

British Columbia's
Water Act
Modernization

Policy Proposal on British Columbia's new
Water Sustainability Act

December 2010



“British Columbia has a rich heritage in our lakes, rivers and streams. Linked to generations past, present and future, our water resources are the foundation of our health, our communities, our prosperity and our environment.

Building on this heritage is vitally important. We can only do this together. I look forward to hearing your thoughts on a new *Water Sustainability Act* for British Columbia.”

Murray Coell
Minister of Environment

Water Act Modernization Continues

Government is exploring ways to modernize the *Water Act* to respond to the new challenges that exist for managing our water, including dealing with population growth, land and resource development and climate change. Modernizing our water laws is an important commitment in Living Water Smart: BC's Water Plan. The next step in *Water Act* Modernization is to present British Columbians with a proposal for a new *Water Sustainability Act* that would replace the current *Water Act*.

The purpose of this paper is to:

- Summarize the key policies of the proposed new *Water Sustainability Act*, and
- Provide an opportunity for stakeholders, First Nations and the public to comment on the proposed policies which will form the basis for the legislation.

This document summarizes the key policies being contemplated for the proposed new *Water Sustainability Act*, expected to be introduced into the legislature in 2012. The Provincial Government is interested in your views and encourages your comments on any aspect of this proposal. Information on how you can participate is provided at the end of this document.

Throughout this paper are a number of boxes identified as *What we heard*. These summarize some of the comments submitted to us during our engagement with you earlier this year. The electronic version of this document contains live hyperlinks to additional information. More detailed background on *Living Water Smart* and *Water Act* Modernization is also available from the *Living Water Smart* website at www.livingwatersmart.ca.

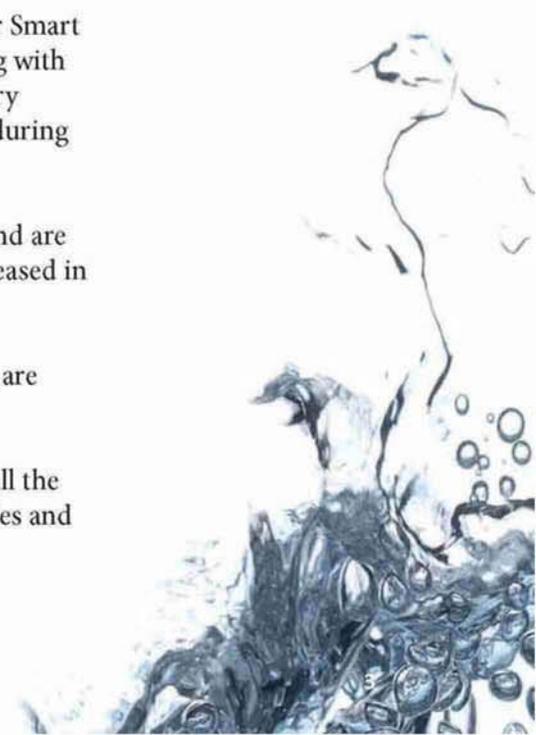
Process to date

Engagement on *Water Act* Modernization began with the launch of the Living Water Smart Blog in December 2009. The Ministry of Environment spent much of 2010 engaging with stakeholders, First Nations and the public on *Water Act* Modernization. The Ministry released a *Discussion Paper* in February 2010 and delivered 12 regional workshops during March and April 2010.

About 900 submissions were received from a broad range of interests and citizens, and are summarized in the *Water Act* Modernization Report on Engagement, which was released in September 2010.

The report, along with copies of all submissions and other background information, are available on the Living Water Smart website at www.livingwatersmart.ca.

During the summer and fall, Ministry of Environment staff reviewed and analyzed all the public input and developed draft policy proposals with the support of other ministries and external technical advisors.



In response to the high level of public interest and repeated requests for more participation, the Ministry committed to providing the public with additional opportunities to comment on specific *Water Act* Modernization proposals. This document has been prepared in response to that commitment.

All feedback from this phase of engagement will be shared with you via the Living Water Smart Blog and website and carefully considered as policy moves forward through the legislative development process.

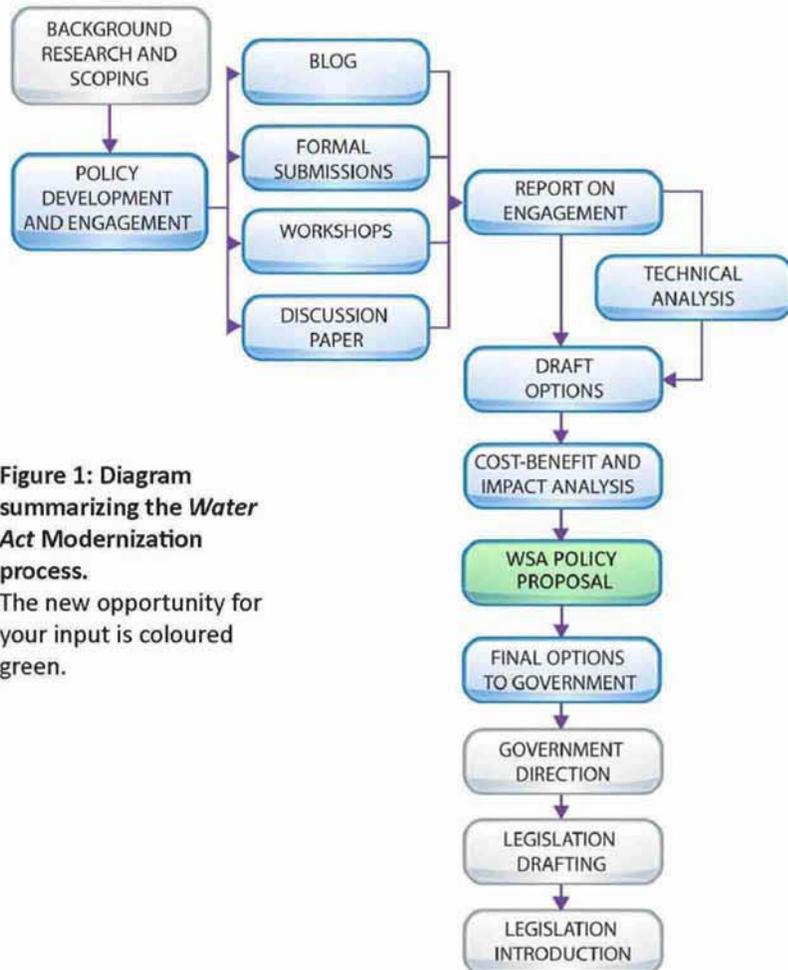


Figure 1: Diagram summarizing the *Water Act* Modernization process.
The new opportunity for your input is coloured green.

A new *Water Sustainability Act*

The *Water Sustainability Act* is for British Columbia – its communities, its environment and its economy. It will help lighten BC's water footprint and transition to a new way of managing water. Water in some parts of BC is already under pressure from a number of competing demands, and these demands continue to increase. Urban, land and resource development, climate change and population growth all affect ecosystems, and ground and surface water quantity and quality.

The WSA directly addresses the four goal areas in the *Water Act* Modernization Discussion Paper and will update, build on and replace the current *Water Act*. The WSA will respond to current and future pressures on water, and position BC as a leader in water stewardship. In addition to the focus on water supply and water quality, protecting human and environmental health, natural ecosystems and their goods and services, water security and public safety, and community, regional and economic development will also be important. For greater certainty, the provisions of the new Act are intended to respect aboriginal and treaty rights in a manner consistent with the *Constitution Act of Canada*.

A new *Water Sustainability Act*: Framework

The *Water Sustainability Act* (WSA) will establish a new legislative framework that will address BC's geographic and hydrologic diversity. The new Act will reflect the Provincial Government's leadership and encourage British Columbians to be responsible water stewards. It will support climate change adaptation and economic security and help ensure that water sustainability is considered in all decisions affecting water.

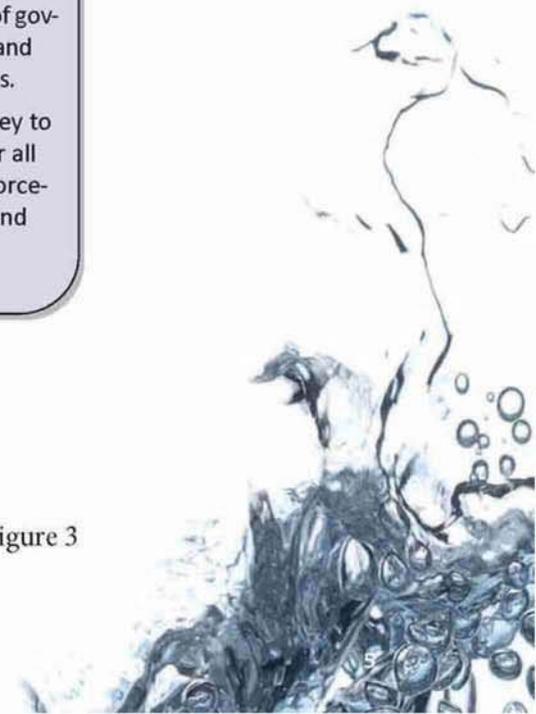
The WSA will establish a provincial framework based on risk, competing demands and scarcity, and enable an area-based approach for water management. The WSA will support government's shift in the natural resource sector to an area-based model and a more integrated approach for natural resource management.

Using an area-based approach means that local conditions, issues and interests, and local knowledge and information, including traditional ecological knowledge, will influence water management and help inform decisions.

What we heard...

- A strong provincial framework with clear and enforceable standards is needed.
- A framework that allows all levels of government and the public to understand everyone's roles and responsibilities.
- Ecosystem-level protections are key to ensuring access to clean water for all purposes. Standards must be enforceable, but allow for collaborative and innovative improvements.

Figure 2 (Appendix A) illustrates some of the challenges facing BC's water supply. Figure 3



(Appendix B) provides an overview of the proposed *Water Sustainability Act*.

The new WSA will have three levels of action for water management. Province-wide, a number of legislative requirements will apply, including protecting instream flows, regulating groundwater use, requiring more efficient use of water and using economic instruments and incentives.

In areas experiencing declining water supply, water quality or deteriorating ecosystems – known and chronic problem areas – additional and more stringent requirements will apply. This approach will enable management that is proactive (prevent problems from occurring) and responsive (respond to problems where they exist) where required. Criteria and thresholds will guide identification of these areas, and increasing risk, conflict and scarcity will drive increasing levels of planning, collaboration, and regulatory action.

In known problem areas where water supply and quality issues can be mitigated, water resource assessments will examine water supply and water quality problems and assess other area-specific factors. Strategies will be designed to meet area needs and avoid or manage problems. Requirements could include developing strategic water allocation plans (e.g., how water is allocated in the future), using area and sector based terms and conditions for new licences, using economic instruments or requiring additional monitoring and data collection. Collaborative and cross-sectoral approaches to solve problems will be used where and when appropriate.

In chronic problem areas where there are significant water supply issues and risks to water quality, quantity, and ecosystems, recovery action will be needed. Requirements could involve developing water resource assessments and strategic water allocation plans, preparing watershed sustainability plans, new conditions for existing and new licences, limits to new allocations, use of additional incentives and economic instruments or changes to land use practices. In these areas, collaboration and cross sector approaches involving industry, governments, communities, water users and citizens will be required to resolve problems and take action to address problems.

Table 1 summarizes the three levels of action and the scope of the policies to be included in the *Water Sustainability Act*.

Table 1. The *Water Sustainability Act*: A Framework for Water Stewardship in BC

Policy Directions	Three levels of action for water stewardship – key policies
<ol style="list-style-type: none"> 1. Protect stream health and aquatic environments 2. Consider water in land-use decisions 3. Regulate groundwater use 4. Regulate during scarcity 5. Improve security, water use efficiency, and conservation 6. Measure and report 7. Enable a range of governance approaches 	<p>In all areas of the province, province-wide measures will be implemented, including requirements for:</p> <ul style="list-style-type: none"> ■ Decision makers to consider <ul style="list-style-type: none"> ➢ Provincial Water Objectives in land, water and other resource use decision making. ➢ Formula-based instream flow assessments for all new groundwater and surface water allocation decisions. ■ For licensees <ul style="list-style-type: none"> ➢ To use water more efficiently. Incentives, economic instruments (e.g., increases in water fees and rentals), voluntary efficiency and conservation measures, and sector-based codes of practice will be enabled. ➢ To report on water use. ■ Use of criteria and thresholds to identify problem areas. ■ Regulating of groundwater use. ■ Water reserves for agriculture. ■ A range of collaboration mechanisms, and the ability to delegate responsibility for activities and decisions to local or regional agencies. ■ Different approaches for managing water during times of scarcity, allowing deviation from priority date under exceptional circumstances. ■ Preserving and protecting wetlands. ■ Dumping prohibitions. ■ An expanded compliance and enforcement framework. ■ Administrative efficiencies for users and for government. <hr/> <p>In known problem areas, apply additional measures to pre-empt emerging water supply and quality issues, including requirements for:</p> <ul style="list-style-type: none"> ■ Water resource assessments that consider available and anticipated water supply, and emerging social, environmental and economic trends. ■ Area- and sector- based conditions for new licences. ■ Incentives, economic instruments, and voluntary efficiency and conservation measures. ■ Additional reporting requirements (e.g., stream flow, aquifer levels). <hr/> <p>In chronic problem areas, apply additional measures to respond to known water supply issues and risks to water quality, including requirements for:</p> <ul style="list-style-type: none"> ■ Watershed sustainability plans where degraded watersheds require recovery action and will affect both land and water development and use. ■ Conditions for existing and new licences (e.g., licence expiry dates, cutbacks on water allocations). ■ Additional incentives, economic instruments and voluntary efficiency and conservation measures. ■ Collection of additional information, through increased monitoring and reporting, and periodic reviews.

A new *Water Sustainability Act*: Policy Directions

The following are key policies being developed as part of the *Water Sustainability Act*.

1. Policy Direction – Protect Stream Health and Aquatic Environments

Instream flows will be protected as an environmental value. Guidelines will be used to determine the instream flow, and decision makers will be required to consider these in new water allocation decisions for both ground and surface water. Licensees will be required to comply with terms and conditions of water licences that ensure their water activities do not compromise instream flows.

- Environmental or instream flows refer to the amount of water that streams need to stay healthy. Ensuring instream flows are protected is about protecting natural capital for the future. Protecting instream flows aligns with First Nations interests in stream health and supports protection of aboriginal rights to hunt and fish.
- Instream flow requirements will be established through the development and application of guidelines. Once these requirements are incorporated into water licences or approvals, the licensee will be required to meet the terms and conditions of the water licence. This approach provides protection of instream flows with enforceable terms and conditions in water licences.
- Protecting instream flows also requires regulating activities that may cause damage to aquatic environments (e.g., instream works, water use, dumping), considering how decisions affect water flow to maintain ecological function and regulating groundwater use (recognizing that surface and ground water are connected).
- Setting instream flow requirements may reduce the amount of water available in some areas for new water licence applications. Imposing additional restrictions in new water licences may result in increases in project costs, such as the costs associated with constructing storage infrastructure. The need to maintain instream flows may result in increased pressure to use groundwater.
- Protecting instream flows and water use reduction during times of scarcity may result in more frequent regulatory action – some senior licensees who have never been regulated may be periodically reduced or suspended.

What we heard...

- Strong support for protection of stream health and aquatic environments.
- Support for both guidelines and standards – preference for standards. Guidelines are too flexible or not enforceable.
- Support for strengthening dumping prohibitions.

2. Policy Direction – Consider Water in Land-use Decisions

Provincial Water Objectives (PWOs) will be established for British Columbia. PWOs will guide decisions made by statutory decision makers under the proposed *WSA* and other laws affecting land and resource use on crown and private land. They will be sufficiently flexible to accommodate regional and local differences. PWOs may focus on:

- Ensuring secure access to healthy water (good quality and adequate quantity),

- Addressing conflict among users, and pressures and trends in water supply and demand,
- Protecting naturally flow sensitive streams and ecosystem health,
- Addressing cumulative impacts.
 - All activities (land and water) within a watershed have the potential to affect water quality, quantity and timing of flow.
 - PWOs will improve consistency in decision-making across all regions of BC in relation to protection of water quantity, water quality and timing of flow. PWOs will also align how statutory decision makers under a variety of statutes (e.g., *Forest and Range Practices Act*, *Oil and Gas Activities Act*) consider water when making decisions regarding land use as well as water allocation.
 - In some areas, meeting PWOs may affect where and how land and resources are developed. In some cases, additional requirements (e.g., information, mitigation strategies) to meet PWOs may be required.

What we heard...

- Support for watershed and ecosystem protection.
- Recognize land - water connections and the interrelationship and how land use practices affect water quality, quantity and timing of flow.
- Balance ecological protection with economic priorities.

3. Policy Direction – Regulate Groundwater Use

Groundwater extraction and use will be regulated in problem areas and for all large groundwater withdrawals across BC. All existing and new large groundwater users throughout the province will be required to obtain a licence or an approval. The definition of a large withdrawal is currently being determined, and could potentially be in the range of 250 to 500 cubic metres per day for wells in unconsolidated aquifers and 100 cubic metres per day for wells in bedrock aquifers.

Groundwater will be licensed more extensively in problem areas. In known and chronic problem areas, licensing requirements will likely also apply to smaller users, in some circumstances this may apply to private domestic wells.

Licences will specify the maximum quantity of groundwater that can be extracted and used, and will set out other terms and conditions of pumping and use. Annual rentals for groundwater will be similar to those for

What we heard...

- Strong support for regulating groundwater.
- Concern expressed for critical areas, aquifers under stress, for cross-jurisdictional integration, if proposals fail to resolve vital groundwater extraction issues and do not go far enough to protect the resource. watershed and ecosystem protection.
- Regulation should vary, based on groundwater quality and aquifer vulnerability.
- Many First Nations communities rely on groundwater and will be impacted by groundwater regulation.

surface water, and will vary according to the water use purpose and the volume allocated. Application fees for groundwater licences, short term use approvals and drilling authorizations will also apply. In some cases, well owners may be required to submit hydrogeological assessments as part of an application for a groundwater licence.

- Groundwater extraction and use is not currently regulated in BC, resulting in localized conflicts, concern about declining groundwater levels and aquifer sustainability, and reduced stream flow in some areas.
- Regulating groundwater will provide clarity around the legal access to groundwater for the people who drink it and a level playing field for the businesses that rely on it. There will be new costs for development of groundwater, requirements for monitoring and reporting of use, and potentially costs to implement water use efficiency measures.

4. Policy Direction – Regulate During Scarcity

A staged approach will be taken (over time or as conditions dictate) to manage water in times of scarcity. The approach will involve:

- Encouraging licensees to implement efficiency and conservation measures (e.g., drought preparedness plans, codes of practice, through incentives, economic measures),
 - Requiring proportional reductions based on water supply forecasts. Implementation of proportional reduction targets will be developed with sectors as appropriate,
 - Regulating by priority date if efficiency and conservation measures, and proportional reductions are insufficient,
 - Deviating from priority date to importance of use will be enabled in exceptional circumstances (e.g., where high importance water uses are at risk, such as municipal water supplies).
- Times of scarcity are periods when insufficient water is available to meet the needs of users and the environment (e.g., drought, excessive water use, natural fluctuations, over-licensing).
 - This approach is intended to promote water conservation and efficiency. It will maintain licensees' certainty of access during times of scarcity, other than in exceptional circumstances. It may reduce the frequency of regulation, improving access and fairness for junior licensees.
 - The ability to regulate by importance of use in exceptional circumstances in the

What we heard...

- Support for both the First-In-Time-First-In-Right priority date and a Priority of Use approach to managing water – including groundwater.
- Collaboratively determine a Priority of Use structure which reduces costs for priority uses like drinking water and food production.
- Food production, drinking water and ecosystem protection are shared key priorities.
- Non-consumptive use of water should be addressed differently than consumptive uses.
- Greater economic, ecological, and social benefits will emerge from a more efficient system.

public interest may be perceived as reducing certainty; however its purpose is to allow decision makers to make common sense decisions.

- Water power projects and other non-consumptive uses affect streams differently than consumptive uses. Many of these licensees already have terms and conditions in their water licences to protect stream health during times of scarcity. As such, the regulation of these water uses will consider licence requirements and specific implications of the project on stream health.
- Storing water helps improve certainty of water availability in the face of variable water supplies. Regulation during scarcity will allow licensees to benefit from their investment in storage infrastructure.

5. Policy Direction – Improve Security, Water Use Efficiency, and Conservation

5.1 Economic Instruments

A range of economic instruments will be enabled as incentives for improving water use efficiency. Measures could include:

- Fee-based measures – e.g., increasing block pricing to incent water conservation, scarcity pricing,
 - Rebates – e.g., infrastructure rebates,
 - Liability and assurance regimes – e.g., requiring a security bond to prevent environmental impacts or to clean up and restore environmental damage,
 - Tradable permits – e.g., water markets.
- Expanding the range of economic instruments that are available will allow flexibility to protect water province-wide, incent conservation in known and chronic problem areas, and help achieve a number of different water management objectives, such as encouraging water conservation, allocating water efficiently among different users, and recovering the full costs of supplying water.
 - If economic instruments are used, licensees will continue to pay fees and rentals and the onus will remain on licensees to use water beneficially and comply with the terms and conditions of their licences.

What we heard...

- Increases in water pricing might reduce agriculture and industry competitiveness and viability.
- Support for enabling economic instruments and incenting conservation and efficiency.
- Greater economic, ecological, and social benefits will emerge from more efficient and flexible systems.

What we heard...

- Support for encouraging greater efficiency.
- Hierarchy of use should not be limited only to times of scarcity, but should underlie ongoing conservation efforts wherever possible.
- Conservation efforts to avoid water scarcity should be ongoing.

5.2 Best Management Practices, Efficiency and Beneficial Use

Water use efficiency will be incorporated into the definition of *beneficial use*. Water users will be required to demonstrate efficiency of use, for example, by matching irrigation flows with crop and soil types.

- *Beneficial use* under the current *Water Act* means using water for the licensed purposes (e.g., irrigation, domestic, industrial use) and under the terms and conditions of a licence. A licensee's requirement to make beneficial use of water currently does not include the concept of efficiency.
- Requiring efficiency as part of beneficial use will be supported through development of best management practices and codes of practice.

5.3 Agricultural Water Reserves

Agricultural water reserves, which expand the current powers to reserve water for an irrigation system or project, will be enabled. Transfers, extension of rights or other forms of collaborative sharing within an agricultural water reserve amongst users will be considered. Economic instruments will help producers achieve a higher return on their water use efficiency investments or their existing storage infrastructure. Using water under cancelled agricultural licences (e.g., for non-use) may be banked in the reserve for future uses within the agriculture sector.

- Currently Agricultural Land Reserve (ALR) lands can only be used for agricultural production. This can sometimes be difficult without secure access to water.
- Agricultural water reserves will protect the future water supply needs of land within the ALR and protect agricultural water needs. Creating agricultural water reserves will potentially improve the long-term security of water supply for ALR lands. This will also support increased agricultural production and food security, and water use efficiency within the agriculture sector. The agriculture sector will have more flexibility to maximize economic benefits from the available water supply.

What we heard...

- Concerns identified about security of water rights.
- Concerns about food security.
- Establish agricultural water resources to complement the Agricultural Land Reserve System.

6. Policy Direction – Measure and Report

Licensed ground and surface water users will be required to report actual water use and in some cases (e.g., in problem areas) stream flow, groundwater levels, well performance, and water quality. Requirements to report will begin with large surface and groundwater users province-wide. Domestic licensees and small private domestic well owners will not likely be required to measure and report, except potentially in problem areas.

Additional or more stringent requirements for monitoring and reporting (e.g., reporting on seasonal water quality) and reporting in problem areas will be enabled. There will be flexibility to allow for consideration of the appropriateness of implementing these requirements.

What we heard...

- Government's role should be measuring and reporting actual water use, while providing clear and timely information about all impacts on the environment and to water users.

- Measuring and reporting water use will provide the information needed to effectively manage water, in particular during drought and scarcity. It will help to provide a more accurate picture of water availability, and a way to measure efficiency of water use over time.
- Reporting will provide the data to support adjustment of license volumes to give water savings back to the stream and facilitate effective future water rights trading. Education of licensees and approval holders about efficient use will also be a benefit.

7. Policy Direction – Enable a Range of Governance Approaches

A range of approaches to support increased collaboration and participation in activities and decision processes will be enabled. Approaches will include the ability to delegate responsibility for activities and decisions to local or regional agencies (e.g., collaboration on development of Watershed Sustainability Plans). Allowing for flexibility, and responding to local conditions, interests and specific water management issues will be key.

- Water governance includes all the elements needed to make decisions: laws and regulations, agencies and institutions, policies and procedures, and science, information, community and traditional knowledge.
- Ultimate accountability for environmental protection will remain with the Provincial Government. Through the area-based approach, the Provincial Government will continue to establish and coordinate laws, rules, agreements and financial arrangements, including setting provincial objectives and outcomes. It will ultimately be responsible for deciding the institutions, systems and roles for any delegated responsibilities. The Province will also determine the compliance and enforcement framework.
- Expanding opportunities for collaboration and involvement in decision processes will give a broader role to British Columbians. It will support the inclusion of local interests and issues in decisions.
- The WSA will be flexible to respond to the range of current and potential agreements that may be established between First Nations and the Provincial Government.

What we heard...

- Support for updating governance structures.
- Aboriginal rights and title must be resolved.
- No clear support for a single governance model.
- Inclusive and collaborative structures will be vital to successful governance improvements.
- Establishing partnerships among stakeholder groups which build on local, tried and true solutions may hold the greatest promise for a mandatory planning process.

Continuing the Conversation

Beginning in January 2011, Ministry of Environment staff will explain key features of the proposed WSA in greater detail on the Living Water Smart Blog and how you can continue to be involved. We welcome your questions and comments on the proposed policy. While the easiest way to have your say is to comment via the Living Water Smart Blog, you can also comment by email, phone, fax.

In the previous round of engagement, much of your valued input came in the form of emails, letters and faxes. As such, this input was unavailable to a wider audience until we released the Report on Engagement. By submitting your questions and comments directly on the Living Water Smart Blog, you can help build a better conversation on the future of water sustainability for all British Columbians.

We encourage you to participate in the conversation through January 2011.

All comments received in response to the Policy Proposal on B.C.'s new *Water Sustainability Act* will be posted on the Living Water Smart website. Personal contact details will be removed before any information is made public.¹

For additional background on *Water Act* Modernization, please refer to:

- *Water Act* Modernization Discussion Paper (February 2010)
- Technical Background Report (March 2010)
- Report on Engagement (September 2010)

How to Comment

on the Blog at:

<http://blog.gov.bc.ca/livingwatersmart>

by email to:

livingwatersmart@gov.bc.ca

by fax to:

(250) 356-1202

by telephone to:

(250) 387-4734

by post to:

Water Act Modernization
Ministry of Environment
Water Protection and Sustainability Branch
PO Box 9362
Stn Prov Govt
Victoria, BC V8W 9M2

¹The Government of British Columbia is committed to protecting the privacy of people whose personal information is held by government through responsible information management practices. Any personal information provided to the Government of BC is collected, used, and disclosed in accordance with the *Freedom of Information and Protection of Privacy Act*, or other applicable legislation.

Appendix A

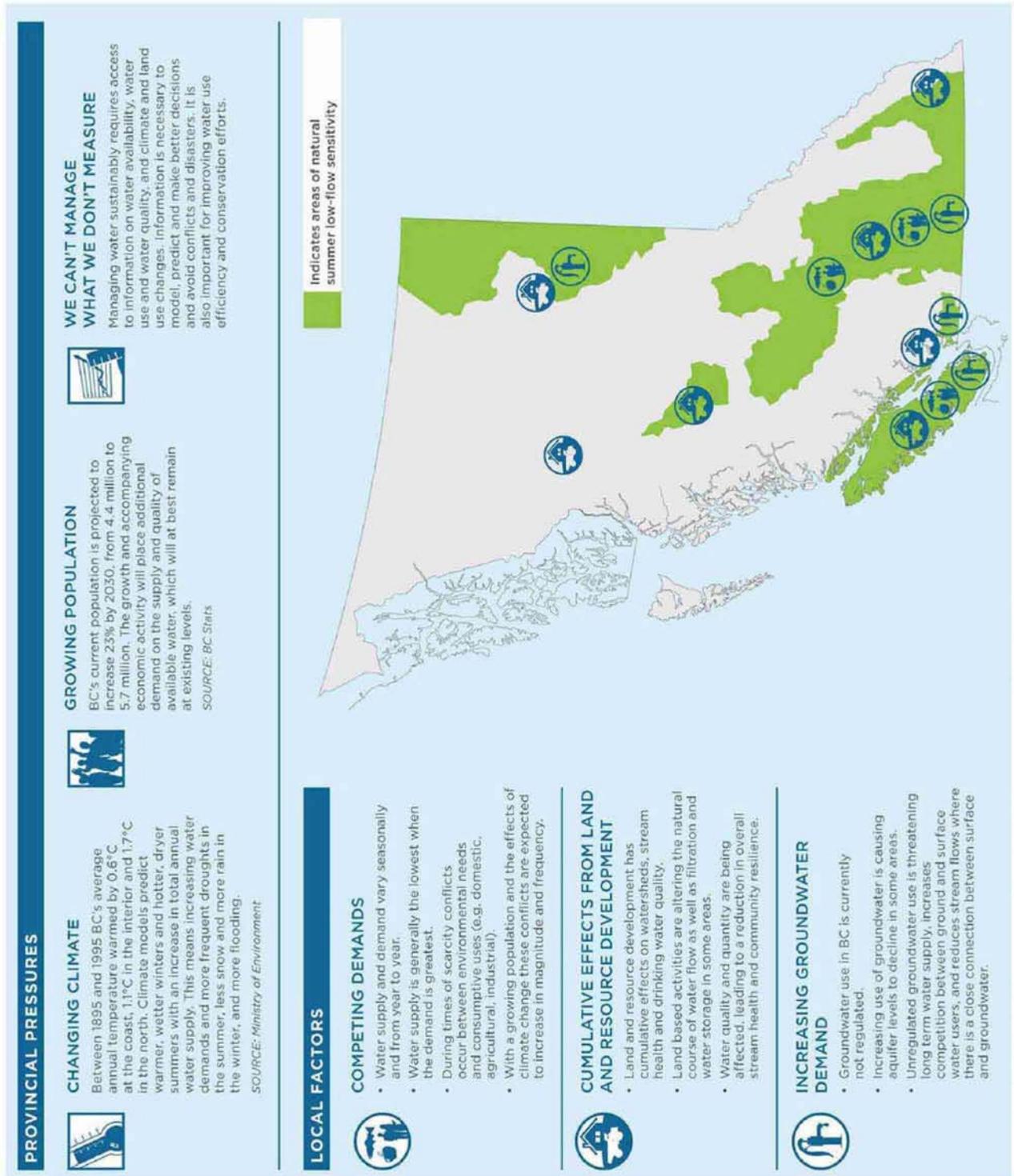


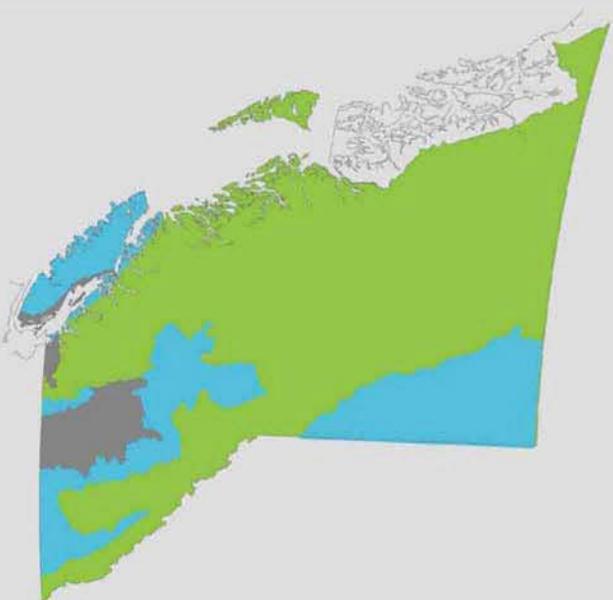
Figure 2: BC's Water Resources: Provincial Pressures and Local Factors

NEW WATER SUSTAINABILITY ACT — healthy watersheds, resilient communities & thriving industries

AREA BASED APPROACH:

Three levels of action based on risk, competing demands and scarcity

The proposed act **RECOGNIZES** BC's geographic diversity, hydrologic variability and uneven population distribution, **RESPONDS** to provincial challenges and localized issues, **SECURES** BC's water dependent future and **FULFILLS** 19 Living Water Smart commitments.



WATER SUPPLY & QUALITY GENERALLY GOOD

Apply province-wide measures, for example:

- Formula-based instream flow assessments for all new groundwater and surface water allocation decisions.
- Regulate groundwater use.
- Require more efficient use of water through incentives, economic instruments and voluntary efficiency and conservation measures.
- Establish water reservations for agriculture.
- Enable shared and delegated decision-making.
- Consider provincial water objectives when making land, water and other resource use decisions.

WATER SUPPLY & QUALITY ISSUES CAN BE MITIGATED

Apply additional measures to pre-empt emerging water supply and quality issues, for example:

- Water resource assessments.
- Area and sector based conditions for new licences.
- Continued use of incentives, economic instruments, and voluntary efficiency and conservation measures.
- Additional reporting requirements.

SIGNIFICANT WATER SUPPLY ISSUES & RISKS TO QUALITY

Apply additional measures to respond to known water supply issues and risks to water quality, for example:

- Watershed sustainability plans.
- New conditions for existing and new licences.
- Use of additional incentives, economic instruments, and voluntary efficiency and conservation measures.
- Additional information, increased monitoring and reporting, periodic reviews.

Appendix B

Figure 3. A new Water Sustainability Act for BC

Water is everyone's concern

and we can all play a role in determining BC's water future. To follow the on-going progress of the *Water Act* Modernization process, visit the [Living Water Smart Blog](#).

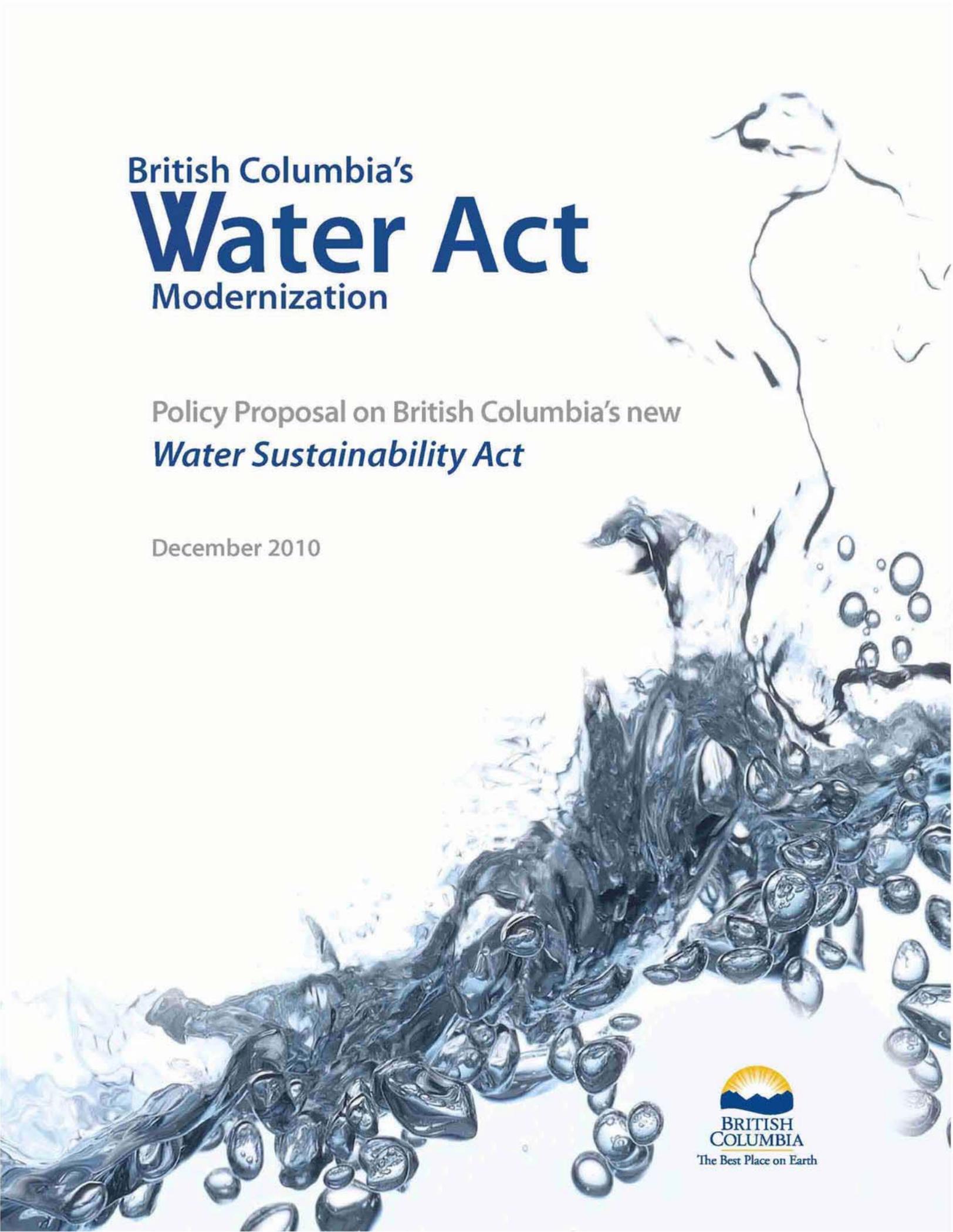


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A dynamic splash of water with numerous bubbles and droplets, creating a sense of movement and freshness. The water is captured in mid-air, with some droplets appearing to be falling or rising.

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