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Crafting Your Lake Message: Applied Social Science Approaches

My goals:

- Promoting planning with community capacity building in mind
- Using social science to improve implementation success







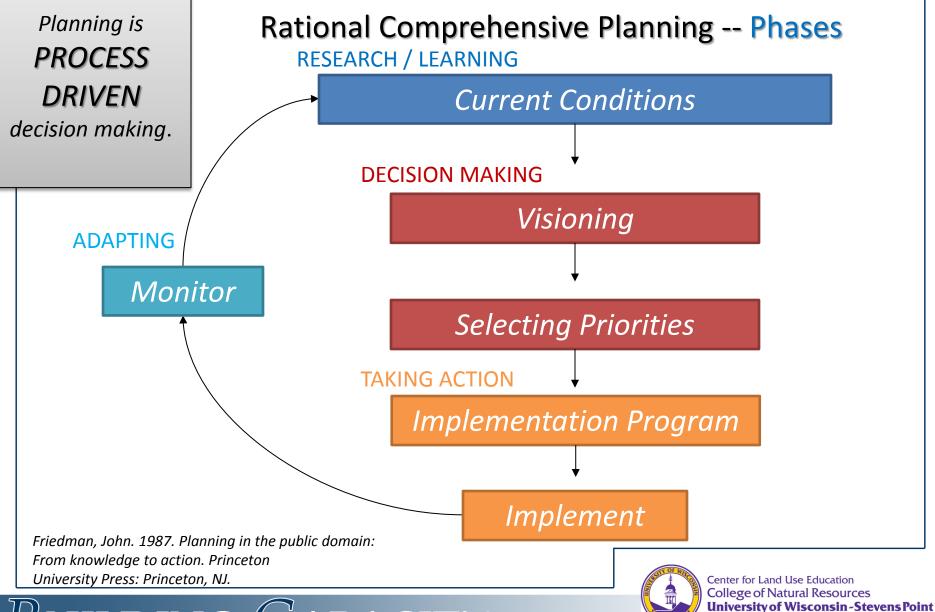
PLANNING: ACTIVE DECISION MAKING

Making Firm Commitments of Resources



PLANNING: COMMUNITY DIALOGUE

Coalition (Capacity) Building



BUILDING CAPACITY EXTENSION
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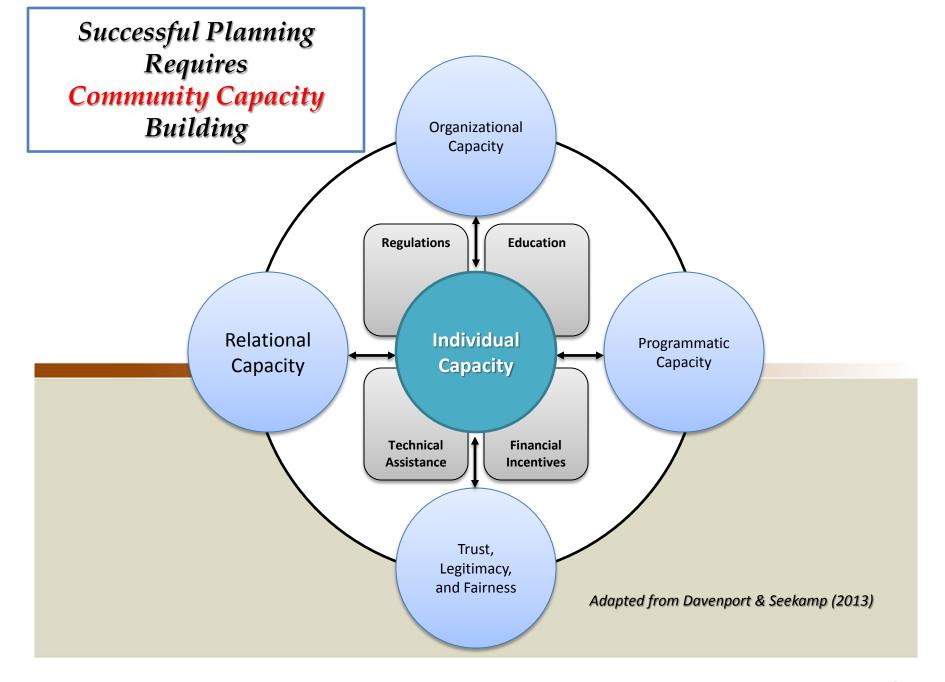
What is society demanding of conservation efforts?

PARTICIPATORY: fair and equitable participation, avoidance of unwarranted priority or power distribution (including recognition of experts as one of many legitimate contributors within an extended peer community).

ADAPTIVE: deliberative learning efforts that allow for collective reflection and questioning, emphasizing social-ecological problem solving.

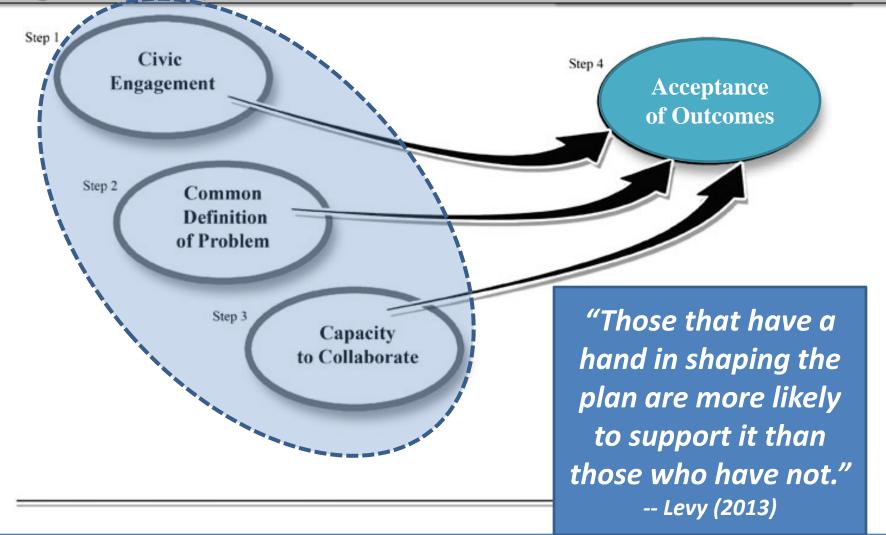
ACTION ORIENTED: emphasis on taking real and substantive steps to implement solutions to local problems.

Source: Clark, Douglas A. (2015). Human dimensions and the evolution of interdisciplinary approaches in conservation social science. In N.J. Bennett & R. Roth (Eds.), The Conservation Social Sciences: What?, How?, and Why? (pp. 64-70). Vancouver, BC: Canadian Wildlife Federation and Institute for Resources, Environment and Sustainability, University of British Columbia.



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)



Planning is
PROCESS
DRIVEN
decision making.

Rational Comprehensive Planning -- Phases

RESEARCH / LEARNING

Current Conditions

DECISION MAKING

Visioning

ADAPTING

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

Implementation Program

Friedman, John. 1987. Planning in the public domain:

From knowledge to action. Princeton

University Press: Princeton, NJ.

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Approaches to informing watershed planning

Public Participation Tools:

The purpose of these surveys is more about generating community awareness than about creating generalizable knowledge about priorities, trust, and effective strategies in the watershed.

We even see some examples where this type of survey actually does more harm as it falsely presents (due to a lack of scientific data collection) social conditions - the "I love my lake" survey phenomena.

Is the goal?							
Still Relevant	No Longer Relevant	Don't Know/ Not Sure					
0	0	0					
0	0	0					
0	0	0					

If not done correctly, questions can lead to 'expected' results

Attitudes about Land Use and Development in the Centre Region

- 1. The following is a list of objectives which could be used to guide future growth and development in the Centre Region. Please read the list of ten items and decide which are most important and least important to you. Place the letter M next to the three objectives that are most important to you. Place the letter L next to the three objectives that are least important to you.
 - Maintaining a low level of environmental pollution
 - Having access to open space (parks, green belts, wooded land) near residential areas
 - Expanding the variety and availability of retail goods and services
 - Improving personal security and public safety
 - - Maintaining and enhancing the visual appearance of buildings and landscaping

LARGELY PARTICIPATION FOCUSED

SCIENCE BASED





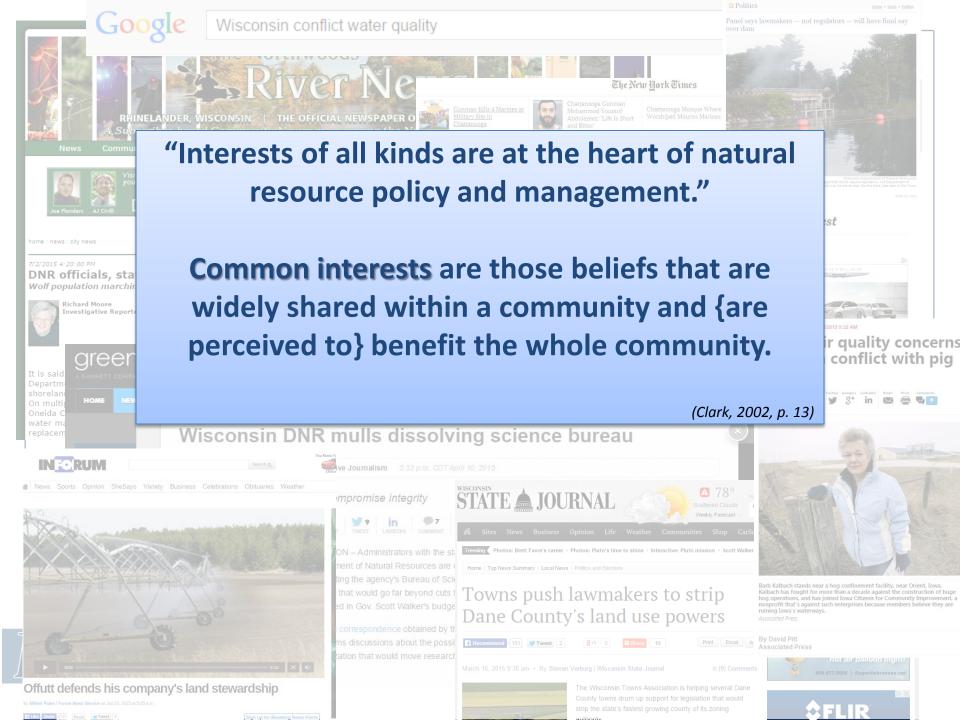
Planning / Evaluation Tools:

I think an important distinction needs to be made regarding social science and watershed planning acknowledging that as a developing field of inquiry the definition of key variables and determining how we measure them is a process that will take a partnership between researchers and practitioners.

Genskow & Prokopy (2011)

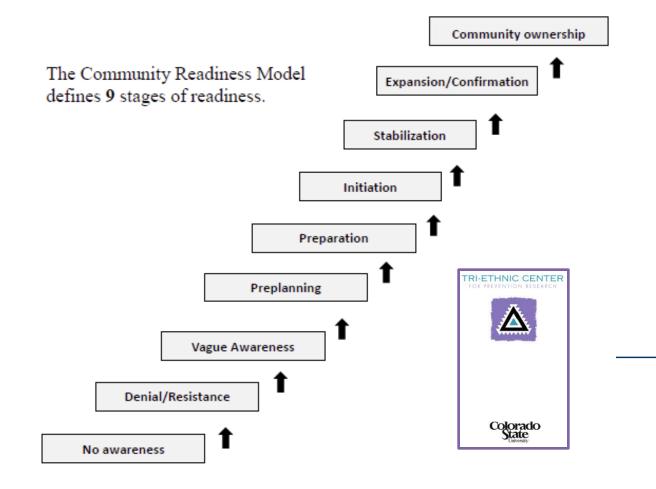
Figure 1: Conceptual model of social indicators and water quality





Role in clarifying & securing common interests

Principle 1: Recognize that not all communities are at the same starting point



Role in clarifying & securing common interests

Principle 2: We need to choose our words carefully

Step 1: Stop using jargon

Step 2: Identify local examples that highlight watershed problems

Step 3: Emphasize (as appropriate) that the problem can be solved locally

Step 4: Keep message simple

Maryland Example: 'storm water fee' = 'rain tax'

> Communicating about Clean Water

Deb Kleiner Communications Manager kleinerd@nwf.org

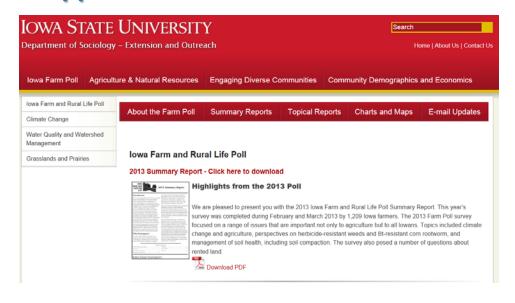






Role in clarifying & securing common interests

Principle 3: It is necessary to invest in developing the social science tools needed to support efforts



BEHAVIOR CHANGE:

We all want to be able to do this – but it's a commitment!

Recent Indiana DNR Example:

- \$70,000 for Social Marketing Campaign to protect Endangered Mussels + \$25,000 Survey Grant
- Key for Success? Needs a fulltime employee





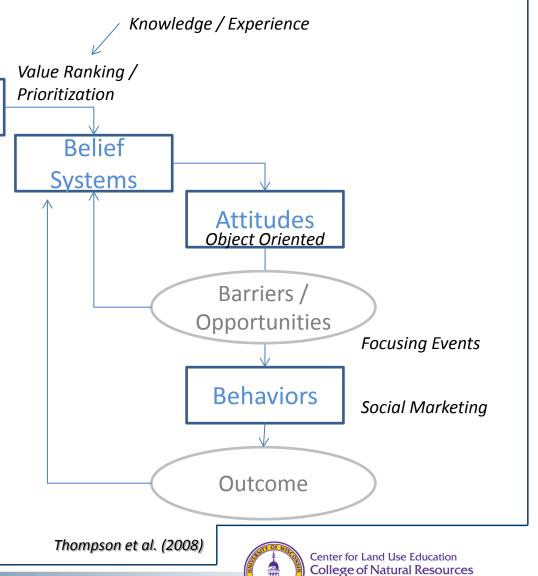
Individual Capacity

Cultural Values Model: Relationship / Practices / Forms

Values

Conversations frequently begin with "we need to change the behavior of ..., maybe we should try ... (social marketing, farmer-led councils, etc.)"

We need better information about what individuals (and communities) will & won't support before jumping to strategies.



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Attitudes

Behavioral beliefs x
Outcome Evaluations

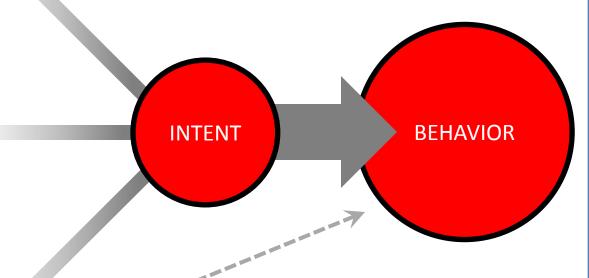
Subjective Norms

Normative beliefs x Motivation to comply

Perceived Behavioral Control

Control beliefs x
Influence of control beliefs

Theory of Planned Behavior



Source: Fishbein, M., and I. Ajzen. 2010. Predicting and Changing Behavior: The Reasoned Action approach. New York: Taylor and Francis.

Shoreline Example

- 1.Landowner's attitudes about landscape, views of native vegetation
- 2.Landowner's belief that installing native vegetation will affect lake health
- 3. Relative value of a healthy lake compared to other priorities

Theory of Planned Behavior

Ease of Use

Perceived Usefulness

Cognitive Compatibility

Peer Influence

Superior's Influence

Self-efficacy

(Confidence to perform)

External Factors

(Barriers: Access to Resources)

Attitudes

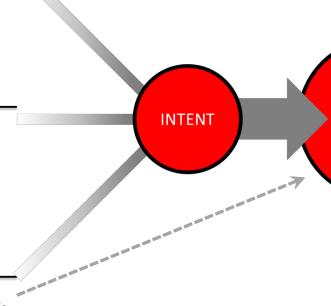
Behavioral beliefs x Outcome Evaluations

Subjective Norms

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Source: Fishbein, M., and I. Ajzen. 2010. Predicting and Changing Behavior: The Reasoned Action approach. New York: Taylor and Francis.













Theory of Planned Behavior

Ease of Use

Perceived Usefulness

Cognitive Compatibility

Attitudes

Behavioral beliefs x
Outcome Evaluations

Shoreline Example

- 1. Neighbor's attitudes about landscape, views of native vegetation
- 2.Perceived beliefs about what is and isn't allowed by regulations
- 3.(Related) Whether or not peer or superior's influence motivates compliance or resistance

Peer Influence

Superior's Influence

Subjective Norms

Normative beliefs x Motivation to comply

INTENT

Self-efficacy

(Confidence to perform)

External Factors

(Barriers: Access to Resources)

Perceived Behavioral Control

Control beliefs x
Influence of control beliefs

Source: Fishbein, M., and I. Ajzen. 2010. Predicting and Changing Behavior: The Reasoned Action approach. New York: Taylor and Francis.

BASS LAKE LANDSCAPE PREFERENCE ANALYSIS

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Summary Results

24 responses produced 3 unique aggregate groups (A, B, C)

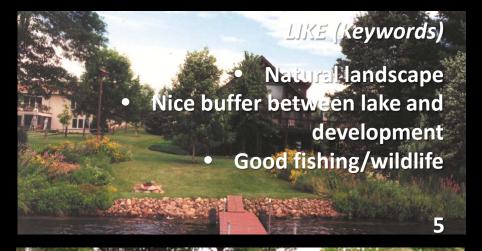












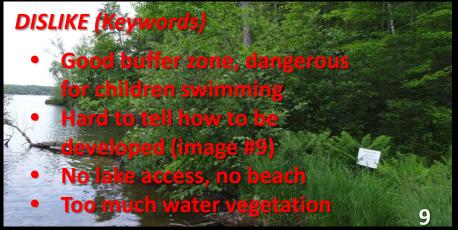














5 Individuals (~21%)





Theory of Planned Behavior

Ease of Use

Perceived Usefulness

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Superior's Influence

Self-efficacy

(Confidence to perform)

External Factors
(Barriers)

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Shoreline Example

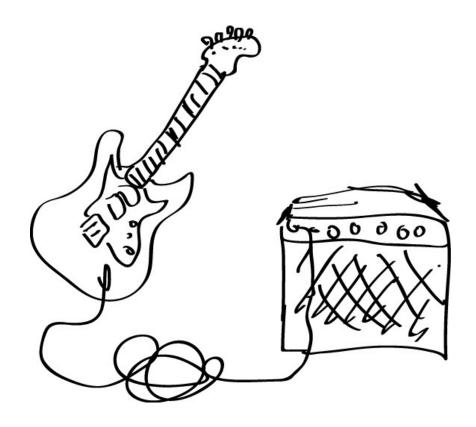
1.Belief that the behavior is something that you have the ability to take on – can I keep up with the landscape maintenance?

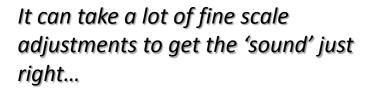
2.Perceived level of access to technical, financial, and implementation resources

3.(Related) Support or lack from the community – will community praise or condemn the landscape project?

Source: Fishbein, M., and I. Ajzen. 2010. Predicting and Changing Behavior: The Reasoned Action approach. New York: Taylor and Francis.

INTENT







Attitudes

Behavioral beliefs x
Outcome Evaluations



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BEGINNING A COMMUNITY DISCUSSION ...

Applied Social Science Lessons:

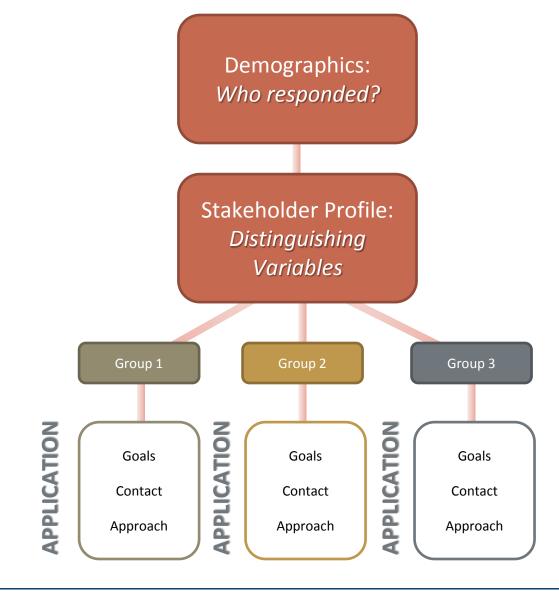
No marketing firm would attempt to 'sell something' without first knowing something about their customers -- we need to learn from this example.

STAKEHOLDER PROFILES









STAKEHOLDER PROFILES

UNDERSTAND MOTIVATION:

What are the key attitudes that influence their involvement in water quality efforts?

(GOALS) ASSESS PRIORITIES:

What will they / won't they support?

(CONTACT) MATCH PARTNERS:

Which groups / agencies are trusted?

(APPROACH) POWER SHARING:

What will it take for individuals to get involved / take ownership?



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Craft your message Applied Social Science Lessons:

Where to begin:

- a. Establish priorities Where do your goals coincide with the community?
 (TARGET SPECIFIC BEHAVIORS INDIVIDUALLY)
- b. Assess the likelihood of support from key stakeholder groups (KNOW YOUR AUDIENCE)
- c. Grow new networks: Create teams that work to engage with community on key issues (BEHAVIOR CHANGE TAKES SUSTAINED EFFORT)







TAKING ACTION FOR WATER QUALITY

In the following section you'll be presented with information about 5 practices that landowners can place on their property to help address water quality problems in Bass Lake. Please respond to the series of questions about each practice to help us understand your interest in taking action on your property.



The 5 practices presented below (and on the next page) are appropriate for different parts of a lake front property, this diagram shows the 3 zones where these practices could be installed.

Transition Zone Practices

NATIVE PLANTINGS are large areas (not small patches) of tall grasses, trees, and shrubs adjacent to the lake that can be designed to meet different goals depending on the property owner – such as plantings to control erosion or create bird habitat.

DIVERSION PRACTICES use a berm or shallow trench to intercept runoff from a path or road and divert it into a dispersion area. Depending on the site, multiple diversion practices may be necessary. What is your level of interest in installing NATIVE PLANTINGS on your property?

(-2) = (0)=Neutral (2) =
Not Interested -2 -1 0 1 2 Very Interested

What is your level of interest in installing DIVERSION PRACTICES on your property?

(-2) = (0)=Neutral (2) = Not Interested -2 -1 0 1 2 Very Interested

Please describe your level of agreement or disagreement with the following statements based on your views of the Transition Zone Practices.

Installing these practices on my property will help reduce algal blooms or other undesirable water quality problems in the lake.

Installing these practices will negatively affect how my property looks.

I have the skills and knowledge necessary to install or maintain these practices on my property.

I lack the funding to install or maintain these practices.

-2 -1 0 1 2

I'm concerned that my neighbors would disapprove of me installing these practices

-2 -1 0 1 2

-4-

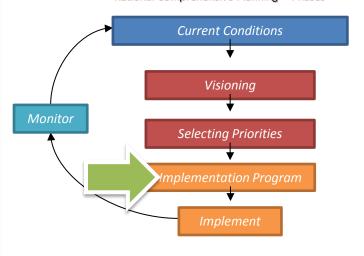
INFORM DECISIONS

BEHAVIOR CHANGE:

We all want to be able to do this

- but it's a commitment!

Rational Comprehensive Planning -- Phases



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SHORELINE LANDSCAPE PREFERENCE

There are many different viewpoints on what makes an attractive, healthy, safe, and enjoyable lake front property landscape and we'd like to know more about your preference. For each of the following please respond by indicating how strongly you agree or disagree with the views expressed in each statement.		Disagree	Neutral	Agree	Strongly Agree
		D	N	Α	SA
An attractive lake front landscape is one that maintains some of the wild characteristics of an undeveloped shoreline.	-2	-1	0	1	2
An attractive lake front landscape is one that is well kept and doesn't look weedy or overgrown with vegetation.	-2	-1	0	1	2
Lake front properties that have a large vegetative buffer between the lake and the house have a big impact on clean water quality in the lake.	-2	-1	0	1	2
Developed shorelines with lawns to the water's edge have little impact on clean water quality in the lake.	-2	-1	0	1	2
As long as there is safe access to the water I don't need a lawn near my shoreline.	-2	-1	0	1	2
Maintaining a lawn, or other low vegetation, across my entire shoreline is necessary to ensure visibility that allows for safe water recreation.	-2	-1	0	1	2
Leaving vegetation in the water near shore allows me to enjoy the fish and wildlife that use this habitat.	-2	-1	0	1	2
Vegetation in the water near shore prevents me from doing the types of activities I enjoy most.	-2	-1	0	1	2
I appreciate lake front landscapes that protect native vegetation while also allowing places for people to gather and access the water.	-2	-1	0	1	2
Tall grasses and other vegetation along the shoreline should be removed because they are full of ticks or other unwanted insect pests.	-2	-1	0	1	2
Having a number of plants and trees between the house and shoreline provides me the privacy I seek.	-2	-1	0	1	2
I want a landscape that provides for wildlife, but it has to have a managed look to its appearance.	-2	-1	0	1	2

Please describe your level of agreement or disagreement with the following statements based on your views of the In-Lake Zone Practice.

Installing these practices on my property will help reduce algal blooms or other undesirable water quality problems in the lake.

Installing these practices will negatively affect how my property looks.



Attitudes

Behavioral beliefs x
Outcome Evaluations



Subjective Norms

Normative beliefs x Motivation to comply



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Perceived Behavioral Control

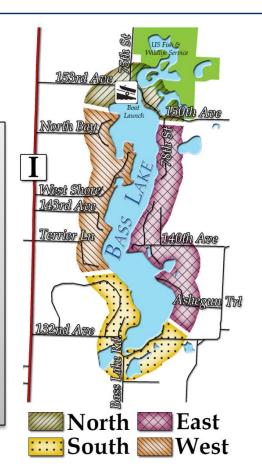
Control beliefs x
Influence of control beliefs



LOCATION

Each of these variables is unlikely to be accurately measured by a single survey item, but 'real estate' is limited so we have to focus our efforts.

*This study is emphasizing assessing landscape preference.





Attitudes

Behavioral beliefs x

Outcome Evaluations



Subjective Norms

Normative beliefs x Motivation to comply



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Perceived Behavioral Control

Control beliefs x
Influence of control beliefs

NORMS

I'm concerned that my neighbors would disapprove of me installing these practices on my property.





TRUST (SOURCE)





Attitudes

Behavioral beliefs x
Outcome Evaluations



Subjective Norms

Normative beliefs x Motivation to comply



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Influence of control beliefs





COLLABORATIVE PLANNING Applied Social Science Lessons

Requires:

AVOID QUICK DECISIONS – Need to understand existing social conditions of the watershed

PROCESS IS GOAL DRIVEN -- Develop networks for translating consensus into results

DECISIONS MUST BE COMMUNITY DRIVEN

- --Community ownership of the process = local solutions for local problems
- -Meet stakeholders where they are at!

COLLABORATIVE PLANNING



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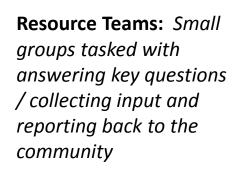


AVOID QUICK DECISIONS

Issue: a community needs adequate time to understand issues, explore options, and work toward consensus

Collaborative Process: LEARNING

Public Meetings / Field Trips: Opportunities to gather information and collect meaningful input



PROCESS IS GOAL FOCUSED

Issue: a community must first decide on what is most important and work toward these goals

Big Eau Pleine Community Survey

DISSOLVED OXYGEN ISSUES IN THE RESERVOIR

Preventing winter fish kills due to low oxygen levels

25.0 25.0 22.5

Avg. Points (out of 100)

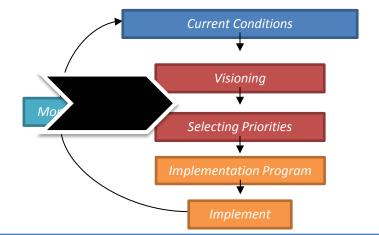
#1 Issue for all Riparian Stakeholder Groups

Developing a vision for the BEP requires acknowledging that minimizing the threat of winter fish kills is key to building lasting support among riparian landowners.

Y/N Mentioned 60% solution or winter water levels in comments

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	32	20.1	47.8	47.8
	Yes	35	22.0	52.2	100.0
	Total	67	42.1	100.0	
Missing	System	92	57.9		
Total		159	100.0		

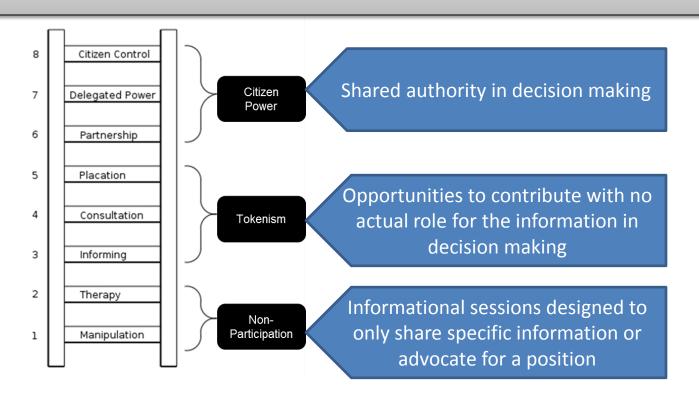
Rational Comprehensive Planning -- Phases



DECISIONS MUST BE COMMUNITY DRIVEN

Issue: use appropriate expertise when needed, but community members must be allowed to decide what is best and how to move forward

Citizen Participation = Citizen Power (Sherry Arnstein, 1969)



QUESTIONS?

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