

## **Water Sustainability Act: Engagement of Communities in Watershed Management**

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The Achilles heel of sustainable watershed management is our ongoing inability to deal effectively with assessing and managing the cumulative effects of the ever-growing human footprint on the land. All of our land and waterscapes require management of the human footprint to avoid over appropriation of ecosystem services and accompanying degradation of carrying capacity both globally and locally. But, this is especially true of those landscapes that are the drainage basins that house community watersheds. The Water Sustainability Act, to be useful in our modern context, needs to establish clear responsibility for cumulative effects assessment and management at the watershed scale. As there is practically no single agency that can provide that responsibility it will have to be provided by a collective of agencies and community organizations. The Act must create that collective mechanism.

One of the most important parts of the current water sustainability act draft legislation is also the weakest. The section on engagement of communities in watershed management needs significant strengthening if it to be a useful stimulus to positive change.

There are five major reasons why communities need to become materially engaged in watershed management:

1. Both the federal and provincial governments are finding it necessary to reduce the staff and budgets of environmental agencies that would normally provide for on-the-ground monitoring of watershed conditions and for taking remedial action where environmental problems are taking place. As the commitments of central agencies are reduced there are greater demands for citizen and local government based agencies to step into the breach and make a positive contribution
2. As the human footprint on the landscape inevitably grows, community watersheds, particularly those in unincorporated electoral areas, are experiencing the cumulative effects of growing settlement, interface fire vulnerability, transportation density, continuous forestry, energy and mineral resource development, expanded resource road networks, increasing recreation uses, expanded back country access to fish and wildlife habitat and increasing pollution. In most cases there is no integrating mechanism or responsible agency that is capable of dealing with cumulative impact assessment and management of all these elements. Local governments, municipalities and regional districts, with responsibilities for land use planning, settlement servicing and water supply management are being challenged with addressing cumulative impacts out of sheer necessity.

3. What land use planning is occurring, even at the local government level, tends to be confined to the assessment of individual development applications, normally arising from a single resource sector or from an applicant for a proposed subdivision. Assessment protocols are in place for each on an individual basis, often accompanied by nominal multi-agency referrals, but there are few instances where proposals for new activity are subjected to watershed scale examination of implications. Watershed scale thinking is beginning to take hold in hundreds of British Columbia communities, but it is arising from citizen groups that must be partnered with government agencies to be effective.
4. Climate change is now appreciated as a major influence on the future water supply provenance and physical volatility of community watersheds. Changes in the annual hydrologic cycle, particularly changes in frequency and intensity of wet and dry extremes, will require many adjustments at the community level. These adjustments are likely to be necessary on a continuing basis and are only likely to be perceived by local people as they experience the changes directly. Systematic continuous monitoring of watersheds is not currently common, both due to the expense and the lack of qualified people to do the necessary system maintenance, sampling, testing and data interpretation. For these gaps to be addressed we will have to engage citizen and local government organizations to put the eyes, ears and able bodies on the ground to conduct the necessary intensity of watershed stewardship.
5. Even under current circumstances of fragmented jurisdictions, growing human footprint and retreating environmental management capacity there is a high premium on collaboration among senior government agencies, between agencies and public watershed stewardship groups and between them both and the private sector. No sector has enough people, time or financial resources to make progress on its own. Successful management of community watersheds over the long term will depend on our ability to pool resources, integrate effort and make watershed stewardship a willingly embraced collective endeavour of “everyman”.

The revised water sustainability act needs to be actively innovative in bringing about a new order of community engagement in watershed management. It is wildly insufficient to speak in terms of a few “advisory committees” as though there was a solidly established government agency to advise. What is needed is legislation that seriously enables collaboration at the watershed scale and provides local government with the letters patent and resource allocations to bring it about. At present there are hundreds of potential models for community engagement and as many versions of community organization reflecting the diversity of British Columbia and the diversity of watershed circumstances. Of course any program that enables greater community engagement will have to reflect that diversity, but the common denominator is local government.

We have the examples at different scales of the Fraser Basin Council, the Okanagan Basin Watershed Board and the recent watershed management plans for Shuswap Lake and Christina Lake to draw upon for ideas that are already seen as practical advances.

It is obvious that there is a necessary role for the provincial government in ensuring that land use regulation and resource management is mindful of the overall provincial public interest. It is equally obvious that an active partnership of the province with local governments is necessary to deliver that commitment on the ground. In the Cowichan Valley Regional District, we are committed to working with the province to articulate a suitable partnership arrangement for community watershed stewardship and to pilot test it in a practical application. We feel confident that the recent experience of the Cowichan Watershed Board, the developing ecological governance model of the Shawnigan Basin Authority and the intention of the Regional District to create a regional scale watershed authority can provide a testing ground that will produce practical and useful results. It appears to us that local government leadership, with extensive engagement with First Nations, local citizens watershed stewardship groups and private industry, is needed to provide both the necessary degree of accountability to the provincial leadership and the grass roots inclusion that gives strength and durability to watershed management.

### **Practical Devolution**

The most difficult aspect of devolving watershed management responsibilities to local government is achieving a reasonable balance between local and provincial control of revenue generating resource development. A balance needs to avoid giving an absolute development-limiting veto to local government while also giving them enough authority to convey a meaningful role. If watershed land use decision-making is to be effectively shared between the province and local government then the rules have to be carefully developed and cooperatively field-tested. Some suggestions for conveyed responsibilities include:

- Authority for local government to convene responsible agencies for collaborative engagement in land use planning and resource development coordination in community watersheds
- Authority for local government to incorporate non-government watershed stewardship groups into the watershed management process both for consultation and for shared decision making
- Recognition of First Nation governments as full partners in community watershed management based on their rights and title to traditional territories and contained resources

- A requirement that resource agency permitting procedures include systematic consultation with local governments and First Nations before applications that are to take place in community watersheds are admitted to a regulatory assessment process
- Authority for local government to participate as a full partner with provincial government agencies in cumulative impact assessment and management in community watersheds
- A commitment to “ecological governance” that recognizes that the water provenance of community watersheds is an “ecosystem service” that requires fundamental attention to maintaining the proper functioning condition and ecological integrity of watershed ecosystems, streams, lakes and wetlands
- Systematic consultation with local government when the imposition of changes in water quality and quantity standards are being contemplated so that the necessary watershed management practices and infrastructure costs can be assessed before new standards are implemented.

The second most difficult aspect of devolving watershed management responsibilities to local government is providing sufficient financial support to enable an effective level of engagement. It is necessary to avoid devolution without resources but also to avoid a cost sink that is unsustainable. A formula needs to be developed that provides local governments, including regional districts, with a share of resource revenues, authority for earmarked development cost charges, taxation authority or basic infrastructure grants that are specifically tied to a watershed management function. These should be based on size of watershed area, numbers of the dependent population, history of water demand and the complexity of the land use pattern, climate conditions and water quality and quantities that must be managed. Such a protocol can only be achieved by negotiation and field trials and must be sufficiently flexible to handle provincial diversity.

Recently, the Shawnigan community has created a “Shawnigan Basin Authority” to act as the civic organization capable of the collaborative efforts needed both with the Regional District and with senior government agencies. The philosophy of the organization is based on the concept of ecological governance and intensive cooperation with all relevant agencies. We are in the process of seeking elector approval for an annual draw on local tax funds so that we are capable of being a direct funding participant and not just a supplicant. We are prepared to work with the Regional District and with government to seek the right mix of local and provincial responsibility for watershed management and are willing to test ideas in a practical setting if the new WSA approach will enable such experimentation.