

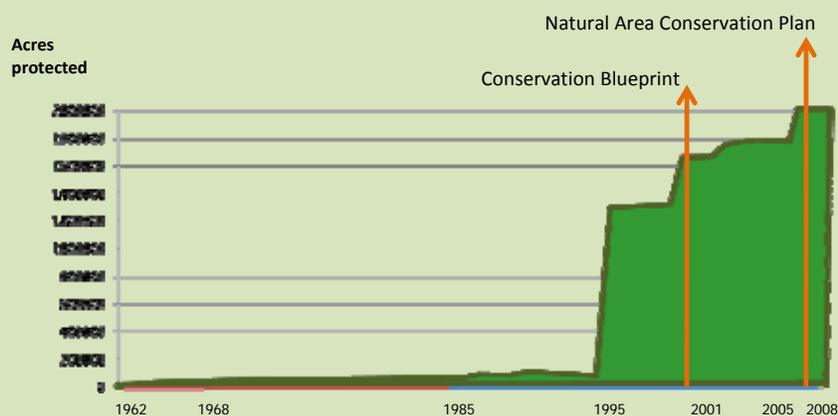
Conservation Assessment, Planning & Implementation at Multiple Scales

CCEA Marine Protected Areas Conference
4 November 2009

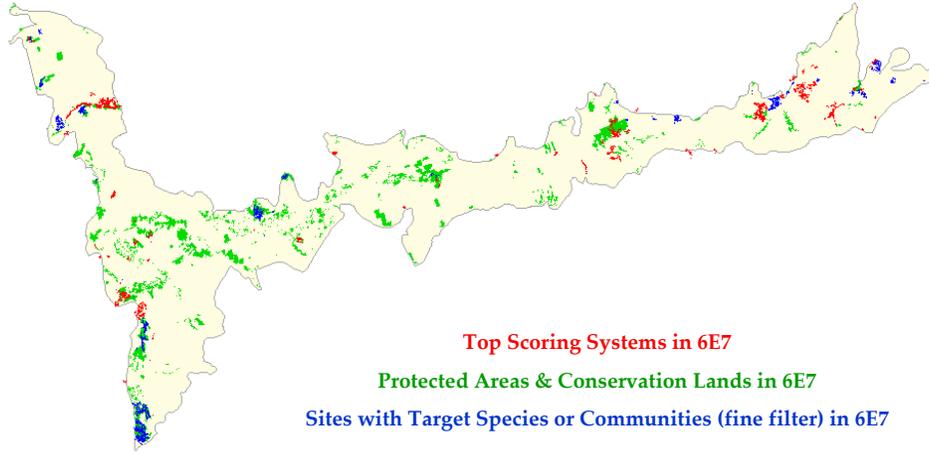
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NCC: A Brief History



Blueprint Portfolio: Ontario methodology



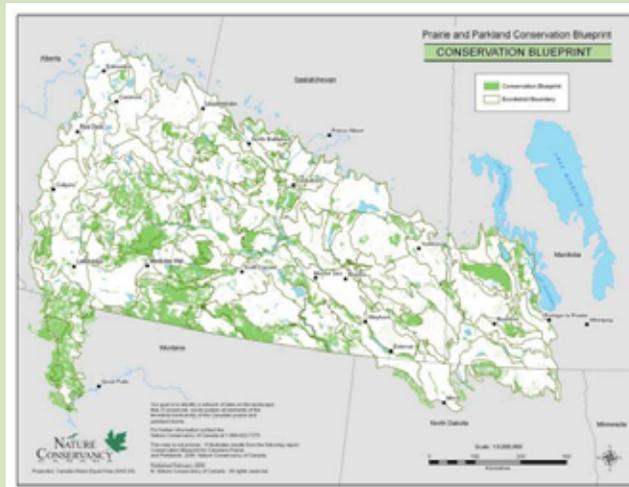
Conservation Blueprint Output



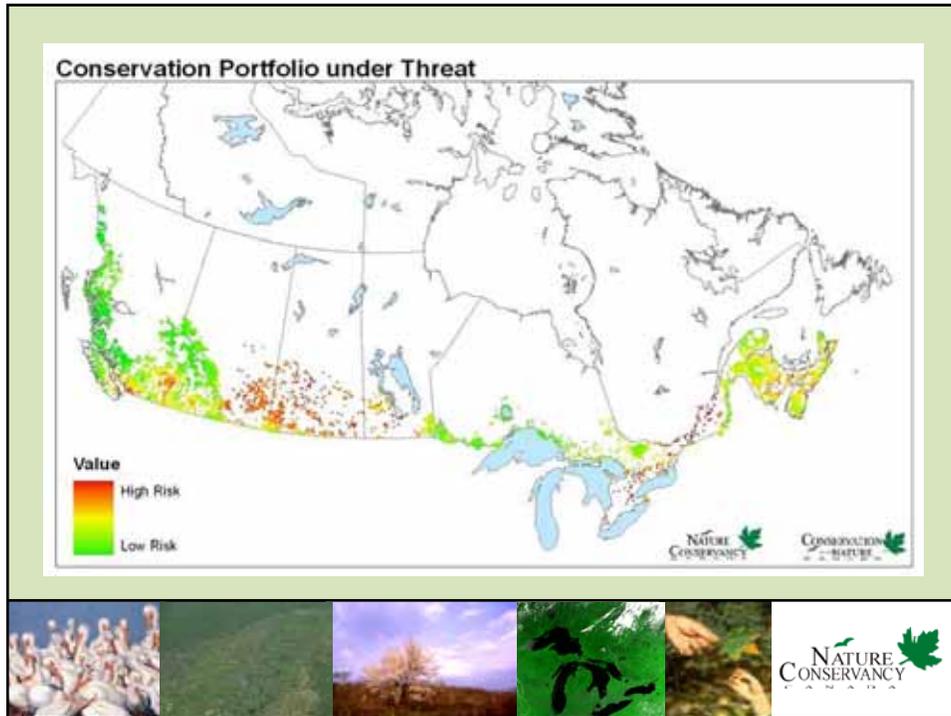
Conservation Blueprint Output



Conservation Blueprint Output







Conservation Blueprints: Insights

LESSONS LEARNED

- Cultivating partnerships/ accessing datasets (e.g. human use: kayak routes, fishing areas) yields more comprehensive output and widespread buy-in
- Aquatic conservation requires both place-based and ecosystem-wide approaches
- We know enough now to identify and protect key areas
- Often low overlap of terrestrial and aquatic priorities

STRENGTHS

- Systematic approach facilitates cross-border and global comparisons
- Provide tools to assess the “big picture” – relative conservation importance of sites

CHALLENGES

- Provides good size and landscape **CONTEXT** for sites but low on local biodiversity **CONTENT** (e.g. local info on new SAR records, local planning information, key socio-economic factors that are critical to decision making)



Natural Area Conservation Plans (NACPs)

Planning approach adapted from TNC's Conservation Action Planning process

NACPs integrate aquatic and terrestrial conservation planning



NACP METHODOLOGY:

- Identify biodiversity targets
- Assess target viability
- Identify and rank threats
- Determine project goals
- Establish conservation actions and measures of success



NACP Output: Conservation Land Prioritization

GIS methodology – automated, rule-based (e.g. RBI, Marxan, ERS)

Manual methodology – expert opinion, local knowledge



NACP Output: Implementation Plan

| PRIORITY | ALLIED OBJECTIVE | STRATEGY | ACTION STEPS | OUTCOME/ MEASURES OF SUCCESS | DELIVERY | ESTIMATED COST (\$) ⁽¹⁾ |
|------------|------------------|--|--|--|---|------------------------------------|
| Urgent | 1,2 | A.1 Control Garlic Mustard and other invasive non native understory species; and contain introduced native species surrounding marsh community | A.1.1 Collect baseline data on Garlic Mustard, and introduced native species populations, and preference spatial extent of invasions; A.1.2 Spray Garlic Mustard annually with 1-3% Roundup; A.1.3 If appropriate, cut Garlic Mustard annually after flowering has begun. A.1.4 Monitor for treatment effects, response to canopy opening, and for new invasions A.1.5 Reduce dispersal of Garlic Mustard seeds by decommissioning trails where possible. A.1.6. Track populations of native wetland species introduced to marsh, and remove if they are spreading. | Decreased community dominance and extent of Garlic Mustard and other invasive non native species. Increased regeneration of native species. No spread of Garlic Mustard to alvar and regenerating forest. Contained populations of introduced marsh species | STAFF CONTRACT LOCAL VOLUNTEER | 16,000 ⁽²⁾ |
| Necessary | 1,2 | A.2. Decrease canopy cover in treed alvar and deciduous forest communities to historic levels | A.2.1 Identify and flag non native trees and shrubs for removal within the property (e.g. European Plum, White Mulberry). A.2.2 Remove all non native trees and shrubs by girdling or cutting, and applying herbicide A.2.3 Where canopy cover >60% girdle Sugar Maple and Hackberry trees | Restored canopy cover (i.e. < 60%) Increased diversity of alvar species Decreased dominance of non native species in canopy | STAFF VOLUNTEER CONTRACT | 4,000 |
| Necessary | 2 | A.3 Increase / maintain complementary habitat for deciduous forest target | A.3.1 Allow natural succession to occur across retired agricultural fields | Increased quality of habitat supporting deciduous forest target (i.e. CUMI-1). Maintained/ improved condition of existing deciduous forest. | STAFF | 1,000 |
| Beneficial | 1,2 | A.4 Improve Eastern Fox Snake habitat | A.4.1 Chip brush from woody plants removed from alvar and forest communities A.4.2 Create vegetation piles from wood chips, weeds, dirt and logs around perimeter of forb-mineral shallow marsh to improve Eastern Fox Snake nesting habitat. | Improved availability of Eastern Fox Snake nesting habitat. | STAFF VOLUNTEER CONTRACT | 2,000 |



NACPs: Insights

- Need planning at multiple scales for effective biodiversity conservation – think global, act local
- Need to integrate key local information and expert knowledge into the plan vs. purely GIS based planning
- Need to cultivate value of investing in aquatic priorities
- Better to do a good plan now than a perfect plan later. NACPs should be dynamic planning document allowing integration of new information, and rapid adaptation
- NACPs can be an important marketing piece in generating interest for new landscapes
- NACPs allow NCC to better work with partners by more clearly defining roles and responsibilities, and by inspiring/ empowering local conservation.
- NACPs focus landowner contact programs
- NACPs facilitate responding to opportunity efficiently and strategically



Thank you!

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