

#### PLANNING: ACTIVE DECISION MAKING

#### **Making Firm Commitments of Resources**



PLANNING: COMMUNITY DIALOGUE

**Capacity (Coalition) Building** 

## Landscape Planning: Applying Social-Ecological Analysis to Support Natural Resource Management Initiatives



ACT 1: Collaborative Planning agriculture

**Issues** 

#### LANDSCAPE PLANNING REQUIRES BALANCING MULTIPLE DEMANDS

## So whose priorities matter?

A. This question speaks directly to why we plan, because there are no simple answers

A Social Pro For Water W

B. Purpose of planning efforts is to improve conditions and / or to address issues in the landscape

C. To achieve this our work must produce outcomes that are acceptable to:

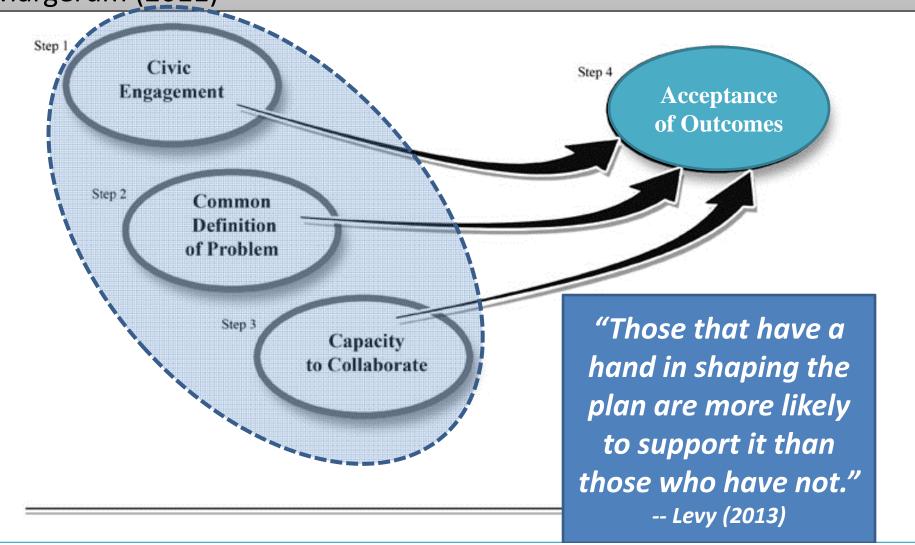
Those who will be responsible for implementation

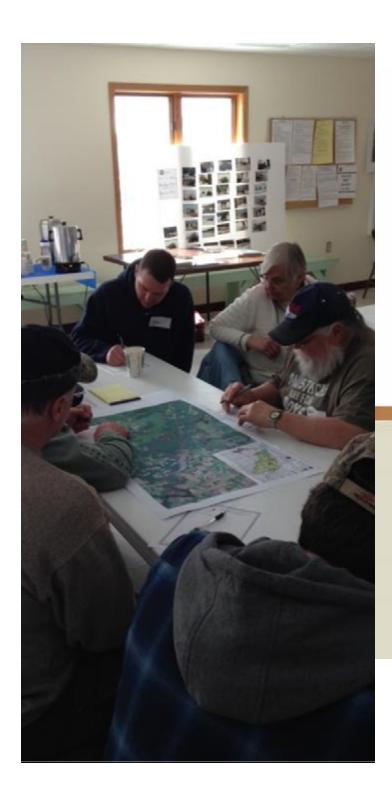
Those who will be affected by our actions

Others with a stake in the community

Collaborative planning is an approach to solving complex problems in which a diverse group of autonomous stakeholders deliberate to build consensus and develop networks for translating consensus into results.

Margerum (2011)





"The biggest influence for me occurred the first time I viewed the phosphorus results from water samples I had taken on the lake. The levels of phosphorus were so much higher than other water bodies I had sampled, that I had to double check the results because I though the lab may have made a mistake."

Individual Capacity

#### Record your story here:

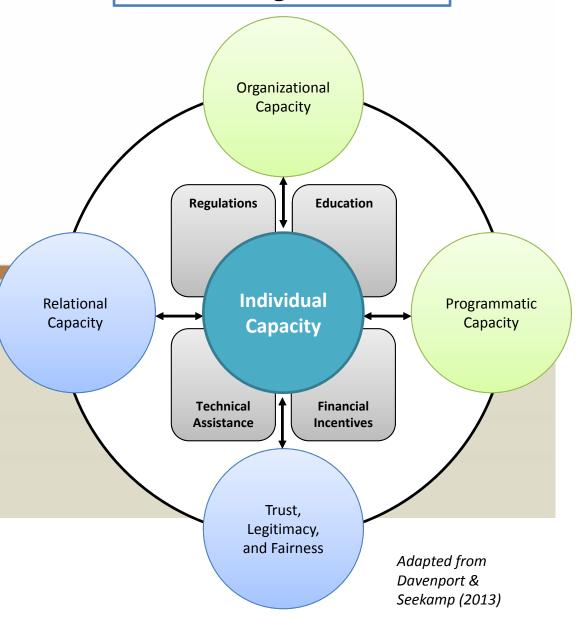
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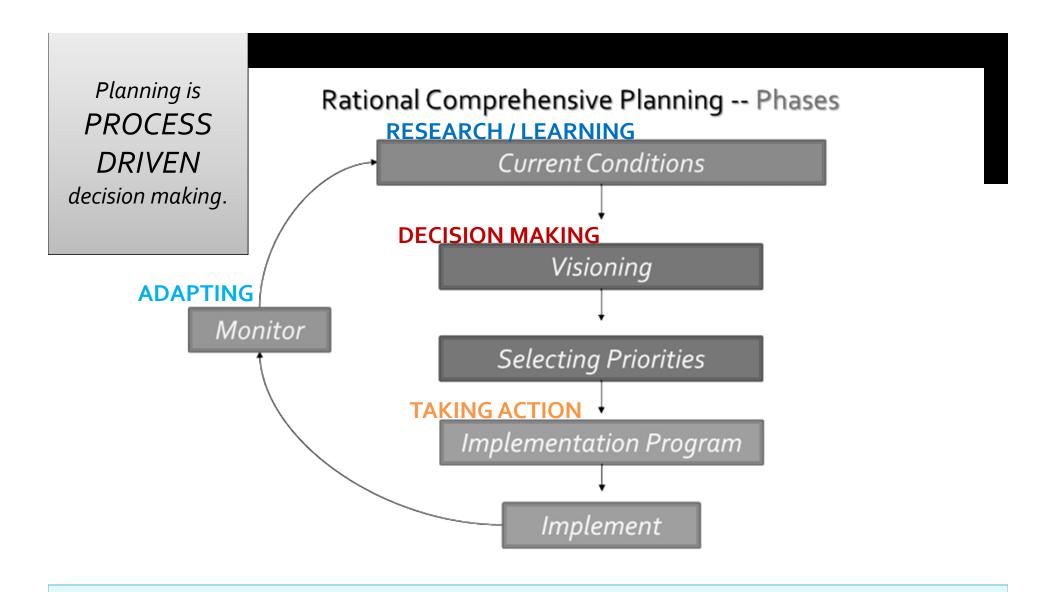
Strengths: Characteristics of the stakeholder group / community that give efforts a relative advantage for success



Weaknesses: Characteristics of the stakeholder group / community that reduce the likelihood of successful action to address issues

Collaborative Planning: Sustainable Watershed Management





Our information needs change -- the type of SOCIAL DATA necessary to inform our work depends on where we're at in the process!

#### Future of Central VVisconsin Grasslands







We fire! fortunate to recreational options, and a Wisconsin nearly 1 million agricultural practices on per

It's clear that farmers and r the least of which is maxim habitat important things are many groups have been wo and wildlife. As part of an that will influence the firm important to you, the lando

We know your time is impo 20 minutes of your time, so or that you don't know how study please contact Dr. De questions feel free to conta

Whale your participation is bring local voices into theu

Sincerely,



Jacob C. Herna Graduate Resear E-mail: Jhern086

Cellage of Natural I Daivenity of Wisco Stavens Food WI, 5



Lake Wausau Community Survey

As a resident of one of the communities that surround Lake Wau to receive a survey concerning efforts to improve the community reson being conducted by faculty in the College of Natural Resources at the Unit partnership with the Lake Wausau Association and sponsoring local govern groups understand how residents in the Wassau area interact with and value I Results will inform ongoing research and activities to improve water quality kept confidential and if you have any concerns about the treatment of re UWSP Institutional Review Board that can be reached at (715) 346-4598.

Your voluntary participation in this survey is a chance to be a part of for Lake Wausau. Please take the time to share your views about this imports and returning the survey in the enclosed postage paid envelope. If you have free to contact one of the members of the research using the informations pro-

Thank you for your assistance,

Dr. Aaron Thompson Assistant Professor naron.thompson@uwsp.edu 715.346.2278

PLEASE READ BEFOR Eau Pleine and all results will be

The survey must be completed by a

Please mark all answers clearly, in p

Have you heard of the Lake Wauss

Never heard of them

doi:10.248e/jswc.6e.2.57A

People, place, behavior, and context: A research agenda for IDEAS & expanding our understanding of what motivates farmers' conservation behaviors

> Adam Reimer, Aaron Thompson, Linda Stalker Prokopy, L. Gordon Arbuckle, Ken Genskow, Douglas Jackson-Smith, Gary Lynne, Laura McCann, Lois Wright Morton, and Pete Nowak

decades, yet there is still a large degree explain adoption decisions. In addition to that better captures the complexities of of unexplained variation and a lack of high variability in determinants of behavior real world behaviors. Typically, adoption understanding about the factors that con- ior, physical and temporal variation in the studies, especially those in the Diffusion tribute to, or inhibit, farmer conservation. characteristics of the practices themselves Our goal with this article is to outline an complicate research efforts. arrenda for fature social science research exploring conservation behaviors in agri- the only important pieces of informacultural systems. We believe that greater tion to understand when researching reflection on what avenues need further conservation behavior. Farmen' conserexploration will lead to improved scien- varion behaviors are more than individual tific undentanding and ultimately greater

College of Natural Resources

ocial scientists have explored social networks. Subsequently, as indivation activities for a number of there are few variables that consistently

why farmers engage in conser-cated by earlier reviews of this literature, should focus their efforts toward operaof Innovations vein of research (P.ogers 1995), ask whether people have adopted Farm and farmer-level factors are not a specific practice but do not measure the extent (e.g., acres, linear feet, or frequency), intensiveness, or variability of the adoption activity. For example, surveys often frame adoption of practices as straight-

decisions about isolated practices; they forward, discrete choices. Conservation are trale dependent and influenced by "tillage for example can mean continuous

Dear Central Wisconsin Landov

conducted by the UW-Extension

community to support local effor

makers understand community [

You can contribute to this import

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will be destroyed prior to the s

any potential for risk or harm d treatment as a participant in this

Debbie Palmer, who can be read

Your voluntary participation in f

about your views of efforts to b

have any questions or comment

the health of this water body.

As a resident living nea

**ACT 2: Natural** Resources Social Science

"One cannot plan ... if one does not have a sense of the present state of events and their probable future direction." -- Levy (2013)

Lake Wausau Association's (LWA) mission is "to protect, maintain, and en values on Lake Waysay and its surroundings; to organize and conduct activ the ecology; water quality, fixhing, and recreational use of Lake Wausau.

Do you agree with the priorities that the Lake Wausan Association has pu

Strongly Disagree	-3	-2	-1	0	1
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identify several research areas that deserve approaches to move this science forward.

EXPANDING THE SCIENCE OF FARMERS' CONSERVATION BEHAVIORS

Measuring Adoption. Measurement of the that not all adoption decisions have the adoption dependent variable has proved same environmental benefit. The salience,

nservation behaviors. In this article, we behavior. Further, participation in governexpanded inquiry, as well as offer a set of likelihood of behavior change, or willinglarger principles to guide future research ness to change behavior are all worthy and important dependent variables, but researchers should be careful not to conflate there

Finally, it is important to recognize

DESIGNATION OF THE ABOUT PROPERTY COMPANY OF THE

Marchines and June 1997 at the Control of the Contr

# BEGINNING A COMMUNITY DISCUSSION ...

#### **Applied Social Science Lessons:**

1. No marketing firm would attempt to 'sell something' without first knowing something about their customers -- we need to learn from this example.



## Lake Wausau Project Phase II, Task 6

Social & Economic Values Survey

**Full Report Available:** 

http://www.uwsp.edu/cnrap/clue/Documents/Public/LakeWausau\_FinalRepo rt-January2015.pdf

## Lake Wausau Community Survey

As a resident of one of the communities that surround Lake Wausau you have been randomly selected to receive a survey concerning efforts to improve the community resource of Lake Wausau. This survey is being conducted by faculty in the College of Natural Resources at the University of Wisconsin—Stevens Point in partnership with the Lake Wausau Association and sponsoring local governments. Survey results will help these groups understand how residents in the Wausau area interact with and value Lake Wausau and the Wisconsin River. Results will inform ongoing research and activities to improve water quality in Lake Wausau. All results will be kept confidential and if you have any concerns about the treatment of research participants please contact the UWSP Institutional Review Board that can be reached at (715) 346-4598.

Your voluntary participation in this survey is a chance to be a part of the process of determining the future for Lake Wausau. Please take the time to share your views about this important community resource by completing and returning the survey in the enclosed postage paid envelope. If you have questions about the survey, please feel free to contact one of the members of the research using the informations provided below.

Thank you for your assistance,

Dr. Melinda Vokoun Assistant Professor Assistant Professor Assistant Professor aaron thompson (tuwsp.edu melinda vokoun@uwsp.edu kristin floress@uwsp.edu 715.346.2278 PLEASE READ BEFORE BEGINNING THIS SURVEY: The survey must be completed by an adult member of your household 18 years of age or older. Please mark all answers clearly, in pen or pencil, as indicated below, The Lake Wausau Association Have you heard of the Lake Wansau Association? Heard of them, but don't Heard of them, and Never heard of them know what they do know what they do Lake Wausau Association's (LWA) mission is "to protect, maintain, and enhance environmental and recreational values on Lake Wausau and its surroundings, to organize and conduct activities intended to maintain or improve the ecology, water quality, fishing, and recreational use of Lake Wausau." - lakewaysay.org Do you agree with the priorities that the Lake Wausau Association has put forth in their mission statement? Strongly Disagree Strongly Agree

## Study Design: Set up to achieve 30% response rate

	30% response rate				
		5 Wave Mailing Process:			
1 <sup>st</sup> Week June 2013		Contact #1: Address Screening Letter / Introduction			
		Contact #2: Survey Booklet			
		Contact #3: Reminder Postcard			
		Contact #4: 2 <sup>nd</sup> Survey Booklet			
3 <sup>rd</sup> Week July 2013	ζ	Contact #5: Reminder Postcard			

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Dr. Kristin Floress Assistant Professor kristin floress@wwsp.edu

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#### **Topics Covered:**

Introductory Questions
-Lake Wausau
Association
-Water Quality
Knowledge

**Governance & Policy** 

Community Perspectives

Economic Variables: Tied to lake activities

Mapping: Issues, improvement, recommendations

**Demographics** 

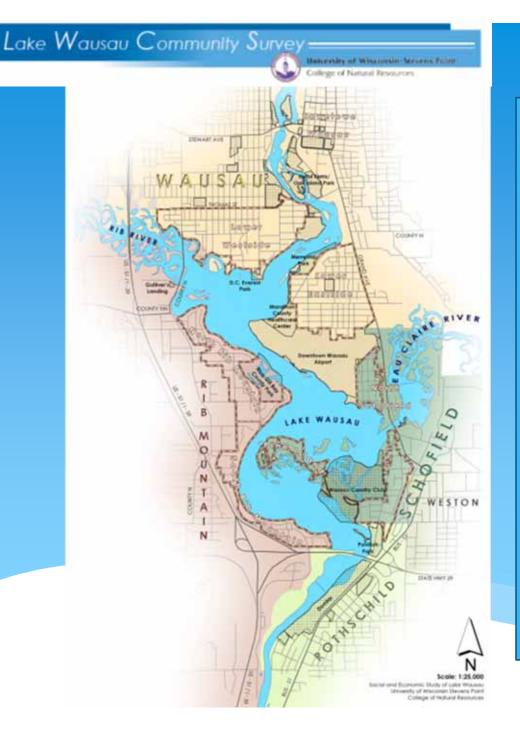
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#### Sample:

Developed 'in-house' using parcel data provided by Marathon County focusing on homeowners within these communities

Total: 850 participants
Representative sample:
-160 randomly selected
households from each
community: Wausau, Schofield,
Rothschild, & Rib Mountain

#### Oversample:

-210 randomly selected households from near lake neighborhoods

# Lake Wausau Community Survey Holicology of Natural Resources College of Natural Resources

	Sample	N	Response Rate	
Wausau	156	56	35.90%	
Schofield	156	62	39.74%	
Rothschild	158	68	43.31%	
Rib Mountain	159	83	52.20%	
Near Lake				
Neighborhoods	207	99	47.83%	
Overall	836	358	44.31%	

#### **LWA Familiarity Results:**

- (-)There is a general lack of familiarity with the Lake Wausau Association 41% of respondents had not heard of the organization.
- (+)Respondents are very supportive of the abbreviated mission statement included in the survey 82% agreed with their priorities.

The Lake Wausau Association								
Have you heard of the Lake Wausau Association?								
Never heard of them	Heard of the know what t	m, but don't hey do			rd of the w what tl	-		
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Strongly Disagree 3	-2 -1	0	1	2	3	Strongl	y Agree	

- +Respondents ranked 30 statements representing various attributes of the lake and surrounding community facilities
- +Analyzed using a 'Inverted-R' factor analysis procedure (Thompson et al., 2013)

# Community Perspective towards Lake Wausau Please describe your level of agreement on the following scale for each of the statements that relate to general views of Lake Wausau; in general the questions relate to areas on, along, or around the lake and Wisconsin River. Lake Wausau vastly adds to the beauty of the community and its surroundings. Lit is important for community members to take an active role in determining the future of Lake Wausau. I choose to spend my time elsewhere because of the lack of recreation facilities on the lake. Providing better habitat for fish and wildlife motivates me to support efforts to improve Lake Wausau.



Why are we looking at perceptions of Lake Wausau?

**Self-Awareness:** What motivates you to get involved in water quality improvement?

**Other-Awareness:** How does your motivation make your priorities different than other members of your community?



Why are we looking at perceptions of Lake Wausau?

**Community-Awareness:** How does impaired water quality negatively impact your community?

**Community-Criteria:** How does addressing these 'negative impacts' improve the lives of different stakeholders in your community?



- +Respondents ranked 30 statements representing various attributes of the lake and surrounding community facilities
- +Analyzed using a 'Inverted-R' factor analysis procedure (Thompson et al., 2013)

Statement #2: It is important for community members to take an active role in determining the future of the Lake Wausau.

Please describe your level of agreement on the following scale for each of the statements that relate to general views of Lake Wausau; in general the questions relate to areas on, along, or around the lake and Wisconsin River.

Statement #7: The scenic and natural beauty of Lake Wausau contributes to our community's ability to attract new residents and employers.



- + 'Inverted-R' process revealed 4 distinct belief systems among respondents
- + Process also identified commonalities, including that <u>all groups</u>:
- 1. Strongly agree that Lake Wausau adds to the beauty of the community (Item #1).
- 2. Strongly agree that community members must take an active role in the future of Lake Wausau (Item #2).
- 3. Agree that Lake Wausau contributes to the community's ability to attract new residents and employers (Item #7).
- 4. Agree that local funding to revitalize Lake Wausau is a good investment in the future (Item #8).



#### Group 01: At home on Lake Wausau

Residents who hold this view enjoy spending time on Lake Wausau, seeing plentiful outdoor recreation options and good fishing as some of the high points of their time spent here. For many they view recreating at Lake Wausau as part of a tradition that keeps them coming back over and over again. They disagree with others who think the lake is dirty and getting worse and for most hold the opposite opinion that the water is safe for recreating and they are willing to eat fish caught there. These individuals believe that the parks on Lake Wausau represent some of the most beautiful places in the county and disagree that there is an unpleasant odor that prevents them from recreating here. When it comes to who is responsible this group sees that both the DNR and local government have appropriately responding to the conditions on Lake Wausau.

Percentage of Community Responses Wausau: 37.0% Schofield: 56.9% Rothschild: 54.1% Rib Mountain: 41.9%

Near Lake: 52.0%



#### Group 02: Hard working Lake Wausau

There are a couple of similarities between residents who hold this view and Group 1 as both believe that Lake Wausau has plentiful outdoor recreation opportunities and that the parks along the lake are some of the most beautiful places in the county. Outside of these areas individuals in group 2 are less motivated by providing fish and wildlife habitat than other groups and instead believe that the lake is important because of the role it plays in supporting manufacturing within the community. They enjoy outdoor recreation, but don't choose to spend their time on the lake. However, this slight to recreating here doesn't seem to be linked to concerns over smell or water quality issues. They are also the least likely to support stronger regulations of activities to protect the enjoyment of the lake for all users and

are the least supportive of the in When it comes to local funding future, but support is lower that

Percentage of Community Responses

Wausau: 21.7%
Schofield: 10.3%
Rothschild: 16.4%
Rib Mountain: 20.2%

Near Lake: 17.3%



Group 03: When recreating, it's not on Lake Wausau

**Negative experiences and perceptions of the recreational aspects of Lake Wausau dominate** the views of members of this group. In particular, they view the lake as lacking recreational facilities and feel that there is **too much competition (or crowding)** that makes it difficult to enjoy what is here. They view the **parks as being less safe** than members of other groups, which in combination with the other factors may explain why this group that does enjoy outdoor recreation chooses to spend their time elsewhere. Put simply they don't see the lake as a good place for doing the things they enjoy most, citing **poor fishing opportunities and frequent disruption from other users** as reasons they go to other lakes. This group seems less connected to the lake as they disagree that spending time here is a tradition or that the lake plays a role

in building community between support efforts to improve the land wildlife habitat, but they als reflection of local government problems.

Percentage of Community Responses

Wausau: 17.4% Schofield: 10.3% Rothschild: 16.4% Rib Mountain: 12.1%

Near Lake: 14.7%



Group 04: It's dirty and the time has come to fix Lake Wausau

The defining feature of those who hold this view is a **strong belief that Lake Wausau is dirty and seems to be getting worse**. They are the only group who to **disagree that water quality is improving** and are the most likely to believe that the condition of the lake is so bad that **it is now only safe to look at the water**. This view is supported by their perception of the **lake having a strong odor** and are the **least likely to feel safe eating fish from the lake**. Similar to group 3 members of this group see a lack of recreational facilities on the lake, but are largely motivated by the need to enhance fish and wildlife habitat. They are also **the most critical of local government's response** to the condition of the lake, but among the most supportive of DNR's involvement in managing these issues.

Percentage of Community Responses

Wausau: 13.0%
Schofield: 15.5%
Rothschild: 6.6%
Rib Mountain: 13.5%

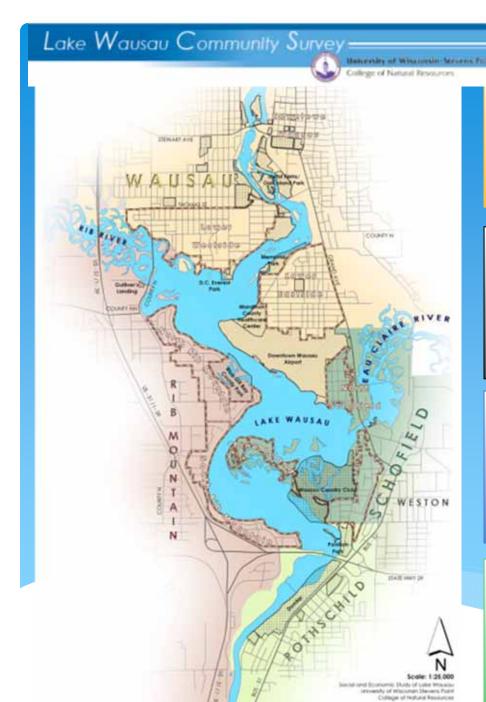
Near Lake: 14.7%

# BEGINNING A COMMUNITY DISCUSSION ...

#### **Applied Social Science Lessons:**

- 2. We need to arm ourselves with information -- What do you know about your audience?
  - a. Who do they trust for information?
  - b. What do they know?
  - c. What motivates their involvement?





Wausau: 37.0%

Group 01: Tradition Schofield: 56.9%

Rothschild: 54.1%

Rib Mountain: 41.9%

Near Lake: 52.0%

Group 02: Industry Schofield: 10.3%

Wausau: 21.7%

Rothschild: 16.4%

Rib Mountain: 20.2%

Near Lake: 17.3%

Group 03: Not on Lake Wausau

Wausau: 17.4%

Schofield: 10.3%

Rothschild: 16.4%

Rib Mountain: 12.1%

Near Lake: 14.7%

Group 04: Dirty

Wausau: 13.0%

Schofield: 15.5%

Rothschild: 6.6%

Rib Mountain: 13.5%

Near Lake: 14.7%

## Lake Wausau Community Survey

Communication and messaging strategies – how can LWA engage the community in a productive discussion about the lake?

Wausau: 37.0%
Group 01: Tradition Schofield: 56.9%
Rothschild: 54.1%

Near Lake: 52.0%

Rib Mountain: 41.9%

Group 02: Industry Schofield: 10.3%

Wausau: 21.7%
Schofield: 10.3%
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Group o3: Not on Lake Wausau

Wausau: 17.4%
Schofield: 10.3%
Rothschild: 16.4%
Rib Mountain: 12.1%
Near Lake: 14.7%

Near Lake: 17.3%

Group 04: Dirty

Wausau: 13.0%
Schofield: 15.5%
Rothschild: 6.6%
Rib Mountain: 13.5%
Near Lake: 14.7%

# BEGINNING A COMMUNITY DISCUSSION ...

#### **Applied Social Science Lessons:**

- 3. Where to begin:
  - a. Create opportunities for dialogue
  - b. Collect 'community perspectives' toward the resource
  - c. Work with a social scientist set goals, do your homework first



#### Collaborative Process: LEARNING

#### **Public Meetings / Field Trips:**

Opportunities to gather information and collect meaningful input

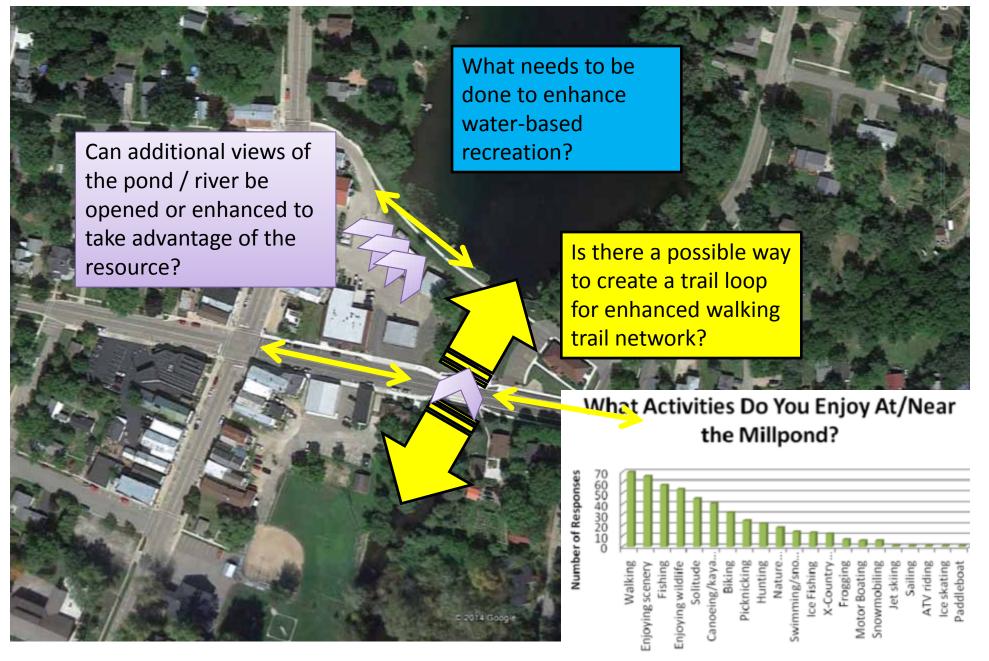


Resource Teams: Small groups tasked with answering key questions / collecting input and reporting back to the community

### LEARNING: Example Goal Development



#### VISIONING: Desired Future Conditions





#### **Community Engagement: Governance Study**

- +Explored current policies, regulations, and plans related to water quality in LW
- +Conducted stakeholder interviews, content analysis, and web survey

#### Take Away Message:

There is a unique opportunity now, as communities are moving to update their comprehensive plans, to make efforts to protect and improve Lake Wausau are a central part of the vision each community surrounding the lake has for their future.

P, Livestock Facility

**Review Board** 

untable

DATCP, DNR

Discussion: How do we get the communities involved?

Table 3. State Policie

Policy

ATCP 50 – Soil and V Resource Managem

ATCP 51- Livestock F Siting

NR 102 – Water Que Standards for Wisco Surface Waters

NR 109 – Aquatic Plants: Introduction, Manual Removal, and Mechanical Control Native populations of aquatic plants, water quality, habitat, aquatic life Individuals, lake organizations LOUs

Removal or introduction of aquatic plants

DNR