


A photograph of a calm body of water, likely a lake or stream, reflecting the surrounding environment. The water is still, creating clear reflections of the trees and a fallen log. The log is positioned horizontally across the middle of the frame, with its reflection visible below it. The trees are reflected in the upper half of the image, and the overall scene is peaceful and natural.

Change Society, Change Individuals, Change Water Quality

Nels Paulson, UW-Stout

Aaron Thompson, UW-Stevens Point / UWEX

- Abstract: Clean water requires more than simply understanding the interaction between land use and water quality. Diving deeper into how to respond to water quality challenges requires understanding the relationships that exist between all of us, a community, that benefit from the ability to use and enjoy clean water. What is our current ability to make the necessary changes to protect or restore the condition of lakes and streams? How can understanding how our community relates to water resources through our attitudes and values inform future actions? Can we build a stronger coalition from within our community to take on these challenges? All this and more will be explored as part of a discussion of how social scientists are supporting lake and watershed groups across Wisconsin in their efforts to build community capacity to be stewards of clean water.

A wooden sign is mounted on two vertical wooden posts in a forest. The sign is made of several horizontal wooden planks and contains a quote in a black, serif font. The background consists of numerous thin, bare tree trunks and branches, suggesting a late autumn or winter setting. The ground is covered with dry leaves and some green grasses.

The idea that we can't afford to
protect the environment... is wrong.
If we continue to allow degradation
of the country's resources, the
ultimate balancing is going to be
between society and nature - and
we'll be bankrupt.

Gaylord Nelson

Change Society, Change Individuals, Change Water Quality

**“Change Society”
Value-based goals**

**“Change Individual”
Actions:
Not just trying to
change the behavior
of an individual, it
takes a community
changing to have a
lasting impact.**

The idea that we can't afford to protect the environment... is wrong. If we continue to allow degradation of the country's resources, the ultimate balancing is going to be between society and nature - and we'll be bankrupt.

**“Change Water Quality”
Clean water affects the
health of all
communities**

Wisconsin Think Water School

Lakes Team

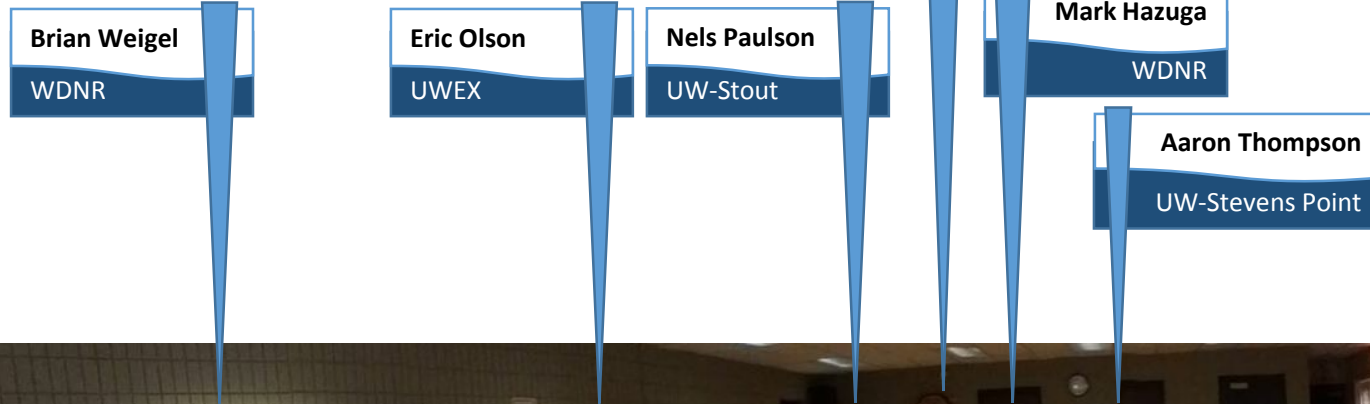
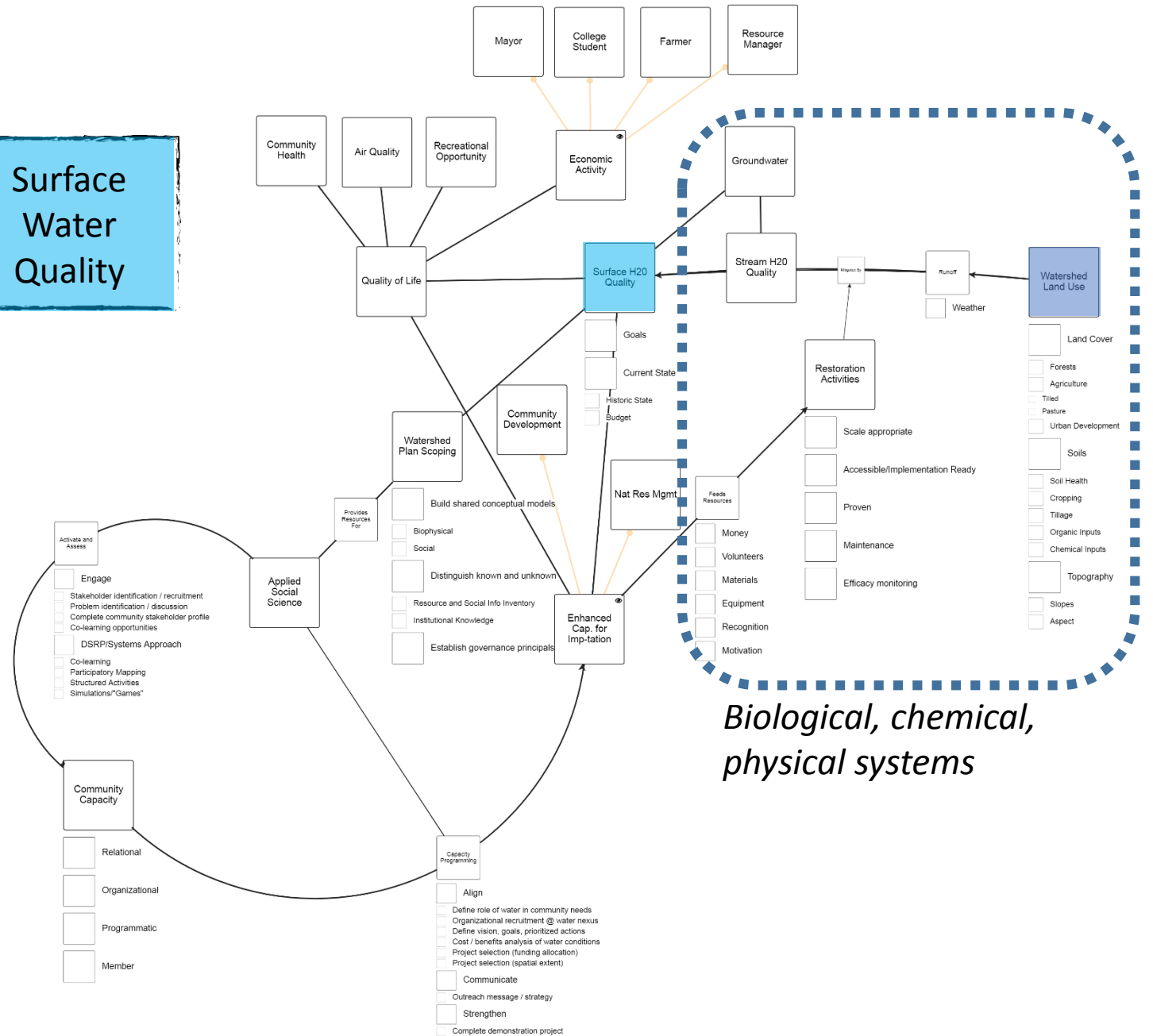
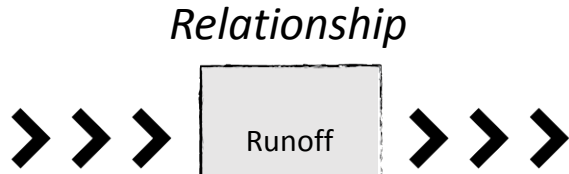
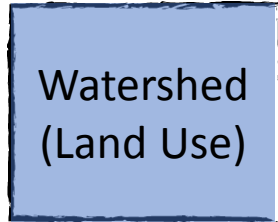


Photo Credit: Jeremy Solin

Our team-based strategy for the ThinkWater School program is to develop a new approach that can be applied to enhance existing watershed planning practices by leveraging an understanding of both social and ecological conditions to increase the effectiveness of these community efforts.

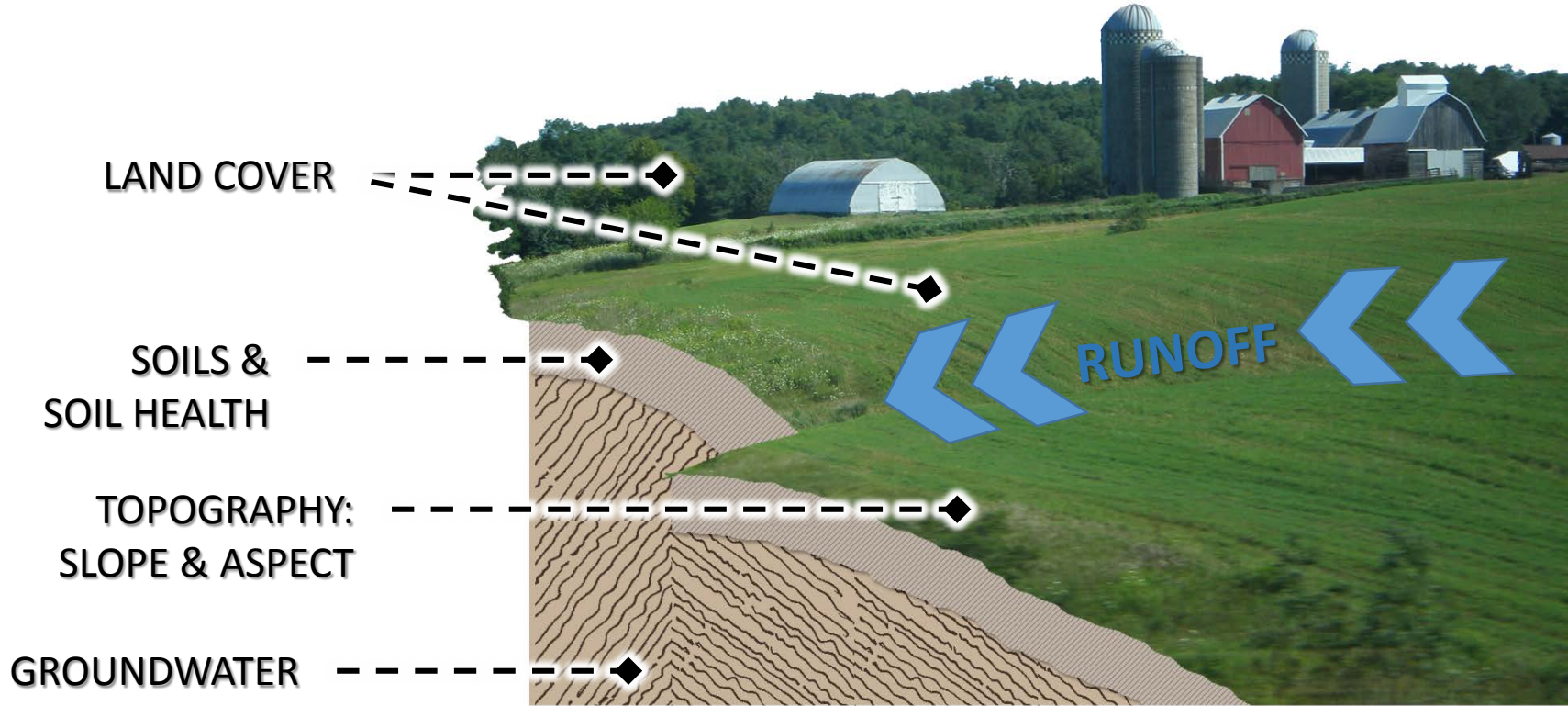
Wisconsin Think Water School

Lakes Team



Wisconsin Think Water School

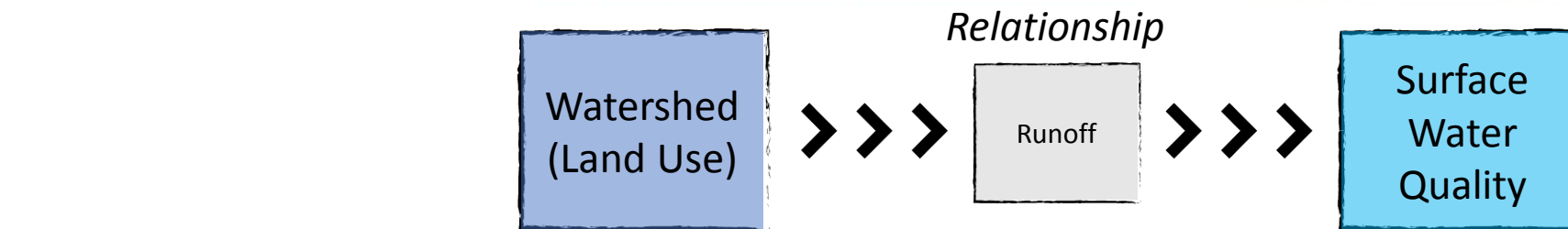
Lakes Team



Development



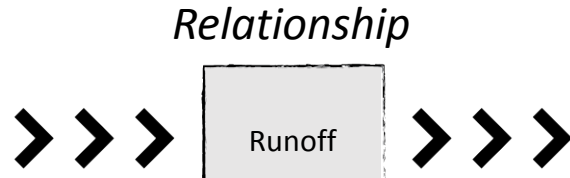
Riparian Conditions



Wisconsin Think Water School

Lakes Team

Watershed
(Land Use)

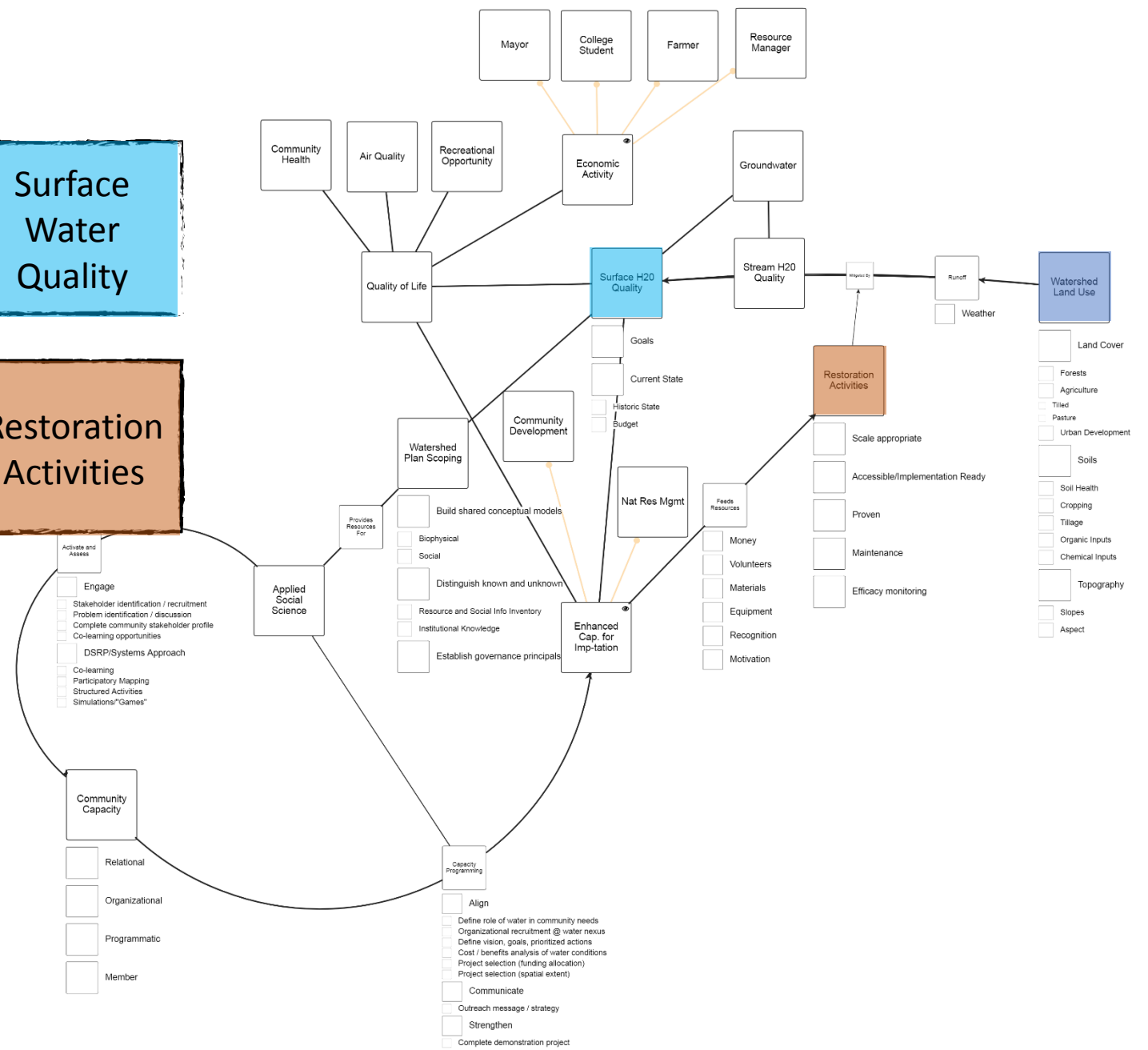


Surface
Water
Quality

Surface
Water
Quality



Restoration
Activities



Wisconsin Think Water School

Lakes Team

Agricultural BMPs



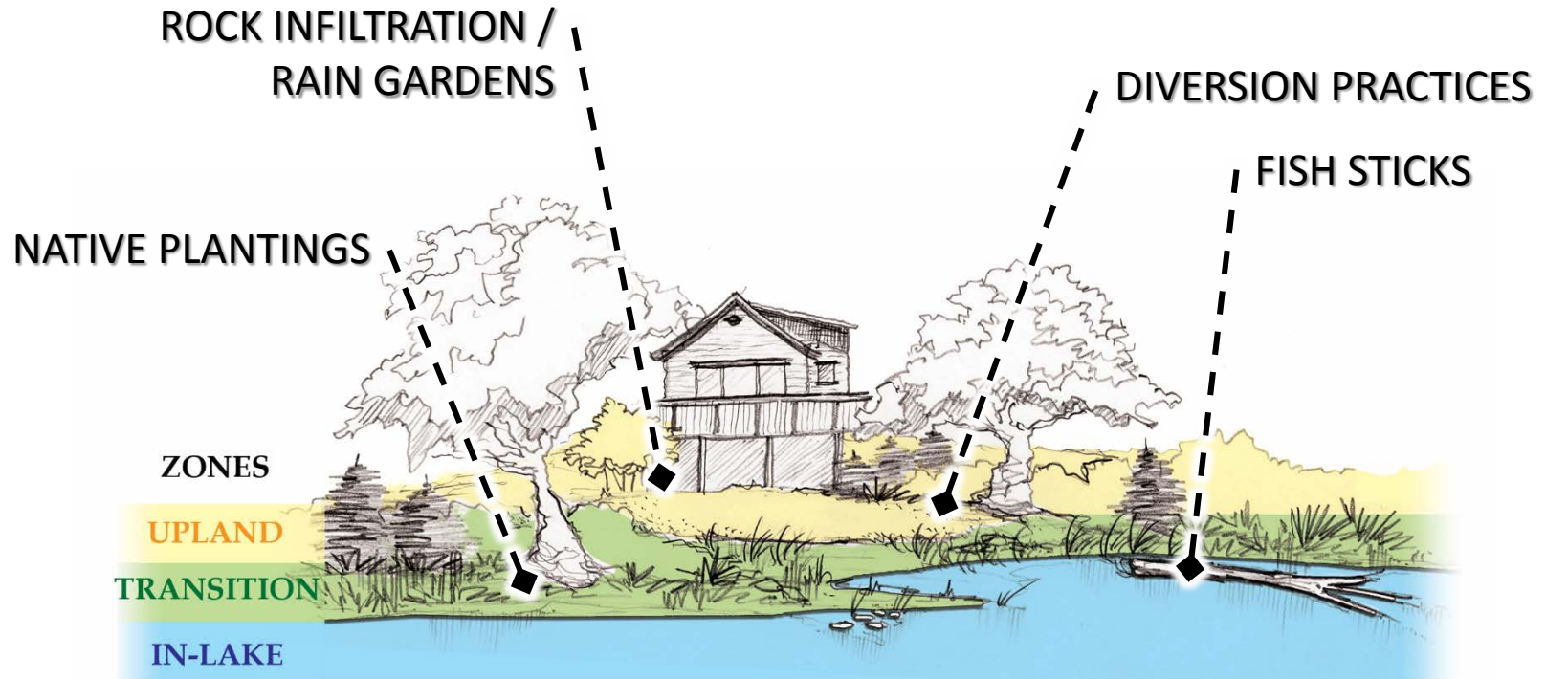
Surface
Water
Quality



Mitigated
By



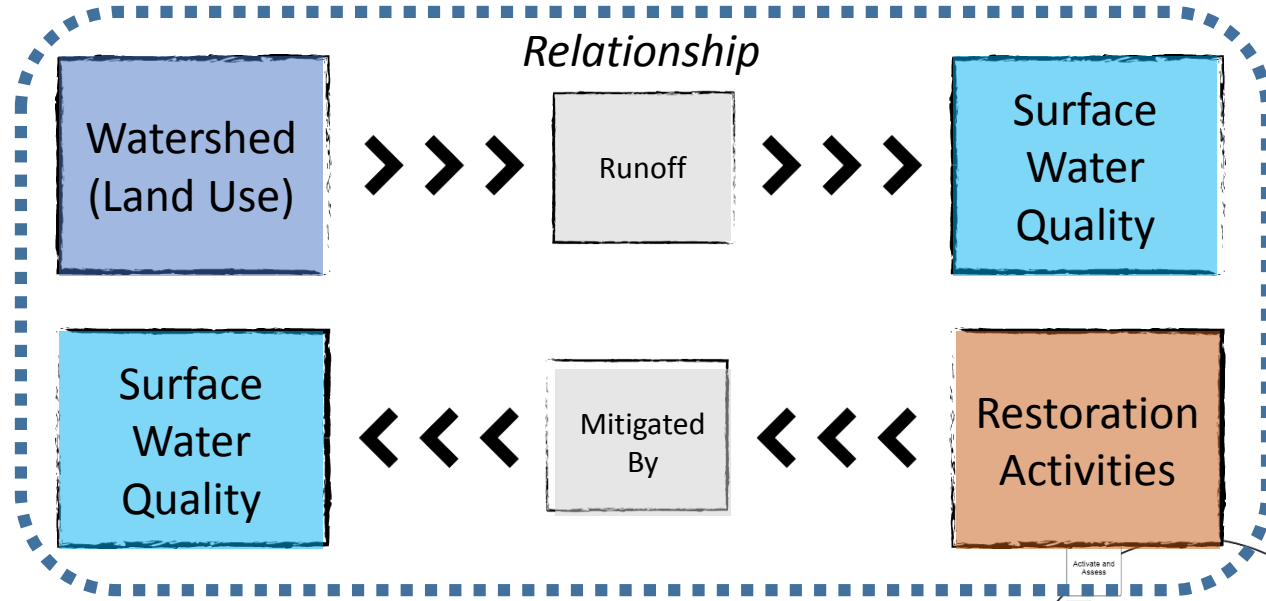
Restoration
Activities



Riparian BMPs

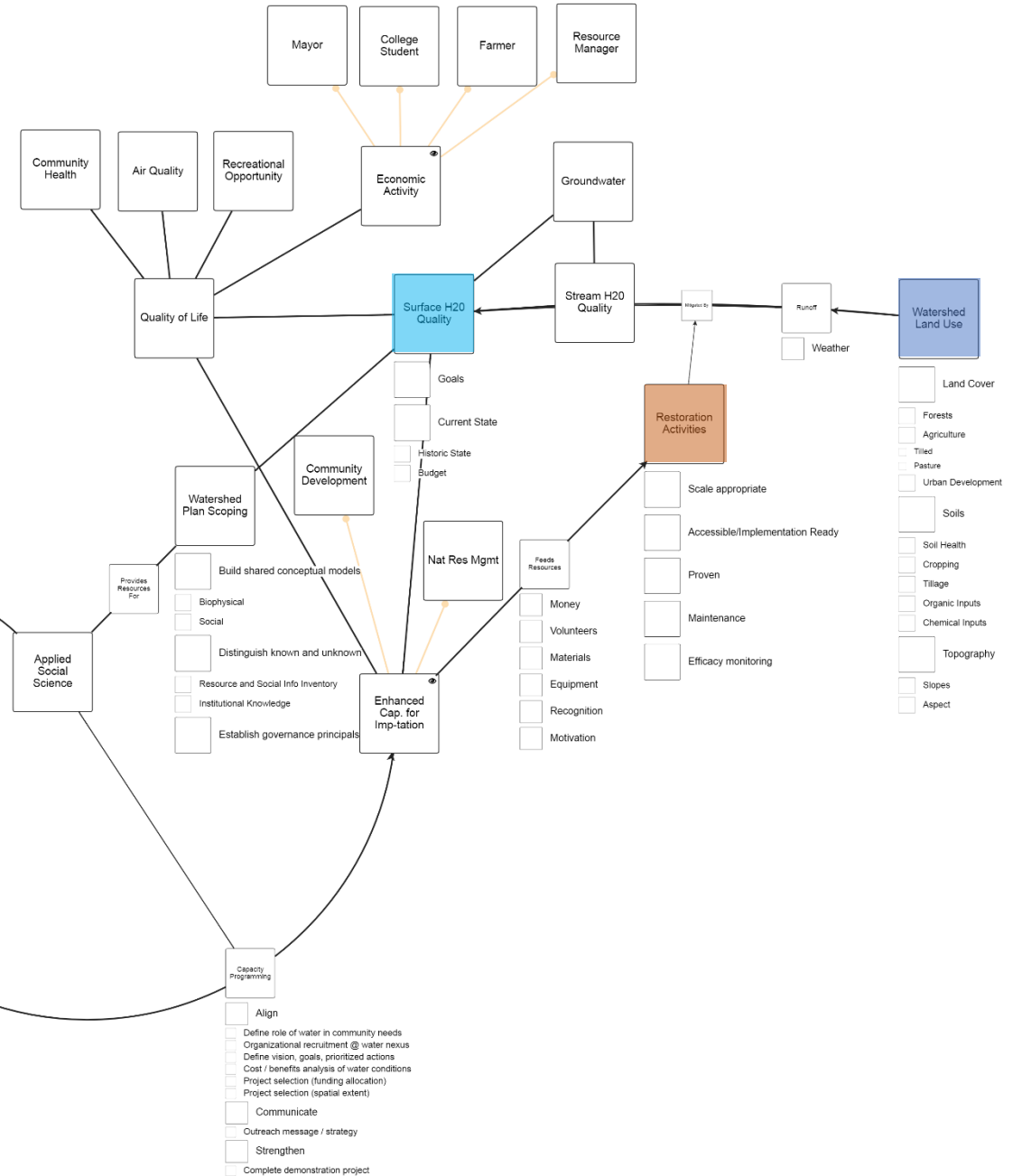
Wisconsin Think Water School

Lakes Team



Biological, chemical, physical systems

Proud tradition of excellence in building the monitoring and support network to manage this (part of the) problem.



Wisconsin Think Water School

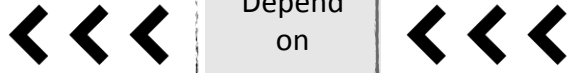
Lakes Team

Restoration Activities

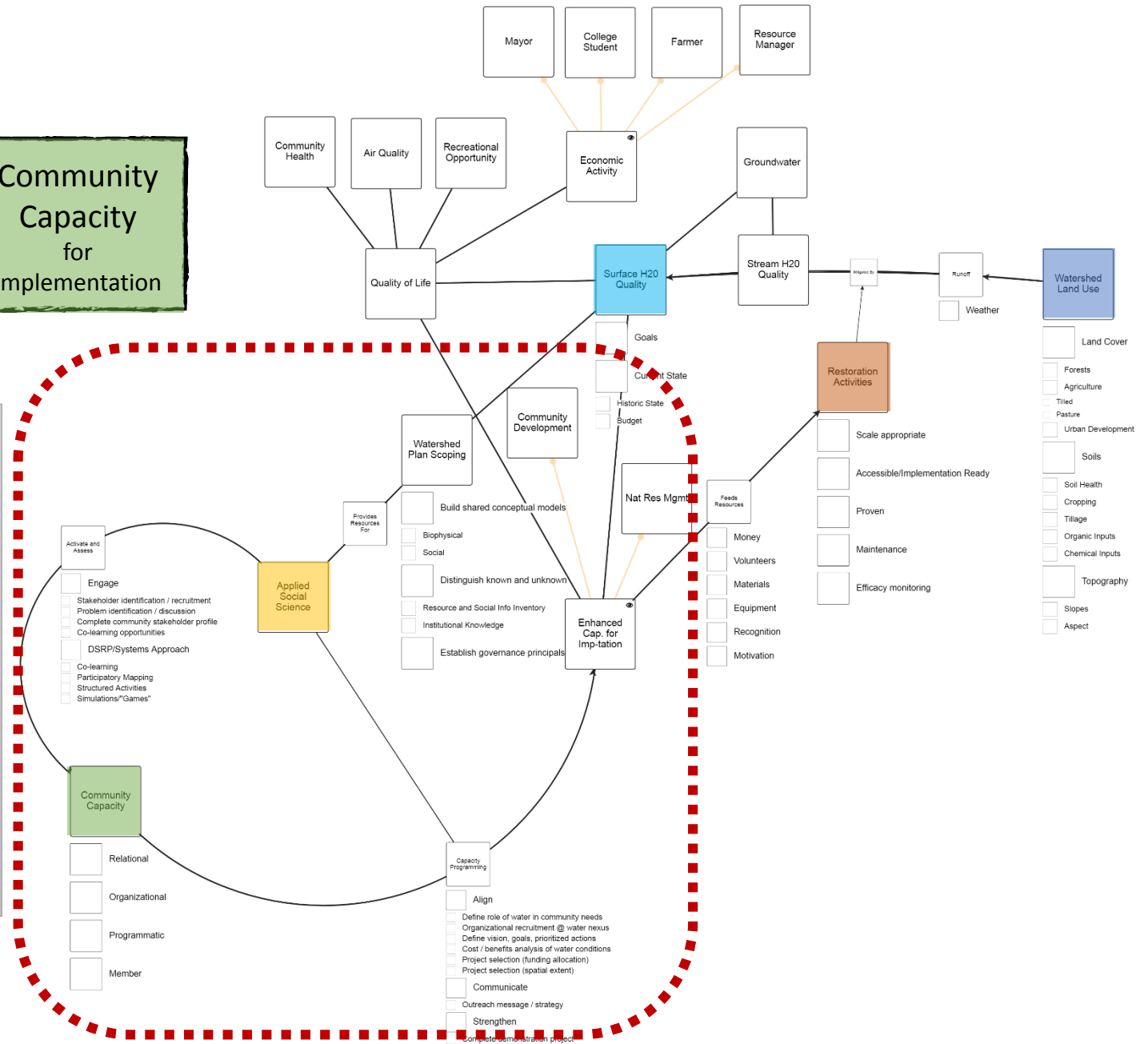
Relationship

Depend on resources

Community Capacity for Implementation



Growing recognition that a significant challenge facing water quality protection and restoration, in a resource constrained context, is the necessary reliance on community resources for implementation of these activities -- **thus community capacity is a LIMITING FACTOR in this system.**



Social systems

Wisconsin Think Water School

Lakes Team



Relationship



Limiting Factor: How do we enhance capacity?

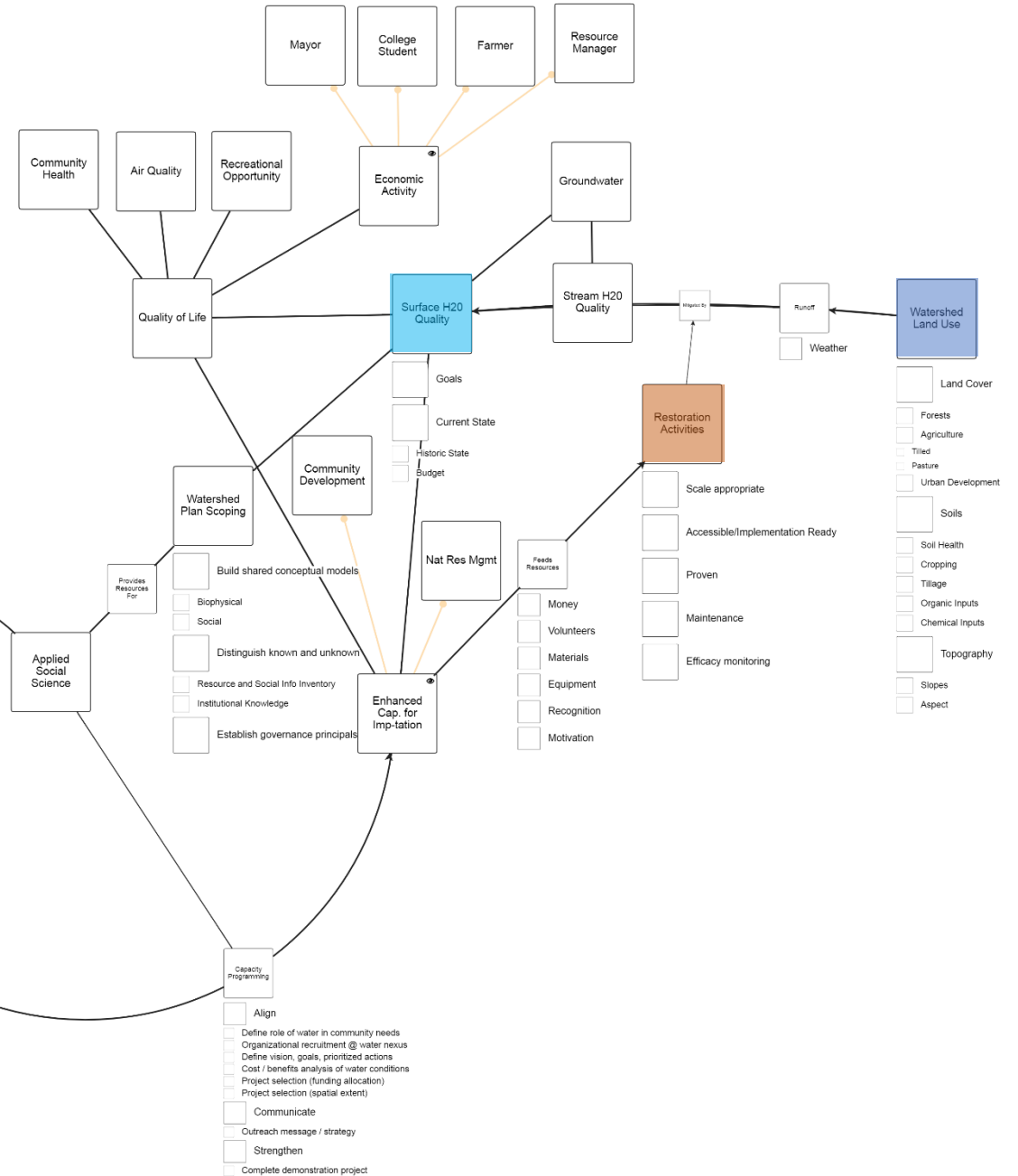
Member Capacity

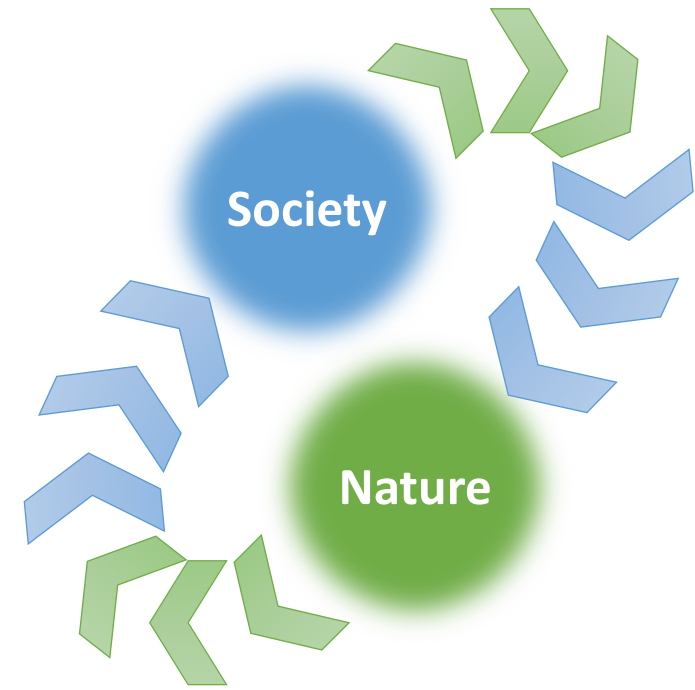
Relationship Capacity

Organization Capacity

Program Capacity

Adapted from Davenport (2015)





The path forward must rely on building within our communities (society) the capacity to respond to water degradation based on a shared understanding of our diverse values and by leveraging opportunities to create lasting changes in our behaviors.

Wisconsin Think Water School

Lakes Team

Individual /
Member
Capacity

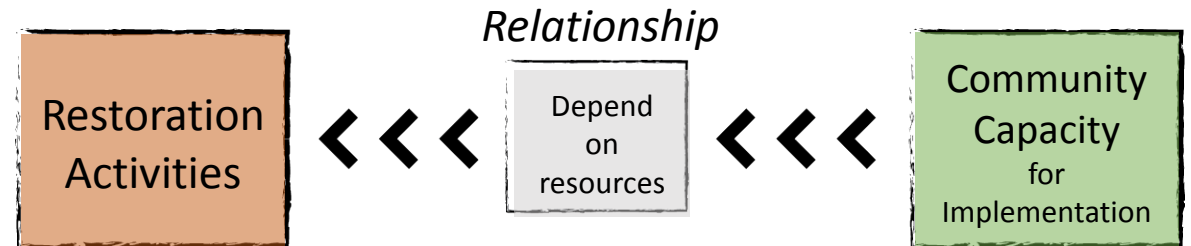
Engage

- Recruitment of resources (members, expertise, funding) and public participation (individual problem setting).



Problem Identification

Stakeholder Recruitment



Wisconsin Think Water School

Lakes Team

Outreach Message & Strategy

Community
Capacity
for
Implementation

Limiting Factor:
*How do we
enhance capacity?*

Member Capacity

Relationship Capacity

Organization Capacity

Program Capacity



Manage Volunteers

Organization
Capacity

Communicate

- Building the organizational capacity to collaborate, including communication and volunteer management strategies.

Wisconsin Think Water School

Lakes Team

Complete Demonstration Project

Community
Capacity
for
Implementation

**Limiting
Factor**



Member Capacity



Relationship Capacity



Organization Capacity



Program Capacity



**Program
Capacity**

Strengthen

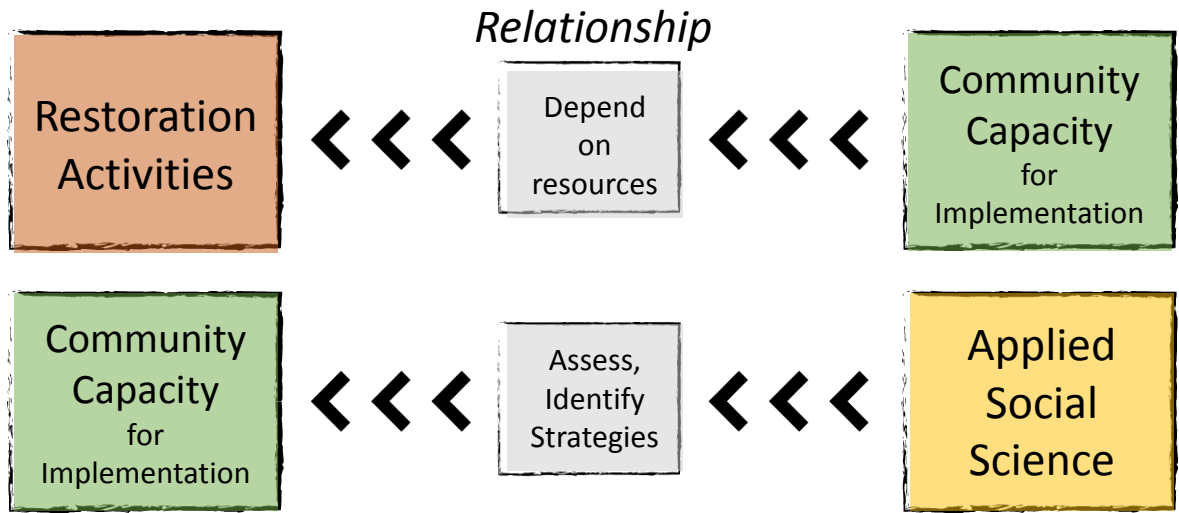
- Program development and network building to achieve results. (Policy & Institutional Capacity)



Respond to Training Gaps

Wisconsin Think Water School

Lakes Team



APPLIED HUMAN DIMENSIONS SCIENCE is the process of **describing, explaining, and predicting social attitudes, processes, and behaviors** relevant to understanding how we conserve, protect, enhance, or use our natural resources.

(Peroff, 2016; human-dimensions.org)

