

REPORT ON NIAGARA REGION MAPPING WORKSHOP

OCTOBER 18, 2013



NIAGARA RESTORATION COUNCIL



REPORT ON NIAGARA REGION MAPPING WORKSHOP OCTOBER 18, 2013

HOSTED BY:

ACER (Association for Canadian Educational Resources)
& GREENING NIAGARA (aka Climate Action Niagara)

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The funding of the ACER-Greening Niagara workshop from the Ontario Trillium Foundation is gratefully acknowledged.

INTRODUCTION:

On October 18, 2013, ACER (Association for Canadian Educational Resources) and Greening Niagara (formerly Climate Action Niagara) co-hosted a workshop for 26 participants from various organizations active in education, restoration and conservation of natural resources in the Niagara Peninsula, at the St. John's Outdoor Education Centre, Welland Ontario. A list of participants and their organizations is attached as Appendix 1. The Agenda is attached as Appendix 2.

PURPOSE:

The purpose of the day was to bring together members of not-for-profit organizations that have been working on forest and restoration issues in the Niagara area. Working with maps, their task was to focus on specific forest, and other watershed areas familiar to them. Participants had been selected for their extensive local knowledge and long-term relationship with the area. Their task was to record any changes they had observed and to note areas they considered vulnerable to weather extremes e.g. drought, flooding, blow-downs, erosion, invasive species etc. They were asked to indicate these issues directly on the maps and to make notes to elaborate on the locations identified as being of concern for one or more of the reasons mentioned.

WORKSHOP METHOD:

Following an introduction to Climate Change issues by Alice Casselman, participants were asked to work either in teams, or on their own, to identify forest areas and to make notes on any environmental and development issues of which they were aware. Colour maps with a 1:10,000 scale that had been prepared by the Niagara Peninsula Conservation Authority were distributed to individuals or groups familiar with the specific locations. Deanna Lindblad of the NPCA provided an introduction to the maps, the areas they represented and assisted participants in finding the map or maps that matched their area of familiarity. Participants wrote their observations on the maps, using arrows, circles and worded descriptions of what they have observed over the years or recently. The map notes have been compiled (Appendix 3).

One of the groups contributed a list of invasive species (Appendix 4) that proved useful as a reference to some of the other groups and individuals.

FINDING COMMON GROUND:

Once the maps had been reviewed, notes completed and issues identified, participants reported back on issues they had identified and a lengthy conversation was held with the purpose of understanding the common ground in the areas of Natural Heritage, Cultural Heritage, Recreation and Economics for the Niagara Region, and in the light of the mandates of the organizations within the assembled group. Native tree species and protection of waterways

Appendix 5 contains a synopsis of the ideas and issues raised by the workshop participants that were recorded on flip charts.

CONSENSUS:

After some struggle, and credit to the participants for working so hard, there was a consensus around the overarching idea of restoring the canopy in the Niagara Region. To this end it was agreed that a recommendation on increasing plantings using species more appropriate under the warming climate as well as native tree species should be circulated for adoption by local municipal councils. By adopting this direction, it was the sense of the group that many of the issues raised in the workshops or that the groups were currently working on could be included. The group agreed to continue a dialogue in search of a vision of how the organizations could work together in the future.

Among the suggestions/recommendations from the participants, an action item list emerged as follows:

WHAT WE CAN DO RIGHT NOW!

1. Create the presentation or obtain from ACER and Greening Niagara and train individuals to deliver
2. Afforestation - document forest loss
3. Adopt-a-watershed -John and Barry
4. Develop the Economic argument for preserving Niagara's natural heritage
5. Support 'on the ground' activities - circulate a list of who is doing what along the lines of the Niagara Knowledge Exchange
6. Find a common ground issue - CANOPY
7. Map flooding and clean ditches
8. Supplement the list of desirable tree species to include those more appropriate to climate change and including native species.

EVALUATION:

Based on the evaluations, the feedback indicated that the workshop was a great success and that the participants would welcome workshops and training in 2014. We learned, as hosts, that for future workshops we need to explain better the activity of the mapping workshop and need to get the information about it distributed with more advance notice. The results of the evaluation are available on request.

OVERALL CONCLUSION

The results of the mapping show the depth of knowledge of participants. The information gathered may be used by the group to obtain an overall sense of the issues of the Niagara area and help to set priorities for action.

Addressing the issues by focusing on the *CANOPY*-its preservation (more plantings), enhancement (greater biodiversity) and improvement of quality (suitable species) will provide groups in the Niagara area with a common vision that will assist with communications both to their own members and to the public at large and all levels of governments.

RECOMMENDATION:

The following is a proposed resolution for the groups to consider:

That the Niagara groups work cooperatively together to draft a series of proposals that they will present to all municipalities in Niagara suggesting policy and bylaw changes that will:

1. protect existing trees;
2. see an increased number of new trees planted;
3. increase the survival of newly planted trees;
4. improve the planting of appropriate species to enhance biodiversity and ecological resilience.

The funding of the *ACER-Greening Niagara* workshop from the Ontario Trillium Foundation is gratefully acknowledged.

APPENDIX 2

Regional Ecology Project (REP- Niagara)

Friday October 18th, 2013

**LOCATION: St. Johns Outdoor Education Centre
2984 Holland Rd. RR#1 Fonthill, ON L0S 1E0**

Community Mapping Workshop Agenda

Workshop will make use of maps produced by the Niagara Peninsula Conservation Authority with a scale of 1:10,000. Participants will receive an orientation to the map layers and how to use the maps during the workshop.

Facilitator: Madelyn Webb

ACER: Alice Casselman

Greening Niagara:

Jane Hanlon

**Associates
Martin**

NRCA: Deanna Lindblad

NRC: Barry Porter

LCN: Michelle

AGENDA:

9:30 Registration and Coffee

10: 00 am Around the room introductions and welcome.

10: 10 am Climate Change in Niagara -Alice Casselman

10:30 Why community mapping?

- Relationship with Climate Change Adaptation and Mitigation.

10: 40 Orientation to the maps and their content.

10: 55 Residents read the landscape. We are relying on your local expertise to help us identify the issues. Please use the attached comment page.

11:00 Working on your own or in pairs/groups from the same area:

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- a. Locate your home on the map
- b. Identify important landscape features - forests, streams, lakes/ponds etc. that you are familiar with
- c. List observations you have made about changes over the past 5-10 or more years to forests, including specific tree species and urban canopy; bird populations; water quantity (levels) and quality (e.g. algal blooms); invasive species; SARS species sightings (see list on comment page).
- d. As a group or individually, have a conversation to identify what you think is a vulnerable area or one at risk and note the criteria you used to arrive at this decision.
- e. On the maps, locate and mark the areas you have defined - include a contact name.
- f. Share the results of your discussions with the larger group

12: 30 Lunch at the tables to continue discussion

1: 00-3:00 NEXT STEPS:

How you can participate in reporting changes and sharing your knowledge.

- Who to contact to report changes, to share our findings, to communicate? Format?
- What steps and measures do we recommend in priority?
- Citizen Science - eyes on the ground reporting changes - biological, physical, Infrastructure
- Volunteer opportunities - Planting urban canopy, buffer zones, riparian
- Covering gaps in the mapping by continuing to request volunteers to complete them and add to the data base

CHANGES observed in My Back Yard - REPORT CARD

LOCATION: _____

LANDSCAPE OR TYPE OF NATURAL
 FEATURE: _____

YOUR
 NAME: _____

Check for yes	Observation-add to list if needed	When	Location/Comments
	Flooding		
	Drought/low water levels		
	Spills		
	Crown die back & health notes		
	Insects		
	Wind events		
	Invasive species		

Please complete and hand in the Evaluation Form at the end of the day.

APPENDIX 3 -Notes from Map Sheets - please check for accuracy

Map Sheet 16, OBM 17655047600

Frank F & Joyce S

Note: One of the largest areas of natural land in Niagara (old growth swamp forest); ownership and protection needs to be clarified NO NAME Location: East side of map, Bayers Creek flows out of it to the South West

Map Sheet 15, OBM 17655047650

Frank F; Amy B; Joyce S

Along Lyons Parkway - note that subdivision is being built , forest has been removed; next to this a note that 'this forest is isolated - Black Gum, lg Pin Oak, vernal pools; east side of map - note that watercourse is rerouted;

Map Sheet 26, OBM 17655047650

Frank F; Amy B; Joyce S

NE quadrant of map - Ramsey Rd forest identified. This swamp forest should be purchased by government agency.

NW quadrant of map - Warden Woods subdivision - contains some areas planned to be protected

South of this area - NF City business maintenance Centre.

West of this area - note is Heartland Forest 93 acres PS4; just south note is Phragmites invasion

SW quadrant of map - Bobolink habitat - work with farmers

Map Sheet 3, OBM **500**

SE quadrant - along lake "old Fort" historic site; rectangular 'pond' has note: Area blasted out hoping to create a harbour for a new homes project was stopped 1970.

Heritage Tree - location on Cohen property, south of Edgmore and Rose Ave intersection at bottom of a lane, on the lake (MW interpretation of hand drawn 'map'.)

I skated on Kraft Pond in '50's-area excavated to provide fill to build Hwy3/Domewood Rd. All Orangetown now.

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Helena Sl @ H2O Old Erie Park is now a birdwatcher's paradise - several walkways and interpretive panels-example of restoring natural beauty - Fowler Road also

Map Sheet 40, OBM*850**

Forest areas on map circled along Elm Pk Pl; near Greenleaf Crt; Willcher Dr; Monique Cres; Strathcona Dr. Note: Jane and Yaneth Rd

Map Sheet 32, *800 - John Bacher, Jane Hanlon**

Two areas marked along the canal. "A" -area is at risk from proposed new Welland Canal superlock. This scheme would do a lot of ecological damage to Great Lakes. Scheme should be abandoned and land turned over to Conservation Auth and afforested.

"B"- Area owned by Seaway suitable for afforestation.

SW quadrant - area marked as "future park"

Map Sheet 41, OBM *800**

Areas circled throughout map but no notes.

Map Sheet 49, OBM *800 - John Bacher, Jane Hanlon**

Two areas marked on map. "A" - lands around QEW interchange possible area for afforestation; "C" - last area of Chevvy (?) Birch. Protection and expansion of forest here important of surviving of species.

Small areas in forest cover missed. These areas are mapped in forest schedule of St. Catharines Official Plan. Where they are in urban areas, they are vulnerable to development.

Map Sheet 31, OBM *850 -JB and JH??**

Two areas marked. "A" Large area of seaway land. Some of this could be afforested if soil improved. Seaway should be asked to consciously encourage biodiversity as part of its mandate; "B" Who owns this area? It is part of superlock scheme - ownership should be transferred to CA.

Map Sheet 27, *600 - John Bacher**

Area marked "A" Large areas near Lyons Creek potential for afforestation could be encouraged by combination tax programs (Agreement Forests) and phosphorus trading.

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Map Sheet 43, OBM *700-John Bacher**

Three areas marked along waterway. "A" Large area of public land suitable for afforestation; "B" Waterwork Park (now closed-former picnic area) should be afforested; "C" Public Land, Lake Gibson suitable for afforestation (may be in progress due to NRC project).

Interest areas identified: M - Morningstar Mill; F - Fonthill Trail needs to be either paved or fine crushed stone - currently unimproved; H - Hydro Trail great walking and cycling trail - fishing ??? along it.

Map Sheet 42 *750 - John Bacher, Jane Hanlon**

Four areas marked. "A" Threatened. Proposal to bury stream - culvert and may be perched. Along west dale tool sheds encroached on flood plain. Floodplain needs to be better protected by buffer zone. More trees need to be planted - schoolyard of Westdale School. Shickland Shipyard site needs study. "B" Second Welland Canal remains also First Welland Canal; "C" 'quasi' wetland filling in needs better management and restoration; "D" Successional large 54 acre area owned entirely by Brock University. This area is vulnerable to residential development since it is currently designated for this purpose by City of St Catharines Official Plan. Brock also owns smaller successional area near hydro lands suitable for afforestation. Brock should be encouraged to afforest this area to strengthen health of existing Niagara Escarpment forest which is vulnerable to storms, pests and diseases connected to climate change.

Area successional owned City of St. Catharines between Burgoyne Woods and Hwy 406; City of St Catharines should encourage this to eventually be a forest.

"E" Fruit trees in this area. General Twelve Mile Creek valley needs reforestation and bank management.

"F" Rotary Park slope needs planting and formal trail access down slope to connection with trail in twelve valley.

"G" Burgoyne Woods fruit trees in back part by Hwy 406 and CN Grimsby subdivision.

PRIORITIES: D - Brock owned area threatened by development; AB - Shickluna Shipyard/Second Welland Canal review archaeological study; Reforestation of Twelve Mile Creek valley

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Map Sheet 57, OBM *800**

Significant storm events taking down lakefront trees and washing out roads at Donovan Bailey. There has also been significant removal of native species used by birds to build larger beaches.

S central area of map between creek and Queen Victoria Street - Significant orchard removals. Does this, in the long-term, open the area to development? Increased housing developments including in areas that should never have been developed like on top of cliff area indicated here. This makes erosion an issue especially since all trees have been removed on hillside. Also all new developments increase impervious surfaces strangling water runoff collection.

Bottom of map, along Culp Road - More rain leaving more water on roads; roadside culverts have been filled in and leveled by property owners. Towns need to rebuild then engage in public education to tell people why it's important not to fill them in. Plus tell people not to mow if they naturalize then they will not be penalized. A lot of planting of non-native species along roadways and private properties. Line to bottom of map "filled with garlic mustard".

Loss of limited successional areas along the QEW if Hwy is expanded to 8 lanes.

Significant tree loss has taken place during storm events over the past few years and no replacement planting is taking place. This makes for a long-term disaster as tree losses continue to mount.

Real loss of forest cover and no interconnectivity between limited green spaces.

Loss of habitat for migrating songbirds along the lakeshore.

PRIORITIES:

Require bigger buffers from waterways, lakes etc.

- Require pervious surfaces on driveways, parking lots etc.
- Use culverts instead of storm drains
- Create natural heritage systems with interconnected green space buffers
- Incentivize tree/shrub planting (natives only)
- Focus on creating a more resilient environment as global warming will have unpredictable consequences.

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Map Sheet 53 , OBM *600-no comments**

Map Sheet 51 , OBM *700 -no comments**

Map Sheet 65 , OBM *800-no comments**

Map Sheet 24 , OBM *750-Frank, Amy, Joyce**

Comments throughout map:

- SW quadrant: 2 green areas with notes: endangered by expansion of urban boundary-needs protection
- Centre: pointer to area along creek "to be developed for housing" - "protect watercourse with sufficient buffer and floodplain"
- Other features : Old City Dump; Fireman's Park; Walker Park - some old growth; Walker greenspace - some old growth.

Map Sheet 25 , OBM *700-Frank, Amy, Joyce**

Forest areas contain species at risk but are isolated and need corridors to connect them.

NW quadrant -Protection needed along stream course before development moves west;
Fernwood Park (green brier) subdivision being built.

SW quadrant -Deerfield Park; Edgewood Park contains **green brier

Map Sheet 48 , OBM *450**

Meream Richards (bee specialist) did a study of Pt Colborne breakwall birds colony long time ago. Available @ Port Colborne archives. Today, only invasive species there. Helipad installed and all the fledglings washed into lake.

Notes: Where canal meets Lake: "boneyard" for old ships being demolished; south of Tennessee Ave "no real beach"; NW quadrant - Bog is not now so "boggy" - home of the Hognose snake

Map Sheet 30 , OBM *450-Cynthia B. Skinner, Bonny Brant**

Pt Abino Rd and Erie- boat club owns land on N side of Erie. They are slowly filling in the swampy area to provide more boat storage area. Pt Abino (gated community). As Toronto and out of town people buy these homes, the association is having to educate the newcomers about the very special environment they now own and to be good caretakers of Carolinian forest. Pt Abino association address on line.

Sherkston: re Michael Drain and Mitchner Drain. Mitchner goes North from RR track; Michael runs south. Sherkston Rd near trail-originally owner wanted to build two dozen

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homes. Aquifer studies showed that could not be done - area is septic/well source of water. Eleven homes were ok'd or less.

S.side Sherkston Rd.- When trail put through, this altered natural water source for the original General Store, Post Office (5061-5073 Sherkston Rd), Train station/gas station building - their water supply. Public hearings were held long ago for the drains and the housing subdivision. S. side of track - flooding and too many houses being built.

Pointer to "Marcy Woods" Carolinian Forest - dunes were forested by Dr. Marcy to prevent erosion.

Map Sheet 19 , OBM *450**

Pointer on map to Beach area: 10-12 storey condo on beach front @ Crystal Beach Bay beach. Your slides show this beach will wash away and undermine the building.

Map Sheet 20 , OBM *400 - map is mostly lake -NO NOTES**

Map Sheet 9 , OBM *450-CB Skinner and Bonnie Brant**

Flora and fauna study done in the '60's(difficult to read, could be '50's) for Thunder Bay Colony -call author's son Al Hollands 716-868-5487.

Map Sheet 7 , OBM *550**

SE quadrant - area circled on Bowen Road. Notes: 365 day a year auto racetrack partially OK'd by Ft Erie-nature clubs have lobbied against using vast area of sensitive land for such a use that not only destroys the flora and fauna, but will also cause large amount of noise, detrimental to humans and animals. FYI Humberton Speedway of Hwy 3 - Port Colborne- that noise is clearly audible in mid-town Port Colborne- Elm Street.

Map Sheet 4 , OBM *450 -CB Skinner**

Notes on beaches: Most westerly beach -Crescent Park Rd @ Beach - attempt to re-establish natural grasses attempted 2 years ago - some vandalism within first year. Bert Miller - nature club, sponsor. Arrow point to "good beach, grass free".

Next beach "not a good beach" - reefs protect the bay - Fowler Road area.

Next beach - Beach cleanup at Fowler Road by community organization.

East of small spit: Old Erie Beach Park restored and birders' paradise.

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Map Sheet 60 , OBM *650**

NE quadrant -Comfort Maple

SE quadrant - Several orchards have been removed; Wooded ravine being filled in; archeology site; Cherry Ridge subdivision where they cut down the cherry trees and bulldozed the ridge.

South central - unused road allowance

Map Sheet 58 , OBM *750**

North centre part of m

ap -forest area circled but no note; note along creek -Trail not passable when 20 Creek is high; deterioration of stairway on forest slope.

SE quadrant - Louth conservation Area -ruts from off-road vehicles in wet areas below Escarpment; Sixteen Creek flows through cave under Staff Ave-dries up in August.

After significant rain events, water is almost over the bridge -Jordan Hollow

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Map #	Comment #	Comment
50	1	Just north of this area is a large grassy slightly hilly field. Looks wild and unused.
50	2	Didn't see. Within private property.
50	3	Didn't see. Within private property.
50	4	Area layered with "successional" looks well covered in trees. Ravine.
50	5	Large, grassy, hilly field. A few small pine trees.
50	6	Didn't see. Within private property.
50	7	A well-taken-care-of back yard
50	8	Didn't see. Within private property.
50	9	Farmer's Field. In use
50	10	Grassy field on farmer's property. Slightly hilly
50	11	Grassy field on farmer's property. Hilly. Several fenced-off areas. (Grazing land?)
50	12	Two flat, grassy fields. ~20 young pine trees spread evenly throughout south field. No trees in north field
64	1	Possible connector to Lake Erie
64	2	Possible connector to Lake Erie
64	3	Connect to Lake Erie
64	4	Possible connector to Lake Erie
64	5	Connect to Lake Erie
56	0	Not specific to a particular area: Offer trees to all non-farm/residential property owners.
56	1	Possible connector to Lake Erie
56	2	Possible connector to Lake Erie
56	3	Possible connector to Lake Erie
56	4	Connect to Lake Erie

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APPENDIX 4 - Please asterisk the species for which there are eradication programs

INVASIVE SPECIES LIST

TREES	SHRUBS
Black Locust	Autumn Olive
European Alder	E. Buckthorn
European Birch	Glossy Buckthorn
English Hawthorn	Japanese Barberry
Norway Maple	Multiflora Rose
Tree of Heaven	Sweetbriar Rose
	Tartarian Honeysuckle
VINES	White Mulberry
Dog Strangling vine	
English Ivy	HERBS
Oriental Bittersweet	Celandine
Periwinkle	Dame's Rocket
Winter Creeper	Garlic Mustard
	Giant Hogweed
GRAMINOIDS	Japanese Knotweed
Barnyard Grass	Moneywort
BromeTimothy	Oxeye Daisy
Canary Grass	Purple Loosestrife
Phragmites	Sweet white and yellow clovers
Quack Grass	Yellow Iris
Reed	
	AQUATIC
REPTILE	European Water Milfoil
Red-eared slider	Hydrilla - Erie Canal
INSECTS	FISH and aquatic animals
Asian Ladybugs	Carp
Asian Longhorn Beetle	Lamprey Eel
Emerald Ash Borer	Round Gobi
Japanese Beetle	Zebra Mussels
BIRDS	MAMMALS
Cormorant	Feral Cats
Grackle	Housecats outdoors
House Sparrow	Norway Rat
Mute Swan	
Starling	

APPENDIX 5 - Flip Chart Notes from discussion relating to:

NATURAL HERITAGE

Comments and Recommendations

1. Better forest protection; protection of urban canopy e.g. NW Niagara Falls; S Mountain Road; W -QEW
2. Better flood protection via setbacks, not burying creeks, wider buffers along waterways and along lake; stop diversions
3. Control of sprawl
4. Bylaw to require greater setbacks from water courses
5. Recommend to change ECA to EPA
6. Control invasives
7. Re-naturalize stream banks
8. Incentives for tree planting (e.g. Losses in Lincoln Co.)
9. Species specific remarks: Shortage of willow; Emerald Ash Borer and Ashes; Hemlocks (on north facing slopes) are sensitive

CULTURAL HERITAGE

Comments and Recommendations

1. Manage Welland Canal area for biodiversity
2. Parks Canada to assess the shipyard site as a focal point
3. Educate residents re the benefits of living with greater density

RECREATION

Comments and Recommendations

1. Improve trail - Rail spur link with Hydro trail
2. Off road vehicles - a problem along Welland Canal
3. Create fruit tree trails (from remnant orchards) as recreation links

ECONOMY AND POLICY

Comments and recommendations

1. Sprawl - using farmland for housing
2. NASCAR racetrack
3. Let contract for cleaning up spills (Clean Harbours)
4. Roadway plantings - ownership and maintenance (especially along Regional Roads)
5. Opportunity: Market area for ecotourism with scenic parkway along Welland River
6. Conservation of Welland lands
7. Tourism needs knowledgeable people - Fort Erie and Port Colborne are opportunities
8. Make impervious surfaces - driveways, parking lots - more permeable; encourage bioswales
9. Bicycle parking
10. Agriculture - orchards being converted to *GMO* corn
11. Province - reduce sprawl by providing transit
12. Niagara Restoration Council -re-naturalizing drains at Fort Erie

Solutions suggested by participants

1. Institute mitigation as was done for Hwy 407
2. Expand Ontario programs such as
 - a. Adopt-a-pond
 - b. Citizen science
 - c. Frog Watch
 - d. Turtle Tally
3. Make better use of on and off ramp space
4. Strengthen Greenbelt in Niagara and then expand province wide
5. Conservation Authority needs bylaw officers
6. Re-naturalize and restore streams, shorelines and roadways
7. Plant native species using list of top ten resilient species - use incentives and expand the list of approved native species
8. Hold public consultations on Waterfront strategies
9. Green Ontario - expand program for free native species in yards PUT IN LINK
10. Expand the definition of 10 acres used re managed forest to include afforested lands - create incentives to reforest
11. Education as to why Norway Maple is not a desirable species

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12. Research needed as to the water retention provided by vegetation growing along watercourses
13. Municipalities- disallow burying watercourses and increase protection of swales
14. Not for profits - form coalitions to lobby for changes
15. Close Wilson Road-*check*
16. Clean up ditches along county roads
17. Align schoolyard greenings with watershed issues
18. Attend Regional public meetings - Lakefront Strategy
19. Niagara Crossing Proposal
20. Niagara - GTA transportation study
21. Focus arguments on the economic as well as environmental cost of not doing anything
22. Flooding issue - oppose urban expansion (OMB)
23. Address afforestation as part of Greenbelt expansion
24. Provide a presentation on climate change and enhancing biodiversity for local neighbourhood groups

WHAT WE CAN DO RIGHT NOW!

1. Create the presentation or obtain from ACER and Greening Niagara and train individuals to deliver
2. Afforestation - document forest loss
3. Adopt-a-watershed -John and Barry
4. Develop the Economic argument for preserving Niagara's natural heritage
5. Support 'on the ground' activities - circulate a list of who is doing what along the lines of the Niagara Knowledge Exchange
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