# Stewardship Plan For Ottawa's Great Forest

South March Highlands – Carp River Conservation Inc. All photos in this presentation were taken in or of the South March Highlands]

### Consider a Proposal:

Total Investment \$142 M
 Initial One-Time Investment \$15 M
 Subsequent Investment \$127 M

Annual Return: > \$27.8 M
Time to Initial Benefit: Zero
Payback Period: 5 Years
Benefit Horizon: Perpetual

Would you consider it?



## Located At The End of Carp Ridge



## A Wild Island Inside Ottawa 10,000 Years Old 3x Larger Than Stanley Park

Old Growth Trees > 100 Years Old

30 Eco-Types Of Vegetation



Visible Canadian Shield

10 Distinct Habitats

### Only Location In Ottawa with Exposed Canadian Shield



## Glaciation & Ancient Sea on Display



In area B, glacial chatter marks (above); striations (top right) and crescent gouges are evident. Only chatter marks and crescent gouges provide ice movement direction. The striated surface retains a remnant mm-thick glacial pavement of semi-fused quartz grains.









A – remnant (symmetrical?) ripple marks; B, C trough cross beds; D- Eroded Algal mounds? All features suggest a low energy tidal, perhaps estuarine, setting when the area was close to the equator with no vegetation as we know it.





## Cultural Heritage Ancient Archaeological Sites



### Euro-Canadian Sites Too



McMurtry's Tannery (Circa 1860)

#### Also:

- Several 19<sup>th</sup> Century homestead sites dating back to 1820 (as old as Pinhey's Point)
- Richardson Stone House dating back to approx. 1860 (as old as the Log Farm)
- A Feldspar Mine dating approximately to 1919-1921 (unique in Ottawa)

#### Natural Heritage: Densest Bio-Diversity In Ottawa [Brunton, 2008]

Over 679 Species: 440 Native Plants 164 Avian 75 Mammals, Fish, Amphibians, Reptiles

Unknown Number of Insect, Fungi & Bryophyte Species

> All Within an Area of 3 x 4 km

### **Provincially Significant Life Science Area**

895 Hectares Rated ANSI

Highest Floristic Diversity of Any Natural Area in Ottawa

> 5.08 = Highest Coefficient of Conservation in Ottawa

440 Species <u>Native</u> Vascular Plants

26 Species Traditionally Used for Native Medicine

2 Endangered 6 Provincially Rare 64 Regionally Rare 50 Uncommon Native Vascular Plants

## Old Growth Commonly Found



## + Provincially Significant Wetland Complex

114 Hectares Rated ANSI

164 Avian Species Observed

1 Endangered
 4 Threatened
 5 Special Concern
 30 Regionally Rare
 Avian Species

## **19 Known Species At Risk**

### **Endangered or**

### **Threatened**

- American Ginseng
- Butternut
- Loggerhead Shrike
- Bobolink
- Whip-poor-will
- Golden Winged Warbler
- Olive Sided Flycatcher
- Western Chorus Frog
- Blanding's Turtle
- Eastern Musk Turtle

## <u>Special</u>

### <u>Concern</u>

- Bridle Shiner
- Short Eared Owl
- Black Tern
- Common Nighthawk
- Snapping Turtle
  - Eastern Milksnake
- Monarch Butterfly
  - Bald Eagle
  - **Red Headed Woodpecker**

## **18 Candidate SAR Also Found in SMH**

- Evening Grosbeak Eastern Wood Peewee Wood Thrush Bank Swallow American Bullfrog American Kestrel Belted-Kingfisher Eastern Red-Backed Salamander Field Sparrow
- Blue-Spotted Salamander
  American Toad
  Bluntnose Minnow
  Boreal Chickadee
  Killdeer
  Midland Painted Turtle
  Northern Two-Lined Salamander
  Green Frog
  Wood Frog

### Less Than 1/3 is Protected Today



## Non-Sustainable Subdivisions Planned

- 1996 Beaver Pond Dam
  - No MoE Environmental Assessment
  - No MNR LIRA permit
  - No DFO permit for dredging the lake
- 2006 Kizell converted into a SWM Cell
  - No Environmental AssessmentNo pollution control
  - Contradicts UNF wetland designation
- 2010 Regional approved locating SWM Facility in Carp River Floodplain

Cannot possibly function during floods

- Future plans depend on diversion of storm water from Shirley's Brook to Kizell
  - Not permitted by Subwatershed Plan
  - Increases Flood risk in areas already subject to flooding



### Flooding Risk Is Real

 1500 Homes Flooded July 24, 2009 in Stittsville, Kanata North, Kanata South, West-Carleton

#### Common Causes

- Failure to account for cumulative storm water flows from subdivisions
- Failure to respect recommendations of applicable Subwatershed Plans
- Excessive removal of floodplain and wetlands
- Planned subdivisions in the SMH are NOT in accordance with applicable Subwatershed Plans



#### Beaver Pond May 2010

### Stewardship for Ottawa's Great Forest

South March Highlands = most accessible of Ottawa's major forests

- Accessible by OC Transpo with larger forest area than Stoney Swamp
- Malborough Forest & Larose Forest are larger but not accessible

#### SMH has significant value as Green Infrastructure

- Natural Habitat functions
- Storm Water Retention
- Removal of Air Pollution
- Groundwater Filtration

#### Requires active stewardship to:

- Manage responsible use
- Protect sensitive areas
- Maximize educational value
- Maximize recreational value
- Celebrate eco-toursim value



## **Stewardship Proposal**

Acquire SMH from Developers

- City of Ottawa acquires Beaver Pond Forest
- NCC acquires remaining areas as part of Greenbelt Master Plan

South March Highlands Carp River Conservation will

- Manage the area at no cost to the City using volunteers
- Education programs in partnership with Ottawa School Boards
- Recreation programs in partnership with Kanata North Recreation Centre

Eco-tourism in partnership with Ottawa Tourism Bureau



### **Operational Care**

#### Access & Connectivity

- Trail Mapping & Maintenance
- Wildlife Corridor Protection
- Restricted & Controlled Areas

#### • Forest, Trail & Stream Maintenance

- Erosion Management
- Litter Control
- Invasive Species Control





### Patrols

- Appropriate Usage
- Safety / Lost Persons
  - Lost & Found



### World Class Educational Centre

### Natural Heritage

- Geology & Geomorphology
- Forest Function & Vegetation
- Wildlife

### Cultural Heritage

Archaeological ResourcesAboriginal Culture & Medicine

### Physical Education & Recreation

- Sports & Fitness
- Therapeutic Health
- Well-Being

### Language & Visual Arts



Outreach
Home Schools
JK – 12
University & College
Community Education
Online Education

### Living Lab

### Appropriate Use Management

### Ecotourism

- Events & Ceremonies
- Destination Marketing
- Self Guided Tours
- Retained Tourism

### Recreational Usage

Centered on Beaver Pond Designated Use Trails within the urban boundary

## Reserved Areas

Primarily on trails beyond the urban boundary



### Value of Green Infrastructure

#### • Value of replenishing Natural Resources

\$2 M / year for cleaning Air & Water, pollination, resisting invasive species [Suzuki Foundation estimate]

#### **Educational Value**

\$0.3 M / year ongoing reduced travel cost for school field trips based on 2 hour travel time reduction

\$priceless: able to experience nature rather than read about it

#### Recreational Value

\$0.5 M / year user fees for outdoor recreation programs managed by the Kanata North Recreation Centre (KNRC) based on \$5 / person / day

#### • Eco-Tourism Value

\$25 M / year increased economic value from 1% of 7.8 M visitors staying 1 extra day to explore Ottawa's Great Forest



### Advantage of Green Infrastructure

- Black Infrastructure must be rebuilt / repaired periodically
- Green Infrastructure is perpetually replenished by nature

Disadvantage: Requires NO concrete to be poured

- Disqualified for Federal Green Infrastructure Funds (!!!)
- Even though this will create jobs
- Even thought this will deliver cleaner Air and Water than the current development proposals



### Myth vs Facts

#### SMH is Yet Another NIMBY Situation

- I'm not from Kanata never even lived there
- Support for SMH comes from Stittsville, Carp, West Carleton, Kanata, Nepean, Orleans, ... across Ottawa
- And from 32 countries around the world

### This is a Solution for a Kanata Problem not an Ottawa Problem

- Ottawa's MOST Bio-diverse Area
- Highest Floristic Diversity In Ottawa
- Largest Deer Wintering Yard In Ottawa
- Oldest Cultural Heritage in Ottawa Provincially Significant
- Highest rating in Urban Natural Features Inventory
- Most benefits from Stewardship Plan accrue outside Kanata

#### Why Bother – Lot's of Forest Remains

- Most species loss is due to lost Critical Habitat
- Critical Habitat is non-replaceable
- We are running out of Critical Habitat too!

### Does City Council Get It?

- Doesn't feel responsible for solving a planning mistake
- Do not see the urgency
- Have not instructed Staff to hold development plans
- Expect all purchase costs to be carried by Kanata
- See a land purchase instead of Public-Public Partnership
- Have not tried to engage the Province or Federal Government
  - Generally lacks vision and leadership on this economic opportunity because it is an environmental opportunity?

## Will You Help?

4742 people via Facebook 1025 people via Twitter 183 people via E-Mail

> All Major Ecological Groups in Ottawa

Ottawa School Boards Ottawa Macro-Ecology

<u>All</u> of the Community Associations in Ottawa