

A Regional Perspective: Developing Social Indicators for Water Quality Initiatives

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The Issue

- Nonpoint source (NPS) is the major cause of water quality impairment
- Limited regulatory options
- Addressed mainly through persuasion
 - Financial incentives
 - Technical support
 - Outreach & education
- Response lag for environmental change
 - Lack of effective evaluation measures

NPS projects

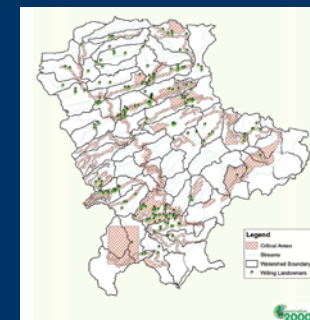
- Watershed based – restoration and protection
- Voluntary involvement
- Technical and \$ assistance
 - First-come basis
 - Multi sources
- Goals are reduction oriented
 - Total load reduction (modeled)
 - In-stream response problematic
- Reporting
 - Administrative indicators
 - Environmental indicators



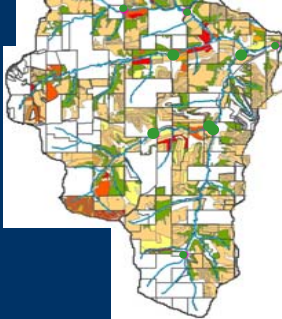
Targeting

- Focus efforts on area of greatest impact
 - Specific audience
 - Specific geographic area
- Some behaviors in some places can have a disproportionate impact on water quality

Targeting Critical Areas



Targeting: data-intensive analysis



Management Response



Options:

- Regulate
- Persuade
 - Outreach and education
 - Financial Support
 - Technical Support

HD.gov

Challenge

- Develop a system for collecting and using social data to evaluate NPS management efforts in Great Lakes Region/Region 5
- Complement existing "administrative" and "environmental" indicators
- Provide assistance & support to state programs and NPS projects

Regional Collaborators

- USDA-CSREES Great Lakes Regional Water Program
- USEPA Region 5 NPS Program
- Region 5 State NPS Coordinators

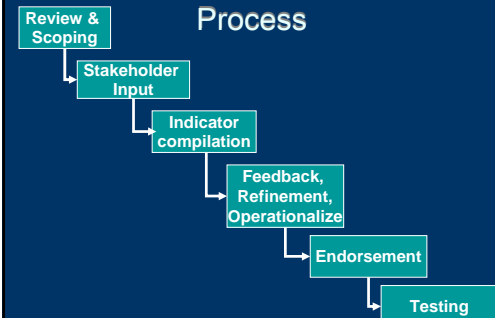


Social Indicators

Measures that enable assessment of social trends and human dimensions of programs and program impacts

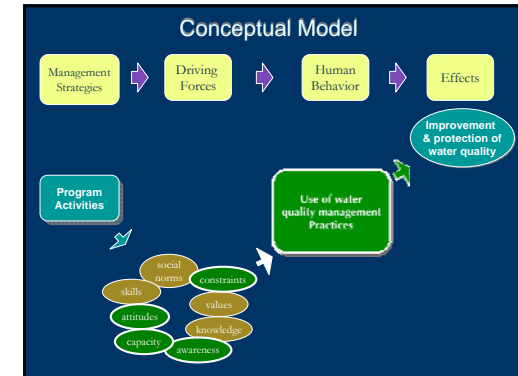
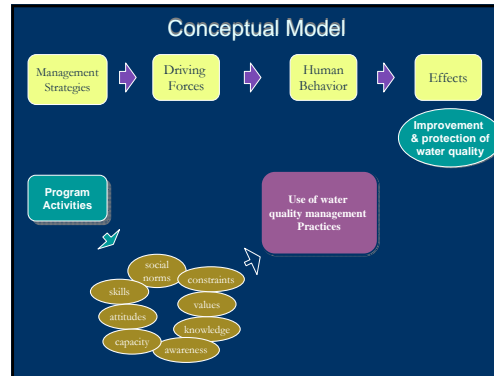
- Traditional Uses:
 - Human health
 - Housing
 - Education levels
 - Social equity issues
- Challenge: How to apply to NPS

Process



A Good Indicator. . .

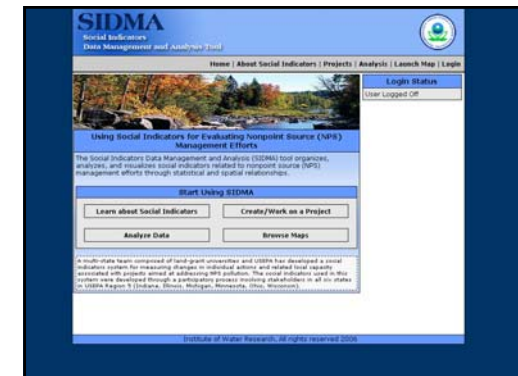
- Has stakeholder ownership
- Clear and understandable
- Measurable
- Practical in terms of accessibility & cost
- A valid measure of the desired result
- Can be aggregated



System Overview

- Indicators
 - 14 "Core" indicators
 - Supplemental indicators
 - Background/contextual factors
- All indicators measure change
- Scale is project level
- Critical areas
- Target audiences

SI Planning and Evaluation Process



Issues to Consider

- Long-term interactions with stakeholders
- Balancing needs for regional consistency v. local flexibility
- Salience of indicators for funders

Acknowledgements

- USEPA Region 5 NPS Program
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<http://www.uwex.edu/ces/regionalwaterquality/>