Purpose of this Brief

This brief provides analysis and recommendations for senior provincial government decision-makers to advance effective modernized land and water planning.

Problem

Conflicts between surface and groundwater users are increasing as communities across the province grapple with the mounting impacts of extreme droughts and flooding. The provincial government is firmly committed to reconciliation with Indigenous peoples, including implementing the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). This requires the provincial government to ensure Indigenous communities have sufficient access to water to meet constitutionally protected rights, as well as access to water for cultural, spiritual, and community use.

Impacts on water quality, environmental flows, and aquatic ecosystem health are being amplified by climate change and the cumulative effects of resource development. Low summer flows are now common in northern rivers, including the Upper Bulkley and rivers around Meziadin Lake, affecting spawning salmon. Droughts in B.C.'s Cowichan watershed have reduced the water available for the local pulp mill, irrigation, drinking water, and fish and ecosystem needs. Similarly, in the Nicola watershed low flows are affecting access to both surface and groundwater for Indigenous and non-Indigenous water users. The impact of extensive forest fires and poor logging practices are increasing siltation and flooding, and degrading watershed health, fish habitat, and drinking water in many regions across B.C., such as Vancouver Island, the Okanagan, and the Central Kootenays.

Two thirds of the province's freshwater species are at risk. This proportion will likely increase as changing hydrology and resource developments continue to reduce freshwater and marine biodiversity. Protection and restoration of aquatic biodiversity—from headwaters to marine habitats—is just as important as managing terrestrial biodiversity in land and water planning.

Rivers, streams, lakes, and aquifers are “integrators” on the landscape. Their health is directly dependent on the stewardship of upslope lands and land use practices in forestry, ranching, agriculture, mining, urban development, and tourism. Poor land use practices exacerbate flooding, imperil water quality, and reduce riparian resilience in the face of a changing climate. These impacts are expected to multiply and become increasingly costly as the climate continues to change.

In 2019, the Auditor General found troubling gaps in provincial oversight and protection of drinking water and source protection, noting that the lack of accountability and ability to protect drinking water is “of grave concern.” This emphasizes the need to clarify roles and responsibilities and update the regulatory regime.

Advancing reconciliation with Indigenous nations will require better management, planning, and governance of water and watersheds and will ultimately depend on resolution of these conflicts. Modernized land use planning cannot be successful unless integrated with watershed management and governance.

This brief is a complement and companion to the Direction Paper Towards Watershed Security: The role of water in modernized land use planning in British Columbia (2020). This brief is written primarily from the perspective of a former senior executive in B.C.'s provincial government and grounded by the authors’ collective experience working with Indigenous nations, communities, funders, and civil society, and advising provincial ministers and Cabinet on priorities, completion of mandates, and implementation.
Analysis

The provincial government already has a number of innovative tools to improve future water security for communities, Indigenous nations, and industry, but must complete policy analysis and capacity-building to implement them effectively. These tools are directly applicable to current land use planning and comprehensive reconciliation agreement tables underway.

In 2016, the provincial government brought the Water Sustainability Act (WSA) into force, which includes both surface and groundwater licensing and regulation. However, most of the WSA’s innovative water planning and sustainability tools—which can be tailored to solve the range of conflicts noted above—have yet to be implemented. Some of the most significant tools include:

- **Water objectives**, which can establish rules for allocating water flows to avoid conflicts between different water uses; establish water quality requirements to protect key uses for fisheries and drinking water; and ensure riparian areas are maintained for aquatic uses.

- **Provisions for protecting environmental flows.**

- **Area-specific regulations** targeted to resolving upslope conflicts between forestry, mining, ranching, urban development, agriculture, and supporting water objectives.

- **Full-scale Water Sustainability Plans**, which can be prepared under reconciliation (or government-to-government) agreements to meet shared water sustainability priorities and objectives.

The provincial government has signed several recent agreements with Indigenous nations to pilot WSA tools in the Nicola, Koksilah River, and Meziadin Lake watersheds, for example. The recently released Memorandum of Understanding with the Wet’suwet’en Nation includes explicit reference to sustainable water management with initial planning underway in the Upper Bulkley watershed. Completion of these water planning tools will require careful analysis and capacity-building both within and between the provincial government and Indigenous nations.

As river hydrology changes in the future, land use plans will have to be adaptive and supported by key design elements critical to plan success. Plan monitoring will be essential with adjustments made where the plan’s intended outcomes are not met. Water objectives may result in changed conditions for forestry, agriculture, mining and existing water licences. Prior consent with Indigenous peoples for a plan under UNDRIP principles will require staff to develop capability to find common ground, think strategically and build relationships. Conflicts may occur between application of Crown law and Indigenous law, requiring special skills to resolve.

This focused decision-makers’ brief complements the detailed Direction Paper “Towards Watershed Security: The role of water in modernized land use planning in British Columbia” (2020) to further support provincial government action. Download the full paper: https://poliswaterproject.org/polis-research-publication/towards-watershed-security/

Recommendations

1. The provincial government undertake the foundational policy work to complete the suite of innovative planning tools such as environmental flows, water objectives, area based regulations and water sustainability plans under Water Sustainability Act by the fall of 2021

2. Over the next 12 months the government tests these policies in the watersheds where with existing agreements and pilots to prepare the regulations and the staff capacities for implementing them more widely. Such piloting will provide valuable learning and capacities for their full implementation after the fall of 2021.

3. All land use planning tables initiate the needed water assessment work now to enable implementation of the water-planning policy tools starting fall 2021.

The POLIS Water Sustainability Project (WSP) is an action-based research group that recognizes water scarcity & sustainability is a social dilemma that cannot be addressed by technical solutions alone. The project focuses on the following five themes crucial to a sustainable water future:

- Water Law & Policy
- Watershed Governance
- International & Transboundary Water Governance
- Water-Energy Nexus
- Water Conservation & Water Soft Path

The WSP works with Indigenous nations, industry, government at all levels, civil society, not-for-profits, communities, professional associations and individuals to develop and embed water conservation and watershed governance approaches that benefit the economy, communities, and the environment. The WSP is a focus initiative of the POLIS Project on Ecological Governance at the University of Victoria’s Centre for Global Studies.