Stakeholder Engagement:
A foundation for natural heritage systems (NHS) identification and conservation in Leeds and Grenville Counties

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A.D. Latornell Conservation Symposium
November 17, 2010
• Southern Ontario: A Fragmented Landscape
• What is a NHS?
• Engagement: What and Why?
• The Eastern Ontario NHS Project
• Lessons Learned
• Benefits of Engagement
Many organizations and agencies are involved in land management but are their activities integrated?

Southern Ontario: A Fragmented Landscape
What is a Natural Heritage System (NHS)?

• Features and areas:
  – Wetlands
  – Woodlands
  – Lakes
  – Streams
  – Meadows
  – Plants and animals they contain
  – Respects cultural features and agricultural activities

• Links these features and areas with natural connections and corridors

*The health of individual features depends upon their placement within a functioning system.*
MNR’s NHS Approach

• An objective, science-based approach to set targets for what should be included in an NHS
• Based on regional, ecological boundaries
• Uses a site selection algorithm
• Results in information to support decision-making
• An approach that can integrate conservation activities through *Stakeholder Engagement*
What is engagement?

• A new way of thinking about how governments, stakeholders, communities and citizens can work together to achieve common goals and find solutions to complex problems¹

• Builds trust and legitimacy

Why engage stakeholders to design an NHS?

• One organization can’t do it alone
• The stakeholders have a crucial role:
  – in identifying objectives for a NHS
  – in setting the ecological targets to guide the NHS design
  – in championing the final NHS and implementing it within their own organizations
NHS Projects across Southern Ontario using this approach
Sustaining What We Value NHS Project
Steering Committee Members

- Eastern Ontario Model Forest
- St. Lawrence Islands National Park
- Frontenac Arch Biosphere Reserve
- Ontario Nature
- United Counties of Leeds and Grenville
- Ministry of Natural Resources
- Environment Canada
Stakeholder Engagement Approach

1. Pre-planning and Terms of Reference
2. Compile data
3. Stakeholders set targets for initial scenarios
4. Produce scenarios for comparison
5. Stakeholders review and discuss scenarios. A preferred scenario is developed
6. Produce preferred scenario
7. Stakeholders review map and finalize the result through consensus
8. Final mapping of priority features, areas and linkages
9. Integrated stakeholder team establishes goals together, shares knowledge and understanding, builds trust and achieves consensus
Stakeholder Interests Represented

- Area Artist
- Cultural
- Landowner
- Landowner/Farmer
- Stewardship Council/Social
- Canadian Land Trust Alliance
- Ontario Federation of Anglers and Hunters
- Algonquin to Adirondacks Conservation Association (NGO)
- Eastern Ontario Model Forest (NGO)
- Upper Tier Municipality – GIS
- Upper Tier Municipality – Sustainability Coordinator
- Municipal Planner/Lower Tier
- St. Lawrence Islands National Park
- Conservation Authority
- Ministry of Natural Resources
- Ministry of Municipal Affairs and Housing
- Agriculture
- Health Unit
Target-Setting Process

- 8 full-day sessions between October 2009 – March 2010
- 67 ecological targets and socio-political considerations
- Presented best-available science and the current condition of the landscape
- Experts invited to help support discussion
Target-Setting Process: Example Target

Interior Forest Cover
200m from Edge

Interior Patch Size
- <1 ha
- >1 and <5 ha
- >5 ha
- Edge Habitat
- Ecoregion Boundaries
- Study Area Boundaries
- Highways

Value 10 – Forest Interior

Objective: To ensure that forest patches include a significant proportion of forest interior in each Soil Landscape to reduce edge impacts and provide habitat for interior species.

Note: Interior Forest identified as 100 m and 200 m from an Edge

Stakeholder decision: 5% of total forest in interior
Target-Setting Process: Example Socio-political constraint

- The stakeholders also decide whether various conservation lands and land uses should be:
  - Always Included
  - Preferred
  - Available
  - Excluded

in the NHS design

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Produce scenarios for comparison

• Site-selection algorithm: MARXAN
• Defendable and Objective
• Easily Updated
• Gives stakeholders more flexibility to consider seemingly conflicting values (e.g. agriculture vs. conservation)
• “What-if” questions allow stakeholders to explore several targets
Reviewing the Learning Scenarios

• Baseline

• Captures 88% of existing natural cover
Reviewing the Learning Scenarios

- The Best Half of What’s Left on the Landscape
- Captures 73% of existing natural cover
Reviewing the Learning Scenarios

• Highest value areas within the study area

• Example application: assessing development impacts
Lessons Learned from the Stakeholder Engagement Process

• Patience and flexibility are key
• “Sometimes you have to move slow to move fast”
  – Pamela Hubbard, facilitator for Niagara NHS project
Benefits of Engagement

- Sense of ownership
- Stakeholders become advocates for the product
- Representing diverse interests increases legitimacy
- Aligned activities
... A step toward integrating natural heritage conservation across fragmented jurisdictional boundaries and organizational mandates.
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Lessons Learned: Communicating Ecological Targets and Thresholds
Communicating Ecological Thresholds

Percent Forest Cover by Quaternary Watersheds