COMMENTS ON THE PROPOSED WATER SUSTAINABILITY ACT
T. Buck Suzuki Environmental Foundation
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The T. Buck Suzuki Environmental Foundation is a B.C. based environmental group that has existed for more than thirty years, with a membership involved in commercial fishing and fish processing, jobs that require sustainable, long-term fishery resources, health oceans and healthy river and stream waterflows.

There has been ongoing public debate for more than two decades on the need to revisit the B.C. Water Act and update it according to a modern, scientific understanding of waterflow needs for B.C. river and stream ecosystems in a way that integrates groundwater protection from over-extraction.

We feel we need to restate the key principles and recommendations that the T. Buck Suzuki Environmental Foundation has put forward for many years regarding essential elements needed to properly regulate surface water and groundwater in B.C.

There are hundreds of salmon streams in B.C. that are known to have inadequate water flows to sustain healthy populations of salmon. Hundreds more are likely to have low flow problems, but the provincial government has inadequate waterflow information, minimal waterflow monitoring and no regular mechanism to assess the month-by-month flow regimes of the majority of stream systems in the province.

Larger systems with major developments such as hydro dams have flow meters and water use monitoring, but even these have been found to have poor data or water withdrawal far in excess of their licence permit.

Salmon need a sustainable flow of clean, cool water to survive. Low water flows can seriously impact fish survival by increasing temperatures, lowering oxygen concentrations, and hindering

spawning and migration. Low flows mean that polluted waters entering our rivers are less diluted and more toxic.

Sockeye salmon are particularly susceptible to warm temperatures. Stress from high temperatures allows diseases, parasites and fatigue to kill off tens of thousands of salmon in the Fraser River mainstem and its tributaries. In-river mortalities are one problem. But a salmon too fatigued and stressed to spawn creates the same end result: the future generation is lost.

There are more than 40,000 water licences in B.C., a large number dating back many decades when environmental concerns were a low priority and water was seen as endless. Water licences have been granted in perpetuity making it very hard for a government to turn back the clock, even though some systems have their entire flow allocated for possible extraction and use.

We are extremely concerned that proposed changes to the Water Act will not ensure adequate waterflows for fish protection when new water licences are granted. And there are no mechanisms being proposed to deal with the mostly unrestricted water licence permitting from past decades that leave many river and stream systems with legally mandated inadequate flows.

The framing of the proposed Water Sustainability Act only states that waterflow needs for fish will be "considered." This does not guarantee that salmon and other fish have adequate water for their survival. We maintain that the only true conservation measure is an ecosystem approach that clearly states that the needs of fish and the environment have first priority. A "fish first" policy is the only way to ensure the future of threatened salmon runs in B.C. and the jobs that depend on a healthy salmon fishery.

We believe that the following principles should be integrated into any new legislation on surface water and groundwater use:

Mandatory waterflow requirements
The majority of scientific studies on waterflow needs and ecosystem health show that salmon and resident freshwater fish face serious risk when more than 30 percent of waterflows are withdrawn.

Fish protection flows
There should be specific measures contained in any water licence where salmon are at risk to address specific fish needs. Conditions limiting rates of extraction, potential storage for low

flow periods, monitoring, etc. should be part of every water licence. For salmon streams/rivers with significant human water use, a month-by-month waterflow regime should be a condition for licence approval to ensure waterflows for all stages of the salmon life cycle, particularly migration and spawning.

Onus to provide information on stream flows

Large-scale water users generally have waterflow monitoring in place and would have the resources for stream assessments. For small users, particularly on small systems with no water flow information, this may be financially more difficult. A practical approach we recommend is to place the cost of information gathering on all water users through a special conservation levy on all water use in the province based on volume of use. This levy would go to cover the government's costs for establishing streamflow data, fish habitat data and fish inventories. This could provide a much needed infusion of cash for monitoring and data collection, with the financial burden spread over all users. Further, we maintain that it would be most efficient and economical to have assessments done by provincial government staff, thereby ensuring independence data gathering. Flow measuring devices should be a standard requirement. If we can do this for natural gas and electricity distribution, we can and must do it for water use.

Other important principles

- Water extraction must never exceed levels required for ecosystem integrity or the needs of fish and wildlife.

- No water should be allowed to be diverted out of its natural watershed.

- Water extraction must not alter the natural water flow pattern and natural sedimentation levels in a watershed or stream system.

- Water being returned to rivers and the water table after human use must be free of toxins dangerous to the long-term health of humans, wildlife, fish and the ecosystem. This would require a high level of municipal sewage treatment, treatment of all stormwater effluent and non-point pollution sources must be eliminated.

- Removal of riparian vegetation or tree cover must not interfere with the natural hydrology of any watershed. Limits must be placed on the extent of impervious surfaces in the urban environment. Floodplains must be left to act as floodplains. Adequate riparian leave strips must be maintained on all fish-bearing waterways.

- Wetlands and marshlands must be preserved as essential components of freshwater systems.

- Water use must be sustainable for future generations.

- For water conservation to be possible, water must be kept as a public resource under public control with authentic local input at the watershed level. Privatization of water rights, drinking water or sanitation services erodes the ability to regulate water quality and water use in the interest of long-term conservation.

- Priority for water use must be for local needs, not for export.

- Adequate public funds must allocated to ensure a high quality drinking water treatment and sewage treatment infrastructure.

- Polluters must pay to remedy all ecological consequences of their actions.

- Laws, regulations and taxes should promote water conservation and penalize water over-consumption.

We ask that these principles be fully incorporated into the new Water Sustainability Act that is planned to be implemented next year in British Columbia.