From: rickandjoan [gilleland@shaw.ca]
Sent: March-23-10 6:32 PM
To: Living Water Smart ENV:EX
Subject: Water Act Modernization Submission
Attachments: Response-WAM discussion paper_rjg_Mar10.pdf

Attached is a submission responding to the questions in the WAM discussion paper

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from
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Salt Spring Island

Water Act Modernization- Response to Discussion Paper- Mar 10
Name of Organization or Individual-____R. Gilleland for Mount Belcher Improvment District- Salt Spring Island__

Note: Questions for response are highlighted in yellow. Responses are highlighted in blue.

General Questions and Comments-

C- The modernized act must not be confined to allocation and licensing only. There are too many areas of concern that would not be captured and addressed if rules and regulations do not also address conservation, limits of consumption, and conflict resolution.

Q- Where are the guarantees about governance surviving funding cut-backs, and re-organizations of government departments?

Q- How would "heavy " extraction be defined for a small (100 people) district? As a per cent of capacity?

C-Extraction levels need to be adapted to the seasons.

C-For groundwater, in bedrock aquifers (eg Gulf Islands) it is difficult to quantify water available. It may be easier to set benchmarks based on known (or calculated) sustainable levels of extraction.

C- The burden should not necessarily be on existing users to demonstrate a problem but rather on a new user to show there isn't a problem. Even so, who is correct?

C- A significant problem is the lack of enforceable regulations/by-laws governing excess withdrawal of water for rural users or small community systems

C- For delegated governance- Only large watershed's or basin-wide entities may have the size and funding base to accept administration duties and delegated descision making. But, if too much is delegated (eg. involved in growth, land use, and development) the entity will become political rather than water stewardship driven. A careful balance is needed.

Q-What about unatural change of aquifer temperature due to concentration of industrial activity, geothermal heating, etc.?

BRITISH COLUMBIA WATER ACT MODERNIZATION DISCUSSION PAPER

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Note: The responses are mainly in Part two. Other parts have been either edited or deleted to help simplify the response document.

BRITISH COLUMBIA WATER ACT MODERNIZATION DISCUSSION PAPER

PART TWO

Proposals for change

4 Principles

WAM is an opportunity to ensure the principles underlying the Water Act respond to modern expectations, as well as promote stream health and water security. These principles have underpinned the development of this discussion paper and, once finalized through engagement, will help to guide the policy development process.

Your views are welcome on the following proposed principles: Responses are highlighted in blue.

1. BC's water resources are used within sustainable limits.

[Sustainable limits must be developed for a local area or watershed and reflect seasonal impacts]

2. First Nations historical knowlege, practical experience, social values and cultural practices associated with water are respected and accommodated.

3. Science and local experience plus data informs water resource management and decision making.

4. Water resource legislation, policy and decision making processes as well as management tools are integrated across all levels of government and are made accessible from one designated office of prime responsibility within a key ministry.
[Ideally a ministry dedicated to all water concerns would be established]

5. Rules and standards for water management are clearly defined and enforced, providing a predictable investment climate across the province.

6. Flexibility is provided to adapt to extreme conditions or unexpected events on a provincial, regional or issue-specific level, based on a provincially controlled and transparent process.

7. Incentives are created for water conservation that consider the needs of users and investors.

8. Rights to use water come with responsibilities to be efficient and help protect stream health.

GOAL ONE - PROTECT STREAM HEALTH AND AQUATIC ENVIRONMENTS

5.1 Objectives for protecting stream health and aquatic environments

In order to better protect stream health and aquatic environments the following objectives are proposed for a modernized Water Act:

1. Environmental flow needs are considered in all water allocation decisions to protect stream health
2. Watershed or aquifer-based water allocation plans include environmental flows and the water available for consumptive use
3. Habitat and riparian area protection provisions are enhanced

Indicate your level of support for the objectives proposed.

.....strongly support...

5.2 Possible Solutions

The possible solutions for protecting stream health in this paper are based on how the Water Act can be more effective in protecting stream health, in particular by expressly requiring environmental flows to be considered in all new water licensing decisions.4 Clarifying how environmental flows will be considered in decisions helps water users, potential investors and decision makers understand the water licence application process. Also included are proposals for habitat and riparian protection that aim to improve efficiency in habitat protection and streamline responses to some activities that may degrade stream health.

OBJECTIVE ONE

Environmental flows are considered in all water allocation decisions to protect stream health.

The decision makers under the Water Act for water licences are the Comptroller of Water Rights and the Regional Water Manager.

A. Environmental Flow Guidelines

In this option the environmental flow recommendations are guidelines, from which the decision maker may deviate in certain circumstances. Clear justification must be provided for any deviation and applicants could appeal decisions.

OR

B. Environmental Flow Standards

In this option the environmental flow recommendations become standards that the decision maker must adhere to with no exceptions.

The distinction between the options is the degreee of discretion provided to the decision maker when reviewing a water licence application. The guidelines option allows the decision maker to consider environmental flows on a case-by-case basis and use conditions in a licence to avoid or minimize potential impacts on stream health. Under the guidelines option if an applicant feels the environmental flow recommendation is too conservative, the applicant may be able to scientifically demonstrate that their application will not impact stream health.

The standards option has more certainty but is less flexible, meaning that there may be greater emphasis placed on the determination of environmental flows. The standards option would need more time and resources to determine as they would be legally enforceable. This may result in longer licence processing times and have increased costs for new licence applicants. The standards option may be viewed as providing greater protection to stream health; however, because of their inflexibility, they could lead to more permissive recommendations. The two options have different implications for flexibility and efficiency in the administration of the Water Act, and water governance arrangements.

Which option do you prefer, and why? Are there others?

Option B preferred but including a clearly defined deviation process to address a limited number of specified individual cases. Standards can be prepared to be more relaxed initially where impact is very small and then made more stringent as required. Where impact is high, standards can be tight initially and relaxed via a deviation process or just relaxed as more data becomes available.

OBJECTIVE TWO

Watershed-based water allocation plans include environmental flow needs and the water available for consumptive use.

Options for including water allocation plans in the Water Act

Consideration must be given as to whether the development of water allocation plans could be optional or required, and determining the level of discretion decision makers have for the resulting plan's application.

A. The development of water allocation plans is optional

Developed at the discretion of the Regional Water Manager and could be based on increasing water demand and decreasing water supplies, changing environmental conditions, conflicts among users, or at the request of a water user community.

OR

B. The development of water allocation plans is required

Plans may be developed province-wide, or

Criteria to determine priority areas may be developed, with priority areas requiring a plan, or

Plans may be ordered by the Comptroller of Water Rights.

AND

C. The decision maker must consider the water allocation plan

Once adopted, decision makers must consider plans. Although the decision maker is not bound by the plan they would be required to explain reasons for any decisions that do not follow the plan's recommendations.

OR

D. The decision maker must follow the water allocation plan

Once adopted, the plan must be followed with no exceptions by the decision maker.

Which options do you prefer, and why? Are there others?

Option B and Option D are preferred but also allowing a Regional Water Manager or even small community system manager to apply for a Water Allocation Plan or Water Management Plan at any time.

Under what conditions should a water allocation plan be developed and how should it be applied?

Conditions to be specified for a WAP or WMP should include:
-when an area is stressed
-when conflict over use exists
-when there is concern (based on evidence to the greatest degree possible) that insufficient resources exist or will exist under allowed ongoing development

A WAP or WMP must have sufficient teeth to prohibit use contrary to the ACT and be enforceable right down to individual property users.

OBJECTIVE THREE

Habitat and riparian area protection provisions are enhanced.

The Water Act defines materials that someone may be ordered to stop introducing or not introduce (dumping) into a stream. Stream health and fish habitat would be better protected if the dumping of a wider range of materials into a stream was prohibited, and the authority for responding to dumping and requiring restoration was clear.

Options for protecting habitat and riparian areas

A. Maintain the requirement for an engineer's order to prohibit dumping of material into streams (reflects current situation).

OR

B. Amend the Water Act to include a prohibition against dumping of a wider range of debris and materials into streams, with a requirement for the person responsible for dumping to restore stream health.

Which option do you prefer, and why? Are there others?

Option B is preferred. There must be no need to issue an order as the default condition. Enforcement is required to be able to stop dumping immediately as well as requiring repair of damage and cleanup.

GOAL TWO

Improve water
governance arrangements

Water governance is a broad and complex concept that includes the laws and regulations, the agencies and institutions that are responsible for decision making, and the policies and procedures that are used to make decisions and manage water resources. Governance also includes the way that science, information, community and traditional knowledge inform laws, policies and decisions.

Put simply, a water governance framework includes three dimensions made up of a number of elements described below. See Resource 10.5 for a fuller discussion and examples.

- Laws, rules, agreements and financing arrangements e.g. federal and provincial legislation, policies, processes, budgets, boundary and inter-jurisdictional agreements;
- Institutions, systems, roles and responsibilities e.g. agencies, information bases and the determination of who does what and how; and
- Operational management functions e.g. planning, issues response, decisions, enforcement, and outreach.

6.1 Objectives for improving water governance

In order to improve BC's water governance arrangements the following objectives

are proposed for a modernized Water Act:

1. Governance roles and accountabilities are clarified in relation to the allocation of water and the protection of stream health and ground water

   This includes roles for First Nations, industry, local communities and non-government organizations in planning and decision making

2. Governance arrangements are flexible and responsive to future needs and values
3. Management is coordinated with neighbouring jurisdictions across all levels of government and those with a major interest in the watershed

Indicate your level of support for the objectives proposed.

Support as far as it goes- under 1. why is ground water not included here as well as under goal 4

6.2 Possible Solutions

Three approaches for water governance are raised for discussion; they reflect a wide spectrum of decision making responsibilities. At one end is the centralized approach; at the other end the delegated approach; and in between, the shared approach. In any approach the province would retain the ultimate responsibility for fulfilling the duty to consult with First Nations, although some procedural aspects of consultation may be shared. The appropriate scale of watershed, accountability and dispute resolution processes would need to be clear in any chosen approach.

Options for improving water governance

A. Centralized approach

B. Shared approach

C. Delegated approach

Which approach do your prefer, and why? Are there others?

Option A is preferred as a starting position. Access and jurisdiction must be clarified, cleaned up and simplified so that any question of water use (internal to government, user originated or the public) can be addressed from a central, visible focal point with thenecessary responsibility and authority.

We must know what the government is prepared to delegate and under what conditions before other options are adopted. This probably means a hybrid system with careful plans for selected delegation. Also, I don't believe that the funding required for large scale, province wide delegation will be made available or sustained. If a delegated watershed is required to generate it's own funds (rather than being able to keep some portion of a provincial tax) there is too much danger it will be driven to a development based model rather than being a water steward. The province must always be actively involved in knowing if the mandate of a particular watershed is being met and make adjustments as needed

Generally, I'm not in favour of adding more of these bureaucracies. This can't just be downloading.

What scale of watershed is most appropriate for water planning and management (see Resource 10.6)?

The first question is really what size of watershed is involved after after an evaluation of what would be delegated (to solve what problems or make what improvements?) on a case by case basis? After that it may be that the watershed is too small to take on more administration/management/autonomy or it may be too large to address local issues (eg would be driven totally by a few interests). I don't think it can be said up front what size of watersheds would be candidates.

What funding solutions might help to implement the approaches?

Water is undervalued. If water was taxed in some way, as part of some other general tax or consumption tax at the provincial level, a designated portion could be used for funding watershed, basin or local groups to avoid pressures for self funding.

What are the important considerations for accountability, transparency, and dispute resolution processes in any delegated or shared approach?

The province must retain responsibility for standards,quantity,quality, conflict resolution,oversite (eg quality assurance), the processes, enforcement and funding. Application of the processes and management within a watershed/basin could be delegated(local bylaws,education, watchdog, tradeoff analysis,conservation targets, water use targets).

It is important to note that transparency, community input and participation, etc. can happen under a central approach, but that approach must be improved.

What are the benefits and implications of sharing roles for water stewardship?

It has been stated that sharing roles for water stewardship engages the public better in those areas and

that locally developed solutions are better. The former is probably true but the latter is not always true. Participation can be ensured under any model if there is a will. People need to feel they have a voice and that their efforts aren't wasted, but sharing/delegation doesn't guarantee the best decisions either.

GOAL THREE

Introduce more flexibility and efficiency

in the water allocation system

7.1 Objectives for introducing more flexibility and efficiency

in the water allocation system

In order to introduce more flexibility and efficiency in the water allocation system the following objectives are proposed for a modernized Water Act:

1. The water allocation system emphasizes and encourages efficiencies in both water use and the administration of water as a natural resource
2. Water users and decision makers have flexibility to quickly adapt to changing environmental, economic and social conditions
3. The water allocation system integrates the management of groundwater and surface water resources where required in problem areas
4. Water users conserve water during drought or when stream health is threatened

Indicate your level of support for the objectives proposed.

Strongly support

7.2 Possible Solutions

All of the options below relate to the allocation of water (where it is, or will be, regulated). For more on groundwater extraction and use see Goal Four.

OBJECTIVE ONE

The water allocation system emphasizes and encourages efficiencies in

both water use and the administration of water as a natural resource.

Options to encourage water use efficiency

A. Government determines actual needs in relation to a proposed undertaking on the basis of efficient practices and works. If water is not being used in a beneficial way as authorized, then the potential for licence cancellation exists. Cancelled water rights may then be reallocated or retained for stream benefit.

OR

B. Codes for efficient infrastructure and practices in different sectors are developed, in partnership with the sector, and the modernized Water Act requires compliance with these codes.

AND

C. The use of incentives and economic instruments is enabled in a modernized Water Act to encourage water efficiency. For example:

Penalties and bonuses;

Water rentals and pricing structures; and

Rebates for water reclamation and non-potable water use.

OR

D. Review rules for the transfer and apportionments of existing water rights.

This includes improving the ability for users to transfer from one appurtenance to another, and for the extension of rights to other purposes. These measures may provide flexibility for users to transfer water from ‘lower value’ uses to ‘higher value’ uses for both short term and long term transfers of existing allocations within water-sheds. Transfers could be enabled for both consumptive uses and stream health pro-

tection purposes. To implement this proposal government would provide guidance and audit transfers to ensure there are no increased impacts on the environment or other users.

Which options do you prefer, and why? Are there others?

Option A, and- Start with Option A and longer term develop codes to take over

Option C, and- Prefer both C and D. Option D seems different, not a mutually exclusive choice

Options to encourage administrative efficiency

E. Permitted uses would be defined and allowed under the Act in accordance with regulations applied in a consistent manner throughout the province.

OR

F. Permitted uses would be defined and allowed under the Act in accordance with regulations. Regulations might apply differently throughout the province based on risk or, if considered acceptable, defined and applied through a water allocation plan.

AND

G. Voluntary self-registration of the permitted use withdrawal.

OR

H. Required self-registration of the permitted use withdrawal.

Which options do you prefer, and why? Are there others?

Option F, and- Permitted use differences are probably needed but there might be a core list of uses that will always be permitted. Prefer both E and F.

Option H, and- Required self registration will provide a better data base.

What considerations would help determine which water uses and extraction

rates could qualify as a permitted use (no water licence required)?
Considerations could be-
No Stress on the watershed/aquifer, no significant development, no change in use profile, no loss of habitat, no drop in stream flows, no forestry changes, no conflicts, noquality changes. Also proof of non-impact by pumping/flow tests and measured use data and/or calculations particularly in dry season.

How should permitted use status be protected?

Permit must require remediation by applicant. Performance bonds could be required up front as part of development.

Options to encourage administrative and water use efficiencies

To improve decision making times and enforcement, existing water licence holders and applicants may potentially be responsible for:

I. Providing more detailed information about the proposed use and efficiency measures for licence applications or changes;

J. Documenting potential environmental impacts and effects on other users in licence applications or changes;

K. Seeking consent from, or undertaking consultation with, affected parties for licence applications or changes;

L. Measuring and reporting actual water use when demonstrating compliance with licence conditions;

M. Reporting well levels for regulated groundwater users;

N. Self-registering wells, especially where groundwater is in direct hydraulic connection with surface water or in areas of known quantity concern; or

O. ANY combination of the above.

Which options do you prefer, and why? Are there others?

Option O. -The list is a good start and would go a long way to proper permitting

OBJECTIVE TWO

Flexibility is provided to water users and decision makers to quickly adapt to changing environmental, economic and social conditions.

Option to provide water users and decision makers the flexibility to adapt:

A.

- Provide decision makers and licence holders with the ability to seek amendments of water licences' terms and conditions based on:
- New information about watershed issues, priorities or changes in supply (watershed, aquifer based) including addressing over-allocation and climate change impacts;
- The ability to use water differently e.g. bring more land into productivity, change land appurtenance or use, or to use water for a higher economic purpose;
- Incentives to consolidate licences within a community/watershed to inspire collaborative or shared management of the resource;
- Adverse impacts on aquifers or groundwater recharge zones; or
- Monitoring information that shows stream health is deteriorating because of lack of water.

Agree with basis of Option A

OBJECTIVE THREE

The water allocation system integrates the management of groundwater and surface water resources where required in problem areas.

Options for the water allocation system

A. First-in-time first-in-right – FITFIR

New surface water and groundwater, where it is regulated, are allocated based on a modified FITFIR approach.

B. Priority of use

New surface water in streams and groundwater, where it is regulated, is allocated based on priority of use determined either in the Water Act or with community involvement in the water allocation plan process.

If water licences have the same priority date on the same stream, the Water Act currently sets the following precedence (ordered highest to lowest): domestic, waterworks, mineral trading, irrigation, mining, industrial, power, hydraulicking, storage, conservation, conveying and land improvement purposes. Many jurisdictions have modified their FITFIR arrangements (during times of low flow). Manitoba, for example, gives priority to domestic then municipal, agricultural, industrial, irrigation, and other uses.

Which option do you prefer, and why? Are there others?

Option B- There is no point in changing the Act if we don't move to a priority system. This recognizes that compensation may be required in some cases.

OBJECTIVE FOUR

Water users will be required to conserve water during drought or when stream health is threatened.

Options to address temporary water scarcity

A. Discretional

The decision-maker determines the approach on a case-by-case basis, balancing

the effects on water users with the required environmental outcome (similar to section 9 of the Fish Protection Act).

B. Sharing

All water users would reduce use on a proportional basis depending on the water supply forecast, for example, if the supply forecast shows less water than normal, then allocations would be reduced on a pro rata basis. This approach could be influenced by water use efficiency, creating an incentive to employ efficient practices.

C. Hierarchy of uses

A hierarchy of uses guides how water use is reduced, for example, human and stock watering needs would be satisfied before landscape irrigation.

D. Priority date

This approach follows FITFIR, as contemplated by the current requirements of sections 15 and 88 of the Water Act but could be expanded to include the protection of ecosystem values.

Which options do you prefer, and why? Are there others?

Option C- This should not be discretionary and sharing reductions proportionally is not enough. The hierarchy of uses is optimal but needs open discussion in a local area and established up front.

Options to address long-term water scarcity

E. Through a mandatory Water Management Planning process

In some cases the province may require a planning initiative to address long term water scarcity, such as a Water Management Plan provided for in Part 4 of the Water Act.

F. At the request of water users or communities

Water licensees and other interested parties may develop a plan that addresses long term scarcity on a watershed basis and provides recommendations for supply and demand side changes to be made. Approved processes that include the wider community would need to be developed and followed.

Which option do you prefer, and why? Are there others?

Both Option E and F. Implement option E and allow option F. Need to allow quite a small scale of water user or community if the impact is large. Even two neighbours could jointly register a mutual agreement to follow restrictions selected from a list on a dowloadable form.

GOAL FOUR

Regulate Groundwater

Extraction and Use

8.1 Objective for regulating groundwater extraction and use

In addition to the objectives outlined in Goal Three the following groundwater specific objective is proposed for a modernized Water Act:

1. Groundwater extraction and use is regulated in priority (critical) areas and for all large withdrawals.

also add-

2. Enable small community systems to apply for and develop a local Water Management Plan including by-laws if a set of criteria are met...such as those for priority areas based on locally developed levels of groundwater extraction and consumption.

Indicate your level of support for the objective proposed.

Strongly support but with additional objective

8.2 Possible Solutions

Water, whether in a stream or in the ground, will be considered the same resource

under the modernized Water Act. In addition to the possible solutions outlined Goal Three, any groundwater regulation would be designed so impacts on other water users and watershed health is considered before additional diversion and extraction of groundwater is approved.

OBJECTIVE ONE

Groundwater extraction and use is regulated in priority (critical) areas and for all large withdrawals.

It is proposed to regulate extraction and use of groundwater above the applicable thresholds for large withdrawals, or within priority areas for all new and existing wells. The overall objective is resource protection. The possible solution includes the regulation of the extraction and use of fresh water for all purposes, including the injection of groundwater for oil and gas production. The construction of water source wells associated with oil and gas activities will continue to be regulated under oil and gas legislation.

The possible solution contemplates that if licensing of groundwater or other forms of regulation are considered necessary, existing groundwater users would be provided with transitional time to apply for their existing extraction and use to obtain protection similar to a water licence. Incentives for applying might include:

- increased security of the existing use;
- protection of the use from impacts (e.g., regulation of new well drilling on adjacent property); and
- an application deadline after which increased requirements to prove historic water extraction and use could apply.

Options for determining the thresholds for large groundwater withdrawals

A. The threshold for large could be:

500 m3/day for wells drilled in unconsolidated, sand and gravel aquifers or if otherwise determined to be large by a Water Management Plan.

100 m3/day for wells drilled into consolidated bedrock aquifers or if otherwise determined to be large by a Water Management Plan.

OR

B. The threshold for large could be:

250 m3/day for wells drilled in unconsolidated, sand and gravel aquifers or if otherwise determined to be large by a Water Management Plan.

50 m3/day for wells drilled into consolidated bedrock aquifers or if otherwise determined by a Water Management Plan.

The 500 m3/day threshold would capture mid to large sized water supply systems for small towns and larger communities, larger farms, resorts and golf courses. The 250 m3/day threshold would provide greater extraction control and would capture all of the above as well as some smaller enterprises. There would be a corresponding increase in regulatory costs.

The proposed thresholds are the highest in Canada due to the relative abundance of groundwater in some parts of BC. A lower threshold is appropriate for bedrock aquifers as they are less productive and their levels are more impacted more by extractions due to their confined nature and reduced recharge potential. Where

groundwater is not abundant it may be designated as a priority area and be regulated from a lower threshold.

Which thresholds do you prefer, and why? Are there others?

Prefer Option B but with 50 m3/day for wells in bedrock aquifer. Local communities should be able to set lower limits based on their own data and demonstrated support of the community. There would be the need to harmonize limits in adjacent communities.

Options for determining priority areas to regulate groundwater extraction and use

All groundwater users will be regulated in priority areas except for small scale extraction and use of groundwater for domestic purposes (for example 2-3m3/day).

A. Heavy groundwater extraction and use (rely on BC Aquifer Classification System);

B. Area of known quantity concern e.g., declining groundwater level, conflicts with other groundwater users, aquifers or water resources impacted by salt water intrusion;

C. Groundwater in direct hydraulic connection with surface water in areas of known quantity concern;

D. Significant population that is reliant on groundwater for drinking water;

E. Trans-boundary aquifers;

F. Basins where surface water is at or near the allocation limit; or

G. ANY combination of the above.

Priority areas may include the Okanagan Basin, the Lower Mainland, the Gulf Islands and the East Coast of Vancouver Island. The above criteria would allow for the identification of other basins such as in the southern interior of BC, where the availability of surface water is limited and tighter controls on the extraction and use

of groundwater may be desirable to protect the security of existing licences and environmental flows.

Which options do you prefer, and why? Are there others?

Prefer Option G- There are always a range of factors that can impact a given aquifer.