DEMOCRATIZING URBAN WATERSHEDS
A Prospect for Participatory Environmental Planning in Metro Vancouver

Public participation is often lauded by municipalities as a valuable component of environmental planning. Yet, municipalities engaged in planning face the dilemma of determining how citizens and other non-traditional stakeholders can be meaningfully and effectively included in the decision-making process. For planners, this raises an essential question – what tools exist at the municipal planning level that can help promote public participation in environmental planning? This article explores ongoing planning challenges in urban watersheds in Metro Vancouver and an emerging participatory planning tool, known as the Open Standards for the Practice of Conservation, which is being pilot-tested by environmental planners and water resources managers throughout the region to bolster public participation.

Challenges of Participatory Planning in Metro Vancouver

For those engaged in watershed planning, the challenge of fostering public participation is usually hampered by more complex political, institutional, and economic realities that municipalities face. For instance, in Vancouver’s Still Creek, recent efforts to daylight and restore sections of the creek that were once covered in culverts has entailed overcoming a lack of coordination across jurisdictions from all orders of government. The crux of the matter is a separation of governance for tasks such as land use zoning, managing stormwater, and protecting fish habitat, all of which require close collaboration in order to maintain the health of watersheds like Still Creek. While government authorities previously formed a temporary Still Creek Steering Committee to spearhead collaboration on watershed governance, in the absence of a long-term, unified governmental approach to planning, it remains exceedingly difficult to foster participation in decision making.

Meanwhile, the growing populations in Vancouver’s neighbouring municipalities are creating land use pressures elsewhere. Neal Aven, the City of Surrey’s manager of urban forestry explains: “One of the big challenges is … the balance between developing the city [such as] building a strong industrial base and a residential base, while at the same time protecting all the biodiversity needs that we want and are trying to achieve.” Aven points out that, while development poses a challenge for conservation, it also offers prospects: “In places like Surrey, Langley, Maple Ridge, or Abbotsford, where growth is still happening, there are lots of opportunities to protect even more [biodiversity].” However, achieving this win-win scenario relies on a planning process that can deliver benefits in the eyes of both developers and conservationists, which is a difficult balance to strike.

Another municipality in Metro Vancouver navigating similar complexities is the City of Coquitlam. Margaret

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Birch, the city’s environmental services coordinator, confirms that land development and stormwater management are the most pressing issues the municipality faces. She also believes that one of the limiting factors for public participation is the municipal planning process for urban watersheds – referred to variously as Integrated Stormwater Management Planning (ISMP) or Integrated Watershed Management Planning (IWMP). As Birch explains:

IWMPs are driven by a necessity of municipalities that must have those in place when 20 percent or more of the land is being developed. An IWMP is funded by the city as a requirement before land use decisions are made, so it’s municipal-driven by a schedule and budget. Engaging volunteer stewards on a technical committee, with as few as two years to complete an environmental assessment and hydrological engineering assessment, can be a big challenge to their capacity to meaningfully participate.

Birch further emphasizes the difficulty of incorporating citizens and stewardship groups into such a fast-paced, technical process: “[Municipalities] are not able to support stewards with honorariums, so the stewards tend to be left behind or they can’t keep up.” The question then, is how to foster a planning environment where citizens can keep up?

Open Standards Approach to Watershed Planning

The challenges faced in Metro Vancouver suggest that municipalities, and the environmental managers who advise on development and conservation plans, would benefit from a participatory planning approach that is collaborative across jurisdictional boundaries, effective at balancing goals for conservation and economic growth, and accessible to citizens and stewardship groups. What the Open Standards (OS) approach offers is a series of alternatives. OS is defined as a planning framework used to collaboratively and systematically conserve ecosystems. In particular, OS facilitates and emphasizes adaptive management, cross-sectoral partnerships, and democratic participation of citizens as solutions to such planning issues.

Moreover, OS offers an adaptive management process with five recommended steps for formulating and implementing plans, as shown in Figure 1.

While these serve as a foundation for more comprehensive planning, the steps are promoted to be optional and free-form. Indeed, the name “Open Standards” was selected intentionally, as it encourages practitioners to use the standards freely and to apply them in a way that best fits an environmental or conservation management scenario. A prominent and successful case of OS being used in this way is the Coquitlam River Watershed Roundtable (CRWR) – a participatory entity with representatives from all orders of government, community and industry stakeholders, and the Kwikwetlem First Nation.

Birch, who is also a member of the roundtable, clarifies the way that the CRWR adopted this new planning tool:

How they used [Open Standards] was through a series of community meetings where they asked the community and all of their sectors of interest: what are those things in the Coquitlam River watershed that you care about? Through a workshop process, the participants narrowed it down to 10 ecological and human wellbeing components.

For the Coquitlam River watershed, these 10 components became their guiding principles for watershed planning – and were used to inform the establishment of a watershed plan that reconciles the growing pressure for real estate development with the collaboratively-determined needs for “healthier riparian areas, natural areas, livable communities, and recreation.” What is especially notable about the introduction of human wellbeing into the CRWR watershed planning is that it captures the benefits that nature provides to humans that are often overlooked in municipal planning decisions – including the mental and physical health benefits associated with being closer to forests and water bodies in urban and rural areas.

The CRWR followed the OS exercise of developing a conceptual model that includes identifying conservation goals, assessing risks and threats to watershed health, and outlining an analytical map of

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**Figure 1**

The Open Standards Approach

1. **Conceptualize**
   - Define planning purpose and project team
   - Define scope, vision, targets
   - Identify critical threats
   - Analyze the conservation situation

2. **Plan Actions and Monitoring**
   - Develop goals, strategies, assumptions, and objectives
   - Develop monitoring plan
   - Develop operational plan

3. **Implement Actions and Monitoring**
   - Develop work plan and timeline
   - Develop and refine budget
   - Implement plans

4. **Analyze, Use, Adapt**
   - Prepare data for analysis
   - Share learning
   - Adapt strategic plan

5. **Capture and Share Learning**
   - Document learning
   - Share learning
   - Create learning environment

Conservation Measures Partnership

Open Standards
goals and underlying problems. Regarding the health of the Coquitlam River watershed, Birch notes, “The Open Standards resulted in doing the conceptual modeling, and developing from each model what strategies could be [implemented].” A first objective of the CRWR Watershed Plan strategy for action is to address “healthier riparian areas” – the vegetation along streams and rivers that filters runoff from roads and protects water quality. To achieve this goal, the CRWR proposed an “incentives feasibility study” that, when complete, can provide potential incentives for the development community in Coquitlam to act as stewards by conserving riparian areas within development sites. Equipped with this strategy, Birch affirms, “We have a detailed action plan being developed; we are friendly and we know the players; we know what we need to do.”

Communities of Practice in Urban Watersheds

OS provides an opportunity for municipal planners to plan systematically and share the lessons learned widely. In a recent workshop hosted by Simon Fraser University’s Faculty of Environment Professional Programs, planners and environmental managers across Metro Vancouver convened to learn, discuss, and apply the OS approach. Surrey’s Neal Aven, who attended the workshop, noted that OS offers a more holistic approach that aligns well with how Surrey’s urban forestry team strives to undertake environmental planning: “In the City of Surrey, we tend to follow a similar sort of systematic approach when we’re thinking of projects … we conceptualize things, we plan them, we implement them, we monitor them, and we try to learn from them.” Aven intends to incorporate the OS framework into his adaptive management approach to urban forestry, whether it be in developing new strategies to treat aphids in Surrey’s street trees or in new ways to protect forest understory from disturbances.

By offering the workshop, SFU’s Faculty of Environment aims to foster a “community of practice” for planners using the OS method across municipalities – with a goal of creating a “group of practitioners who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis.” To support such communities of practice, researchers and practitioners investigating the effective uses of citizen participation methods and cases have been compiling their success stories on the open-source, knowledge-sharing website Participedia.net. The Participedia Project provides examples of citizen participation in environmental planning in settings that range from the urban watersheds of Still Creek and Coquitlam River in Metro Vancouver, to the coastal rainforests of Haida Gwaii on the North Coast of British Columbia. This open-source website is an example of how best practices such as OS can be more widely disseminated.

Grassroots Approach that Involves Government

While it is still too early to know the implications of applying this planning tool in Metro Vancouver, the benefits for the Coquitlam River Watershed Roundtable are well-established. (See the article in the November 2015 issue of Municipal World.) When asked if the OS framework allows for public participation to take form in a more meaningful way in watershed planning, Birch confirms: “Yes, absolutely. This is completely balanced, open, transparent input from all sectors including stewards, it’s basically a grassroots approach that involves government.”

It is clear that for municipal planning innovators like Birch, it is worth experimenting with new approaches to capture the full benefits of public participation. Moreover, in an era where municipalities are grappling with the intersecting threats of climate change, rapid urbanization, and the economy/environment divide, the OS framework is emerging as a promising conservation tool for municipal planners moving forward. MW