



Making a difference...together

WATER ADVISORY COMMITTEE

Notice of Meeting on **Wednesday, September 2, 2015 @ 9 am**
Goldstream Conference Room, 2nd Floor, 479 Island Highway, Victoria, BC

R. Mersereau
M. Doehnel
M. Gingras
G. Orr
B. Wilkes

M. Thompson
E. Dyck
B. June
J. Rogers
M. Williams

T. Wood
P. Elworthy
R. Neuman
F. Schultz

AGENDA

1. Approval of Agenda
2. Adoption of Minutes of May 6, 2015
3. Presentations/Delegations
 - There are no Presentations/Delegations
4. Chair's Remarks
5. Reports from Working Groups
 - a) Water Value and Conservation
 - b) Water for Food (memo provided)
 - c) Disaster Preparedness (report provided)
6. Questions from Committee Members
7. New Business
8. Adjournment

To ensure a quorum is present, please call Margaret at 250.474.9606 if you or your alternate cannot attend.



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MINUTES OF A MEETING OF THE WATER ADVISORY COMMITTEE
Held Wednesday, May 6, 2015 at 9 am in the Goldstream Conference Room,
479 Island Highway, Victoria, BC

PRESENT: R. Mersereau (Chair) (9:05 am), M. Thompson, M. Williams, J. Rogers, M. Doehnel, R. Neuman, T. Wood, B. June (9:05 am), M. Gingras, R. Machin, E. Dyck, B. Wilkes
Staff: T. Robbins, M. Montague (Recorder)

ABSENT: G. Orr, F. Schultz, P. Elworthy

The meeting was called to order at 9 am.

1. APPROVAL OF AGENDA

The following items were added to the agenda:

- Regional Sustainability Strategy Update
- 100th Year Anniversary Celebration Update

MOVED by B. Wilkes and **SECONDED** by M. Williams,
that the Water Advisory Committee approve the agenda as amended.

CARRIED

2. ADOPTION OF MINUTES OF MARCH 4, 2015

MOVED by M. Thompson and **SECONDED** by M. Williams
that the Water Advisory Committee adopt the minutes of the meeting held March 4, 2015.

CARRIED

R. Mersereau and B. June joined the meeting.

3. PRESENTATIONS

- There were no presentations.

4. CHAIR'S REMARKS

The Chair remarked as follows:

- She thanked the committee members that attended the Leech Open Houses;
- She stated that she was very proud of the work the Water Advisory Committee did on the RSS draft and the fantastic job that B. Wilkes did on his presentation last week to the Committee of the Whole.

5. REPORTS FROM WORKING GROUPS

R. Mersereau recapped the process for the benefit of the new member.

Water Pricing/Conservation Working Group

- An editorial piece has been sent to the Times Colonist to be published in conjunction with the 100th Anniversary Celebration. B. Wilkes will circulate the draft to the committee members for information.

- R. Mersereau noted that she contacted O. Brandes at Polis to ask him to give a presentation to the Committee on the relationship between water pricing and conservation.

Agriculture Working Group

- The group met with T. Robbins. The group expressed a desire to look at water for food and not water in general. It was agreed that a definition of an appropriate use of water for agriculture needs to be drafted for review by staff and the budget sub-committee.

100th Anniversary Celebration Working Group

- T. Robbins provided an update on the celebration planning to date. He noted that an invitation has been sent out for the May 28th event.

Disaster Planning Working Group

- M. Williams provided a handout produced by the Disaster Planning Working Group and spoke to the document. The following recommendations were put forward to the Committee:
 1. First and immediate priority should be given to preparing a plan to supply potable water to people in the event that supplies are interrupted for any reason such as the scenarios outlined below and
 2. Second priority should be given to preparing recovery plans to restore temporary and then normal water supply for the scenarios outlined below.

MOVED by M. Williams and **SECONDED** by R. Mersereau,
That the Water Advisory Committee accept the recommendations from the Disaster Planning Working Group.

CARRIED

M. Williams will prepare a report for consideration and forwarding to the Regional Water Supply Commission.

6. UPDATE ON THE SHAWNGAN WATERSHED

T. Robbins provided an update on the current issues surrounding the Shawnigan Watershed and the position of the CRD in this matter.

7. REPORT ON THE LEECH OPEN HOUSES

T. Robbins provided an update on the recent Leech Open Houses. He thanked those committee members that attended the events in the various locations. Information from the open houses is currently being compiled and a report will be taken to the Regional Water Supply Commission meeting in September.

8. QUESTIONS FROM COMMITTEE MEMBERS

None.

9. NEW BUSINESS

A working meeting will be held in June. The next business meeting will be held in September.

10. ADJOURNMENT

MOVED by B. June and **SECONDED** by R. Mersereau,
That the meeting of the Water Advisory Committee be adjourned at 11:05 am.

Draft

MEMO TO THE WATER ADVISORY COMMITTEE

From: The Water for Food Working Group

Date: 2 September, 2015

Re: Seeking a change in ‘agricultural subsidy’ terminology at IWS

In light of previous WAC discussions, the Water For Food Working Group is recommending that the WAC make a recommendation to the Regional Water Supply Commission to discontinue use of the term ‘agricultural subsidy’ in budget materials and in internal correspondence at IWS.

The Working Group welcomes advice and feedback from the WAC on the most appropriate alternatives for terminology (some options are listed below), and also on the proposed memo for the RWSC relating to this matter (enclosed).

Possible terms to replace the ‘agricultural subsidy’ expense line item in the budget:

- Agricultural contribution
- Agricultural rebate program
- Agricultural support initiative
- Agriculture enhancement program
- Agricultural investment

Note: The Working Group has intentionally avoided considering terms like ‘local food’ or ‘food security’ due to speculation that there are non-food producing agricultural ratepayers, but this can also be the subject of discussion.

DRAFT MEMO TO THE REGIONAL WATER SUPPLY COMMISSION

From: The Water Advisory Committee

Date: 16 September, 2015

Re: Recommendation for change in IWS ‘agricultural subsidy’ expense item terminology

Purpose

Members of the Water Advisory Committee feel strongly that Integrated Water Services should continue the practice of affording reduced water rates (relative to residential and commercial rates) to agricultural users throughout the region, and are recommending a change in terminology used to reference this practice.

Background

Adopting preferential rates for the use of water for agriculture or irrigation recognizes the need to ensure that the availability and affordability of water does not impede local agriculture and increased food security for our region. With only one exception, all greater Victoria municipalities have recognized the importance of agriculture or local food security in their Official Community Plans, and it also emerged as a priority issue throughout the Regional Sustainability Strategy consultation and drafting processes in recent years.

In a global context, it is a common practice for agricultural water rates to be significantly lower than water used for domestic or residential use, and often lower than the cost of providing the service¹. A 2011 comparison of water rates across twelve OECD countries revealed ten (including Canada) had average prices below \$0.10 US per cubic metre², significantly less than the \$0.2105 charged to agricultural users in the CRD. Since only 2% of water consumption in the CRD is for agricultural use (compared to approximately 70% worldwide³), the WAC considers the approximate \$1 million investment (equivalent to approximately \$3.00 per connected water user, per year) to be relatively modest in light of the important objective of supporting agricultural enterprises within our region, which are otherwise beleaguered with challenges stemming from high land prices.

It should also be noted that notwithstanding the above, the WAC is interested in supporting IWS staff with future efforts to better understand the characteristics of those who benefit from the reduced rate, to ensure the investment is financially sustainable over the long-term, and that it is serving its intended purpose.

Recommendation

To discontinue use, in both internal correspondence and in all budget materials, of the term ‘agricultural subsidy’, in favour of the term .

¹ Garrido, A. and Calatrava, J. 2010. *Agricultural Water Pricing: EU and Mexico*. Background report to the OECD study *Sustainable Management of Water Resources in Agriculture*. Accessed July 28, 2015 from <http://www.oecd.org/eu/45015101.pdf>

² Canada West Foundation. 2011. *Water, Water Use, & Water Pricing Around the World*. Canadian Water Policy Backgrounder. Accessed May 12, 2015 from http://cwf.ca/pdf-docs/publications/Water_Backgrounder_8_Sept_2011.pdf

³ United Nations Educational, Scientific, and Cultural Organization. 2012. *Managing Water Under Uncertainty and Risk*. United Nations World Water Development Report 4. Accessed August 12, 2015 from <http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/SC/pdf/WWDR4%20Volume%201-Managing%20Water%20under%20Uncertainty%20and%20Risk.pdf>

REPORT TO WATER ADVISORY COMMITTEE MEETING OF WEDNESDAY, 2 SEPTEMBER 2015

SUBJECT WATER SUPPLY EMERGENCY PREPAREDNESS PLAN (WSEPP)

ISSUE

A disaster such as a major earthquake, a wildfire in the watershed (which is increasingly likely in light of climate change impacts) or an act of terrorism could completely disrupt the water supply to virtually all residents of the CRD.

BACKGROUND

The CRD does not presently have adequate plans to deal with such an emergency and needs to direct resources to develop a formal response procedure, an organizational structure, train staff and assemble equipment to respond when potable water is not available through the greater Victoria water supply system (GVWSS). The CRD Board, the Regional Water Supply Commission and Integrated Water Services, as managers and operators will be deemed responsible for delivery of potable water in an emergency and need to prepare the water supply emergency preparedness plan (**WSEPP**).

THE PLAN

Goal

The goal of the WSEPP is to ensure delivery, at minimum, of subsistence levels of safe potable water for human consumption following a disaster and until normal water supply and distribution is re-established.

Phases

It is recommended that the WSEPP will be developed in two phases to respond to the following events which may interrupt the supply of potable water to the CRD;

Scenarios

1. failure of Sooke Lake dam
2. collapse of Kapoor tunnel
3. break in #3 main from disinfection facility
4. break in #4 main to the Saanich Peninsula
5. break in #15 main to Sooke
6. all of the above at once and multiple breaks in distribution systems
7. contamination of the water supply after a major wildfire in the watershed or other event

Phase 1 – a plan to immediately supply water for drinking using, where possible, the components of the GVVSS and other surface or groundwater sources.

Phase 2 – a recovery plan to restore temporary and then normal water supply throughout the GVVSS.

Development & Implementation of WSEPP – Tasks* and Timetable

Phase 1

- a) A budget to prepare a plan and to procure immediate materials and equipment for the emergency subsistence supply of water for drinking be presented for approval of the RWSC in 2015
- b) A full plan be prepared and immediate materials and equipment procured by September 2016
- c) A budget to procure the remaining materials and equipment be submitted in 2016 for implementation in 2017.

*see Appendix A for tasks to be considered in Phase 1)

Phase 2

- a) A budget be presented for approval of the RWSC in 2015 to carry out the following in 2016
 - 1) Conduct an assessment of the risk, consequences and vulnerability of major components of the water supply and transmission system to interruptions in supply
 - 2) Use the results of 1) above to prepare a budget and list of components for priority action
 - 3) The procurement of immediate priority items
- b) Implement the tasks in a) above by September 2016
- c) A budget be prepared for submission to the RWSC in 2016 to complete the procurement of the remaining materials and equipment
- d) Implement the procurement of the remaining materials and equipment in 2017 and beyond

* see Appendix B for tasks to be considered in Phase 2.

RECOMMENDATION

That the WAC recommend to the Regional Water Supply Commission that a Water Supply Emergency Preparedness plan be prepared as outlined in this report.

APPENDIX A

Phase 1 Tasks

- Find out what plans if any municipalities, hospitals, care homes, Governments have for meeting their own needs in the first weeks of water supply interruption.
- Research water sources that could be available for supply in the event of an earthquake: lakes e.g. deep end of Sooke Lake, Thetis, and Elk; wells e.g. Sidney; capacity; water quality; ownership; how to use e.g. will treatment be needed.
- Design a master system for emergency distribution of water to all areas and high priority entities like hospitals consisting of ; alternate water sources, transport methods, distribution locations - how many and where, treatment, storage, dispensing, water quality monitoring. Get approvals for use of sources.
- Come up with a realistic timeline for meeting community water needs in the first months e.g. people are on their own for 7 days then CRD distribution system up and running until partial or full supply restored.
- Consider the problem of water for people versus water for firefighting and how this will be addressed.
- Consider what role distribution reservoirs will play during and after an earthquake
- Establish roles and responsibilities of parties involved in the distribution of water in an emergency; CRD, municipalities, DND, First Nations, Provincial, hospitals.
- Establish communications and coordination system between 1) water staff and other entities involved in the distribution of water 2) emergency command centres and 3) the public
- Undertake staff training for management of the distribution system during a prolonged water supply interruption.
- Modify the master plan for use as needed if high priority components like Sooke Lake reservoir, Kapoor, #4 and #15 mains are not functional
- Procure materials and equipment for the emergency water supply distribution system and/or secure sources for the same when needed.
- Publicize the results of this work so the public knows how to prepare and what to do in the event water supply is disrupted
- Work out how to cost share all of the above.

APPENDIX B

Phase 2 Tasks

- Conduct an assessment of the risk and vulnerability of major components of the water supply and transmission system to interruptions in supply. Look at liquefaction areas and slope stability problems and wildfire in the watershed.
- Use the results above to prepare a list of components for priority action
- Look at how to temporarily mitigate interruption of high priority components e.g. Sooke Lake reservoir, Kapoor tunnel, #4 and #15 mains, wildfire.
- Procure equipment and materials for short term mitigation of high priority items
- Assess distribution reservoirs and their role during and immediately after an emergency; determine if seismic closure valves are appropriate
- Complete the documentation of demarcation lines for operational responsibility at all supply takeoff points
- Design a water quality monitoring programme for the period after disaster until integrity of the distribution system is restored to normal
- Prepare a general plan in conjunction with the municipalities on how to coordinate activities, equipment and materials
- Prepare an outline plan for medium and long term mitigation of identified risks and vulnerabilities