

# Intake Screen Maintenance

2019 Clean and Safe Drinking Water Workshop

**Donald Burden, P.Eng.**

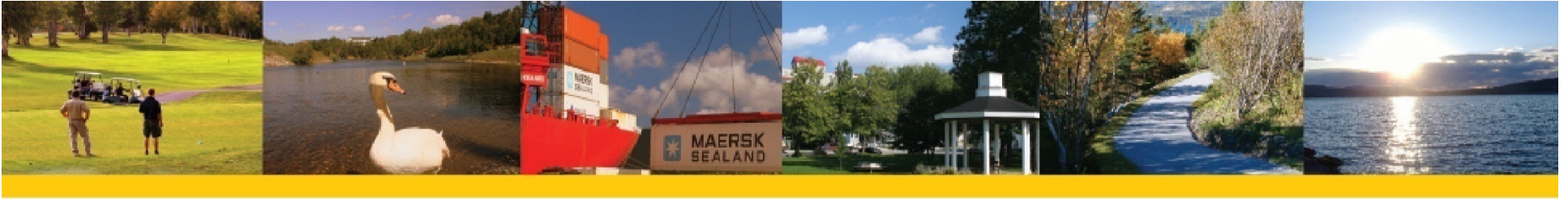
Director of Public Works, Water, and Wastewater - City of Corner Brook

March 26, 2019



# Presentation Outline

- Permit to Operate
- Corner Brook's Intake System
- Intake Maintenance
  - Daily
  - Yearly
  - As required
- Costs
- Safety
- Acknowledgements
- Questions



# Permit to Operate

Develop a schedule for screen maintenance

- Each location develops a schedule based on history
- Each location will be different depending on location of intake i.e. pond vs. river

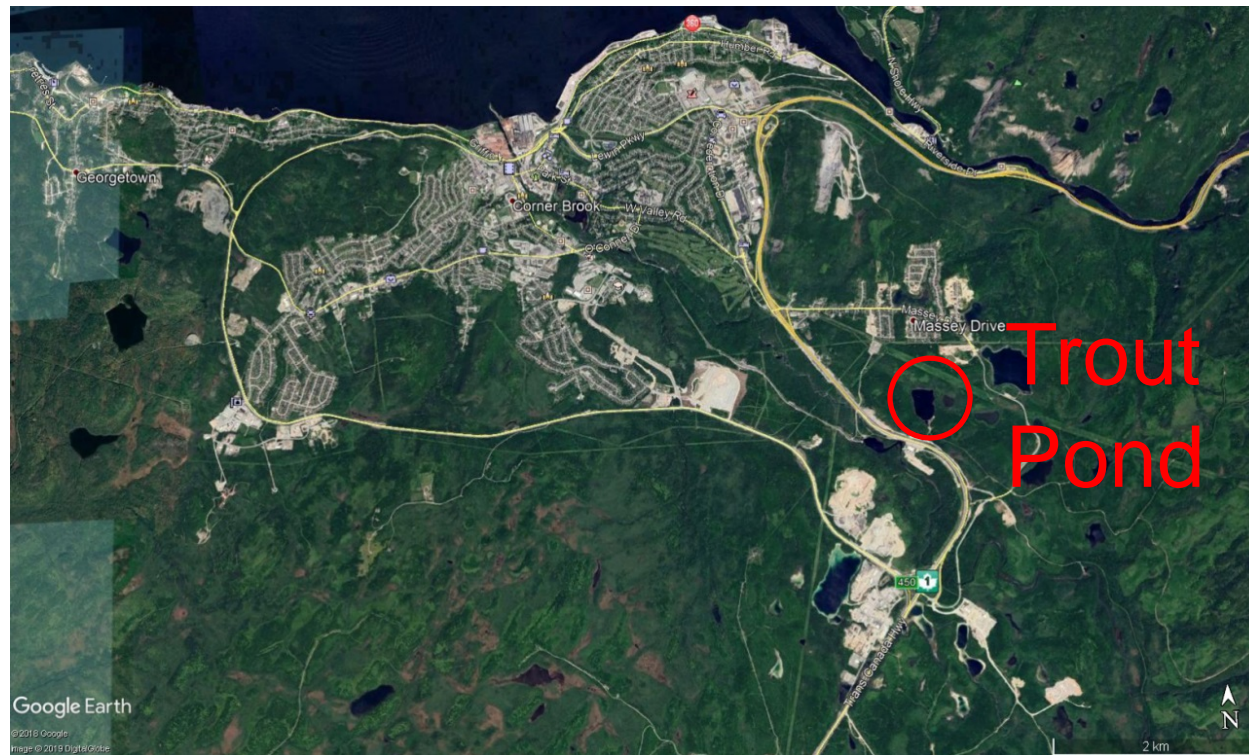


# Corner Brook's Intake System



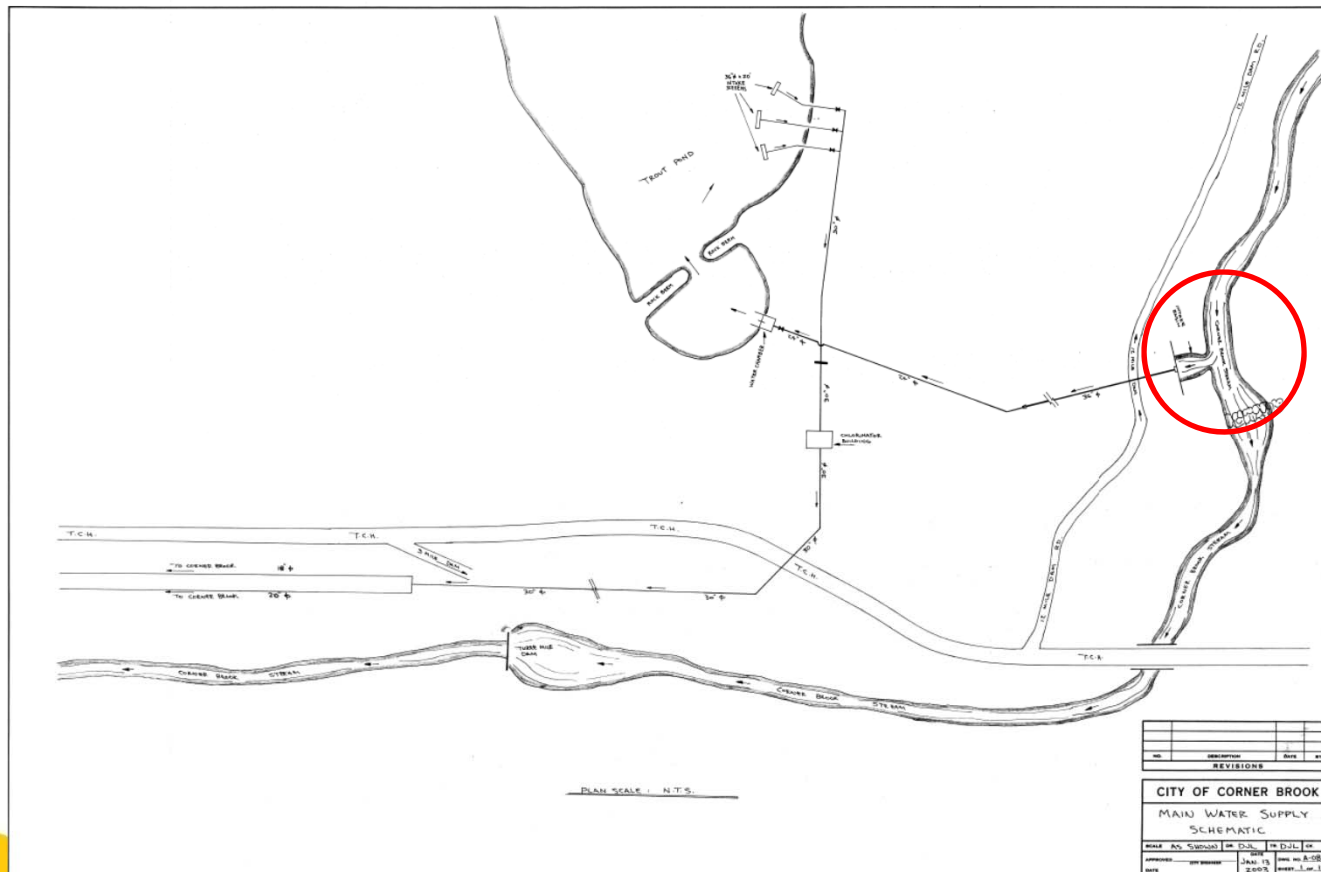


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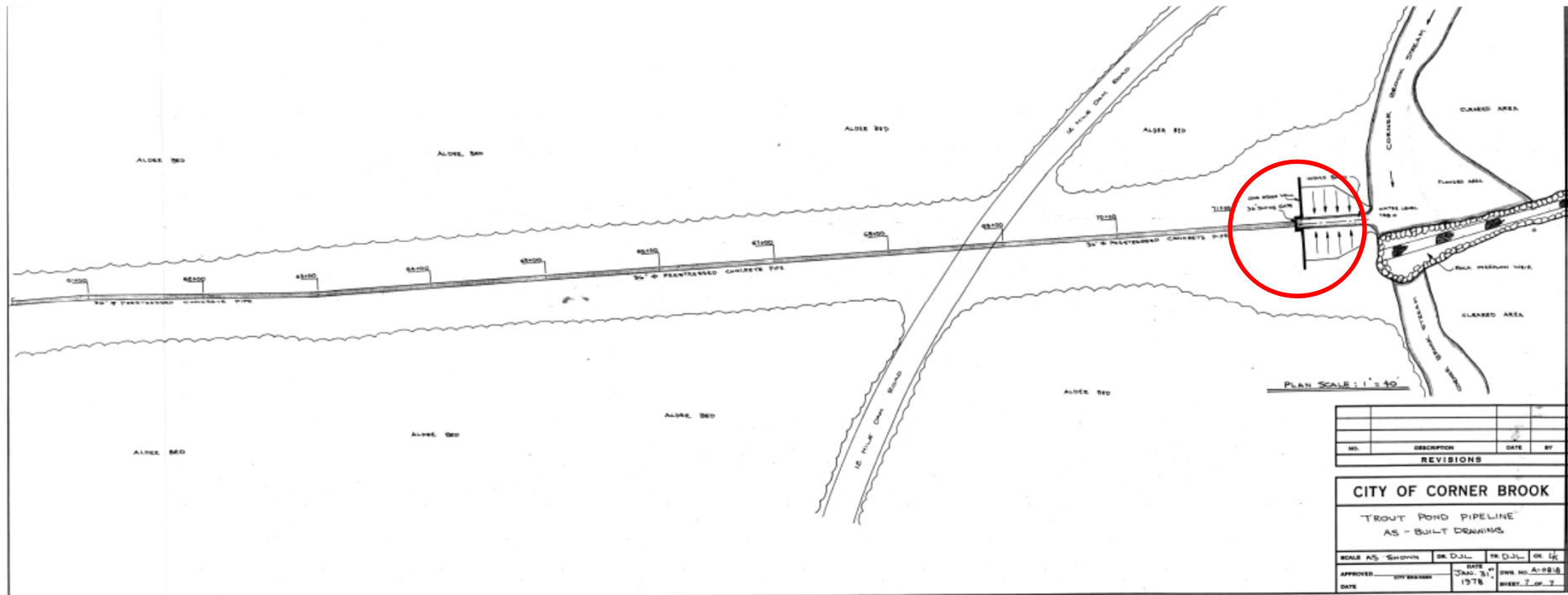


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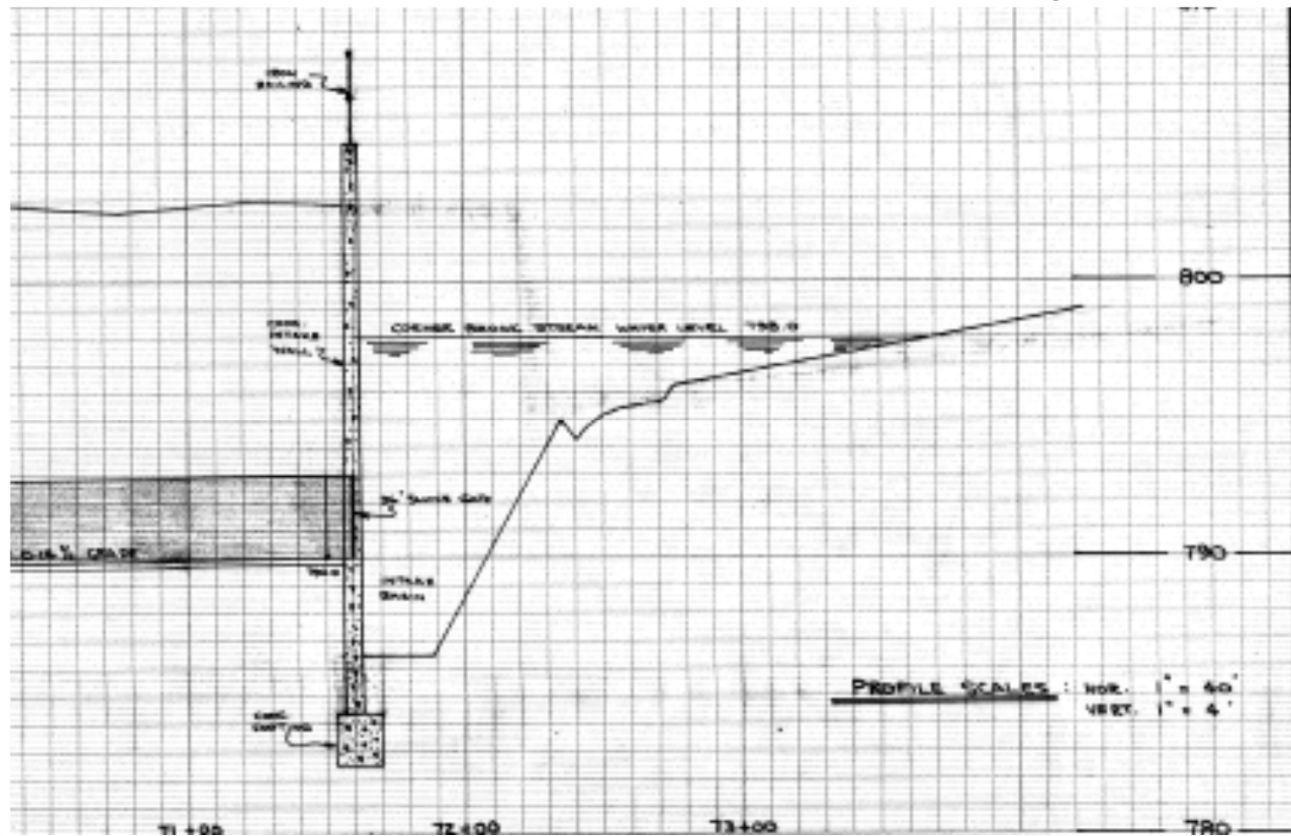


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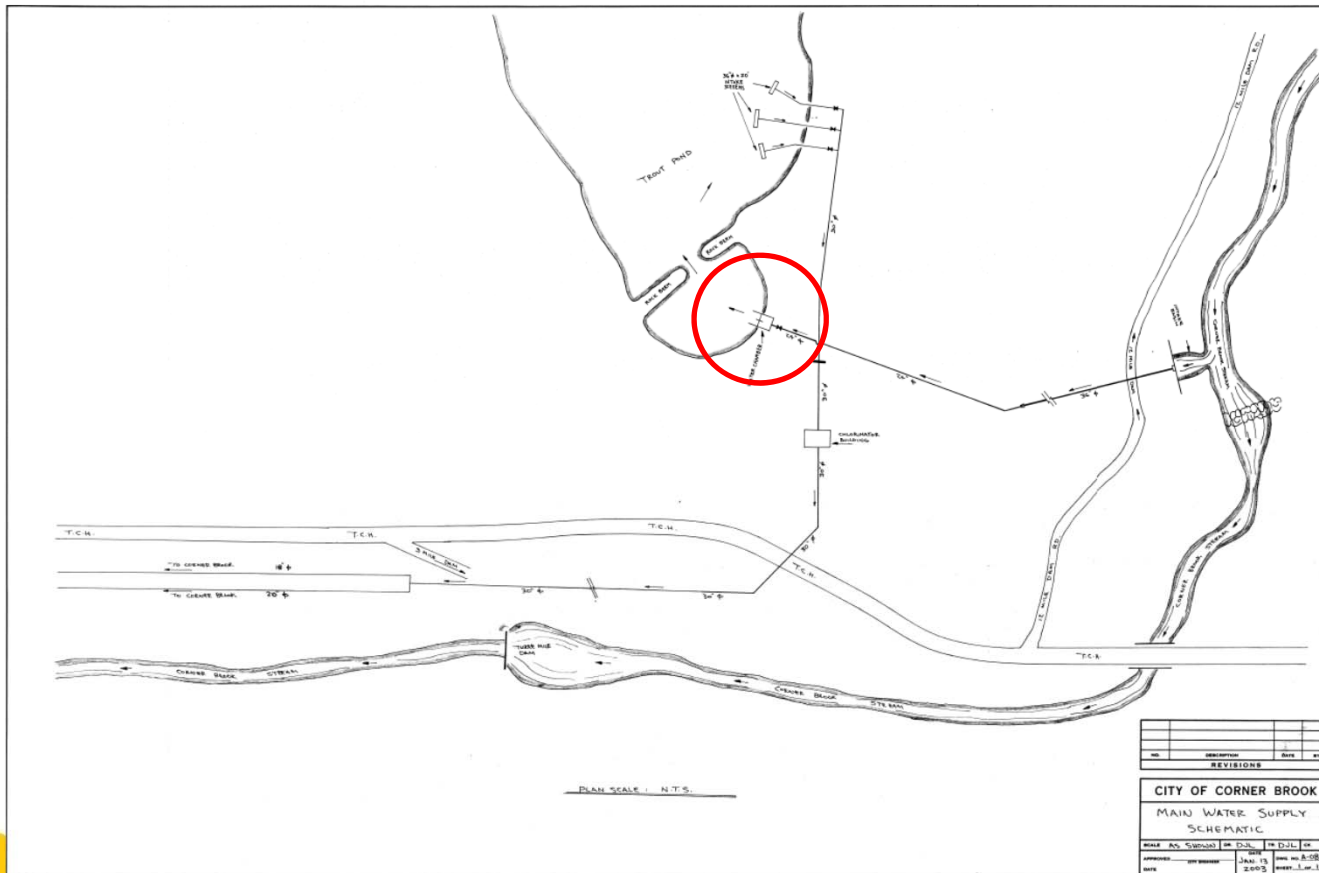
# Corner Brook's Intake System







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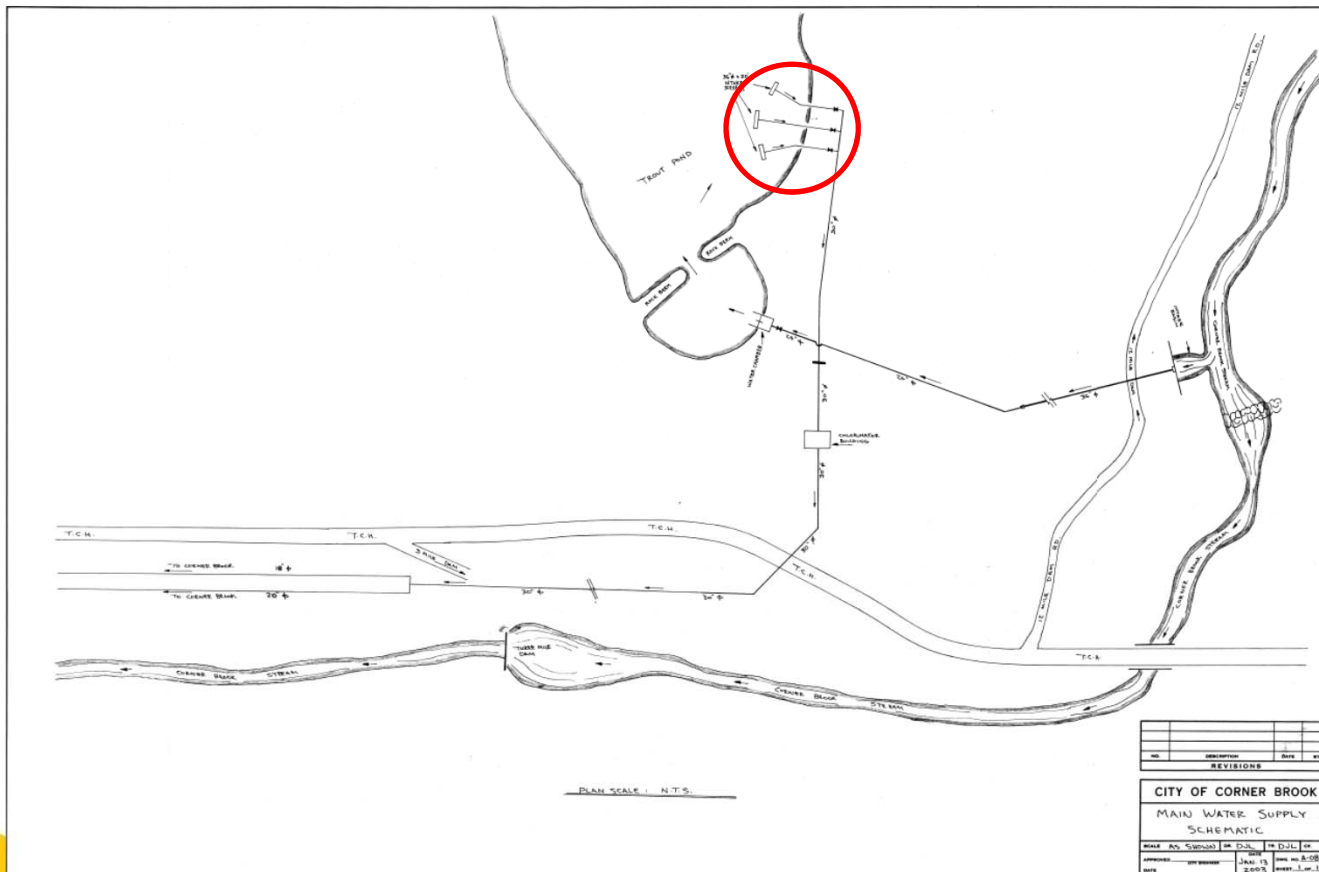


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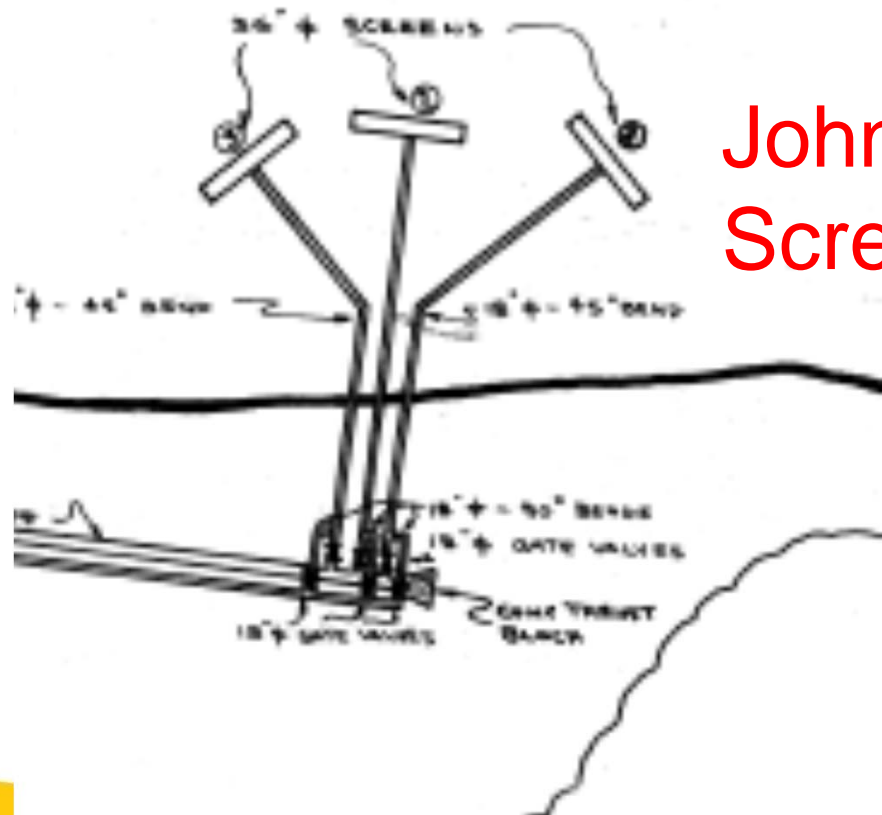


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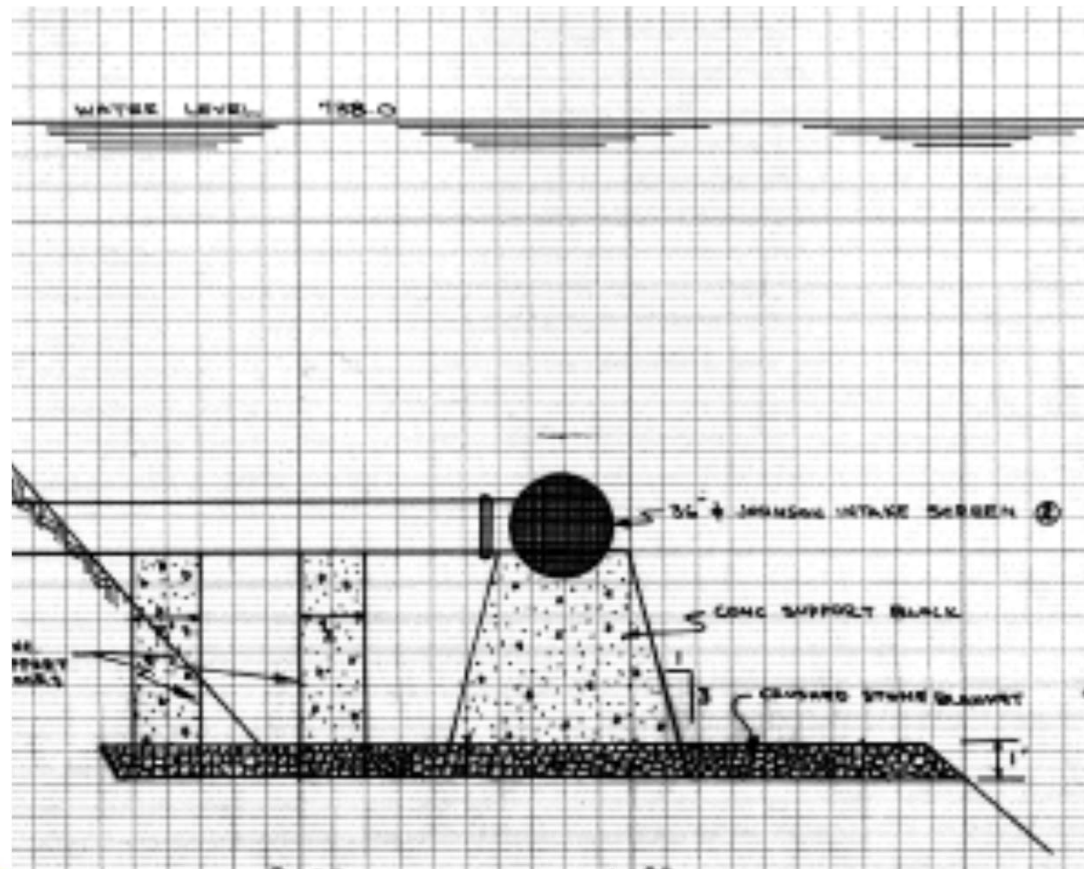
# Corner Brook's Intake System



Johnson  
Screens

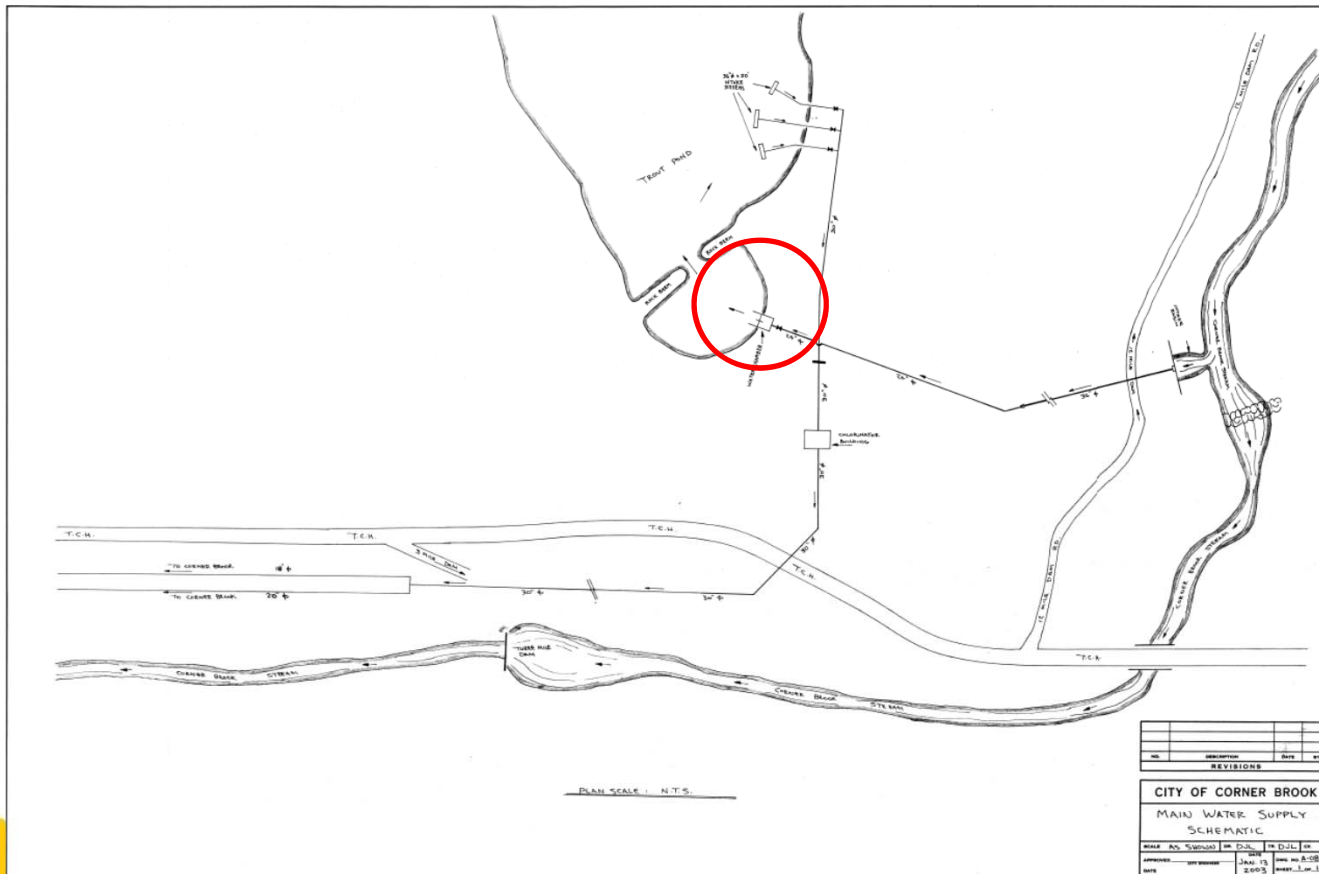


# Corner Brook's Intake System





# Daily Intake Maintenance



| NO.                         | DESCRIPTION | DATE          | BY            |
|-----------------------------|-------------|---------------|---------------|
| REVISIONS                   |             |               |               |
| <b>CITY OF CORNER BROOK</b> |             |               |               |
| MAIN WATER SUPPLY SCHEMATIC |             |               |               |
| DESIGN                      | NO. 500000  | DR. D.J.L.    | DR. D.J.L.    |
| APPROVED                    | DATE        | DATE          | DATE          |
|                             |             | June 13, 2005 | June 13, 2005 |



# Daily Intake Maintenance





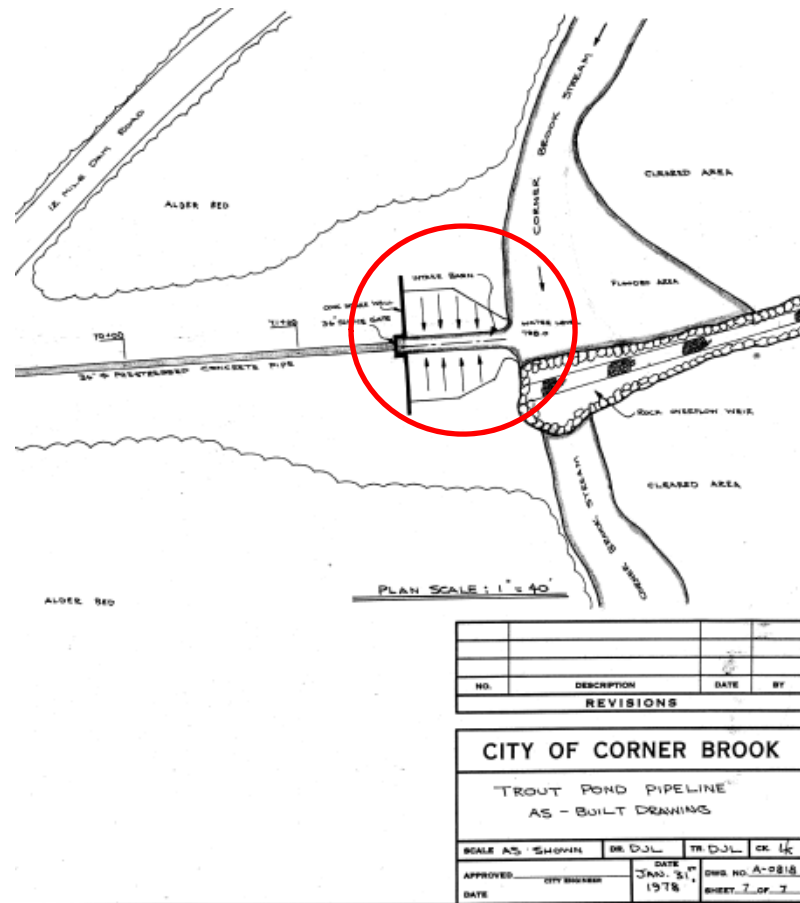
# Daily Intake Maintenance







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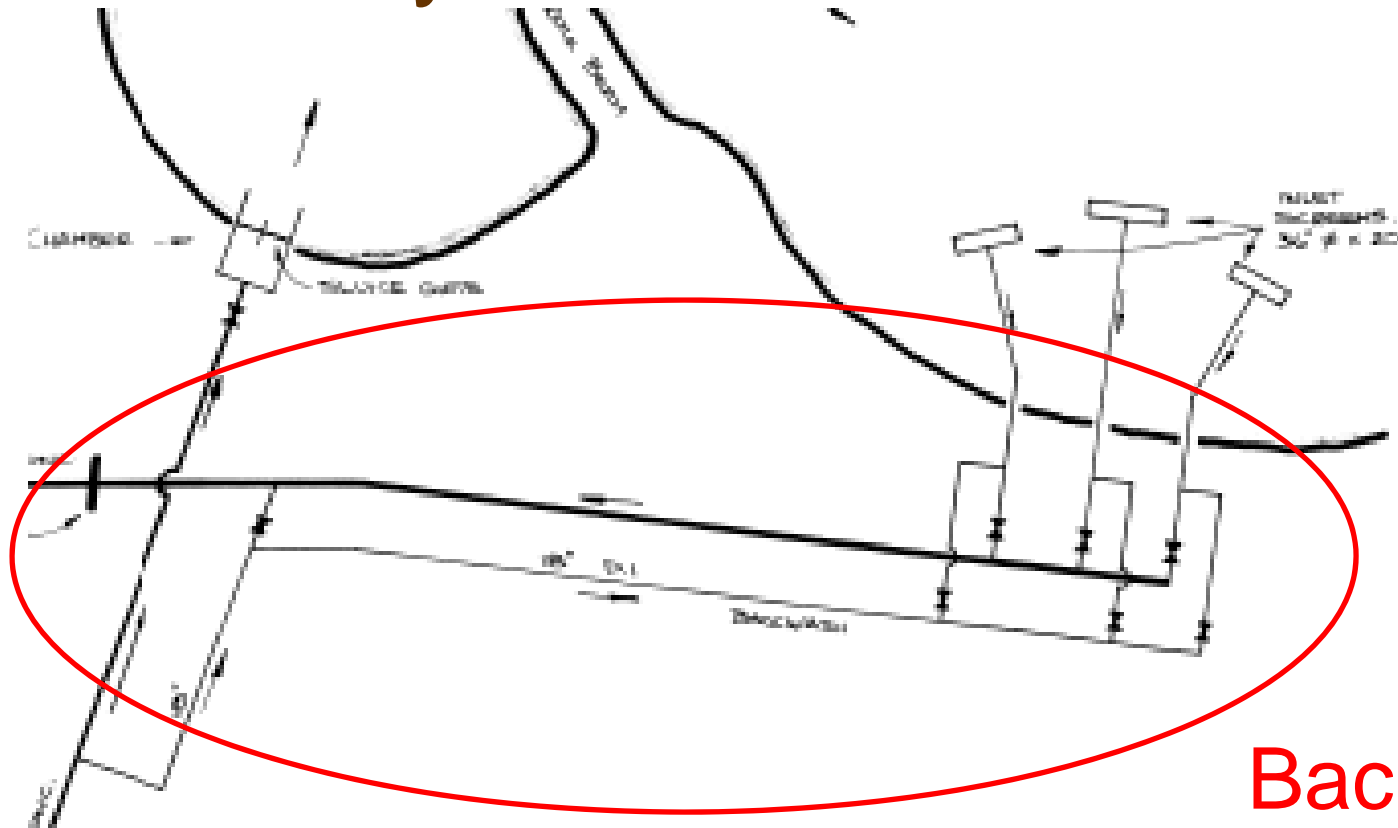


# Daily Intake Maintenance





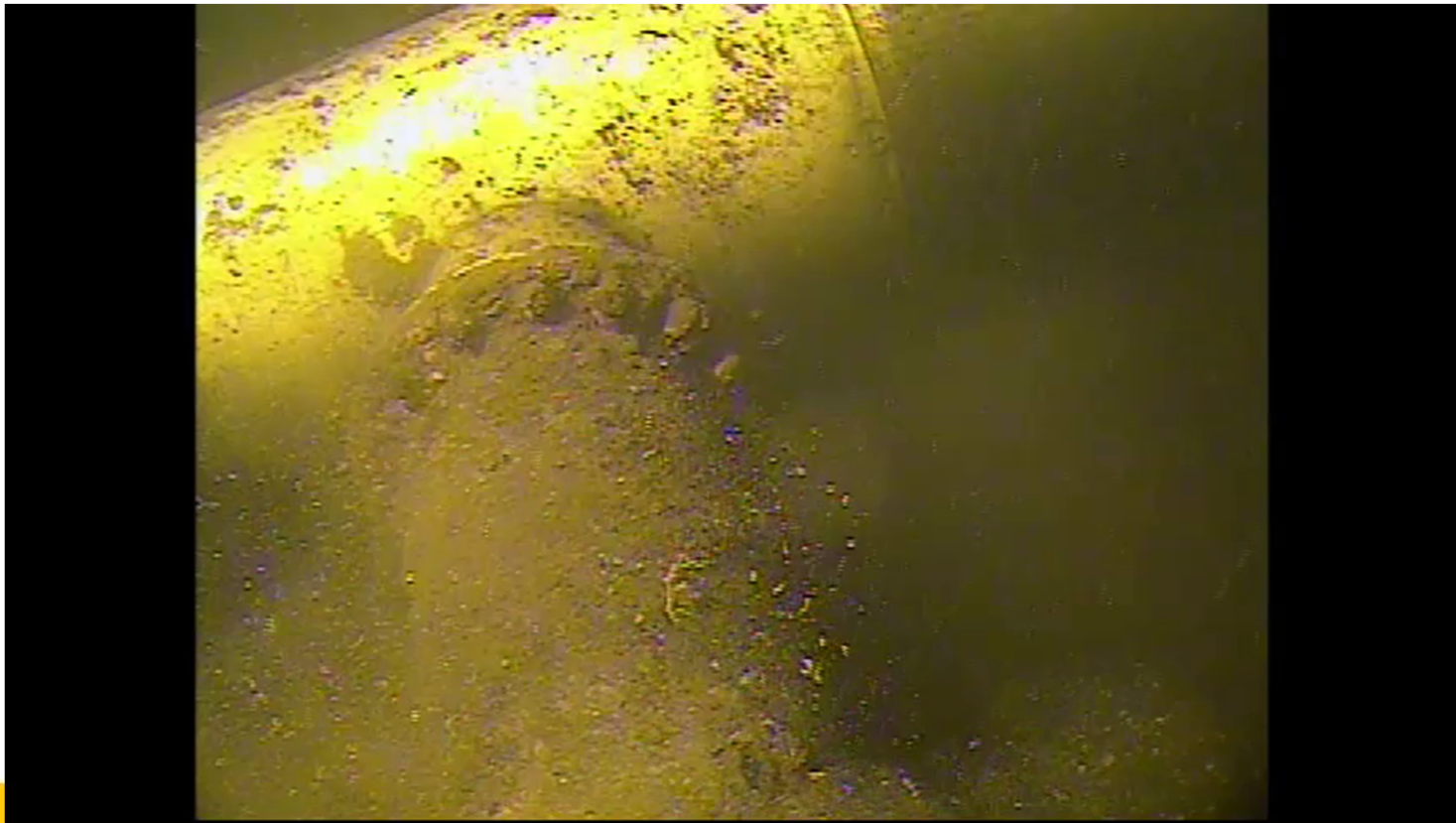
# Yearly Intake Maintenance



Backwash



# Intake Screen Maintenance





# Intake Maintenance





## Intake Maintenance Costs

- Cost of diving services - \$200/hr
- Intake screen inspection and cleaning - 2 hrs
- Trash rack inspection and cleaning - 10 hrs
- Vacuum truck - 13 ½ hrs @\$125/hr



# Safety

**Title: CONTRACTOR ORIENTATION** Date of Issue: 2015-11-17  
Page: 1 of 1  
Version: 1

**2.0 SAFETY ORIENTATION CHECKLIST (Contractors)**

Contractor's Name: Bailey's Marine Project: Trout Pond & CB Stream  
Inspection & cleaning  
 Date: July 13/17

| ITEMS COVERED  | INITIAL |
|--|---------|
| Contact information for the City of Corner Brook's OH&S Committee members  | AB      |
| City of Corner Brook's Occupational Health & Safety Policy Statement & Program   | AB      |
| Contractor compliance with City OH&S requirements and provincial act and regulations   | AB      |
| Use of Personal Protective Equipment (CSA Approved Hard Hat, CSA Approved Vest (Class 2, Level 2), CSA Approved Safety Boots, CSA Approved Eye Protection)   | AB      |
| Health & Safety Rules and Responsibilities   | AB      |
| Individual Responsibilities  | AB      |
| Penalties  | AB      |
| 3 Rights / Right to Refuse unsafe work   | AB      |
| Respectful Workplace Policy  | AB      |
| Emergency Procedures   | AB      |
| Accidents & Incidents  | AB      |
| Reporting (near miss reporting)  | AB      |
| All equipment must have a First Aid Kit and a Fire Extinguisher  | AB      |
| Pre-trip inspection requirement and copy of form used  | AB      |
| Tobacco, Nicotine & Vapor Free Workspace   | AB      |
| Drug & Alcohol Policy  | AB      |
| City of Corner Brook Job Site Audits   | AB      |
| Safety in the Depot Yard (memo)  | AB      |
| Participate in Toolbox Meetings with Supervisor & crew   | AB      |
| Training   | AB      |
| Safe Lifting Techniques  | AB      |
| Cleaning Solvents & Flammables   | AB      |
| WHMIS (SWP-11 Rev 1)   | AB      |
| Valid Certificate of Clearance from WHSCC  | AB      |
| Valid Insurance Statement - Complete with expiry date and a minimum of \$2,000,000 liability.  | AB      |
| Include all relevant certifications i.e. Traffic Control, Trenching, Power Line Hazards, WHMIS (include expiry date), etc.   | AB      |
| Driver's Licenses  | AB      |
| Does Contractor Have an OH&S Program? <b>If yes</b> , a copy must be provided  | AB      |
| I will review all City of Corner Brook safety documentation provided in this orientation with my employees prior to assigning them to complete work for the City of Corner Brook. Sign off of this review by each employee will be documented and submitted to the City of Corner Brook. | AB      |

| SWP's / Traffic Manual / Pre job Hazard Assessments                            | INITIAL      |
|--|--------------|
| General Vehicle Safety (SWP-03)  | Add revs WSP |
| Introduction to Depot Yard (SWP-24)  | AB           |
| General Heavy Equipment Safety (SWP-34)  | AB           |
| Working on the ground around mobile equipment (SWP-65)                         | AB           |
| Pre-job Hazard Assessment (Hazard Recognition, Evaluation & Control completed) | AB           |
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Orientation Given By: Signature: [Signature] Date: July 13/17  
 Contractor's Signature: [Signature] Date: July 13/17

July 13, 2017 8:30 AM

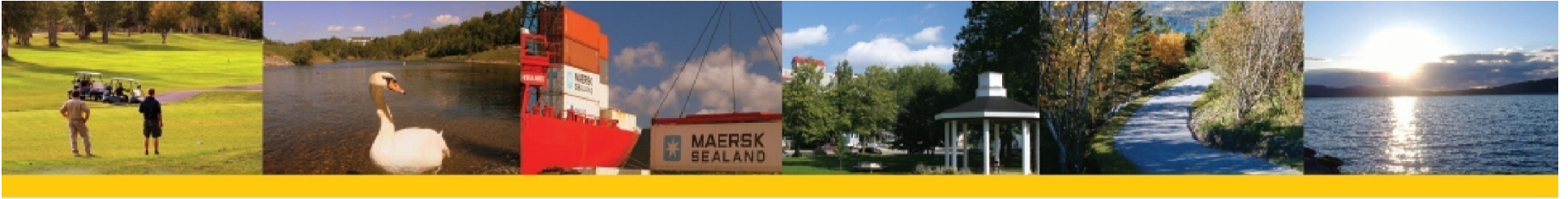




## Acknowledgements

- Keith Costello, Superintendent of Water and Wastewater, City of Corner Brook
- Gerry Lahey, Environmental Scientist, Dept. of Municipal Affairs & Environment, Water Resources Management Division





# Questions

