Okanagan Water Stewardship Council
Proposed Work Plan for October 2006-'08
October 10, 2006

The great strength of the Okanagan Water Stewardship Council is its collective diversity and expertise. The Okanagan Basin Water Board convened this Council with the intention of using the group as a think tank – to provide timely advice, analysis and strategic planning for long-term sustainable water management. Ideally, the Council will develop solutions that will be mutually agreeable across the different sectors of the water stakeholder community.

As a consequence, one of the Council's most critical activities will be to engage with one another about specific issues of particular importance for the watershed. Although everyone agrees there is an urgent need for better water management in the Okanagan, each stakeholder has a different perspective on the problem – how the issues should be defined, which are most critical to resolve, and how best to proceed. By systematically discussing the breadth of Okanagan water issues, the Council will be prepared to produce informed and nuanced technical and policy recommendations for action by the Board and community.

The following outlines a set of proposed topics to be taken up by the Council in the coming year. The goal of each discussion should be to share information and highlight potential areas of conflict that need resolution; as well as to identify existing knowledge gaps and feasible actions to move forward.

Modes of action
There are a number of actions that the Council may take, based on the topic and outcome of each discussion. The Council may also choose to not take action following a discussion, and may instead use the information to inform actions on other topics at a later date.

- The Chair may assign staff or subcommittees to conduct further research and bring the subject back to the Council in the future.
- The Council may direct staff or subcommittees to summarize discussion conclusions so that they may be included in the Sustainable Water Strategy.
- The Council may form a resolution directing staff or subcommittees to produce recommendations or position statements to share with the OBWB.
- The Council may form a resolution directing staff, subcommittees or a hired consultant to draft bylaws or other legislation recommended for adoption by local jurisdictions.
- The Council may form a resolution to employ a consultant to analyze specific issues and develop reports based on this work.
- The Council may form a resolution directing staff, subcommittees or a hired consultant to develop programs to improve water management.

Priority Water Resource Issues for the Okanagan

- **Water Governance** –
  - **Rationale**: Laws and regulations strongly affect which water management solutions are possible. There are widespread concerns about the maze of regulations and conflicting mandates related to water, crossing all layers of government. Having a better understanding of water law is essential for informing future decisions.
  - **Potential topics**:
    - International and Federal water laws, including transboundary issues and aboriginal titles and rights;
    - The Water Act;
    - The Drinking Water Protection Act;
    - The Fisheries Act;
    - Conflicts between legislation or among water stakeholders
    - Needs for further legislation;
    - Issues with enforcement.

- **First Nations** –
  - **Rationale**: The First Nations of the Okanagan hold a unique position in the valley. As aboriginal title holders, they are senior government partners and the primary stewards of Okanagan lands and resources, so it is essential to have their participation in long-term and basin-wide water management planning. The Okanagan Nation is particularly concerned about the sustainability of current water management practices, and with the need to protect water resources for future generations – ensuring also that there are adequate supplies of good quality water for fish and wildlife.
  - **Potential topics**:
    - Traditional knowledge and natural resource management in the Okanagan;
    - Current water management concerns and priorities of the Okanagan Nation Alliance and member bands;
    - How the Okanagan Nations' title and natural resource rights interface with Federal, Provincial and local district regulations and governance;
    - Potential for mutual support, water management partnerships and joint funding opportunities.

- **Source protection** –
  - **Rationale**: Source area protection has been one of the most effective mechanisms for protecting the quality and quantity of water supplies in other areas, and is thought to be especially important when supplies are uncertain and treatment costs are high.
  - **Potential topics**:
    - Resources needing protection: water quality, water recharge, storage capacity expansion, etc…
    - Different definitions and forms of Source Protection;
    - Existing stakeholder/land use conflicts;
    - Legislative tools;
    - Potential Source Protection funding and implementation mechanisms: fees on water bills, sales tax, assessments, purchasing development rights on agricultural lands, etc...
    - Potential pitfalls with land protection mechanisms: holding and monitoring covenants, need for endowments, etc...

- **Drought management planning** –
  - **Rationale**: Water concerns in the Okanagan often stem from variability in supply and demand, but what constitutes a water shortage? Water shortages vary in effect and intensity depending on geography, existing infrastructure and management regimes, and water needs for agriculture, fish, domestic use, etc… Prioritization of water use and allocation is a major source of conflict during dry years.
  - **Potential topics**:
    - What is the status of drought management planning within the different jurisdictions – municipalities and utilities – in the Okanagan?
    - How should drought management plans be developed and structured?
    - Pros and cons of water conservation ("essential for sustainability" vs. "water conservation lead to overallocation");
    - Pros and cons of water metering (important data, vs. "meters just let people who have more money take more water");
    - Should there be a basin-wide prioritization ranking for water use, or should these be developed by individual communities?
    - Is there a need for common drought trigger points for all utilities for valley lakes based on water level and time of year (what if some utilities have lots of water, and others do not)?
    - Potential and advisability of basin-wide water transfers between utilities and licensees.

- **Water quality** –
  - **Rationale**: Declining water quality in the Okanagan Lakes was one of the primary triggers for the creation of the Okanagan Basin Water Board. Since the 1970s, advanced treatment systems have dramatically reduced nutrient inputs from municipal sewage systems, but other water quality concerns remain – including pesticides, pharmaceutical, heavy metals. Are these concerns valid?
  - **Potential topics**:
    - Current water quality status in the Okanagan lakes and water systems;
    - Sources of impairment: stormwater outfalls, wastewater discharges, leaching septic systems, impervious surfaces, range cattle, etc…;
    - Impacts and mitigation of mining;
    - Experimental nutrient additions to support fisheries in Okanagan Lake;
    - Boil water advisories and filtration requirements for waterworks systems.

- **Agricultural irrigation** –
  - **Rationale**: Agriculture is the biggest water user in the valley, and a major economic driver. However, water needs increase in hot and dry years, leading to competition between agricultural, domestic, and environmental needs. Present irrigation licensing and payment structures create a disincentive for agricultural water conservation and metering. In an industry with low profit margins, the advent of metered pricing and the likelihood of price increases could make many agricultural crops economically unfeasible. There are also potential issues with the impact of agricultural operations and water quality. These and related concerns have been politically explosive in other areas, and having resolution on some of these issues would be a great benefit to the community.
  - **Potential topics**:
    - What specific policies and assurances are to create incentives for agricultural metering and conservation?
    - Should irrigation licenses be tied to specific properties, or can they be transferred when land is converted to other uses?
    - Pros and cons of developing an agricultural water market;
    - Other mechanisms could be used to support agricultural sustainability;
    - What agricultural practices are of most concern for impacts on water quality?

- **Water economics** –
  - **Rationale**: Water flows uphill toward money, and the costs of water treatment and supply are a major driving factor in water conservation, urban/suburban development, and the long-term viability of agriculture.
  - **Potential topics**:
    - Factors contributing to water costs: development of sources, operations and maintenance, monitoring, water treatment, etc…
    - Current status of water pricing;
    - Pros and cons of full-cost water pricing for domestic, and agricultural use;
    - Philosophical concerns about placing a value on water;
    - Which costs should be shared between communities?
    - What other economic mechanisms could boost the effectiveness and cooperation of water management in the Okanagan?

- **Environment, fisheries and wildlife** –
  - **Rationale**: It is essential to consider environmental factors in water management planning – for legal, ethical and practical reasons. Source area protections can do double-duty for protecting some ecological uses, but others require specific consideration. Like agriculture, wildlife need guaranteed water supplies – especially during times of drought – rather than a percentage allocation of available supply.
  - **Potential topics**:
    - What ecological uses most need protection?
    - How does water licensing law apply to fish and wildlife needs?
    - Gaps or conflicts in existing laws and regulations;
    - Potential conflicts between user groups and environmental needs (for example, the need for fish flows and agricultural water needs both increase during droughts);
    - Potential strategies or mechanisms for alleviating conflicts (for example, relocating water licenses from streams to lakes);
    - Potential environmental impacts of increasing water storage.

- **Water and land use planning** –
  - **Rationale**: When local governments and planners have clear planning guidelines, it is much easier for them to develop and implement standardized policies that protect water quality and supply. It is necessary to identify specific concerns about development, and make recommendations that reduce negative impacts.
  - **Potential topics**:
    - What development impacts cause the greatest concern for water quality and supply?
    - Short-term impacts: erosion, stormwater runoff, need for adequate soil on lawns, etc…
    - Long-term or cumulative impacts: reduced aquifer recharge, reduced storage capacity, increased flooding frequency etc...
    - What specific policies, practices or guidelines should be adopted by local governments?
    - Integrating water management planning with regional growth strategies;
    - Policies for upgrading and maintaining storm drain systems;
    - Design standards for development;
    - Foreshore development planning.

- **Water conservation programs, education and outreach** –
  - **Rationale**: Water conservation saves both money and energy, and having water conservation habits, practices and infrastructure in place will enable the community to maintain a high quality of life during times of drought. Part of the challenge in the Okanagan is to build a culture of conservation, even during years when water is plentiful, and to build public support for financing infrastructure improvements.
  - **Potential topics**:
    - What is the best way to respond to the question, "When are we going to run out of water?"
    - What are the components for a comprehensive conservation strategy?
    - Potential water conservation projects to educate the public and engage/mobilize stewardship groups;
    - What common standards should be developed for water saving devices? How to build support for large-scale conservation measures such as reusing treated wastewater, installing drip irrigation, implementing leak detection studies, and water audits.

OWSC Products

The following are products proposed for development by the Okanagan Water Stewardship Council over the course of the Water Management Initiative (March 2006-2009).

Long-term workplan

The OWSC has committed to developing a Sustainable Water Strategy for the Okanagan Basin. In addition to this work, it has been proposed that the OWSC culminate their first three-year term by holding a State of the Okanagan Basin Conference, and producing a State of the Okanagan Basin Report. This report could be further developed into a semi-annual Okanagan Watershed Report Card. There has also been a proposal that the OWSC develop a water protection manual of best management practices for development.

Proposed policy statements

During the course of the first three-year term, the OWSC intends to draft policy statements or proposed bylaws on specific water management topics. The following have recently been proposed by members of the Council.

- Statement on universal metering
- Statement/draft bylaw on soil amendments
- Statement/draft bylaw on minimum lot size for septic systems
- Uniform stormwater regulations for sediment and erosion control
- Statement on the Province's responsibility for hydrological monitoring

Communication resources

There are a number of other resources that may be developed by the OWSC, and made available to interested stakeholders through the OWSC website.

- Okanagan Activity Matrix listing all the water-related projects taking place in the Basin.
- Index of water stewardship-related organizations and contacts
- Public surveys on water value and pricing
- Web-based clearinghouse for water-related information, links to other organizations, water utilities, and government sites
- Source list of agencies and organizations that provide grant funding for water-related projects.