



Marinette County



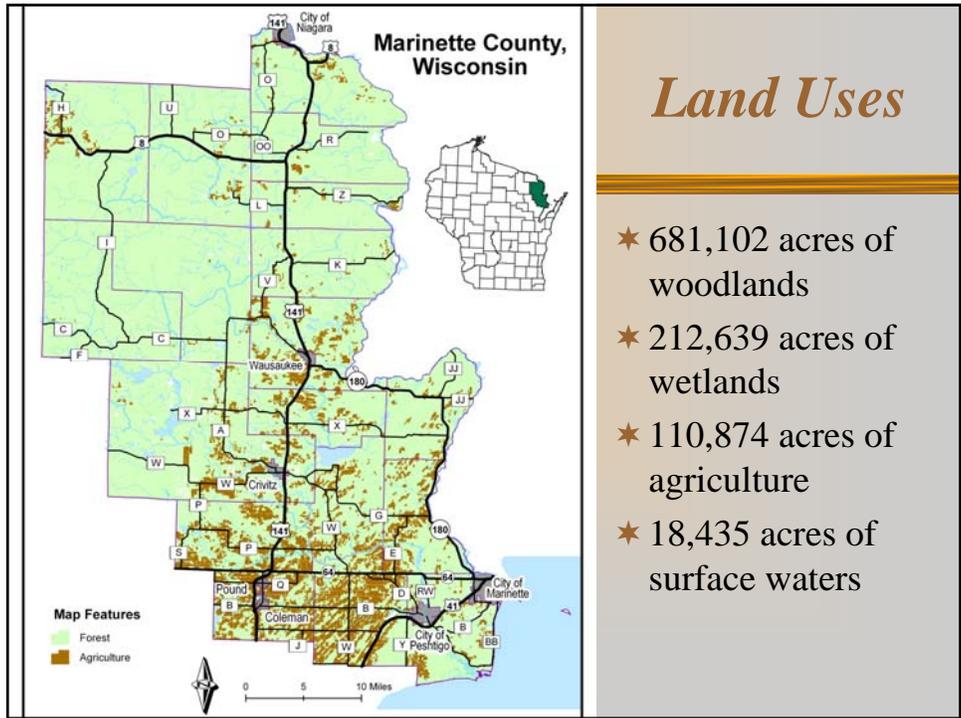
2011 - 2020 Land & Water Resource Management Plan

Marinette County, Wisconsin



Statistics

- ★ 914,286 acres in size (3rd largest)
- ★ Population 44,823 (32nd highest)
- ★ 230,866 acres of County Forest (2nd most)
- ★ 442 Lakes (13th most)
- ★ 191 Trout Streams (1st)
- ★ 161 ORW/ERW Streams (1st)



Plan Goals

- ★ **Help Marinette County citizens make the connection between land use and environmental quality.**
- ★ **Control runoff pollution from agricultural lands and increase natural habitat.**
- ★ **Control runoff pollution from riparian areas and forest lands. Increase natural habitat.**
- ★ **Manage and/or prevent the spread of invasive exotic species.**



Goal 1 - Help Marinette County citizens make the connection between land use and environmental quality

- ★ Increase appreciation of local natural resources and awareness of local resource problems
- ★ “No Child Left Inside”
- ★ Encourage land management practices which reduce pollution and increase natural habitat
- ★ Provide people with the tools and skills to protect and preserve the natural landscape
- ★ Recognize good stewardship
- ★ Offer organization and planning assistance



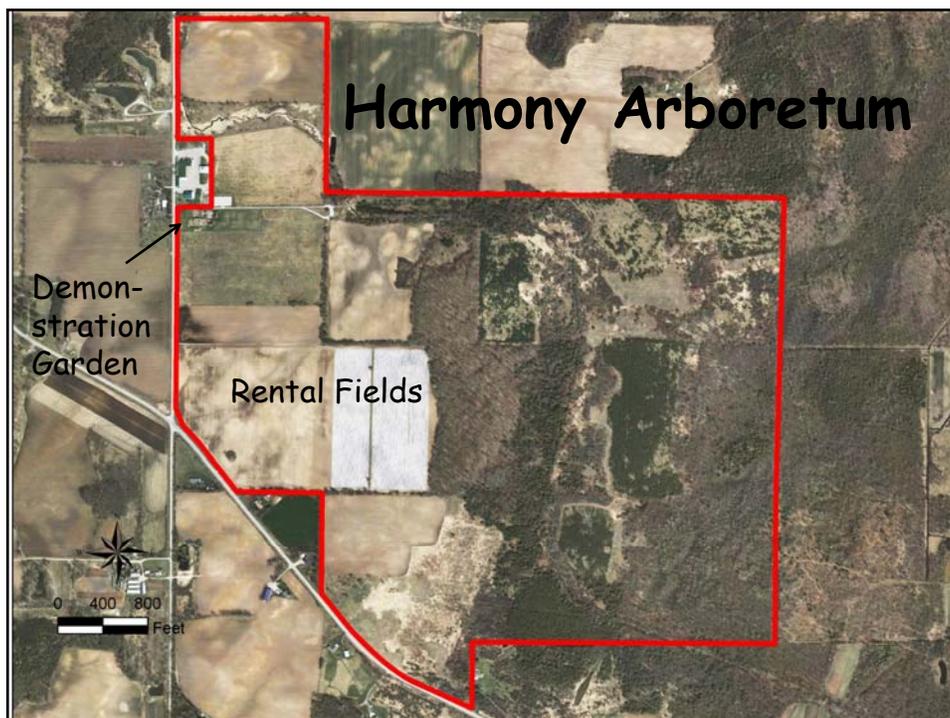
Help Marinette County citizens make the connection between land use and environmental quality.

	2006 - 2010	2011 – Sept 2015
★	632 TOAD Programs	917 TOAD Programs
★	21,118 TOAD Attendees	28,078 TOAD Attendees
★	299 Conservation Camp Attendees	437 Conservation Camp Attendees
★	2226 4 th Graders	2117 4 th Graders
★	Harmony Arboretum	25 Seminars Harmony Arboretum in 2015















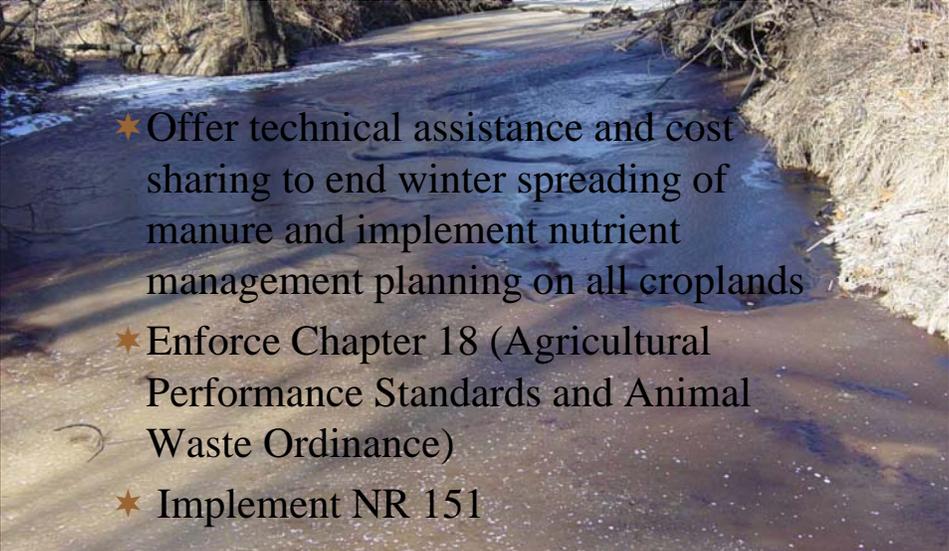
Why the focus on education?

*“In the end we will only conserve what we love.
We will only love what we understand.
We will understand only what we are taught.”*

Baba Dioum, Senegalese Ecologist



Goal 2 - Control runoff pollution from agricultural lands. Increase natural habitat.



- ★ Offer technical assistance and cost sharing to end winter spreading of manure and implement nutrient management planning on all croplands
- ★ Enforce Chapter 18 (Agricultural Performance Standards and Animal Waste Ordinance)
- ★ Implement NR 151



Control runoff pollution from agricultural lands. Increase natural habitat.

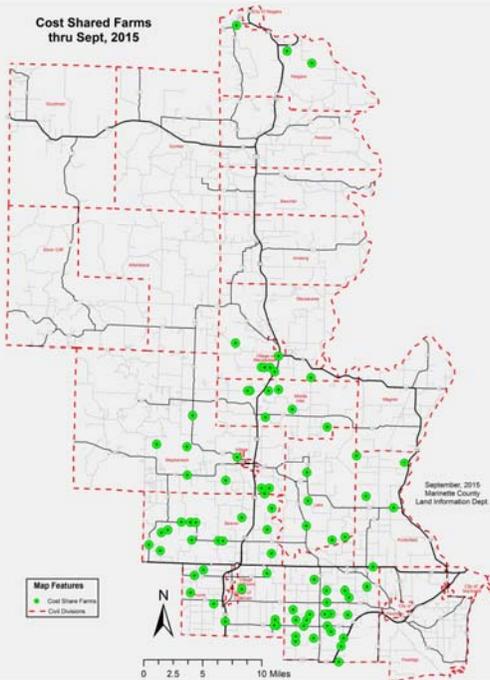
	2006- 2010	2011 - 2015
	★ 13 Manure Storages	★ 16 Manure Storages
	★ 16 Barnyards	★ 12 Barnyard Runoff Mgmt.
	★ 14 Waste Transfers	★ 7 Waste Transfer Systems
	★ 8 Milk House Waste	★ 5 MS or BY Roofs
	★ 7 MS or BY Roofs	★ 4 Feed Leachate Practices
	★ 16,048 acres no longer winter spread	★ 7,090 acres no longer winter spread
	★ 0% Ave. Underspensing	★ NKE Plan
		★ 0% Ave. Underspensing

“9 Key Elements” for Watershed-Based Plans

EPA Nonpoint Source (Section 319) Program

1. Identify **causes and sources** of pollution.
2. Estimate the **load reductions expected for the management measures**.
3. A description of the **NPS management measures** that will need to be implemented.
4. An estimate of the amounts of **technical and financial assistance** needed, associated **costs**, and/or the sources and **authorities** that will be relied upon, to implement the plan.
5. An **information/education** component that will be used..
6. A **schedule** for implementing the NPS management measures identified in the plan.
7. A description of interim, **measurable milestones**.
8. A set of **criteria that can be used to determine whether loading reductions are being achieved over time and substantial progress is being made towards attaining water quality standards**.
9. A **monitoring** component to evaluate the effectiveness of the implementation efforts over time.

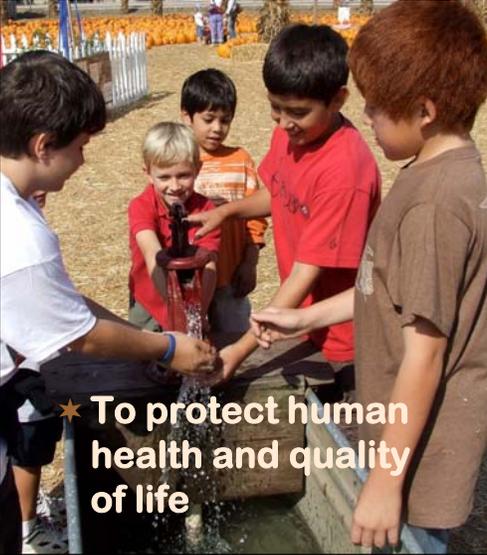
Cost Shared Farms
thru Sept, 2015



Cost Shared Farms

- ★ 52 Targeted Runoff Management Projects
- ★ 6 MPT Priority Watershed Projects
- ★ 21 MIN Priority Watershed Projects
- ★ 36 LWRM Projects – Includes Nutrient Management

 *Why worry about runoff pollution from agricultural lands?*

 **★ To protect human health and quality of life**

 **★ To protect fish and other aquatic life**

 *Terrestrial wildlife also depend on water quality and aquatic habitat.*



Goal 3 - Control runoff pollution from riparian areas and forest lands. Increase natural habitat.

- ★ Assist and build capacity of 13 Lake Associations and Districts and local units of government
- ★ Administer and enforce NR115 and Chapter 21
- ★ Provide technical assistance and cost sharing for restoration and protection
- ★ Perform long term research and disseminate results
- ★ Map and prioritize fish passage problems on County rivers





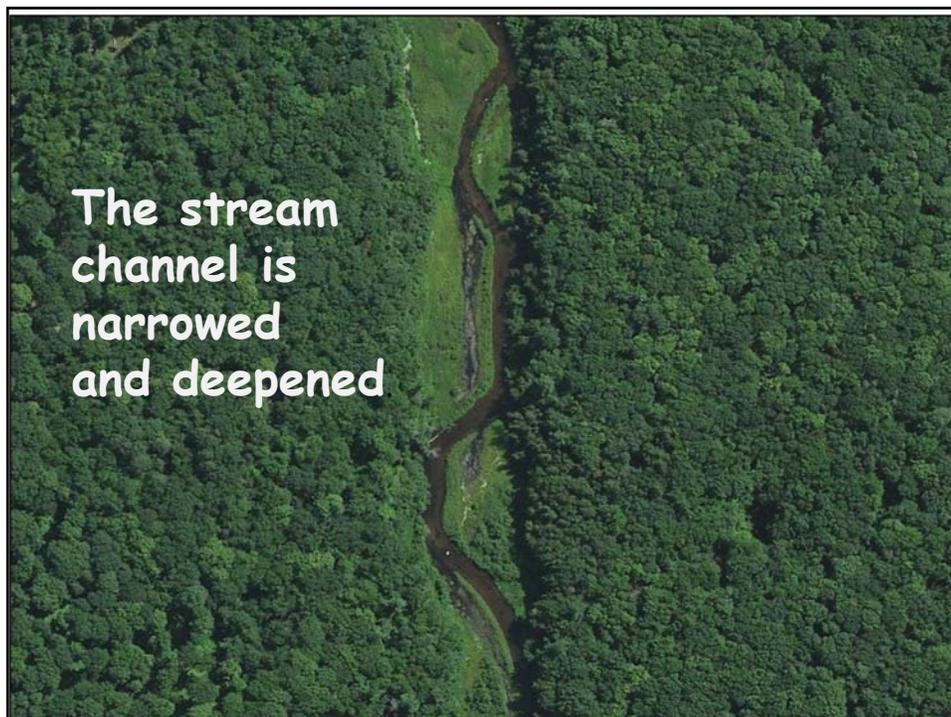

Control runoff pollution from riparian areas and forest lands. Increase natural habitat.

2006 -2010	2011 Through 2015
★ 2 Lake Management Plans	★ 1 Lake Management Plan
★ 28 Developed Area Restorations	★ 19 Developed Area Restorations
★ Pike River Fish Passage Study	★ Pemebonwon River Fish Passage Study
★ Upper Middle Inlet Habitat Restoration	★ N. BR. Pemebonwon R. Habitat Restoration
★ 1 Clean Sweep Day	★ 2 Upper Middle Inlet Habitat Restorations
	★ 1 Clean Sweep Day





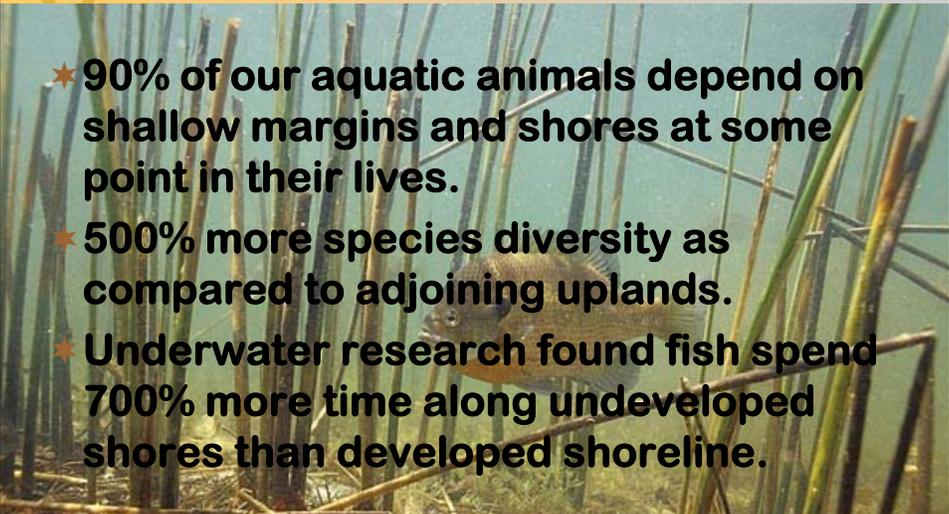


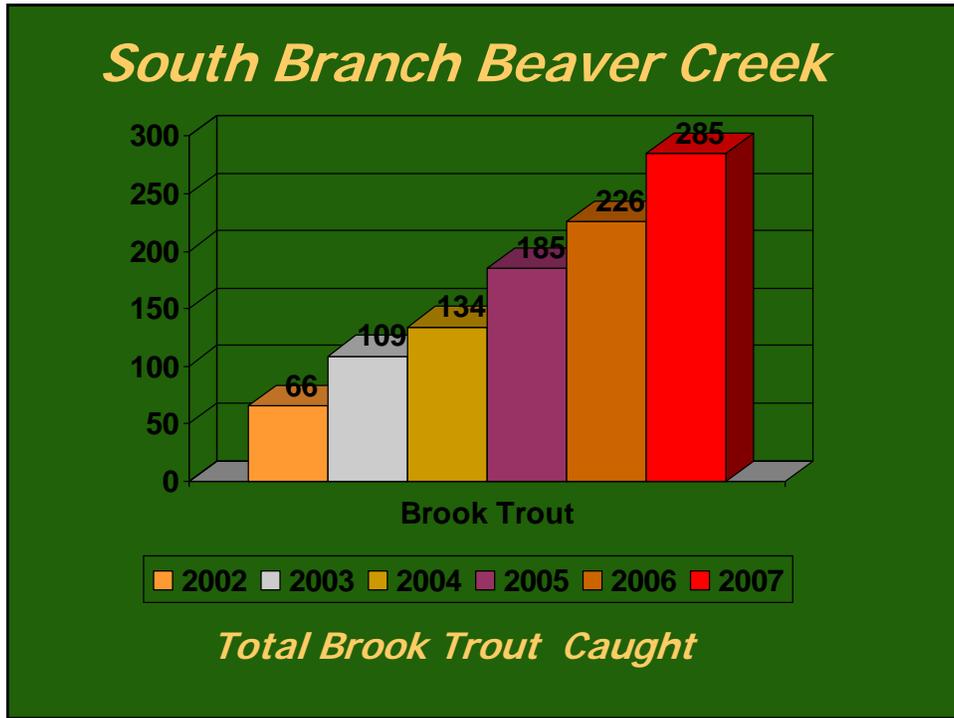




Why worry about Riparian Areas?

- ★ **90% of our aquatic animals depend on shallow margins and shores at some point in their lives.**
- ★ **500% more species diversity as compared to adjoining uplands.**
- ★ **Underwater research found fish spend 700% more time along undeveloped shores than developed shoreline.**





Goal 4 - Manage and/or prevent the spread of invasive exotic species.

- ★ Eradication and control
- ★ Technical assistance and cost sharing
- ★ Interagency cooperation
- ★ Building capacity of Marinette County, local governments, and non-governmental organizations
- ★ Education and monitoring





Exotic species found in Marinette County

 <ul style="list-style-type: none"> * Gypsy Moth * Purple Loosestrife * Eurasian water milfoil 	 <ul style="list-style-type: none"> * Zebra Mussel * Chinese Mystery Snail * Phragmites * Hydrilla * Yellow Floating Heart 	<ul style="list-style-type: none"> * Spiny Waterflea * Japanese Knotweed * Wild Parsnip * Oriental Bittersweet * Garlic Mustard * Glossy Buckthorn * VHS
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Manage and/or prevent the spread of invasive exotic species.

2006 - 2010	2011 - 2015
 <ul style="list-style-type: none"> * 6 Aquatic Invasive Species Management Projects * Joined Wild Rivers Invasive Species Cooperative 	<ul style="list-style-type: none"> * 6 Aquatic Invasive Species Management Projects
 <ul style="list-style-type: none"> * Hired AIS coordinator * Helped DNR Apply for Phragmites Grant 	<ul style="list-style-type: none"> * 2 WDNR phragmites grants * DU/WDNR phragmites grant * Four years of Watercraft Inspectors through WDNR and WRISC (3,793 boats; 9,303 people) * Built DASH * Garlic mustard control
	





 *Why worry about Invasive Exotic Species?*





