OKANAGAN WATER SUPPLY & DEMAND PROJECT
PHASE 3 – OVERVIEW

The Okanagan Water Supply & Demand Project is a best estimate of current and future water supply and demand in the Okanagan, using state-of-the-art computer modeling tools. It shows the pattern of water availability in the valley, and evaluates water management alternatives that accommodate population growth, climate change, land use and preserving the environment. The model will be updated over time, and is essential for sustainability planning.

Phase I (2005), identified what data and information were available. Phase 2 used computer models to develop an Okanagan water budget – intended for use by local governments for planning decisions, and by the Province of BC for water management. Phase 3 focuses on communication, consultation, policy development, and on making data and information widely available. It paves the way for model updates by collecting data on critical elements like lake evaporation and groundwater. Phase 3 ensures that the work of Phase 2 is put to best use for planning, adaptation, education, and improved management, and includes the following activities:

Communication with Stakeholders

- ***Supply & Demand Reporting Tool:*** A web-based search tool that communicates about Okanagan water in an easy-to-understand way – using graphics to show the current and future status of water availability in the valley.
- ***Website***: Enhancing the Water Supply & Demand Project pages on the OBWB website, providing links to the web-based reporting tool, and all project reports.
- ***Web Videos***: A video is being produced on the Okanagan Water Demand Model, in partnership with the Province of BC. The videos would be available on the OBWB website.
- ***Visualization Tools***: Several visualization tools were developed to show climate change (sea level rise) impacts on low-lying areas in the Lower Mainland. OBWB staffers have discussed developing a similar tool for lake level/scenario visualizations with UBC-O researchers.

Database and Models

- **Train researchers and technicians**: Government, and university researchers and local environmental consultants will be trained in use of the Okanagan Hydrology Model, Groundwater Model and the Water Accounting Model to ensure they are widely used.

- **Web-reporting tool expansion**: As new information and scenarios are developed, they will be shared on the web-reporting tool.
- **Additional scenarios**: New scenarios will be developed in response to feedback from stakeholders – looking at a wider range of water futures and how to best adapt.
- **OkWater database**: The data archive will be expanded and made as accessible as possible to the public and expert users.
- **Water Science Library and Database**: All the reports used in the project and many others on Okanagan water are available now on the OBWB website.

Turning Results into Policy

- **Analysis of current water policies** in the Okanagan, and how they are suited to respond to water shortages, with recommendation for changes.
- **Community consultation process**, releasing the results of the project and discussing planning options.
- **A strategy for sharing water during shortages,** such as a basin-wide drought plan, water use plan, and/or water management plan.

Updating and Improving the data and models

- **Water use reporting**: A streamlined web-based system for reporting bulk water use is being developed in partnership with MOE and MCD.
- **Lake evaporation**: A project involving physical measurements of lake evaporation is planned.
- **Hydrometric and meteorological monitoring**: Planned upgrades and expansion of the Okanagan water monitoring systems are sought in partnership senior government.
- **Groundwater monitoring**: The network of test wells will be expanded to track aquifer health in key areas.
- **Improving the models**: The Okanagan hydrology and accounting models have great potential for more detailed use, as they are developed for individual drainage areas.

A Note on the Lead Funder

NRCan's ***Regional Adaptation Collaboratives (RAC) Program*** is a national program. BC's RAC is administered by the Fraser Basin Council on behalf of NRCan and the Province. There are approximately 19 separate projects that together form the BC RAC, with a total budget of more than $3.3 M over 3 years. The Okanagan Water Supply & Demand Project has been awarded

a total of $499,300 through this program – the first $298,000 was announced in January 2010, and recently the project received an additional $201,300.

In the next two fiscal years, RAC funds will be used for Phase 3 projects such as public communication and consultation, making data accessible to municipal planners, further developing future scenarios based on the needs of local governments, stakeholders and senior government partners. The final year will culminate with a report targeted to local governments and the Province identifying potential policy changes and other actions to reduce water shortages and protect ecosystems. Additional funding is being sought for the remaining Phase 3 projects.