Presentation Overview

- Background on Parks Canada canals
- Parks Canada Update
- Challenges
- Asset Management
- Asset Infrastructure
- Investment decision making
- Future Focus
Canal Overview
Canals Overview

- **Nine Canals** – Trent-Severn Waterway, Rideau Canal, and Sault Canal in Ontario; Chambly Canal, Lachine Canal, St. Ours Canal, St-Anne-de-Bellevue Canal, and Carillon Canal in Quebec; and St. Peters Canal in Nova Scotia

- **Total Asset Value** - $5.7 Billion Dollars

- **Locks**
  - Trent-Severn - 42 individual lock chambers, 2 lift locks, and one marine railway covering 386km
  - Rideau Canal – 50 individual lock chambers (half are still hand operated), covering 202 km including 19 km of excavated channels
  - Quebec Canals – 17 individual lock chambers in 5 canals

- **Bridges and Dams**
  - Trent Severn - 156 dams and 27 road bridges (14 are swing bridges) and 16 other bridges
  - Rideau Canal - 40 dams and water retaining structures, 26 bridges and 4 other bridges
  - Quebec Canals – 38 dams and water retaining structures, 23 road bridges, and 26 other bridges

- **Water Management**
  - Permit safe boating, help maintain water quality, source of drinking water for municipalities, provide water for recreational activities, protect fish and wildlife habitat, mitigate flooding of agricultural, generate hydro-electric power
  - Trent-Severn Waterway – 21 Hydro generation facilities – 2MW to 12MW
  - Rideau Canal – 5 Hydro generation facilities – 187KW to 3.4MW
Management Challenges

• **Recreational Boating**
  – Length of the season
  – Hours of operation
  – Use of mobile crews

• **Water Management**
  – Maintaining navigational water levels and flows
  – Managing expectations on reservoir lakes
  – Working with Hydro for flow

• **Governance Questions**
  – Private Members Bill
  – Trent-Severn Working Group

• **Asset Management Decisions**
  – Age of infrastructure – decisions based on risk
  – External pressure from communities e.g., what we do, and how we do it
  – Internal and external capacity to manage projects
Parks Canada Update

• Contributions to Budget 2012 – $29.2M
• Focused service delivery offer across the country
• Restructuring of canals within Parks Canada
  – Focused asset management capacity - separation of operations from strategic capital planning
  – Increased emphasis on revenue generation potential, partnerships and innovations in what we offer
Hydro Development

• Trent-Severn Waterway – 21 Hydro generation facilities – 2MW to 12MW
• Rideau Canal – 5 Hydro generation facilities – 187KW to 3.4MW
• Increased collaboration with Ontario Water Power Association
• Joint project to streamline process related to hydro development on Parks Canada lands. Focus in four areas:
  – Site Release
  – Licensing
  – Revenue
  – Communications
Asset Management

Ensure a focus remains on all assets...

*Daily priorities do not trump long-term planning and management*

- **Daily Operations – Waterways Units**
  - Lock gates and swing bridges
  - Water level changes at dams
  - Routine inspections for dams, and bridges
  - Building maintenance
  - Seasonal maintenance

- **Strategic /High Risk – Executive Directors Office**
  - Dam safety reviews
  - Engineering dam inspections
  - Large project management e.g., Bolsolver Dam
  - Developing a long-term capital plan
## Asset Infrastructure

**CRV, Condition and DW**

<table>
<thead>
<tr>
<th>Waterway</th>
<th>Current Replacement Value ($M)</th>
<th>Condition Rating (as % of CRV)</th>
<th>Deferred Work ($M)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Good</td>
<td>Fair</td>
</tr>
<tr>
<td>Carillon</td>
<td>171</td>
<td>1%</td>
<td>98%</td>
</tr>
<tr>
<td>Chambly</td>
<td>244</td>
<td>13%</td>
<td>40%</td>
</tr>
<tr>
<td>Lachine</td>
<td>710</td>
<td>8%</td>
<td>16%</td>
</tr>
<tr>
<td>Rideau</td>
<td>929</td>
<td>11%</td>
<td>59%</td>
</tr>
<tr>
<td>Ste.-Anne-de-Bellevue</td>
<td>120</td>
<td>0%</td>
<td>40%</td>
</tr>
<tr>
<td>St.-Ours</td>
<td>159</td>
<td>24%</td>
<td>76%</td>
</tr>
<tr>
<td>Sault Ste. Marie</td>
<td>74</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>St. Peters</td>
<td>36</td>
<td>71%</td>
<td>2%</td>
</tr>
<tr>
<td>Trent Severn</td>
<td>3,311</td>
<td>16%</td>
<td>36%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5,754</strong></td>
<td><strong>13%</strong></td>
<td><strong>40%</strong></td>
</tr>
</tbody>
</table>
Current Replacement Value ($M)

- Lachine, 710, 12%
- Chambly, 244, 4%
- Carillon, 171, 3%
- Rideau, 929, 16%
- Ste.-Anne-de-Bellevue, 120, 2%
- St.-Ours, 159, 3%
- Sault Ste. Marie, 74, 1%
- St. Peters, 36, 1%
- Trent-Severn, 3,311, 58%
Deferred Work ($M)

- Lachine, 180, 17%
- Rideau, 105, 10%
- Ste.-Anne-de-Bellevue, 16, 1%
- St.-Ours, 6, 1%
- Sault Ste. Marie, 23, 2%
- St. Peters, 9, 1%
- Trent-Severn, 677, 63%
- Chambly, 37, 3%
- Carillon, 24, 2%
Trent-Severn Waterway Asset Investment Picture
1833 to 2013

Major Structural Materials
- Masonry (Rehab every 50 yrs.)
- Timber (Replace every 20-30 years)
- Concrete (Minor Rehab 40 yrs. / Major Rehab 80-100 yrs.)
- Steel (Minor Rehab 20 yrs. / Major Rehab/Replacement 60 yrs.)

Majority of Assets Built Between 1896-1926

1960s Dept. of Transport Modernization Phase

EAP Funding (2009-10)
Investment Decision Making

• Parks Canada Agency risk based approach
  – Previously – competitive by business unit
  – Now – risk based to ensure investment based on highest risks

• Current projects
  – Canals getting the largest investment of any park or site
  – Largest project – Bolsolver Dam $29M
  – Ongoing relationship with PWGSC for project management

• Investment partnership opportunities
  – Small capital projects e.g., docks
  – Hydro upgrades – log lifters, stop logs, hydraulic gates

• Twenty-year capital plan
  – Based on inspections to target risks
  – Ensures long-term view and strong basis for seeing funding
Future Focus

• Program Measurement Framework 2014-2015
  – Dam safety reviews are completed for 39 of the Agency’s high risk dams
  – Condition rating of 75% of assets are maintained and the condition rating of 10% of assets rated as fair is improved by March 2015

• Continue implementation of the organizational changes
  – strengthening asset management

• Develop the 20-year asset investment plan
Thank you