

Society, Economics, Environment = Community-Based Watershed Management

Issues of Sustainability

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Presentation Objectives

- **Define Community-Based Watershed Management (CBWM) as it relates to regional sustainability**
- **Present CBWM principles**
- **Discuss Ohio's approach**





**Water resource protection
through watershed management efforts
for the goal of high water quality
requires planning
by communities (*stakeholders*)
within the watershed.**

a.k.a.

Community-Based Watershed Management!!

Community-Based Watershed Management

Environment

Using science to protect our natural resources...

Society

...with a social change approach of collaborative community decision making...

Economics

...that impacts the local economy.



Why Community-Based?

- Problems are complex
- Solutions exceed capabilities of one entity
- Collaborative decisions necessary
 - Communities have vested interest
 - Local people are crucial
 - Define workable options
 - Enforce management choices
 - Monitor the effectiveness

A Model for Success

Facilitating Agency

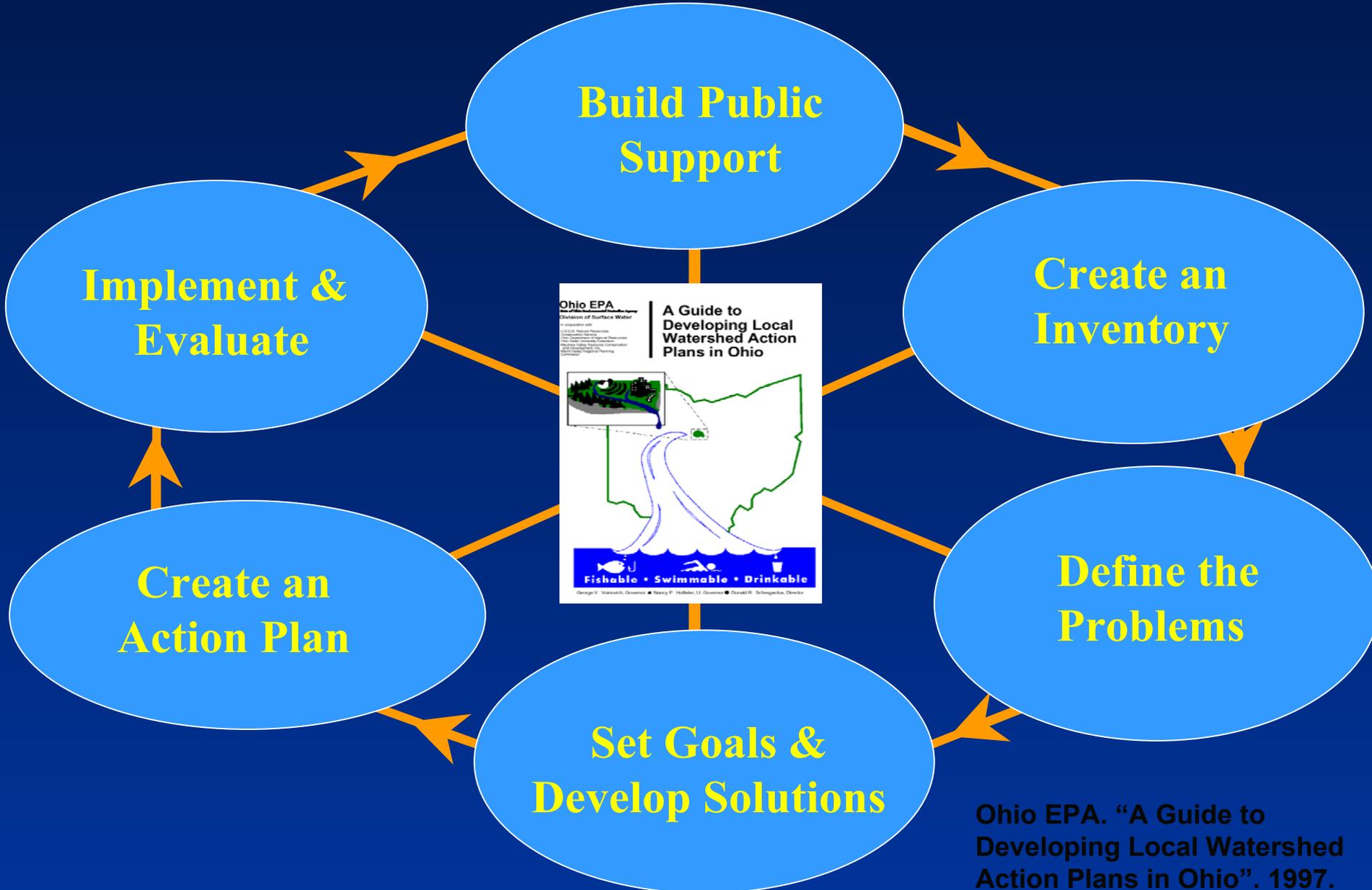


**Community-Based Watershed Management
with Stakeholder Involvement**



Community Organization

The CBWM Approach



Ohio EPA. "A Guide to Developing Local Watershed Action Plans in Ohio". 1997.

Successful Watershed Management

=

**Strong Community-Based Effort
(Stakeholders)**

+

**Good Partnership-Building
(Buy-In)**

+

**Effective and Collaborative
Environmental Decision-Making
(Best Management Practices)**



Social Goals

- Educate and inform the general public
- Incorporate public values into decisions
- Improve the quality of decisions
- Contributes to environmental literacy
- Resolve conflict among competing interests
- Build trust in institutions

Protection Goals

Change in behavior with
better decisions...

...for communities, by public and private
entities (**institutional**) and in our
backyards (**as individuals**).



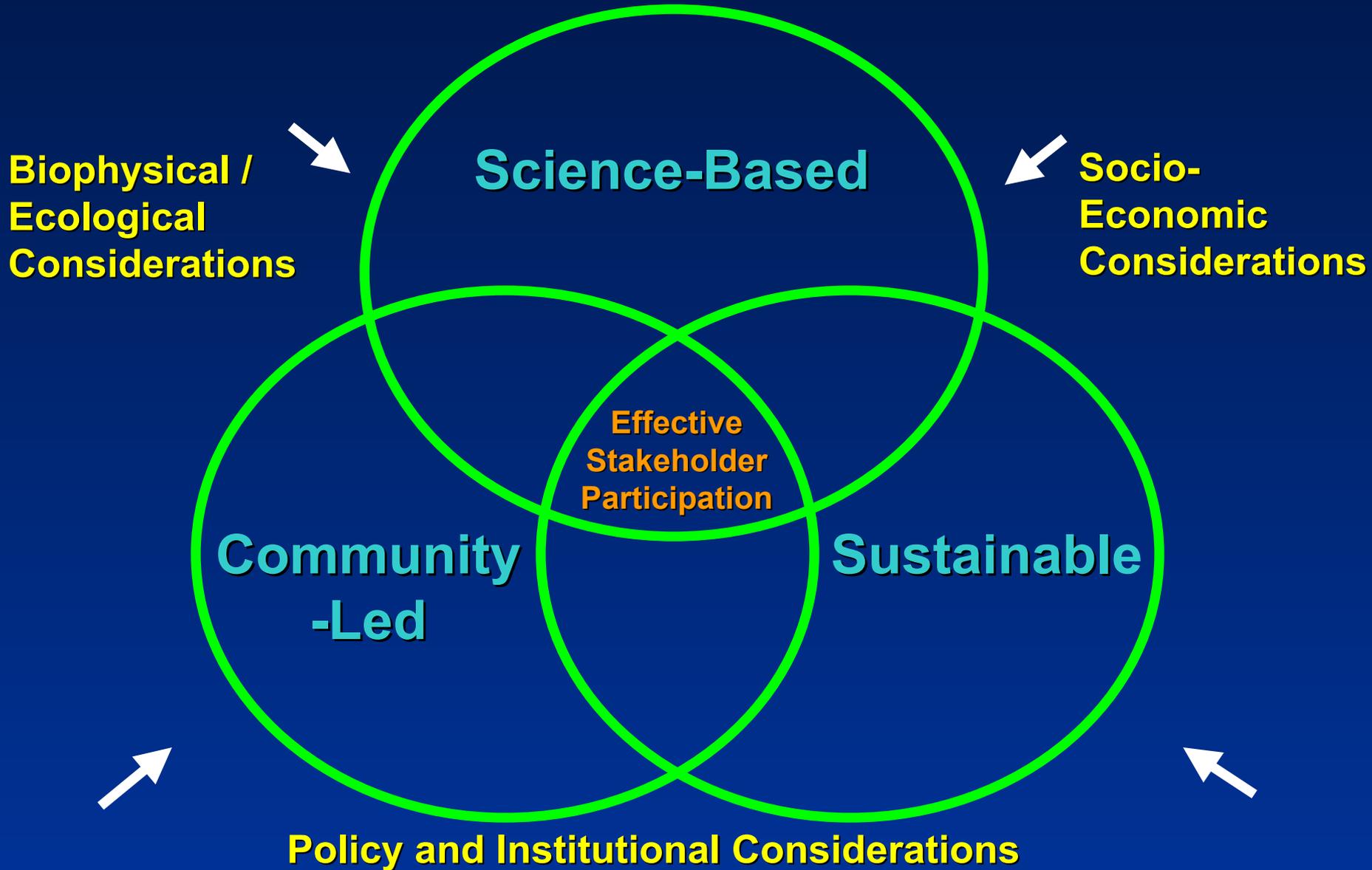
Environmental Behavior Model

- Entry-level - (awareness)
↓
- Ownership - (knowledge)
↓
- Empowerment - (attitude / skills)
↓
- Citizenship (*Steward*) Behavior - (motivation)

Watershed Management Core Components

- **Science-Based – Decisions based on data**
- **Community-Led – Stakeholders decide**
- **Sustainable – Long-term coordination**

CBWM Core Components



Implementation Continuum

Water Quality Attainment
Drinking Water Protection

- 
5. Sustained implementation of endorsed WAP
 4. WAP receives state endorsement
 3. Group develops Watershed Action Plan
 2. Coordinated, issue-based local group forms
 1. Local water resource advocate / steward

Ohio

<http://www.epa.state.oh.us/dsw/nps/NPSMP/index.html>

Developing Capacity in Ohio

Resources Needed

- **People - *Staff***
- **Technical - *Knowledge***
- **Financial - *Money***
- **Networking - *Partnerships***
- **Organizational - *Efficiency***
- **Legitimacy - *Good Representation***



Stakeholders!



Watershed Toolshed	Community-Based Watershed Management	Watershed Groups in Ohio	Resources & References	Ohio Watershed Academy
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Supporting community-based watershed protection
http://ohiowatersheds.osu.edu/

Welcome to the Ohio Watershed Network

The Ohio Watershed Network (OWN) provides information to community members and natural resources professionals who want to protect the resources in their watershed.

[Click here for information about the
Connecting Ohio's
Watersheds 2003/WMAO
Spring Meeting
June 3-4, 2003, in Columbus, OH](#)

- [Watershed Toolshed](#)
- [Community-Based Watershed Management](#)
- [Watershed Groups in Ohio](#)
- [Resources & Reference](#)
- [Ohio Watershed Academy](#)

WatershedCONNECTION



Great Miami River.
The Great Miami River Watershed is located in the southwest portion of Ohio and includes the Great Miami, Stillwater, and Mad Rivers. For more information about the Great Miami and the watershed groups go to: http://www.miamiconservancy.org/Great_Miami_River_Watershed/default.htm

[See past Watershed Connection features...](#)

SUBMIT YOUR watershed info

References

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- Hungerford, H.R. and Volk, T.L. 1990. "Changing learner behavior through environmental education." The Journal of Environmental Education. 21(3), 8-22.
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