

AWWA/WEF Joint Utility Management Conference
Dallas Texas
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National Water and Wastewater Benchmarking Initiative

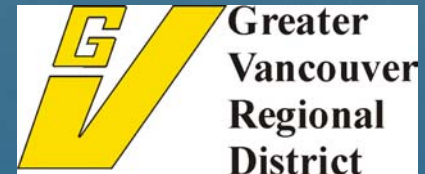
Translating Benchmarking Into Continuous Improvement:

A Canadian Partnership Makes the Leap



A **tyco** INTERNATIONAL LTD. COMPANY

David Main
Director of Asset Management
Burnaby, British Columbia
Canada



David Duthie, P. Eng
Administrator, GVRD Operations and
Maintenance Department
Burnaby, British Columbia
Canada



What is Benchmarking?



How well are we doing?

How do we compare?

Are we providing value for money?

How can we improve?

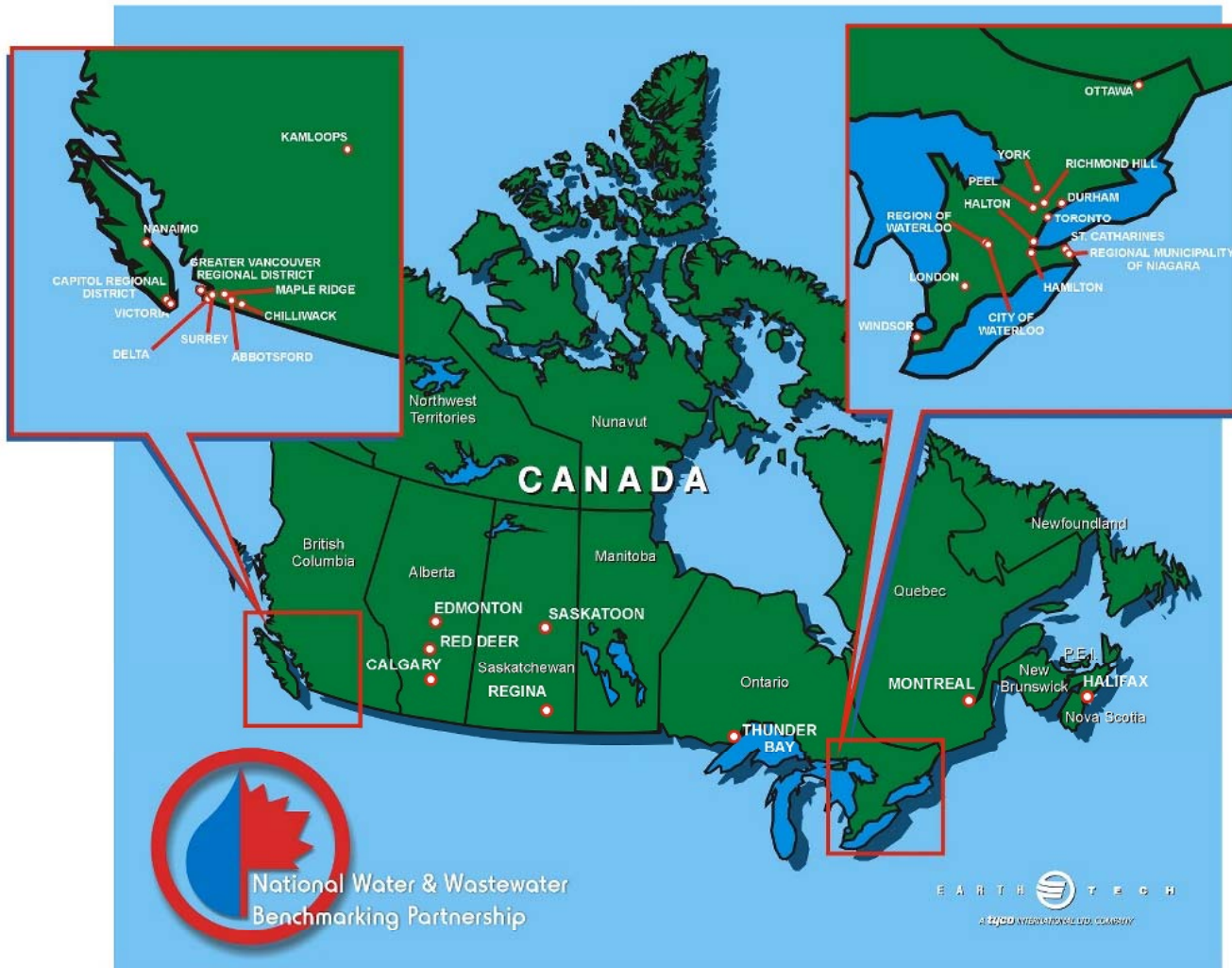


Project History



- Pilot process for wastewater utilities in 1997 with four participating municipalities (Calgary, Edmonton, Victoria, GVRD), Earth Tech, and the National Research Council of Canada)
- Expanded to 17 municipalities the following year for 1st “production” iteration
- Expanded to include water utilities in 2001, and stormwater management in 2002
- Now completing its Fifth iteration
 - **38 Wastewater and 27 Water Utilities from Halifax to Victoria**
 - **Representing approximately 60% of Canada’s population**

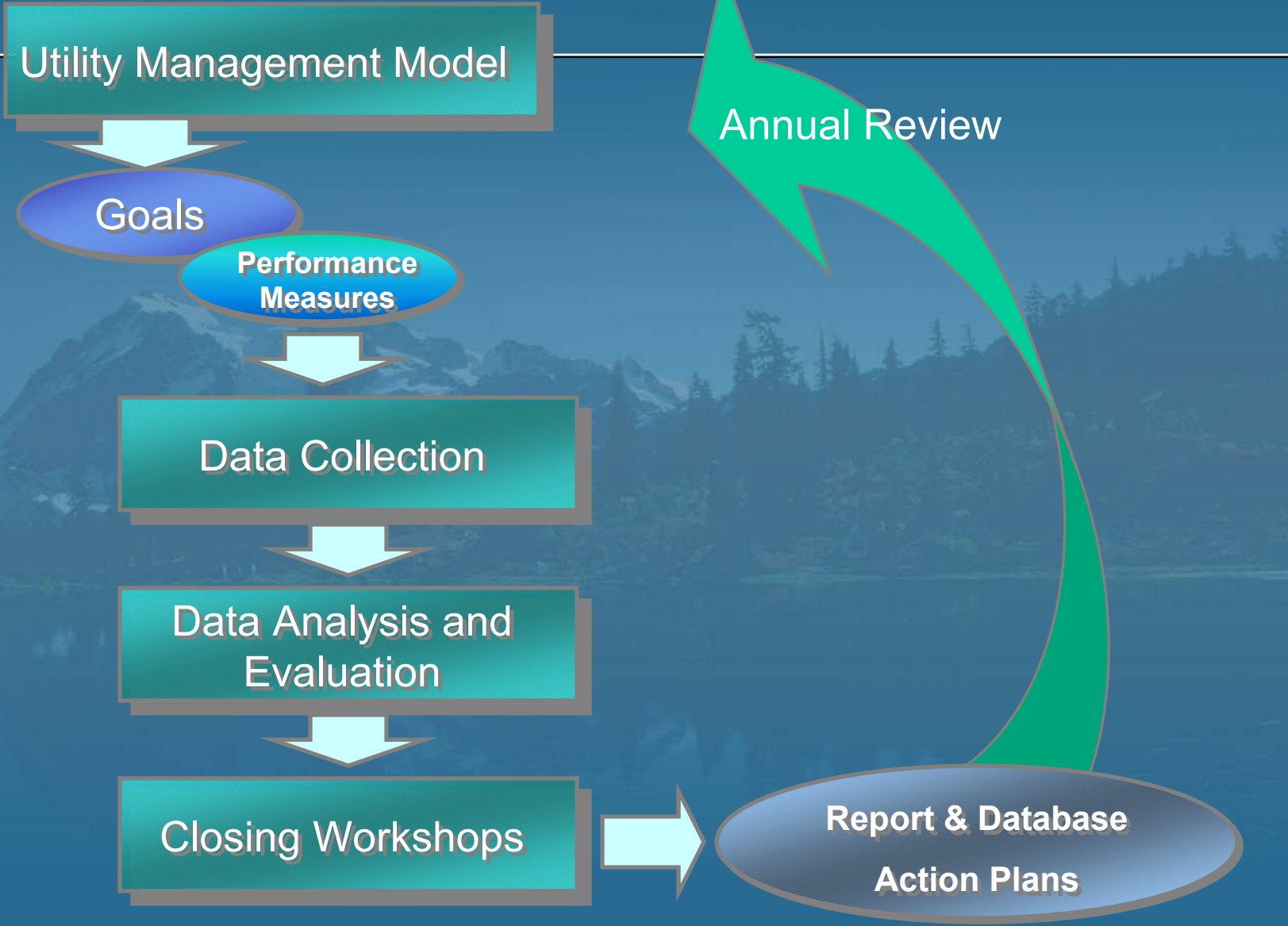
Canada: Coast to Coast



National Water & Wastewater
Benchmarking Partnership

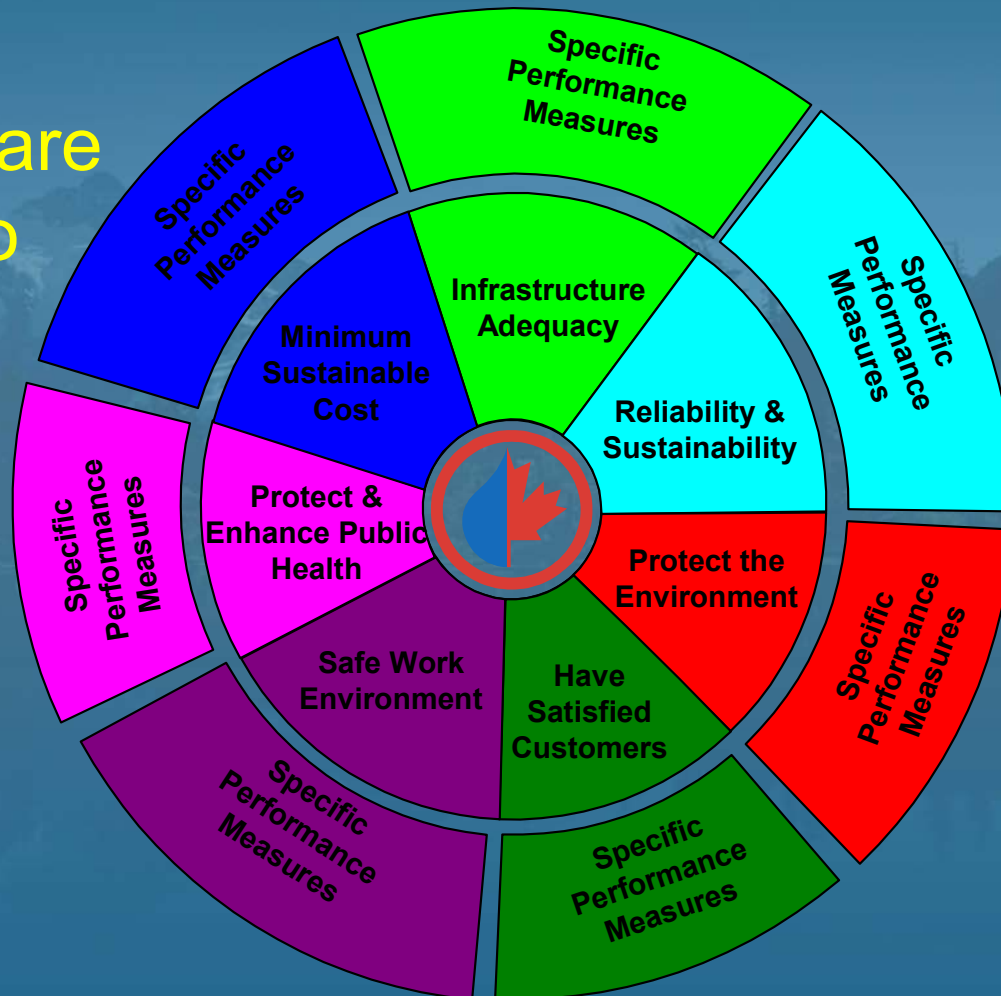
EARTH  TECH
A tyco water services ltd. company

Methodology



What do we benchmark?

7 generic goals that are common to all utilities;



- Using performance indicators that measure attainment of each goal

The Keys to Success

- Not Rocket Science: Follow basic steps
- It's in the details
 - Everything must be tangible
 - Very specific definitions to ensure comparability
- Data collection: Blood, sweat, tears
 - Hard work, site visits, quality assurance
 - Balance accuracy with practicality

Benchmarking. So what!



National Water and Wastewater
Benchmarking Initiative

- Most benchmarking exercises fail within a year or two because of this
- Must learn to use the data as a tool to manage and guide the selection of “strategies”
- Strategies usually requires a utility to change, which is always hard
- Use benchmarking to monitor strategies

Our approach

- Leverage the efforts of utilities
 - Requires the dedication of participants
 - Face to face discussion is valuable
 - Consultant is the facilitator
- Leverage the efforts of others
 - Many best practice strategies are published and well documented
 - Don't' re-invent the wheel
- We are still learning

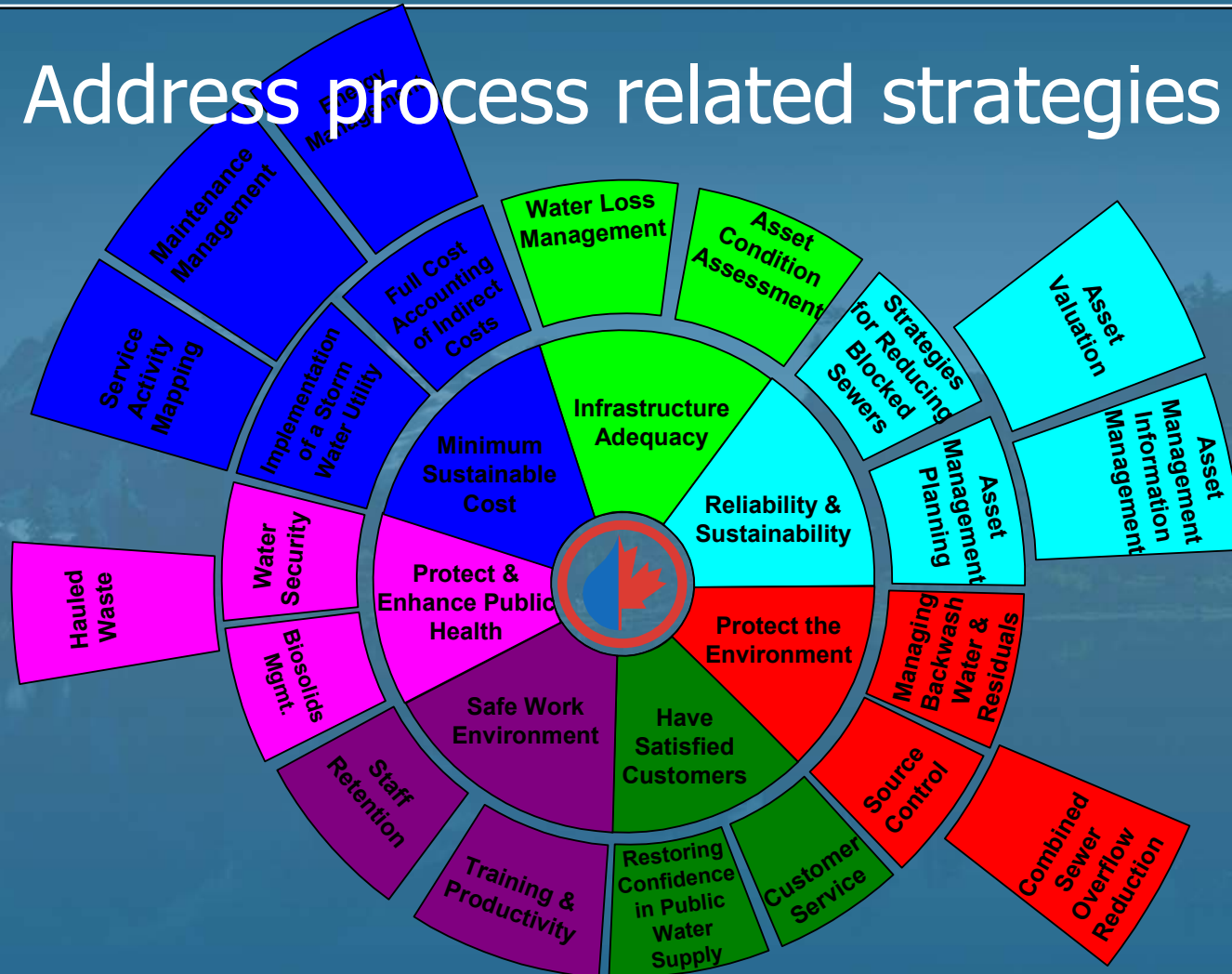
Continuous Improvement Process Task Forces



- Identify performance gaps
- Identify process related issues
- Refine performance measures ~ improved tracking
- Identify any related "Best Practice " sources"
- Set a specific "Action Plan".
- Conference calls, Workshop discussions
- Network with experts

Process Task Forces

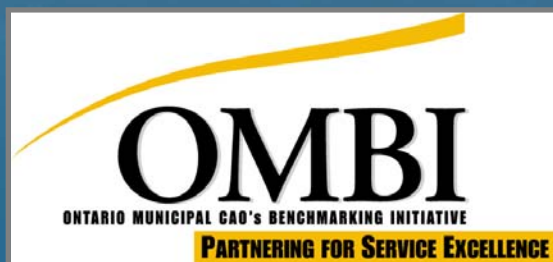
- Address process related strategies



Continuous Improvement Strategic Linkages

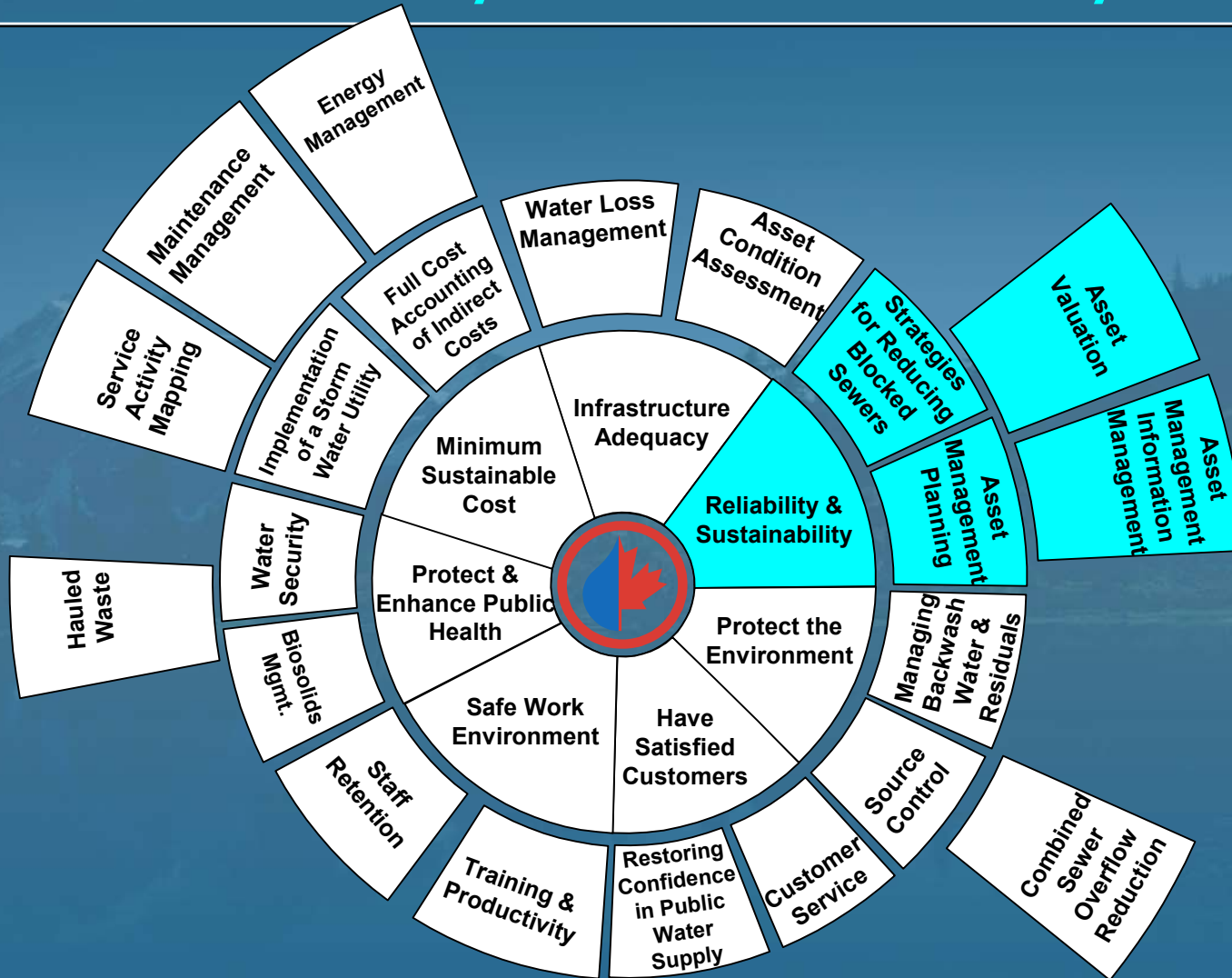


- UK Office of Water Services
- National Research Council
- Ontario Municipal Benchmarking Initiative
- National Guide to Sustainable Municipal Infrastructure



Utility Task Forces

Goal 1: Reliability & Sustainability

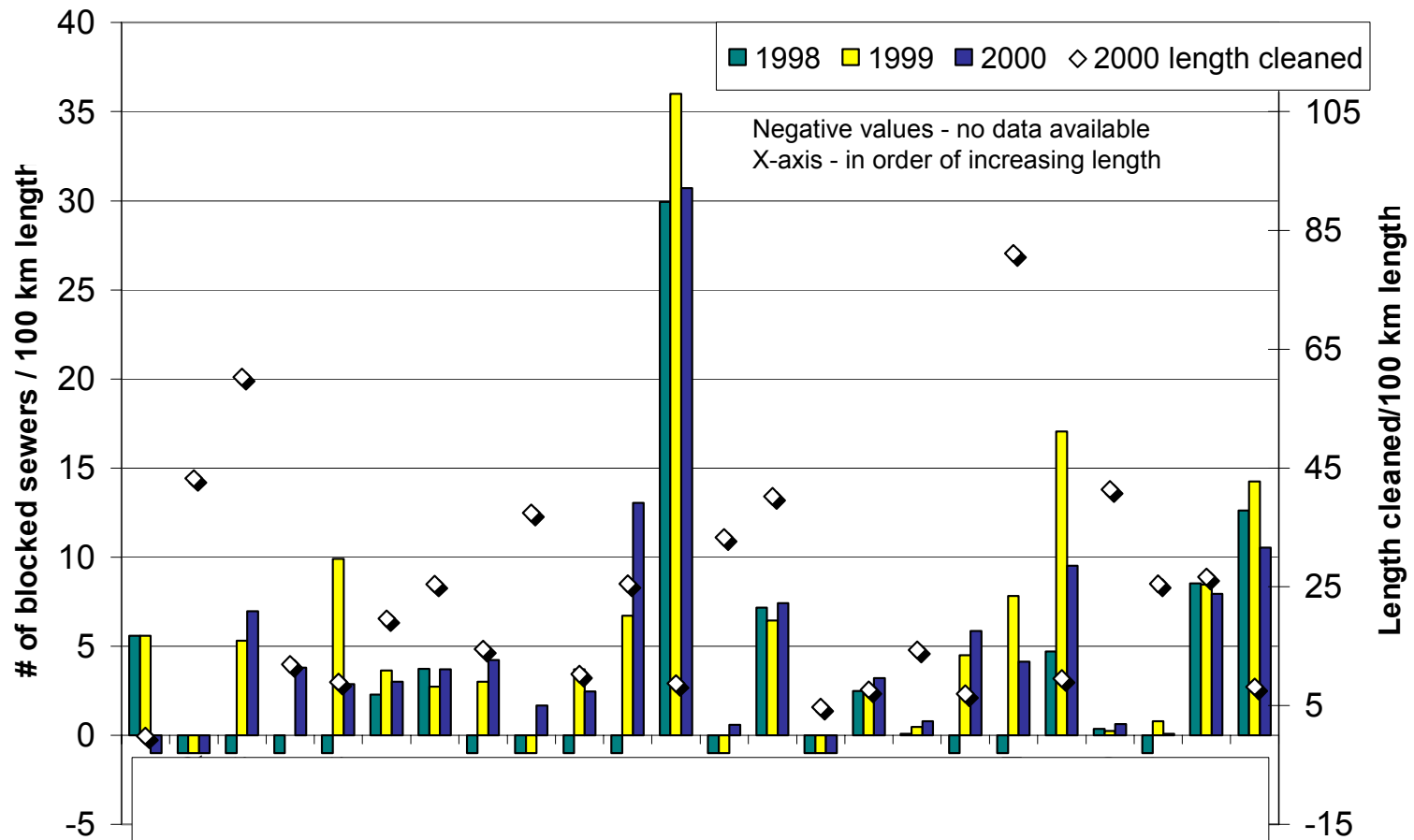


Utility Task Forces

Goal 1: Reliability & Sustainability



#of blocked sewers / 100km length
Wastewater Collection Systems

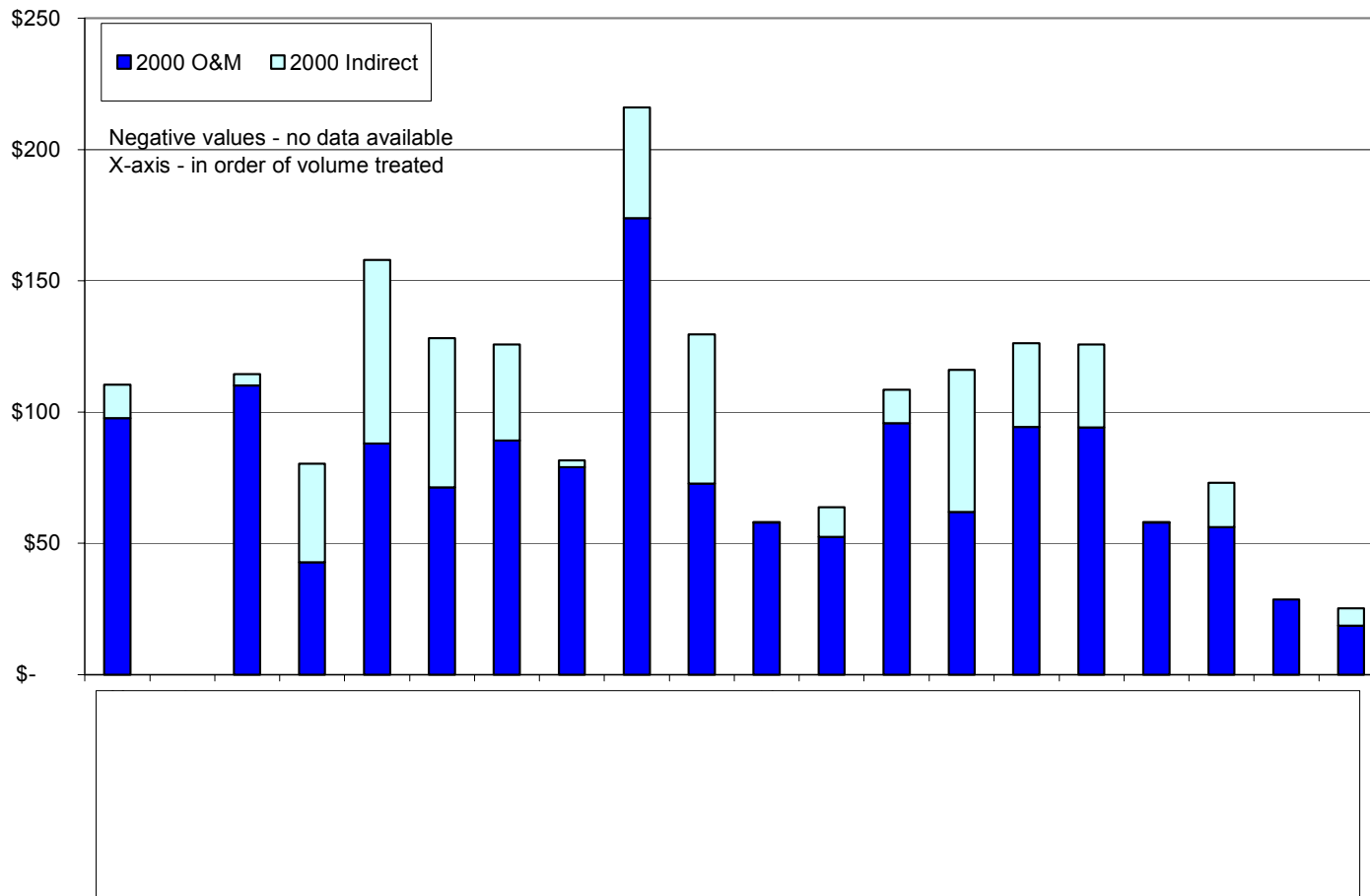


Utility Task Forces

Goal 3: Minimum Sustainable Cost

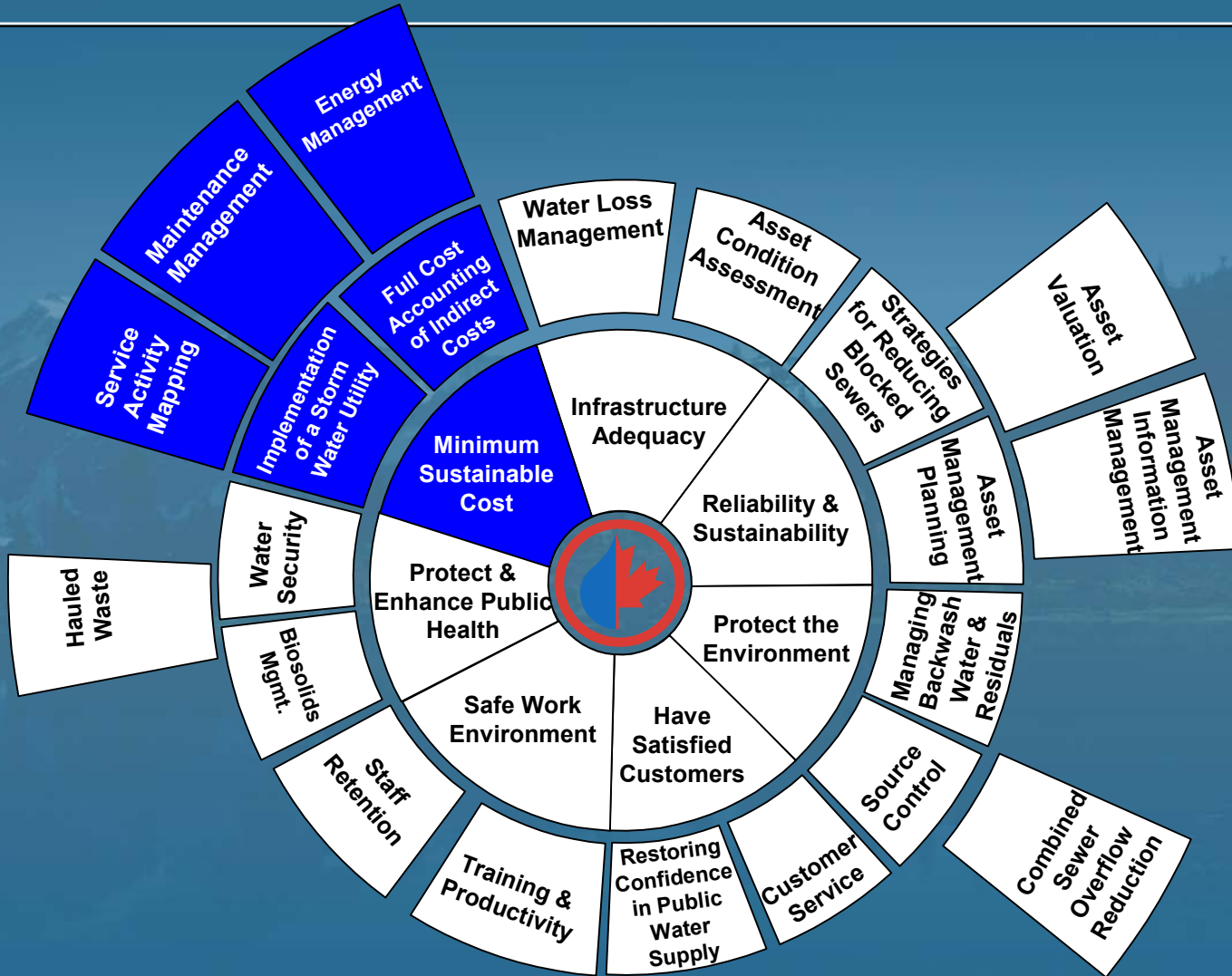


Breakdown of Total cost / ML treated
Water Treatment Plants with Treated Volumes over 12,000 ML/year



Utility Task Forces

Goal 3: Minimum Sustainable Cost

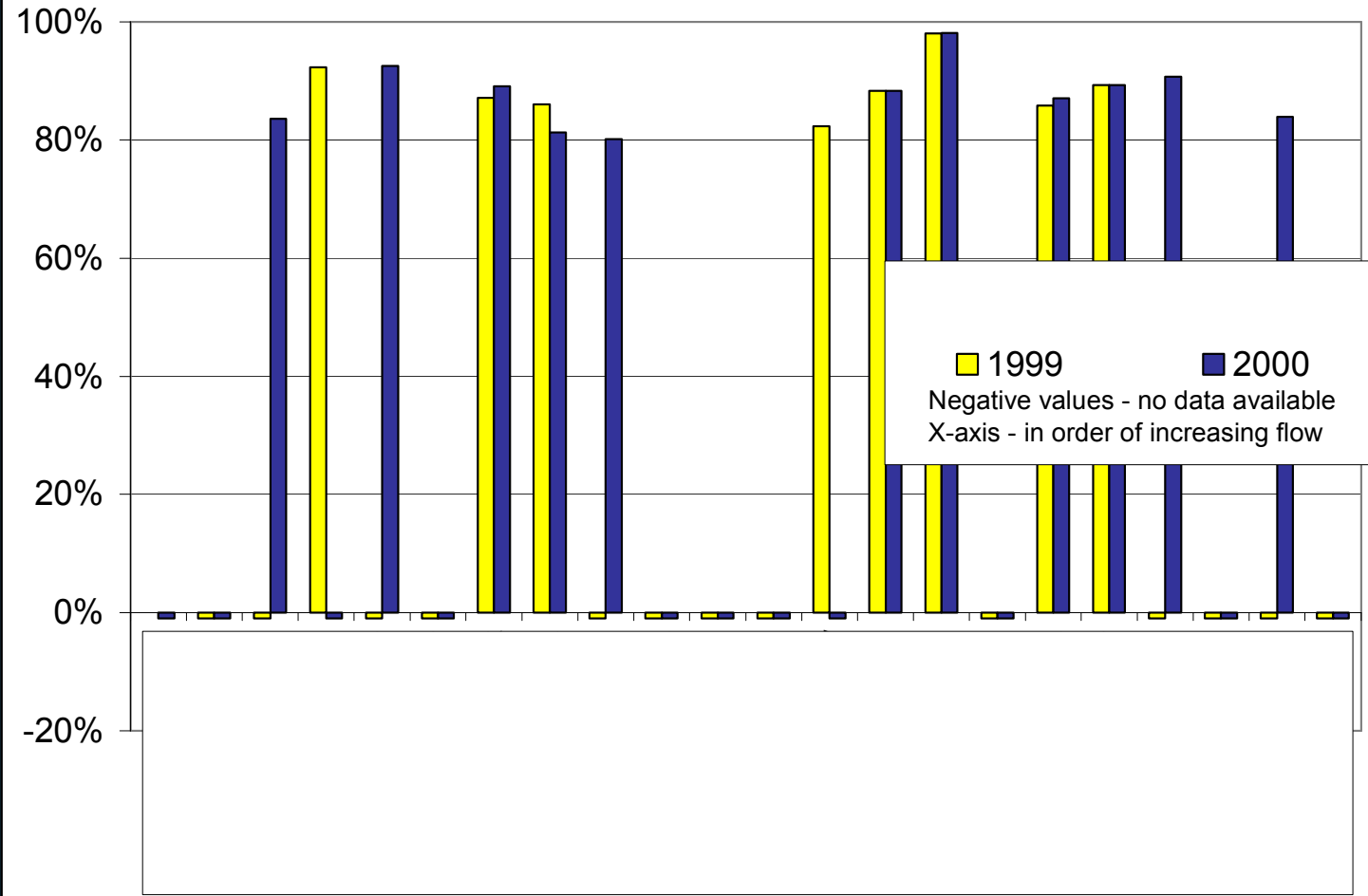


Utility Task Forces

Goal 5: Safe Work Environment



Total available field hours / Total paid field hours
Secondary and Advanced WWTPs with Flows Above 25 ML/day



Some examples

- Infrastructure reinvestment
- Attendance management
- Effect of cleaning and inspection on blockages
- Safety and accidents

Benchmarking And Continuous Improvement



QUESTIONS?