

OPSRRA OTTER POINT & SHIRLEY & JORDAN RIVER RESIDENTS & RATEPAYERS ASSOCIATION

NEW BC WATER SUSTAINABILITY ACT REVIEW for SURVEY

The new Water Sustainability Act (WSA) will be introduced in the Spring 2014 Legislative Session. We will not see the draft WSA until it is presented in the Legislature.

For details concerning the Proposals and Technical data underlying the new Act visit www.engage.gov.bc.ca/watersustainabilityact.

OPSRRA will conduct a survey about the new WSA in February 2014. This report will help OPSRRA members think about the issues and their survey responses. This report highlights specific areas and concludes with sources used.

Water Science and Economics

There are a number of scientific methodologies to measure water flows. BC will likely use the following definition:

Environmental flows are the time dependent flows or levels of water in a stream required to protect stream health.

The models set **in stream required flow** (IRF) in the range of 75 to 80%. At those levels, a stream or a system of streams in a watershed can attend to storage needs, water quality, habitat flow, channel and riparian maintenance etc. That then leaves **15 to 20%**, seasonally adjusted in “normal” years and months, for **human harvest**; this is **validated science**.

There is a growing body of economics theory concerning **ecosystem services**: how humans get **financial returns** from healthy watersheds. In 2011, the State of Virginia had *Dartmouth Natural Resource Trust* do a study on watershed ecosystem services. On the single variable of water supply/quality it found that forest lands “pay us” \$250 an acre per year, and wetlands yield returns of \$1,763 an acre per year.

The debate is not about the science of water, but rather the economic and social decisions made by people.

Would a new WSA based on watershed science be too unwieldy to implement?

It has been argued, mainly by large corporations or small government ideologues, that this water science is too unwieldy to implement. Actually, the scientific models in use can be applied with limited baseline input and from existing desktop applications; Australia, New Zealand and Florida now use these models in their new water laws.

- Salmon are the icon species of BC. They spawn in countless watersheds, need about 75% of the water, and are **bioindicators**.
- We already have the in-stream required flow data for our local watersheds and most of BC.

Would a WSA using watershed science be too costly to put in place and operate?

The BC government has indicated that the new WSA must have a “**net zero**” impact on the provincial budget with no additional costs or revenues. The new Act will likely devolve the work (cost) of monitoring, planning and governance to the regional level.

The annual revenue currently generated from water licence fees in BC is \$350 million, with 98% of those fees from BC Hydro! BC residents also enjoy some of the lowest drinking water costs in the world.

Another way to save money and deny water science is found in the new Alberta Water Act which continues issuing water licences in perpetuity and exempts existing licences from periodic review (Alberta is very concerned about the Site C dam on the Peace River). The Alberta government has already spent over \$4.6 billion to monitor environmental flows in the Athabasca River.

Australia, New Zealand and Florida have put in place additional costs for water licences and to monitor usage and flows. The Australian government has allocated \$3.1 billion to buy back water licences so their rivers won't run dry.

Unable to wait for provincial Water Act reform, three Regional Districts in the Okanagan formed the Okanagan Basin Water Board (OBWB) and a Water Stewardship Council to ensure a sustainable water supply to 2050. The OBWB uses its taxing power to fund research projects to provide ongoing evidence as to what changes are needed.

In 1997, New York City opted for an ecosystem services approach that saved \$6 billion in filtration upgrades and protected the *unfenced* recreational Catskill-Delaware Watersheds; New York City water is renowned for its quality. An average Victoria household pays \$347 (Can\$) per year for water. In New York it costs \$339 (US\$).

What is a fair water tax or levy for business or industrial water use? Should those who damage watersheds be required to pay the full costs of clean up and remediation, and for damages like the Calgary flood this year?

What is a reasonable tax or water fee “lift” for the average BC citizen? We know BC average non-mortgage debt will reach an all-time high of \$29,000 in 2014. Over 80% of CRD residents are facing property tax increases of at least 15% for their new sewage system. These urban residents already know they have a safe and protected watershed with a 50 year sustainability plan in place. (Presumably this “protection” will extend to Kemp Lake Waterworks (KLWD) users when they shift to CRD water.)

Our local communities have other watershed concerns.

Many years ago the BC Government used a one-time 1% tax lift to provide sustainable health care delivery. That approach could be used in the new WSA implementation. Water, after all, is the life blood of our inseparable environmental, economic and human ecosystem.

Local Watersheds, Wells and Water Licenses Under the Current WSA Proposals

The new WSA proposals are virtually nonexistent when it comes to **groundwater**. For example, there are no hard provisions to protect our local wells. The proposals imply protection for all BC watersheds, but the WSA plans to address environmental flows are for only 15 “chronic problem areas” by authorizing (requiring?) a *Watershed Sustainability Plan* (WSP).

Our communities would not qualify as “chronic problem areas “ due to our small populations, relative abundance of water and climate change predictions. The WSA will not likely include any activities currently covered under the *Forest & Range Practices Act* (2002), and the *Oil and Gas Activities Act* (2008). There are no WSA requirements to register existing or new wells. Why would the activities governed under these Acts, which are inherently dependent upon sustainable environmental flows, be exempted?

There may be a provision allowing mandatory well registration through a local WSP. The proposals suggest that well licensing is problematic. The *BC Water and Waste Association* (BCWWA), an organization representing some 4,000 water “experts” and administrators in our province, have submitted that it is very easy to do a simple well registration without the onerous implications of licensing or well inspections/reporting under Ministry of Environment “rules“.

Existing and new water licenses will generally operate as in the past. It is not known whether existing licences or new ones will be regulated or re-prioritized according to environmental flows (read: 15 to 20% for people). The new act does propose enshrining the “*First-in-Time-First-in-Right*” (FITFIR) protocol; this would reduce water rights of junior licensees in times of drought or scarcity. It also serves to protect the rights of large long term industrial licenses, but we do not know how this might impact individual or community water licenses across BC. It may be that FITFIR makes sense for current water license holders in our communities. Opponents of the FITFIR protocol argue for mandatory environmental flow assessments in all new licenses, and that all licenses be time limited and subject to periodic reviews to adjust for changes in flow-ecology relationships (all climate change predictions for our area indicate hotter, drier summers). Additionally, residents in our communities might also want to consider whether FITFIR has a value in future groundwater decisions about existing wells when coupled with environmental flow information: would this provide better existing well protection for new residential or commercial development?

Finally comes the local question of existing or new community water systems in our area. How would those systems be impacted, governed and protected (at what costs?) under the provisions of the new Act?

Information Concerning Wells and Water Licenses

Because the new WSA may end up with some provisions concerning well protection based upon existing well discharge capacity through a WSP, the Ministry of Environment published, *A Guide to Conducting Well Pumping Tests* on their web site: www.env.gov.bc.ca. More information about water licenses and the government proposals is published in an article containing links in *The Tyee*: www.thetyee.ca/Opinion/2013/04/12/Modernize-BC-Water-Act/

Governance Under the WSA Proposals

The other aspect of making an **environmental flow model** the foundation of the new WSA will lie in its provisions concerning governance. Will the applications be immediate and province-wide with mandatory requirements including groundwater and surface water, or a cosmetic list of guidelines that no one has to obey?

One of the primary scientists in the proposal stage, Ron Ptolomey, suggests that guidelines will only work when decisions are transparent, require written scientific data and reasoning, and are subject to known appeal processes. Florida uses an independent scientific peer review panel with a 120-day timeline (*Florida Statute 373.42*).

The WSA Governance Proposal is meant to set provincial requirements/guidelines and then devolve all the work and decision making down to the local or regional level through local

stewardship or advisory agencies using local WSPs.

Water Governance in the JDF Electoral Area (JDFEA) Under the WSA Proposals

Would this be like the development of the *Regional Growth Strategy* (RGS), done “for us” at the CRD level with minimal input from the Juan de Fuca Electoral Area communities? Unlike the CRD Municipalities, RGS decisions for our electoral areas are made by the CRD Board.

Many in our communities do not feel that the CRD has paid sufficient attention to our water supply and watershed issues. The local issues raised in the RGS process were reported by the CRD in the Spring of 2013 with no “action plan” to date. A WSP made under this type of RGS governance model will likely produce similar results, particularly as our local communities have not been identified as “chronic problem areas” under the current proposals. The CRD would be obligated to do nothing.

An alternate model would be that used for our Official Community Plans (OCP). This model is more “localized” using Land Use and Advisory Planning Commissions and eleven member Citizen Review Committees. The OCP model also has mechanisms requiring local community participation, public meetings and on-line access to minutes and reports. This OCP advisory or stewardship version provides much more scope for elected representatives as part of any WSP decision making process.

Governance critiques of the proposals of a new WSA are clear about wanting mandatory government environmental flow protections in the new Act which would then be enforced and regulated locally. Critics are clearly saying, “local, but not too local”, and “please fund us”.

Is The JDFEA a Viable Local Water Governance Option under a New WSA?

In all likelihood, under the new WSA, municipalities will have authority very similar to their current RGS role. Is the JDFEA a viable local decision making body for local Watershed Sustainability Plans? Would the CRD, or any provincial regional district, “allow” electoral area quasi-autonomy in watershed decision-making?

Sometimes demographics are helpful when it comes to political decisions related to local governance.

- The Juan de Fuca Electoral Area (JDFEA) has about 5,000 people, roughly 1.5% of the total CRD population. It contains 1,502 km² or 64% of the total CRD geographic area.
- The District of Highlands has an area of 30 km² and a population of about 2,000.
- The District of Metchosin is around 30 km² with 5,000 people.

The Vancouver Island Water Allocation Plans, completed in 1996, have already documented environmental flows for our local watersheds so we would not have this “local” research cost.

First Nations and Water Governance Under the WSA Proposals

The provincial government proposals indicate that First Nations play a full role in the WSA process. The BC Assembly of First Nations submission December 2, 2013, refutes this assertion. This has major implications for our communities because we are within territory covered under the Douglas Treaty of 1850 with the T’Souke Nation. The Pacheedaht Nation did not sign the Douglas Treaty. These treaties have been consistently upheld by Canadian Courts. The new WSA must contain a negotiated framework to address how our local water sustainability plans would “fit” with T’Souke Nation “water rights”.

Sources Used To Prepare This Report

You can find most sources used for this article at: www.engage.gov.bc.ca/watersustainabilityact

Go to *What We've Heard* where all submissions are listed in alphabetical order:

- The CRD Water submission by Jack Hull (February 10, 2011), is under Capital Regional District.
- The BC Water and Waste Association final submission of November 14, 2013 (second entry) and the BC Wildlife Federation final submission November 13, 2013 (second entry) had invaluable information about environmental flows.
- The BC Assembly of First Nations submission December 2, 2013 (second entry) outlines First Nations concerns with the WSA proposals and contains an overview of Canadian water laws, *Legal Analysis of the Legislative Proposal: Water Sustainability Act*, prepared by the Arbutus Law Group.
- Environmental flow studies for nearly all Vancouver Island Watersheds were completed by the Ministry of Environment in 1996. The Modified Tennant Methodology was used and it is the methodology employed in the new WSA proposals.

The *Sooke Water Allocation Plan* and the *San Juan River Allocation Plan* cover the full south west Island areas: www.env.gov.bc.ca/wsd/water_rights/wap

The science of ecosystem services economics: www.teebweb.org/wp-content/uploads/2013/0

Search “Nature’s Revenue Streams, Five Ecological Value Case Studies” for five specific local applications and costing charts in the Blenkinsop and Glanford area of the CRD.

The world’s largest ecosystem services application is found in the Catskill and Delaware watersheds of the New York City Water supply system for nine million people (about twice the BC population). It is an excellent example of multi-jurisdictional co-operation and demonstrates how the rural communities of upstate new York “had to be recognized” to get their “fair share” of nature’s revenues. A good report, *New York City Depends on Natural Water Filtration*: http://smapp.rand.org/ise/ourfuture/NaturesServices/sec1_watershed.html

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