

Appendix C

Public Information Centre

**Notice of Public Information Centre (PIC) for Schedule 'B' Class
Environmental Assessment for Norfolk County Eco-Passages Project**

Project Name: Engineering and Environmental Services for Three (3) Wildlife Culverts (Eco passages) on the Long Point Causeway between Lakeshore Rd and Erie Blvd
Project Location: Norfolk County, Ontario

The Long Point Causeway is a vital community and recreational link that connects the mainland to the cottage community on Long Point. The significance of Long Point, Big Creek Marsh and their associated habitat and wildlife is recognized worldwide. Based on monitoring conducted by the Canadian Wildlife Service, wildlife mortality on the Causeway has exceeded 10,000 animals in one year. To address this issue a project to implement three wildlife culverts on the causeway has been initiated. The purpose of this Notice is to invite public participation in this project at a Public Information Centre on **Thursday, June 2nd, 2011 from 5 pm to 7 pm at the Port Rowan Community Centre.**

Project Description:

Norfolk County is planning to engage in the implementation of three (3) wildlife culverts ("eco-passages") on the Long Point causeway between Lakeshore Road and Erie Boulevard. These eco-passages are intended to provide opportunity for safe movement of wildlife under the Causeway in an effort to reduce wildlife road mortality. One of the eco-passages is also intended to re-instate a hydraulic connection to the Inner Bay. Upon completion of the project, Norfolk County will be equipped with an appropriate solution to move forward into subsequent steps of detailed design, and construction associated with the installation of the Three (3) Wildlife Culverts (Eco-passages).

The Proponent:

Norfolk County is a rural city-status single-tier municipality on the north shore of Lake Erie in South-Western Ontario, Canada.

The Process:

An Environmental Assessment study of the three (3) eco-passage installations shall be conducted, ensuring that the study is structured to achieve compliance with both the Municipal Class EA process (Sept 2007) and the Canadian Environmental Assessment Act (CEAA) process.

Project Contacts and Information:

To learn more about the project, public meetings, or to communicate ideas or concerns, please contact either:

Consulting Engineer

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Proponent

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May 24, 2011

**Subject: Notice of Public Information Centre
County of Norfolk – Three (3) Wildlife Culverts (Ecopassages) on the Long Point
Causeway (LPC)**

The County of Norfolk is proposing to construct three wildlife culverts near the south end of the Long Point Causeway. Long Point Causeway is a section of Highway 59 between Lakeshore Road and Erie Boulevard in Port Dover, Norfolk County. The intent of the proposed culverts is to provide safe movement corridors for wildlife under the Causeway and reduce wildlife road mortality. One of the proposed culverts is intended to re-establish historic hydraulic connections between the Inner Bay and the Big Creek Marsh Wetland. This project meets the requirements of a Schedule B Municipal Class Environmental Assessment (Class EA) process (MEA 2007). S.Burnett & Associates Limited has been retained to undertake the MEA process.

In accordance with a Schedule 'B' Municipal Class EA process, a Notice of a Public Information Centre has been prepared and was advertised in the local newspapers. This Notice is being sent to you to ensure full and meaningful consultation with all interested parties. The Public Information Centre will be held on **Thursday, June 2nd, 2011 from 5 pm to 7 pm at the Port Rowan Community Centre**. We invite your participation in this meeting. You are receiving this letter and Notice because your property has been identified in the vicinity of the proposed project site or you have indicated that you would be interested in learning more about the project.

Your comments, queries or information relevant to the proposed project would be greatly appreciated. We look forward to seeing you at the upcoming Public Information Centre.

Please direct any correspondence to:
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Yours Truly,



Stephen Burnett, P.Eng
S. Burnett & Associates Limited



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ecokare international



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& ASSOCIATES**
Consulting Engineers



**Class Environmental Assessment for
Three (3) Wildlife Eco-passages at the Long Point Causeway**

Norfolk County

Welcome to the Public Information Centre!

(Please sign in on the form provided)

June 2nd , 2011

Background Information



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- Long Point Causeway (LPC) – is a section of County Highway 59 that connect Port Rowan to the cottage community on Long Point at the head of Long Point Inner Bay on Lake Erie
- The significance of LPC includes the following:
 - 1) A vital community and recreational link in Norfolk County
 - 2) A World Biosphere Reserve as one of the most important areas for reptiles & birds in Canada
 - 3) A refuge for Species-at-Risk in South-western Ontario, which otherwise is fragmented by agriculture and development

Photo of Big Marsh



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02/06/2011

Class EA for Three (3) Wildlife Eco-passages at the LPC

Existing Problems/Issues



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- LPC has the 5th highest road mortality rate in the world for turtles
- LPC forms the east edge of the Big Creek Marsh, a 1,200 hectares of wetland located at the mouth of Big Creek at the head of Inner Bay
- LPC isolates the Big Creek Marsh from the shoreline and nearshore habitat of Inner Bay, hindering wildlife movement opportunities, causing significant wildlife road mortality and reducing the open water connection

Wildlife Road Mortality Records



Table 1 – Summary of Road-killed Amphibians

Common Name	Scientific Name	1979	1980	1992	1993	2008	Temporary 'Silt' Fencing Installed				2009	2010
Northern Leopard Frog	Lithobates pipiens	9,172	10,753	445	7,476	375					7	13
Bullfrog **	Lithobates catesbeianus	576	514	101	154	72					29	14
Green Frog	Lithobates clamitans	12	19	26	10	18					8	3
Gray Treefrog	Hyla versicolor	0	0	4	11	1					0	0
Western Chorus Frog	Pseudacris triseriata	0	12	0	0	0					0	0
American Toad	Anaxyrus americanus	164	55	83	131	151					0	0
SAR Toad *		12	16	0	1	0					0	0
Unidentifiable Anuran		104	109	40	34	198					41	15
TOTAL AMPHIBIANS		10,040	11,478	699	7,817	815					85	45
*Species denoted in RED are designated species at risk by COSARO												
**Note that 2009 totals include specimens killed along the causeway prior to the drift fence being erected.												

Wildlife Road Mortality Records



Table 2 – Summary of Road-killed Reptiles

Common Name	Scientific Name	1979	1980	1992	1993	2008	Temporary 'Silt' Fencing Installed		
Painted Turtle	Chrysemys picta marginata	95	74	93	79	36		39	34
SAR Turtle Species*		107	86	71	111	110		46	45
Eastern Gartersnake	Thamnophis sirtalis	26	43	13	32	92		35	30
Northern Watersnake	Nerodia sipedon	4	2	0	2	0		1	0
SAR Snake Species*		5	14	3	4	20		5	4
TOTAL REPTILES		237	219	180	228	258		126	113

*Species denoted in red are designated species at risk by COSARO (endangered, threatened or special concern)
 **Note that 2009 totals include specimens killed along the causeway prior to the drift fence being erected.

Wildlife Road Mortality Records



Table 3 – Summary of Road-killed Birds

Common Name	Scientific Name	2008	2009	2010
Barn Swallow	<i>Hirundo rustica</i>	11	0	8
Cliff Swallow	<i>Petrochelidon pyrrhonota</i>	1	0	0
Tree Swallow	<i>Tachycineta bicolor</i>	0	0	7
Bank Swallow	<i>Riparia riparia</i>	0	0	1
Purple Martin	<i>Progne subis</i>	0	0	3
Song Sparrow	<i>Melospiza melodia</i>	3	0	1
Swamp Sparrow	<i>Melospiza georgiana</i>	10	0	0
Marsh Wren	<i>Cistothorus palustris</i>	10	0	0
American Robin	<i>Turdus migratorius</i>	4	6	18
Eastern Kingbird	<i>Tyrannus tyrannus</i>	0	0	1
Gray Catbird	<i>Dumetalla carolinensis</i>	1	4	1
European Starling	<i>Stumus vulgaris</i>	1	0	2
Common Grackle	<i>Quiscalus quiscula</i>	4	5	5
Red-winged Blackbird	<i>Agelaius phoeniceus</i>	7	9	2
Common Yellowthroat	<i>Geothlypis trichas</i>	13	1	0
Northern Flicker	<i>Colaptes auratus</i>	2	0	0
Mourning Dove	<i>Zenaidura macroura</i>	3	2	0
Rock Dove	<i>Columba livia</i>	1	0	1
Sora Rail	<i>Porzana carolina</i>	1	0	1
American Woodcock	<i>Scolopax minor</i>	0	0	2
Yellow Warbler	<i>Dendroica petechia</i>	2	3	0
American Goldfinch	<i>Carduelis tristis</i>	1	2	9
Indigo Bunting	<i>Passerina cyanea</i>	2	0	0
Cedar waxwing	<i>Bombycilla cedrorum</i>	0	1	4
House Sparrow	<i>Passer domesticus</i>	0	0	2
Hooded Merganser	<i>Lophodytes cucullatus</i>	0	0	1
Unidentifiable Bird	n/a	23	18	19
TOTAL BIRDS**		100	51	88

**Note that 2009 totals include specimens killed along the causeway prior to the drift fence being erected.

Wildlife Road Mortality Records



Table 4 – Summary of Road-killed Mammals

Common Name	Scientific Name	2008	2009	2010
Virginia Opossum	<i>Didelphis marsupialis</i>	3	4	12
Star-nosed Mole	<i>Condylura cristata</i>	2	0	0
Little Brown Bat	<i>Myotis lucifugus</i>	5	1	1
Red Bat	<i>Lasiurus borealis</i>	2	0	2
Long-tailed Weasel	<i>Mustela frenata</i>	1	3	1
Short-tailed Weasel	<i>Mustela erminea</i>	1	0	0
American Mink	<i>Mustela vison</i>	3	1	2
Raccoon	<i>Procyon lotor</i>	11	4	10
Deer Mouse	<i>Peromyscus maniculatus</i>	10	0	0
House Mouse	<i>Mus musculus</i>	4	0	0
Unidentified mouse species		10	2	15
N. Short-tailed Shrew	<i>Blarina brevicauda</i>	0	0	2
Meadow Vole	<i>Microtus pennsylvanicus</i>	1	1	0
Eastern Cottontail	<i>Sylvilagus floridanus</i>	8	2	5
Striped Skunk	<i>Mephitis mephitis</i>	0	1	0
Muskrat	<i>Ondatra zibethicus</i>	0	2	1
House Cat	<i>Felis domestica</i>	0	2	0
Unidentifiable mammal		5	1	0
TOTAL MAMMALS**		66	24	50

**Note that 2009 totals include specimens killed along the causeway prior to the drift fence being erected.

Wildlife Road Mortality Records



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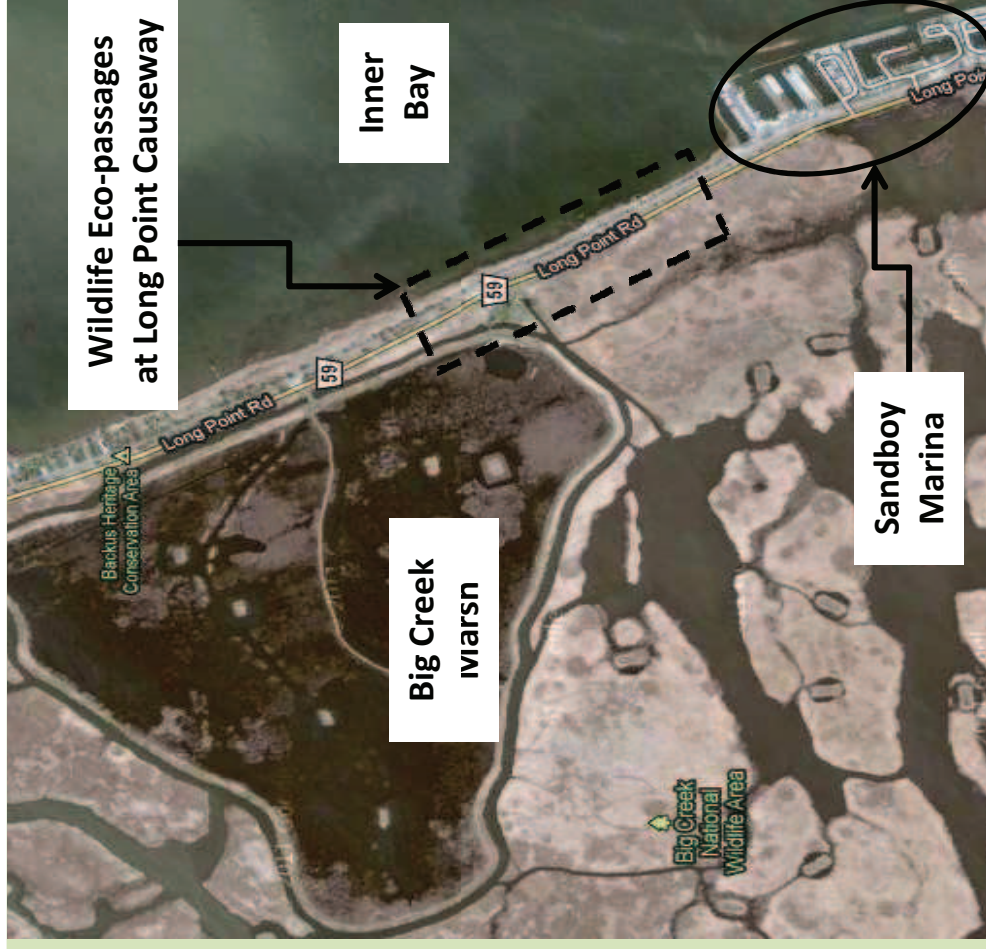
- Although the Temporary `Silt' Fencing has reduced the Mortality Rates of Reptiles by 56% since 2008, 497 Reptiles have been killed from 2008-2010. Of these reptile road-kills, 310 were turtles and 201 were Species at Risk
- Also, in the same time period, 945 Amphibians were killed on the Long Point Causeway
- The temporary fencing has had very little improvements in the deaths of Snakes, Birds and Mammals, as these creatures have the ability to travel over or around the temporary fencing and onto the Causeway

Wildlife Eco-passages Site Location Map



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- One Hydraulic Eco-passage:
 - The proposed structure is larger than the terrestrial Eco- passages to accommodate the larger flow channel and dry banks
 - Proposed 10 m wide structure
 - Dredging may be required to open a channel from Big Creek Marsh across the causeway
- Two Terrestrial Eco-passages:
 - Proposed next to the Sandboy Marina
 - The originally proposed location within the marina could lead to potential for conflict between boat traffic and wildlife and therefore, this location has been adjusted to the northwest of the Marina



Proposed Alternatives



- **Alternative 1:** Do Nothing
- **Alternative 2:** Continue with the Current Temporary Silt Fence
- Proceed to Construct the Three (3) Selected Wildlife Eco-passages Near the South End of LPC
 - **Alternative 3:** Concrete Box Culverts with Barrier Fence
 - **Alternative 4:** Steel Culverts with Barrier Fence
 - **Alternative 5:** Open Grate Culverts with Barrier Fence
- **Alternative 6:** Head –starting and other Turtle Reproductive Intervention Measures (Nest Protection and Artificial Incubation)



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Alternatives

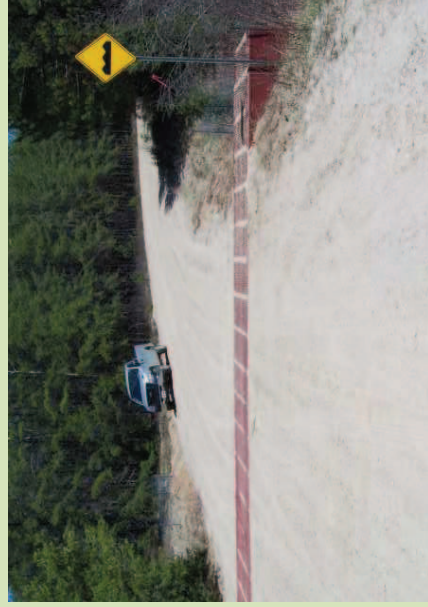
Box Culverts



Steel Culverts



Open Grate Culverts



Criteria for Evaluation of Alternatives



- Technical Feasibility
 - Can it be done?
 - Is the technology proven?
 - What is the risk with the new technology?
 - Operational Accreditation Requirements?
- Environmental Impact
 - Does it comply with Environmental Regulations?
 - Are the environmental impacts known, or can they be predicted?
 - Can the environmental impacts be mitigated?

Criteria for Evaluation of Alternatives



- Economic Feasibility
 - Capital Cost
 - Operation and Maintenance Cost
 - Life Cycle Cost Analysis
 - Economic Sustainability
- Social Impact
 - Financial Implications for residents
 - Impacts on economic development opportunities and the local business community
 - Impacts on land use and urban structures
 - Impacts on quality of life
 - Schedule for implementation
 - Longer term planning considerations

Next Steps



- Obtain feedback on proposed alternatives
- Consider other alternatives that may be suggested
- Evaluate alternative strategies for reducing wildlife mortality and re-establishing hydrology at Long Point Causeway
- Continue exchanges with Review Agencies, Liaison Committee Members and other stakeholders
- Recommend preferred alternative
- Recommend a monitoring and evaluation program
- Prepare Environmental Study Report