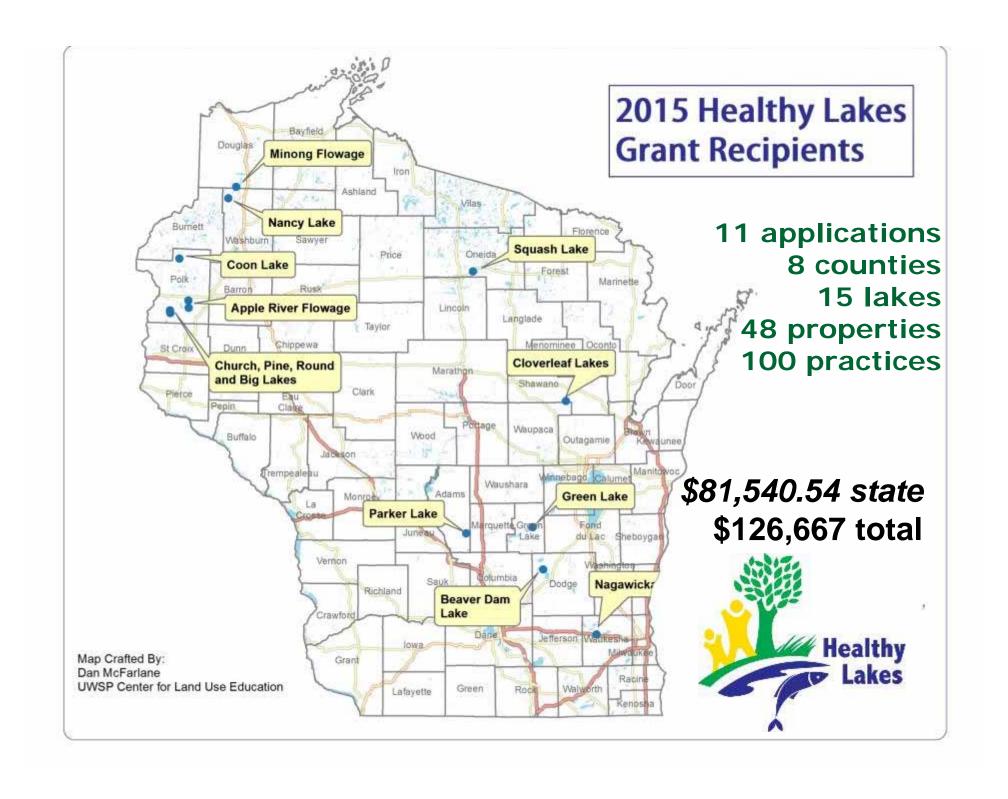
h.oha.(1)	
☐ Fish Sticks	
☐ 350 square feet native plantings	
☐ Diversion practice(s)	
☐ Infiltration practice(s)	
☐ Rain garden	
I/We understand that by signing this Pledge I/we am/are indicating a strong interes	
follow through with a Healthy Lakes project on my/our property, but this is not a le	gal
requirement to do so.	
Describe Personal Participation Goal (optional):	
Name: John and Jane Lake-lover (please print)	
Phone #: (123) - 456-7890	
E-mail address: lovinglakes@yoohoo.com	

Date: 01/01/2015

Signed: John Lale-Lover and Jane Lake-Lover

Grant Review/Ranking

- LPT 191.07 <u>Priorities</u> (4) The department *may* consider the following factors when developing a project priority list:
- The degree to which the project provides for the protection or improvement of water quality
 - E.g. ORW/ERW, impaired?
- The degree to which the project provides for protection or improvement of other aspects of the natural ecosystem such as fish and wildlife habitat, native vegetation or natural beauty
 - E. g. sites adjacent to sensitive area, support from fisheries, wildlife, etc.
- The availability of public access to, and public use of, the lake.
 - E. g. public property or demonstration sites
- The degree to which the proposed project complements other lake and watershed management efforts including local comprehensive plans and the level of support from other affected management units or organizations
 - E. g. partner support, other plans
- The likelihood of the project to successfully meet the stated project objectives and 2-year timeline and the degree of detail in the application
 - E. g. landowner commitment, neighbors participating together, costs, baseline monitoring/inventory completed, compliance monitoring/maintenance assistance





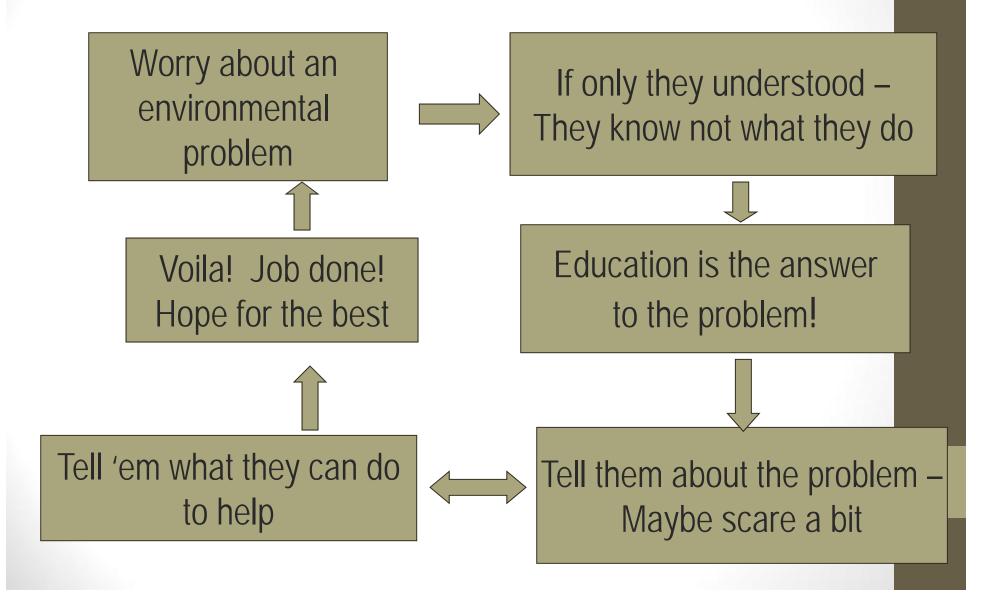
Insights to promote natural shorelines among lakeshore property owners





John Haack Regional Natural Resource Educator

Modifying Behavior: The Typical Education Model



Factors Related to Adoption

- Beliefs alone don't get it done
- Varying levels of readiness
 - use tailored message v. 1 size fits all
- Perceptions: My shore is more natural than... (survey/biologist/ photos)
- Understand lake property owners
 - survey, focus group, interviews...

 Providing objective feedback mildly (i.e. self assessment/worksheet, shoreland map ratings?)

Avoid "reactance"



Self-assessment worksheets objective feedback provided mildly...

Bone Lake Management District

Polk County, WI

Administration Bone Lake Momt Plan Lake Protection Bone Lake Events About Bone Lake About Polk County Water Quality Join Our Mailine

Interactive Checklist Survey for a FREE Site Visit

Are all areas of your lot well covered with vegetation?

- My lot is completely vegetated with tall growth between my house and the lake.
- There are no areas of bare soil on my lot. My lot has some tall vegetation near the water.
- There are few areas of bare soil AND/ OR my property is covered with a thick lawn.
- My lot has extensive areas of bare soil AND/OR is covered with a thin lawn.
- Gullies have formed from water running across my lot.



2080C-G20 West Bone Lake Drive Milltown WI 54858

Shoreland assessment maps



 Use outreach messages emphasizing social norms (informal rules of behavior)

 "Join your neighbors in adopting a natural shoreline to keep your lake clean"

- Emphasizing social norms cont.
 - Shine a spotlight on good example
 - Shoreland signs, boat landings, parks, tours, feature articles...



Choose Words Selectively

- Not just what you say but how you say it
- Water Words that Work
 www.waterwordsthatwork.com



- "Swap the shop talk"
- Emphasize:
- Inclusivity WE, OUR, SHARED...
- Water Protection and Preserving Water Quality
- Future Generations...
- Keep people in the Picture- benefits for people

Choose Words Selectively

The Language of Conservation

Bad Words to Avoid	Good Words to Use		
Environment	Land, air and water		
Ecosystems	Natural areas		
Biodiversity / endangered species	Fish and wildlife		
Regulations	Safeguards/protections		
Riparian	Land along lakes, rivers and streams		
Aquifer	Groundwater		
Watershed	Land around rivers, lakes and streams		
Environmental groups	Conservation groups / organizations protecting land, air, and water		
Agricultural land	Working farms and ranches		
Urban sprawl	Poorly planned growth/ development		
Green jobs	Clean energy jobs/jobs protecting water quality/etc.		

Small Message Difference Make a Difference

- Native plant coupon promotional effort
 - \$5 Off vs. Free
 - "Free" double coupon redemption



Existing Natural Vegetation on Neighbors - Important

 Vegetation on a shoreline was more strongly related to the amount of vegetation on neighbors' shorelines...

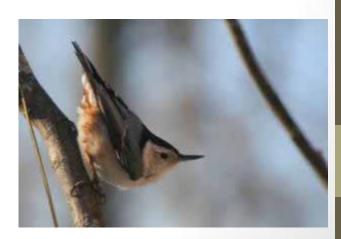
...than to their property management goals or

stewardship.



Native Plants are Good

- Emphasize positive outcomes landowner care about (barriers/ benefits)
 - Habitat for desired wildlife
 - Potentially less undesirable wildlife
- Address outcomes they don't want
 - Blocking their view
 - Looking messy
 - Decreased property value



Address Owners Goals for Shoreline Landscaping

 Neatly groomed landscape, not messy- clean edges along more natural areas

Clear view of the lake – lower natural vegetation

Ticks- mulched pathways



Promote Natural Shorelines to Attract Desired Wildlife

- Highlight the species most meaningful to property owners you work with:
 - Song Birds
 - Frogs
 - Fish



Promote Natural Shorelines to Attract Desired Wildlife

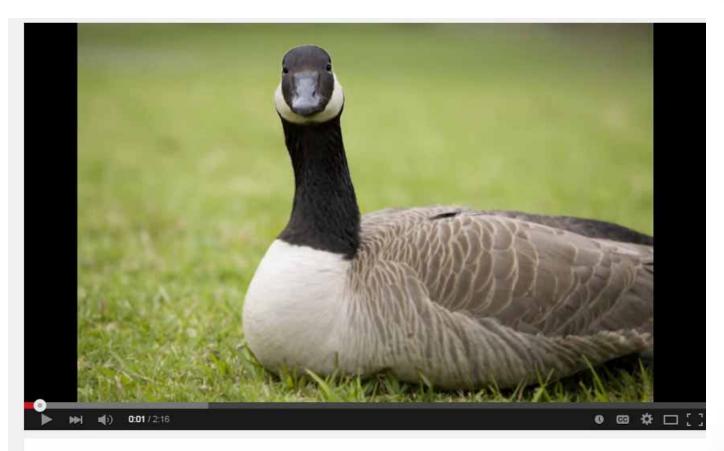
- Highlight the species most meaningful to property owners you work with:
 - Song Birds
 - Frogs
 - Fish



Benefits/ More Frogs



Benefits/ Prevent Geese



Sebastian the Goose Encourages Natural Shorelines

Other Considerations: Pick Your Messenger carefully

- Many folks prefer a messenger similar to target audience
 - Neighbors
 - Friends
 - Lake Assoc. Members



Other Considerations: Vocal Minority Put-off

 Reactance Theory- perceived threat to their private property rights... those with perceived authority

Greatest when comes from gov. or some untrusted entity

Least when coming from those without authority-

neighbors, volunteers



Other Considerations: Vocal Minority Put-off

- Reactance Theory- perceived threat to their autonomy/ self-governing
 - "A MAN WITH A CONVICTION is a hard man to change. Tell him you disagree and he turns away.
 Show him facts or figures and he questions your sources. Appeal to logic and he fails to see your point" Leon Festinger

Other Considerations: Use Multiple Strategies

Use multiple approaches that complement each other

Similar design elements

SHARE YOUR SHORE

Create long-term relationships

Sustained efforts: 18% -154 parcels, 660 sq ft.

Other Considerations: Use Multiple Strategies

Real change-more natural shorelines takes time

No silver bullets



Be patient



Conclusions from Survey MN

- 8% need little or no intervention
- 19% inclined to restore buffer
 - Assess barriers
- 51% potential target for communications strategy
 - beauty of buffers
 - water quality improvement
 - Ability- to keep up with maintenance

Conclusions from Survey MN

• Incentives:

- One time payment \$500= additional 23%
- Yearly payment of \$100= additional 30%

N~4000 respondents

Using Social Information

- Basic assumption (Kristin F.)
 - One-size fits all outreach unsuccessful strategy
 - Importance of case specific data, targeting audiences

 We wouldn't use ecological data from one lake to plan for another, same with social

Implementing

Key /Foundation
Beyond Service Delivery Model



Human Capacity to govern for the common good.

- 1. Democracy- rule by the people
- 2. Active Citizenship... me too.
- 3. Mindset and skills to do this work- define problem, solutions... *Civic Imagination*
- 4. Institutional efficacy "effectiveness/ competency"

Create Institutional Frame Work to Support / Sustain Efforts

- Governance concept
 - All impacted by the problem are stakeholders & help define the problem.
 - All stakeholder are accountable for contributing
 leadership, time, knowledge, constituencies & dollars
 - All folks are involved in decision making
 - All implement in the place they have authority to act

UWEX Lakes → Healthy Lakes



Using Social Science to Encourage More Natural Shorelands and Healthier Lakes

Back to Healthy Lakes Home Page

General Principals of Social Marketing

Marketing Materials

Coupon Promotional Materials

Key Insights and Recommendations

Resources and Reports

Peer Reviewed Journal Articles

Multiple Website Linkes

Media Coverage

Contact Us

Insights to promote natural shorelines among lakeshore property owners

Questions? Thoughts?

Thanks to:
Bret Shaw and Mike Amato
UW Madison
Life Sciences Communication





John Haack Regional Natural Resource Educator



Leadership:

A Case Study in Making a Movement Happen

