

<h2 style="margin: 0;">Integrated Resource Plan</h2> <h3 style="margin: 0;">Technical Conference 1</h3>	<p>Date: March 24, 2011</p> <p>Time: 1:00 PM to 4:00 PM</p> <p>Place: 450 Cowie Hill Drive, Halifax Multi-Purpose Room 113</p>
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Attendees:

Halifax Water	NSUARB Team	Stakeholders
<ul style="list-style-type: none"> • Jamie Hannam (JG) • Val Williams (VW) • David Waterfield (DW) 	<ul style="list-style-type: none"> • Heidi MacIntosh (HM) • James Goldstein (JG) • Jon Beekman (JB) 	<ul style="list-style-type: none"> • Fred Wendt (FW) • Earle Richardson (ER) • Dawn MacNeill (DM) • Maggie Stewart (MS)

Meeting Summary

1. IRP Overview

VW gave an overview of the IRP process, explaining that it will give long-term direction for Halifax Water (HW) and provide a framework for detailed capital investment analysis, which will be the subject of future rate applications to the NSUARB.

Discussion:

.1 A question was raised regarding the involvement of the Stakeholders in the IRP process. JG provided an explanation that the IRP process encourages Stakeholder involvement at all stages which will be discussed further as the DRAFT Terms of Reference (ToR) is presented.

2. Systems Overview & Constraints

JH provided an overview of the water system including details of the two major water sources – JD Kline Water Treatment Plant (WTP) at Pockwock Lake serving communities including Halifax, Herring Cove, Bedford, Sackville and Beaverbank, and the Lake Major Water Treatment Plant serving Dartmouth, Cole Harbour and Eastern Passage. JH also highlighted that HW operates small system treatment facilities including Bennery Lake serving Stanfield International Airport, Collins Park, Middle Musquodoboit, Five Island Lake, Silver Sands and Miller Lake. There appears to be adequate water supply available over the 25-30 year planning horizon. There are no major water quality issues facing HRWC and the vast majority of land within the watershed is owned by HRWC or protected.

Halifax Water has had a strong leak detection and repair program that has significantly reduced unaccounted for (non-revenue) water. Despite growth in its customer base, there has been a drop in water demand in recent years.

Water system constraints discussed included the ongoing program to refurbish the transmission main from JD Kline WTP, the need to rehab the JD Kline WTP as key components reach the end of their expected useful life, and the aging distribution system in the downtown areas of Halifax and Dartmouth.

VW highlighted the main Wastewater Treatment Facilities (WWTF) including the three Halifax Harbour Solution plants at Halifax, Dartmouth and Herring Cove along with the other 12 wastewater sewersheds and explained that given the raised elevations in some areas, HW operates 175 wastewater pumping stations. The suburban areas either have stormwater systems separate from the sanitary system or no stormwater system, which is a major problem.

Constraints in the system include the need for rehabilitation of much of the wastewater collection system, issues around inflow and infiltration (I/I), and the combined sewer systems in the downtown areas of Halifax and Dartmouth. The new CCME- related regulations will require HRWC's wastewater treatment plants to be upgraded to secondary treatment plus reduction of CSOs and possibly elimination of SSOs. VW also highlighted the issue that different agencies have responsibility for different components of the storm / surface water system. HRWC is responsible for maintaining existing stormwater infrastructure, but HRM is responsible for planning and building stormwater infrastructure, and it is HRM, not HRWC, who will be developing the Regional Stormwater Functional Plan. HRWC plans to work closely with HRM on this.

JH summarized that the water system is in relatively good shape while the wastewater and stormwater systems are facing major challenges and will receive much of the attention in the IRP and future capital investment planning.

Discussion:

- .1 A question was asked about the degree to which there is redundancy in the transmission main from Pockwock/the JD Kline WTP to Downtown Halifax. JH responded that while there is redundancy for certain sections, there is no redundancy for most of the way.
- .2 A question was asked about the implications of the CCME regulations for the location and level of future development in the region. JH acknowledged that the new regulations could have an impact on future development.
- .3 A stakeholder mentioned that in its 2010 rate case HRWC did not have a good quantitative handle on the wastewater/stormwater systems and future investment needs, and asked whether the IRP will provide this. JH responded that HRWC's other ongoing planning efforts, including the Regional Wastewater Functional Plan (RWWFP) and the Asset Management Assessment will provide HRWC with the information to prioritize and develop cost estimates of wastewater capital investments within the IRP's long-term planning period. The HRM's Stormwater Management Functional Plan (SWMFP) when completed is also expected to provide the information to similarly allow for developing the stormwater capital investment needs.
- .4 A question was asked whether HRWC planned to do sensitivity analyses regarding expected growth in the region over the next 20 years. JH responded that HRM's Regional Plan

provides a very good basis for future growth projections (including ranges), which HRWC will rely on in the IRP.

- .5 A question was asked about the respective timing of the IRP and the RWWFP and whether the RWWFP will be flexible enough to allow for changes based on the results of the IRP. JH and VW responded that these efforts will proceed simultaneously; the RWWFP is mostly an assessment of the existing wastewater system capacity and will inform the IRP.
- .6 A stakeholder expressed appreciation for the stakeholder process in the IRP and asked about similar opportunities for the RWWFP. JH responded that there would be an opportunity for stakeholders to comment on the recommendations at the end of the RWWFP process, but that it is mostly an assessment of current conditions and there is no need for an extensive stakeholder process.

3. Ongoing Halifax Water Initiatives

VW ran through other initiatives currently underway at Halifax Water:

- Regional Wastewater Functional Plan (RWWFP)
- SCADA Master Plan
- Debt Study
- Asset Management Assessment (AMA)
- Storm Water Management Functional Plan (SWMFP) – Halifax Regional Municipality (HRM) project in which HW will participate

Discussion:

- .1 A question was raised around the credit of stormwater charges where the property does not connect to a storm water system. JG clarified that rates/charges for the various infrastructures are not part of the IRP. JH confirmed that HW was currently working on a stormwater billing structure and issues such as credits will be part of the billing structure consideration, as will creation of a system that can be reasonably managed.
- .2 A concern was raised regarding HW's ability to influence outcomes through the IRP related to supply-side and demand-side options for which HW does not have jurisdiction (e.g., conservation solutions related to building code practices for low flow devices, comprehensive management of stormwater). JH acknowledged that HW does not have authority over all components a potential plan, but it is important for the IRP to identify what policies and tools could be used and what role/authority HW and others have.
- .3 A question was asked whether risk is part of the Asset Management Assessment. JH responded that it is. The asset management process identifies probabilities of asset failures and the impact of each such failure in its consideration of risk. To date, this has been carried out at a high level.
- .4 A stakeholder expressed concern that with several parties having important roles in the region's water, wastewater, and stormwater systems – HRWC, HRM, the Provincial

Government, especially Nova Scotia Environment, and private landowners and developers – lack of coordination could result in sub-optimal plans and investments.

4. BREAK

5. Review DRAFT Terms of Reference (ToR) for the IRP

VW advised it was important for all stakeholders to pass on any comments regarding the content of the ToR as this document will guide the outcome from the first IRP due in 2012.

VW ran through the IRP Terms of Reference:

- 1.0 Objectives
- 2.0 IRP Approach
- 3.0 Scope
- 4.0 Integrated Resource Plan Framework
 - 4.1 Process
 - 4.2 IRP Deliverables
 - 4.2.1 Demand and Capacity Forecasts
 - 4.2.2 Supply-side options
 - 4.2.3 Demand-side options
 - 4.2.4 Rehabilitation/Replacement of Aging Assets
 - 4.2.5 Capital Upgrades for Regulatory Compliance
 - 4.2.6 Capital Upgrades Related to Growth
 - 4.2.7 Staffing Considerations
 - 4.2.8 Financial Considerations
 - 4.2.9 Basic Assumptions and Plan Alternatives
 - 4.2.10 Resource Plans Development and Integration
 - 4.2.11 Sensitivity Analysis
 - 4.2.12 Final Integrated Resource Plan Report
 - 4.3 Stakeholder Consultation
 - 4.4 Confidentiality
 - 4.5 IRP Process Timeline Summary

Discussion:

- .1 Under proposed Section 3.0 Scope, there was a concern raised that recommendations will be constrained to the lowest net present value (NPV) scenario which may not be the best for the environment.
- .2 Under proposed Section 4.2.3 Demand-Side Options, JG highlighted that HW appeared to have successful demand/supply-side methods in place for the water side of the business and given the short timescale of the first IRP, maybe a generic approach could be applied to wastewater/stormwater to see what reductions may be achieved.
- .3 Under proposed Section 4.2.8 Financial Considerations, the issue of funding programs was expanded. Picking up on the statement “Availability of funding assistance through federal and provincial programs”, JG suggested the IRP include scenarios around different funding

sources/levels and include sensitivity to their variations.

- .4 As it relates to the final IRP document (section 4.2.12), JG suggested that the recommendations for the next 3 years may be a specific action plan but longer term recommendations may be more generic and less detailed.
- .5 VW confirmed that some dates will change around the procurement of consulting services and there may be some minor changes to times to receive feedback from future meetings, but the final report will be ready for June 2012. There was a question raised as to whether the first IRP will be complete by the next rate application. JH and JG indicated that the IRP will not be completed by the time HRWC files its next rate application, which is expected in early 2012, however, it is understood that much of the work undertaken in the IRP will be available to help inform the next rate application.

6. Expectations from the IRP

There was an opportunity for all interested parties to comment on what they would like to see in the IRP.

Discussion:

- .1 A question was raised on whether “anyone” can provide comments on the ToR. VW confirmed that it is a public consultation with notice on the HW website asking for all interested parties to participate.
- .2 A question was raised as to whether the Consumer Advocate (who was active in the 2010 rate case) and HRM were invited to participate. VW responded that they were sent invitations and HRWC expected them to participate.
- .3 Stakeholders expressed IRP appreciation for the high level of stakeholder involvement in the IRP, including at this earliest stage of scoping the plan.

7. Questions & Comments

- .1 The comment was repeated that analysis of scenarios be undertaken that are not least cost (NPV) for HW with confirmation that this concern will be made in writing. JG commented that some scenarios are broader than the scope of the IRP and the place for these are more reasonably HRM’s Regional Plan. JG noted that the scenarios considered will all have to meet a set of performance and regulatory requirements that HRWC will identify, and then cost will be considered.
- .2 Questions were raised regarding differential rates and stormwater rates for customers that have already indirectly paid. JG provided guidance that the IRP process is not intended to develop the necessary rate structure. The IRP will inform HW of the long term capital program and investment needs that will dictate the total revenue requirements. Establishing appropriate rates to meet the projected revenue requirements will be assessed

through the Cost of Service Study and will need to be approved by the UARB in a future proceeding.

- .3 A question was raised as to whether stakeholders will have knowledge of the outputs from the other ongoing initiatives such as the AMA, Debt Study, and RWWFP. VW advised that where the outputs from the other initiatives will inform or provide direction to the IRP process, information will be made available by HW.
- .4 A question was raised about whether consideration had been made for water quality concerns such as source water protection (while recognizing this is typically not an issue for HW) but perhaps should be identified in the ToR anyway. VW acknowledged that this item is not presently in the DRAFT ToR, however it will be reviewed and language added if deemed necessary by HW.
- .5 Also around watershed management specifically, a question was raised regarding the strategic procurement of land for protecting the watershed. VW indicated that this is not presently in the DRAFT ToR, however it will be reviewed and language added if deemed necessary by HW.
- .6 Questions were asked about minutes of the Technical Conferences. While this was not formally planned for this first Technical Conference, summary notes will be provided. As well, HW will arrange for minutes or recording of subsequent Technical Conference proceedings.
- .7 An inquiry was made as to whether comments provided by all stakeholders would be made public. All documentation relating to the IRP consultation process (barring confidentiality issues) will be compiled as part of the overall project record.

8. Next Steps

VW will make adjustments to the IRP Process Timeline (particularly around the procurement of consulting services and the available response times from stakeholders following each Technical Conference).

Written comments on the DRAFT ToR are requested by 5th April after which a final ToR will be submitted to the NSUARB on 11th April.