



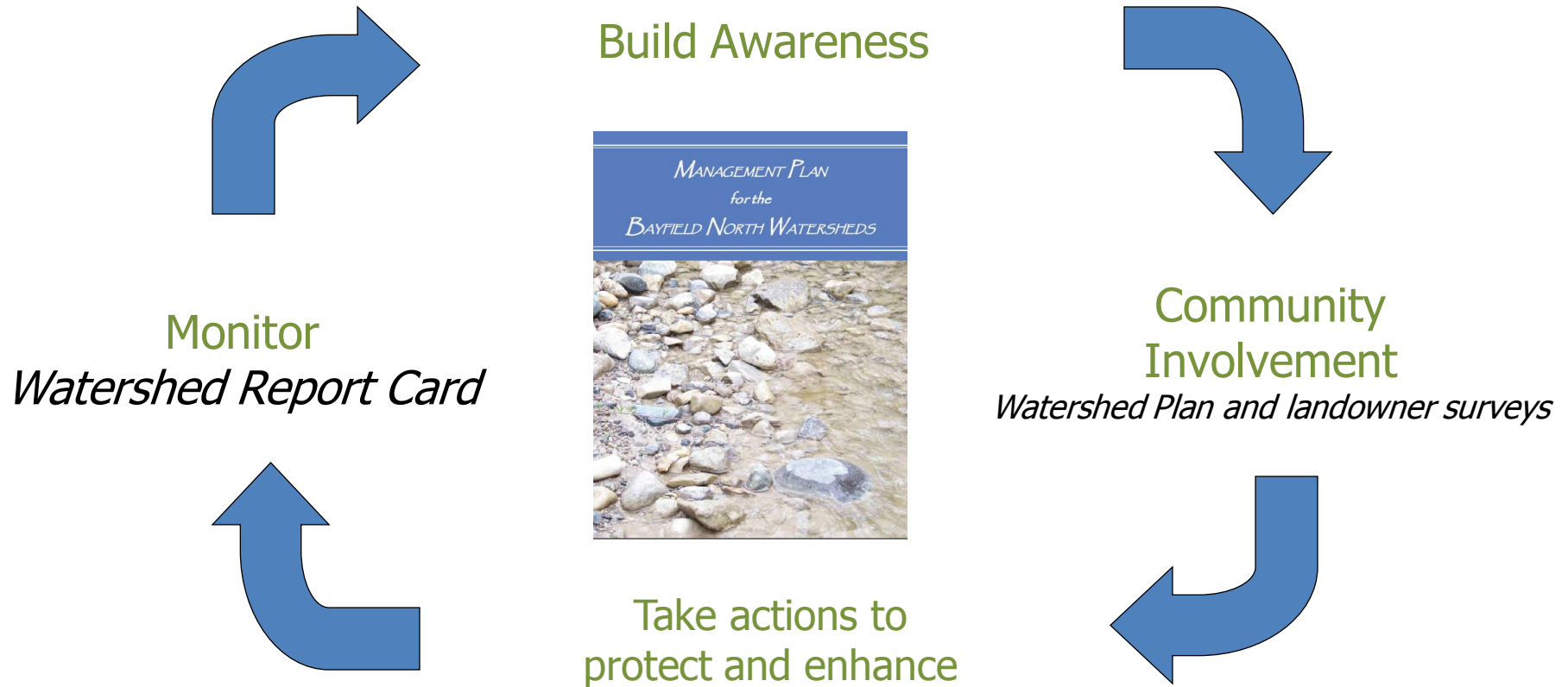
**SHARING AGRICULTURAL SCIENCE, TECHNOLOGY
& DATA TO IMPROVE GREAT LAKES WATER QUALITY**

A BI-NATIONAL WORKSHOP

Evolving field and watershed tools: explaining BMP effectiveness and water quality results

Mari Veliz
Ausable Bayfield Conservation Authority
June 13-14 2013

Watershed Reporting Promotes Actions





Land Owner Surveys Promote Actions

- Landowner survey purpose:
 - Model may need very detailed land management information – planting and harvest dates, tillage, crop rotation
 - BMP (past, present and future)
 - Evaluation of past outreach activities
- Landowner survey components:
 - General farm information
 - Livestock information
 - BMP questions (past, current and future)
 - Field information
- Time
 - 1 to 4 h compensated
- **Considerations:** Survey will be created with specific project objectives in mind

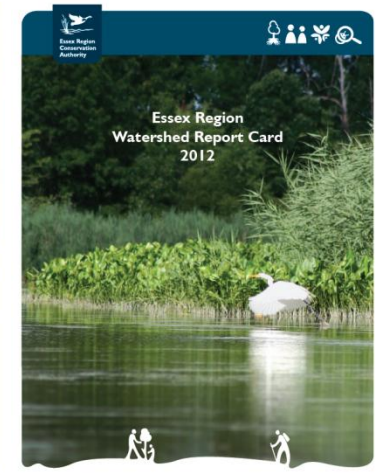
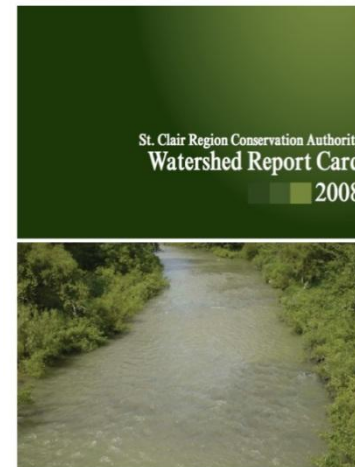
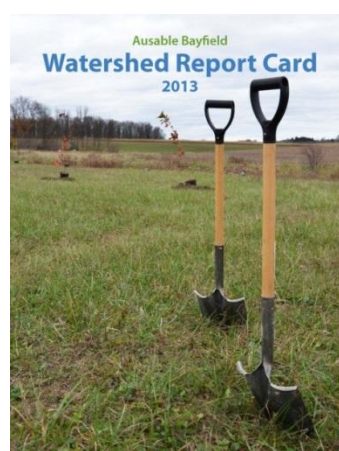
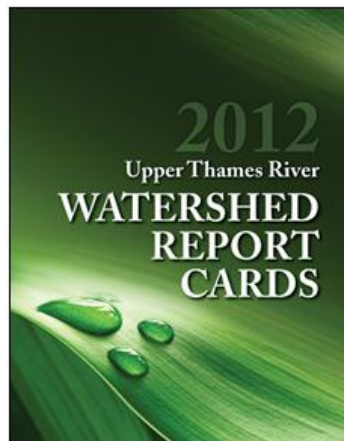


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Watershed Report Cards Promote Actions

- Geographically relevant
- Summary of technical information that people do not normally see
- People understand the information
- People are motivated by the information
- **Consideration: To evaluate BMPs - data for surface water quality will need to reflect storm runoff – the time when BMPs need to be effective**



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Water Quality Monitoring Watershed Based BMP Evaluation (WBBE)

- In addition to monthly samples (usually low stream flows), collected samples during high flow events



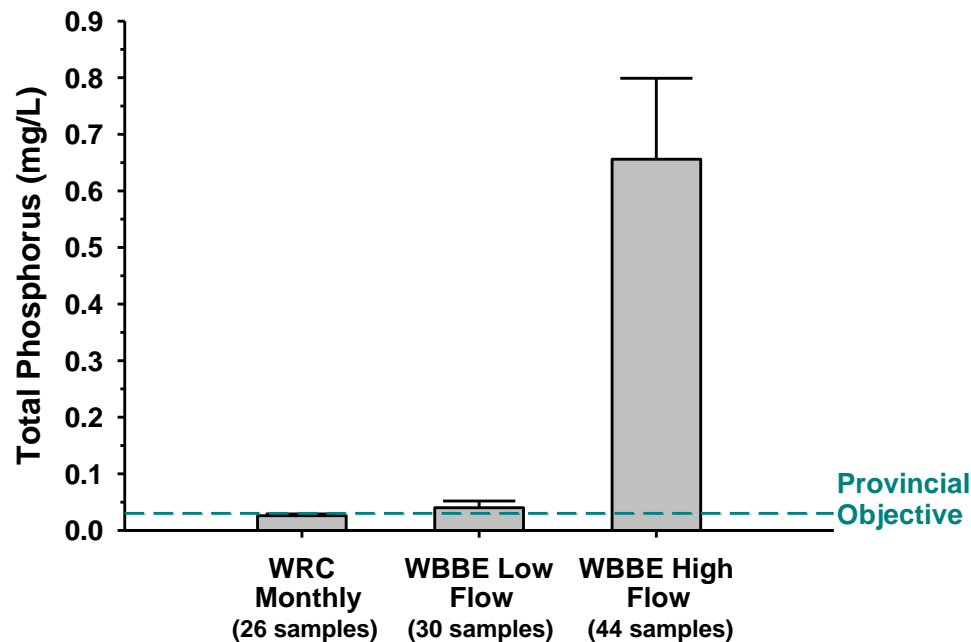
Gully Creek – low flow



Gully Creek – high flow

Gully Creek Total Phosphorus

Watershed Report Card data and data collected during WBBE (2010-2012)





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Communicating BMP Effectiveness - Next Steps and Recommendations

- To address monitoring gaps:
 - more collaboration amongst agencies to develop more comprehensive monitoring approaches that in particular, capture storm events
- To address BMP implementation and collecting land management data challenges:
 - Water quality information needs to be less abstract (the closer to the farm property scale the better) and more related to people in their communities
 - Watershed planning (science based with multiple stakeholders) may help provide opportunities for goal setting and ongoing dialogue and may help to explain the need for collecting the land management data