living within our means

Recommendations for Drought Proofing the Okanagan

Okanagan Basin WATER BOARD

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Government will require all users to cut back their water use in times of drought or where stream health is threatened.
BC Living Water Smart Plan (2008)

Whether a dry period in the Okanagan is considered a drought depends on geography, infrastructure and management regimes, and water demand for environmental and human uses. It is essential to characterize different drought intensities to develop appropriate response plans. If an official drought declaration is called too late, opportunities for conservation measures may be lost.
Okanagan Sustainable Water Strategy (2008)

Message from the Acting Chair of the Okanagan Basin Water Board

This summer has been a wake-up call – leading us to ask ourselves: "Are we ready for drought?" Here in the Okanagan, it is easy to forget that we live in a desert-like climate when we are surrounded by large lakes and lush green vineyards and orchards. But, looking around at the dry hills and forests, smelling the smoke from the forest fires, and seeing the low water levels in the streams and lakes this year reminds us of just how vulnerable our area is to water shortages. Water managers work hard to ensure that supplies last from season to season, but climate change, pine beetle and a growing population is changing the game. Every Okanagan citizen has a responsibility to take care of our water. Drop by drop, each of us makes use of our most precious resource--we water our gardens, play on the lakes, eat Okanagan fruit, and drink Okanagan wine. Drop by drop, water is ours to waste or conserve. Now is the time to collectively protect our resources for our children and grandchildren, and do all we can to ensure that their quality of life is not just as good as ours, but even better. On behalf of the Okanagan Basin Water Board, I ask municipalities and other water purveyors to work together to develop plans to share water that meet all of our needs and the needs of the environment. There is absolutely no risk to drought planning – when the rains come we can enjoy our supplies but when we have dry years, we will be ready.

Stu Wells, Acting Chair of the Okanagan Basin Water Board

Message from the Executive Director of the Okanagan Basin Water Board

The Okanagan stands out among all areas in British Columbia by how much we depend on the health and beauty of our lake system. The lakes are our greatest asset, and protecting this asset will take the combined effort of all Okanagan communities. I like to think of it as a new opportunity to demonstrate leadership by working together on collaborative water management. As the response to this workshop showed, Okanagan water suppliers and elected officials are seriously committed to protecting the sustainability and security of our water supplies. In the coming decade, one of the most important contributions the Okanagan Basin Water Board can make is to help communities prepare for the impacts of population growth, development and climate change. We will continue to look to the governments of Canada and B.C. for their leadership and assistance, but here in the Okanagan watershed, the Okanagan Basin Water Board hopes to assist each community and water purveyor with developing an effective drought response plan, and to link these plans together to have a Basin-wide plan to protect from drought and protect the health of our lakes.

Anna Warwick Sears, Executive Director of the Okanagan Basin Water Board

Table of Contents

Introduction

Water is a priceless natural asset in the Okanagan Basin. Balancing the competing water requirements of the environment, human needs, irrigation, tourism, recreation, industry, and cultural values has become increasingly difficult as more people live, work, and play in our watershed. We have always had large seasonal and annual cycles, alternating between wet and dry periods, and some areas of the Basin regularly experience water shortages. Climate change is expected intensify this pattern: to bring more powerful storms, longer drought cycles and greater evaporation, and lead to a longer, hotter growing season with increased irrigation demand.

Drought conditions will impact Okanagan communities in many different ways. Drought can reduce supplies for drinking water and household use, lead to lower streamflows and warmer river temperatures for fish, and limit the water for irrigating our crops, orchards and vineyards. Over the next decade it will be very important for local governments to prepare for the impacts of population growth, development and climate change on water supplies. Everyone needs water, and we are all connected through the chain of valley lakes. We need to take a Basin-wide approach to water management, looking at the system as a whole and finding ways to work together to drought proof the Okanagan Basin.

The Drought Planning Workshop, hosted by the Okanagan Basin Water Board on July 23, 2009, began a discussion about the tools and policies needed for coordinated drought management planning in the Okanagan Basin. This report summarizes the workshop and some of the tools available for local governments.

Overview of 2009 OBWB Drought Planning Workshop

Content and Format

"If we knew with certainty that the Okanagan will face an Australian-like drought in the next five years, what management tools would we need to best handle the crisis?"

Dr. Anna Warwick Sears, Executive Director, Okanagan Basin Water Board

More than ninety politicians, water purveyors, consultants, members of non-profit groups, and media from around the Okanagan gathered together at the Kelowna Community Theatre to discuss how best to prepare for water shortages. The Workshop provided information on the current water situation in the Basin and outlined tools, policies and management techniques available for purveyors to respond to water shortages and to prepare for future drought conditions. Furthermore, the workshop provided an opportunity to discuss and identify collaborative "drought proofing" actions that may be accomplished on a Basin scale.

The workshop included presentations from federal, provincial, and local water managers (available at www.obwb.ca/drought_planning_workshop_2009/):

- 2009 Water Conditions in the Okanagan and Neighbouring Watersheds
  Brian Symonds, Director of Regional Operations, Penticton, Ministry of Environment

- **Drought Issues in the Okanagan Basin: Local Purveyor Perspective**
  Bob Hrasko, Vice-Chair of the Water Supply Association of British Columbia
- **Low Flows and Impacts to Fish and Fish Habitat**
  Dean Watts, Senior Habitat Biologist, Fisheries and Oceans Canada
- **Dealing with Drought in BC**
  Ted van der Gulik, Senior Engineer, Ministry of Agriculture and Lands
- **Using the Water Supply & Demand Project for Okanagan Drought Planning**
  Anna Warwick Sears, Executive Director, Okanagan Basin Water Board
- **Dealing with Drought: It Takes More Than Planning**
  Wenda Mason, Manager, Major Projects, Water Stewardship Division, Ministry of Environment
- **Glenmore-Ellison Improvement District: Case Study 2005 Drought Management Plan**
  Darren Schlamp, Manager, Engineering and Development, Glenmore Ellison Improvement District
- **Drought Planning for Utilities at the Basin Scale**
  Nelson Jatel, Water Stewardship Director, Okanagan Basin Water Board

The workshop also included an interactive discussion where the audience commented and asked questions about topics related to drought proofing the Okanagan. The topics included:

- Storage development and management
- Common drought trigger levels for valley lakes
- Coordinated conservation bylaws
- User pay versus allocation allotment
- Defining and communicating drought to the public
- Memorandum of Understanding – drought policies

Quotes from Participants

BC's Living Water Smart plan asks all users to cut back their water use during droughts or when stream health is threatened. We have to recognize limits to water, which means that the days of taking it for granted have passed. I am committed to making sure that critical water information is available so that local water purveyors can make the right decisions about when to conserve water, at the right time. There is only one water in the Okanagan, and we need to take care of it.

John Slater, MLA, Parliamentary Secretary for Water Supply and Allocation to the Minister of Environment

Water is something we often take for granted. People often say we have lots of water as they point to our beautiful Okanagan Lake. However, the reality is that the Okanagan's semi-arid climate and growing population highlight the need to plan as a region to mitigate low water conditions. The Federal government is here to help – following up on the May 2007 National Drought Strategy for Agriculture working group held in Kelowna, Agriculture and Agri-Food Canada is proposing a national drought strategy. I salute and thank the numerous volunteers and staff of the working groups that are proactively raising awareness of the importance and value of water and look forward to continuing to work with you. We all play a part in water conservation and planning to ensure that we can continue a strong regional economy and high quality of life. Enjoy water and remind your friends and family of the importance of preserving and protecting our valuable asset. Water is the life blood of every resident in the Okanagan.

Ron Cannan, MP Kelowna Lake Country

It is perhaps appropriate that we are meeting in this rehearsal room, and that's how we should see this day. Drought is coming to a neighbourhood near you. It's our responsibility to plan for this and to have answers for when it comes.

Mayor Stu Wells, Town of Osoyoos, Acting Chair of the Okanagan Basin Water Board

Drought planning is essential for the entire Okanagan and all water purveyors must continue to work together to achieve the best practices for such a plan. I believe that water availability will be the determining factor for future growth in our communities. The Drought Planning Workshop hosted by the Okanagan Water Basin should be our first step towards an ultimate goal of achieving a sustainable valley. We live in a beautiful region and need to be vigilant and relentless in maintaining a quality of life for our future generations. Water quantity and quality is the key!

Mayor Sharon Shepherd, City of Kelowna

With the increasing potential for low flow years, water purveyors must evaluate suitable sites to increase reservoir storage and the economics associated with such a decision. Equally important is the utilities' water conservation strategy, which must include water meters for all customers as well as an effective consumption-based metered rate to encourage customers to use less water. Metered rates to measure actual consumption and a drought management plan, which includes outdoor sprinkling regulations, will assist the utility to defer capital spending requirements associated with the construction of larger reservoirs and distribution or treatment infrastructure. These are primary tools to enable a utility to prepare a comprehensive water management plan for the future.

Brian W. Jamieson, P.Eng., General Manager, Westbank Irrigation District

Recommendations for Drought Proofing the Okanagan Basin

Recommendations to Senior Government

Senior government has an important leadership role in drought management. Local governments and water suppliers look to them for water supply monitoring and forecasting, effective communication of current conditions, and tools and templates for drought planning.

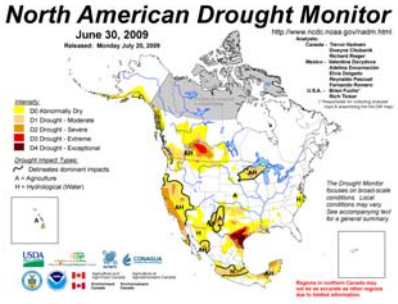
Actions by the Government of Canada:

- **Funding for Water Infrastructure:** Target Building Canada infrastructure dollars to projects that upgrade and expand water systems, repair leaks, and separate urban and agricultural water supplies.
- **Funding for Agricultural Water Supply Expansion Program:** Renew Agriculture and Agri-Food Canada funding for the Canada-B.C. Water Supply Expansion program, supporting irrigation system upgrades and efficiency improvements.
- **Expand Water Monitoring:** Expand the network of Water Survey hydrometric and weather stations in the Okanagan to allow local managers to have early warning of water supply changes.
- **Measure Lake Evaporation:** Use latest technology and techniques of Environment Canada to determine how much water is lost from the surface of our lakes. Without knowing how much we are losing, we can't manage our supplies.

- Increase First Nations' Water Science Capacity: Okanagan First Nations' recognize the need to identify current and future water demand for reserve lands and to prepare for potential shortages, but lack staff capacity and hydrological expertise. Provide funding to support full-time water science staff to work with local water managers and put plans in place.

Actions by the Government of British Columbia:

- Drought Response Framework: Develop a B.C.-wide framework for drought response and enact enabling legislation. The framework will establish steps for coordinated drought response by the B.C. Government, outline key provincial agencies and their role during droughts, design a plan for agencies to communicate during droughts, and identify other core participants for drought planning.
- Drought Communication to Water Sector: Develop a communication strategy that provides timely information to water purveyors, local industry and stewardship groups about drought on a watershed level.
    - Drought Information: Collect, coordinate and share B.C. drought information. As part of this effort, develop maps that show drought intensities in each B.C. watershed and update this information monthly (Figure 1).
    - Okanagan Drought Indicators: Develop a drought response system that uses water levels in Okanagan mainstem lakes as indicators of drought severity and triggers specific actions at each level.

(A)  (B) 

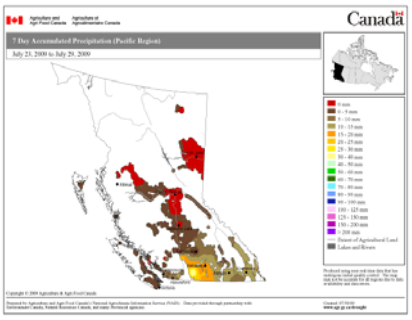
(C) 

Figure 1: Data layers that could be used for watershed level drought monitoring in BC (A) BC Watersheds (geographical context), (B) North American Drought Monitor (C) Agriculture and Agri-Food Canada Drought Watch.

- Drought Signage: Provide a basin-by-basin drought scale and post road signs that show drought intensity (similar to fire watch) on major highways in drought sensitive areas in the province (Figure 2).

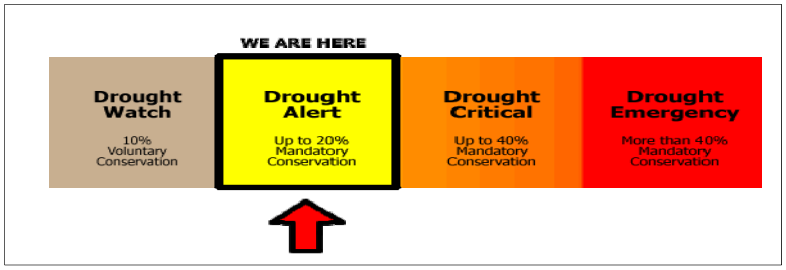


Figure 2: Potential format for drought signage to be posted on major highways in drought sensitive areas throughout the BC.

- Review Status of Drought Plans: Review and report on the status of the drought management and water conservation planning projects funded by the 2004 provincial Dealing with Drought grant program.
- Fund Drought Plans and Water Conservation Projects: Provide new funding to local governments and water purveyors for drought management and water conservation planning and projects (e.g., metering, infrastructure improvements (twinning systems), education and outreach).

Recommendations to Local Government and Water Purveyors

Local governments and water purveyors manage community water supplies at an operational level. They need efficient and useable resources on drought management from senior government, and the ability to customize responses and actions to the major water demands in their areas.

Actions by the Okanagan Local Governments and Purveyors:

- Build Drought Teams: Establish local drought management teams following the guidelines in the *Dealing with Drought* handbook – bring together key players who know what is required.
- Put Plans in Place: Prepare Drought Management Plans, Water Conservation Plans, and Emergency Drought Plans following the template in the *Dealing with Drought Handbook*. When all purveyors use the same template, plans can be linked together across regions.
- Take Action for Water Conservation: Improve water efficiency in your community by considering the following actions:
    - *Xeriscape parks; median strips and public spaces* leading by example to demonstrates attractive landscaping with water saving plants;
    - *Use the Landscape Irrigation Calculator* (http://www.irrigationbc.com/) to determine an appropriate irrigation schedule for municipal landscaping.
    - *Estimate cost savings* with the Water Conservation Calculator (available from the Ministry of Community and Rural Development, Autumn 2009) to determine the best value of different water conservation measures;
    - *Implement demand management* programs that include universal metering of domestic, agricultural, and utility water extractions and volume-based water pricing;
        - *Landscape and irrigation bylaws* like those developed for the City of Kelowna;
        - *Water conservation bylaws* that include outdoor water use restrictions to have consistent and coordinated conservation efforts among all users;
        - *Mandate purple pipes* in new construction to capture rainwater and recycle gray water;
        - *Adopt common sprinkling restrictions* between neighbouring jurisdictions;
- Protect the Quality of Supplies: Protect and restore stream banks to preserve water quality;
- Recharge aquifers*:* Implement stormwater best practices to recharge aquifers and protect water quality;
- Measure and Record What We Have: Install flow measurement recorders at reservoir spillways to track water availability and identify low water levels early;

- Communicate to Water Users: Develop a plan to communicate your drought management goals, actions, water supply status, and forecasts to major water users in the community.

Recommendations to the Okanagan Basin Water Board

The Okanagan Basin Water Board provides a basin-wide perspective and a mechanism to improve communication between regions and reduce fragmentation in policy and planning. The Board also forges stronger links between local and senior governments, and participates as a partner in Okanagan water research and infrastructure funding.

Actions by the Okanagan Basin Water Board:

- Build Basin-Wide Drought Response Framework: Develop a technical framework to map hydrological links between water sources, water licenses, and actual water use. Demonstrate how specific conservation or management changes upstream can reduce water shortages and impacts downstream;
- Assemble a Basin-Wide Drought Team: Develop a basin drought management team that includes representatives from local drought management teams.
- Forge Coordinated Drought Response Agreements: Develop a coordinated drought management plan for the Basin based on formal agreements to link local drought response plans and common drought trigger levels for valley lakes.
- Science to Support Drought Proofing: Conduct research to support drought proofing initiatives of local governments and water purveyors:
    - *identify groundwater limited areas*;
    - *facilitate lake evaporation study* by Environment Canada; and
    - *document the state of readiness* and identify needs of Okanagan water purveyors for drought management plans/conservation tools.
- Develop a Water Conservation Bylaws Toolkit for use by local governments and improvement districts.
- Enhance Communication: Work with Okanagan regional districts to ensure that proper communication between and among local water purveyors is carried out in a timely fashion.
- Coordinate Drought Response Drills: Work with the Provincial government to coordinate a "drill day" to challenge all water suppliers to test their drought response plans.

Concluding Remarks

The Drought Planning Workshop began a dialogue between water purveyors and managers, scientists, politicians and the Okanagan Basin Water Board about how to prepare the Okanagan Basin and limit the impact from future water shortages. The recommendations contained here capture that dialogue and are fundamental to creating a drought proof Okanagan. The Okanagan Basin Water Board is committed to advocating for and coordinating the implementation of these recommendations and to ensuring that drought planning remains a high priority for water managers in the Okanagan Basin.

Appendix A: List of Participants at 2009 OBWB Drought Planning Workshop

Name	Title	Agency
Alan Lawrence		
Alan Patton	Director	Rural Oliver, RDOS
Anna Warwick Sears	Executive Director	OBWB
Bill Caswell	Chairman	South East Kelowna Irrigation District
Bob Fugger	Trustee	Glenmore Ellison Improvement District
Bob Hrasko	Administrator	BMID
Brian Jamieson	Manager	Westbank Irrigation District
Brian Symonds	Director, Regional Operations	Ministry of Environment
Bryn Lord	Drinking Water Specialist	Interior Health Authority
Buffy Baumbrough	Director	OBWB/City Vernon
Carol Zanon	Councillor	District of West Kelowna
Carolyn Stewart	Water Conservation Coordinator	City of Penticton
Darlene McKnight		South East Kelowna Irrigation District
Darren Schlamp	Water Operations	Glenmore Ellison Improvement District
Dave Gold	Public Works/Utilities	Westbank First Nation
Dean Watts	Senior Habitat Biologist	Fisheries and Oceans Canada
Deborah Greaves	reporter, Writer	Westside Weekly
Denise MacDonald	Executive	BC Fruit Grower's Association
Denise Neilsen	Research Scientist	Agriculture Canada
Denny Ross Smith		Small Water Users of BC
Don Dobson	Consultant	Dobson Engineering
Doug Edwards	Regional Water Resources Engineer	Agriculture Canada
Ehren Lee	Water Resources Consultant	Urban Systems
Garry Zarr	Chairman	Rutland Waterworks District
Genevieve Dunbar	Office and Grants Admin	OBWB
Gord Ivans	Chairman	BMID
Gwen Steele	President	Okanagan Xeriscape Association
Gyula Kiss	Director	OBWB/RDNO
Heather Larratt	Biologist	Larratt Aquatic
Henry Stanski	Retired Meteorologist	Environment Canada
Horst Grams	Trustee	Glenmore Ellison Improvement District
Jack Allingham	Utility Manager	District of Lake Country
Jack Gilroy	Councilor	City of Vernon
Jacqueline Foley	Hydrogeologist	Golder Associates
James Moller	Manager	Lakeview Irrigation District
Jennifer Miles	Water Conservation Technician	Greater Vernon Water
Jesse Skwaruk	Political Science Grad	Student
Joanne de Vries	CEO	Fresh Outlook Foundation
Jody Good	Hydrogeologist	Mould Engineering
Joe Bulach	Trustee	Glenmore Ellison Improvement District
John Slater	MLA - Boundary-Similkameen	BC Liberal Party
Jose Garcia	Owner/Consultant	Insight Environmental Consulting Ltd.
Kellie Garcia	Research & Communication Coord.	OBWB
Ken Harvie		South East Kelowna Irrigation District
Kevin Bladon	Research & Extension Specialist	FORREX
Kevin Murphy	Agrologist	Ministry of Agriculture and Lands
Kevin Reynolds	Assistant Manager	Rutland Waterworks District
Lee Hesketh	Cattlemen's Association	OWSC
Lisa Massini	Vice President	Okanagan Xeriscape Association
Lorne Davies	Geostream Consulting	OWSC
Lorne Lacroix	Chairman	South East Kelowna Irrigation District
Lorraine Bennest	Member	OWSC/BC Fruit Growers Assoc
Michael Mercer	Director of Engineering	District of Lake Country
Mike Gavinchuk	Director, Electoral Area B	Regional District North Okanagan
Mike Mitchell	Utility Foreman	District of Lake Country

Name	Title	Agency
Nancy Howlett	Manager	Glenmore Ellison Improvement District
Nancy Lee	Planning Policy Analyst	Agriculture Canada - National AgroClimate Information service
Neal Klassen	Contractor	Water Smart, City Kelowna
Nelson Jatel	Water Stewardship Director	OBWB
Patti Hansen	Water Quality Technician	District of Lake Country
Pete Spencer	Environmental Farm Plan	BC Cattlemen's Association
Peter Hill	Sustainability Manager	School District #23
Peter Waterman	Former Councillor	Summerland
Phil Epp	Water Resources Specialist	MoE - Water Stewardship
Randy McLean	Mayor	Princeton
Ray Riley	Hydrologist	Urban Systems
Rick Fairbairn	Director	OBWB/RDNO
Rick Simpson	Fisheries Director	Oceola Fish and Game Club
Rob Birtles	Drinking Water Specialist	Interior Health Authority
Rob Turner	Reporter	Castanet.net news website
Ron Cannan	MP Kelowna-Lake Country	Federal government
Sharon Shepherd	Mayor	City of Kelowna
Skye Thomson	Groundwater Protection Officer	MoE - Water Stewardship
Solvej Patschke	Source Protection Officer	MoE - Water Stewardship
Steve Bonn	Trustee	Glenmore Ellison Improvement District
Stu Wells	Director	OBWB/RDOS
Suhdev Goraya	Executive	BC Fruit Grower's Association
Ted Lynch	Trustee	Okanagan Falls Irrigation District
Ted van der Gulik	Senior Engineer	Ministry of Agriculture and Lands
Terry Condon	Councillor	District of Peachland
Tjaar Van der Berg	Owner/Consultant	LandInfo Technologies
Trina Koch	Environmental Scientist	EBA Engineering
Trudy Peterson	Public Works/Utilities	Westbank First Nation
Wayne Lippert	Mayor	City of Vernon
Wenda Mason	Manager, Major Projects	MoE - Water Stewardship
Wes Kmet		
Zee Marcolin	Hydrogeologist	Golder Associates

Appendix B: Drought Management Planning Resources

What Information Do We Have About Drought Conditions?

- **BC River Forecast Centre** (Ministry of Environment): www.env.gov.bc.ca/rfc
  Provides warnings and forecasts of stream and lake conditions around the province.

- **Drought Watch website** (Agriculture and Agri-Food Canada): www.agr.gc.ca/pfra/drought
  Provides information on the impacts of climatic variability on water supply and agriculture and promotes practices which reduce drought vulnerability and improve management during a drought. Contains maps of current precipitation and temperature conditions by region, climate profiles, and drought management articles and fact sheets.

- **North American Drought Monitor** (National Environmental Satellite, Data, and Information Service and US Department of Commerce National Climatic Data Center): www.ncdc.noaa.gov/oa/climate/monitoring/drought/nadm/#overview
  A cooperative effort between drought experts in Canada, Mexico and the United States to monitor drought across the continent on an ongoing basis.

- **Canadian Weather Office** (Environment Canada): www.weatheroffice.gc.ca/canada_e.html
  Provides current conditions and forecasts for Canada.

- **National Climate Data and Information Archive** (Environment Canada): www.climate.weatheroffice.ec.gc.ca/Welcome_e.html
  Contains official historical climate and weather observations for Canada.

How Can I Plan Ahead to Limit the Impact of Water Shortages?

- **Dealing with Drought: A Handbook for Water Suppliers in British Columbia** (Ministry of Environment): www.env.gov.bc.ca/wsd/public_safety/drought_info/
  Includes strategies to help prevent the onset of water shortages and provides assistance with assessing, planning, and responding to drought conditions and coordinating communications.

- **Water Conservation Planning Guide for British Columbia's Communities** (Polis Project on Ecological Governance and Ministry of Community Development): www.polisproject.org/files/Water_Conservation_Planning_Guide_v1.0.pdf
  This guide can help communities develop and implement comprehensive integrated water conservation plans. It identifies seven key steps to the development of a water conservation plan, provides "To Do" checklists, includes case studies, and offers in-depth lists of resources for each step.

- **The Soft Path for Water in a Nutshell** (Polis Project on Ecological Governance): www.poliswaterproject.org/publication/23

  Provides an overview of the steps involved in soft path planning, illustrates how soft path planning differs from conventional, supply management and discusses the potential for this approach to develop water sustainability in Canada.

What Tools are Available for Municipalities?

- **Thinking Beyond Pipes and Pumps: Top 10 Ways Communities Can Save Water and Money** (Polis Project on Ecological Governance): www.poliswaterproject.org/publication/22

  Provides a practical resource on how individuals, utilities and communities can save water and money. The Top Ten represent a suite of actions that can be tailored on a community-by-community basis.

- **Water Conservation Toolkit for Canadian Municipalities and Communities** (Polis Project on Ecological Governance): www.waterdsm.org/toolkit

  Aims to provide practical tools to Canadian communities seeking to develop and implement a comprehensive and long-term approach to freshwater management.

- **Groundwater Bylaws Toolkit** (Okanagan Basin Water Board): www.obwb.ca/groundwater_bylaws_toolkit/

  Provides local governments with practical land use management tools to support the protection of groundwater resources.

What Tools are Available to Improve Agricultural and Irrigation Efficiency?

- **Drought Strategies website** (Ministry of Agriculture and Lands): www.agf.gov.bc.ca/emergency/Drought/

  Provides information on drought strategies, including irrigation, crop, soil, livestock, and pasture and range management and feed and pasture availability, and includes links to drought programs, publications, and conceptual plans.

- **Irrigation Calculators** (Irrigation Industry Association of BC): www.irrigationbc.com/

  Four calculators have been developed by the IIABC: Landscape Calculator, Agricultural Calculator, Weather Calculator, and Soil Calculator. User guides have also been developed to accompany the calculators.

- **Farmwest Climate website**: www.farmwest.com/index.cfm?method=climate.showclimate

  Provides climate information to farmers and irrigators in British Columbia, including evapotranspiration (ET) for irrigation scheduling, as well as corn heat units (CHU), growing degree days, T-Sum, a temperature monitor and the weather forecast.

- **BC Guide to Irrigation Scheduling and Water Conservation** (Ministry of Agriculture and Lands and the IIABC): www.farmwest.com/index.cfm?method=pages.showPage&pageid=235

  Provides documents that can assist in the design and operation of irrigation systems.

Where Can I Find Out More About Water Planning In BC and the Okanagan?

- Living Water Smart: British Columbia's Water Plan: www.livingwatersmart.ca/
  The provincial government's plan to keep our water healthy and secure for the future.

- Okanagan Sustainable Water Strategy: http://www.obwb.ca/water_strategy/
  A comprehensive guide to water management practices that will help us adapt to changing climate and rising water demand and work toward long-term water sustainability in the Okanagan Basin.