

MEMORANDUM

File No. 0400.51

To: Mayor and Council, City of Kelowna
From: Anna Warwick Sears, Executive Director, Okanagan Basin Water Board
Date: June 29, 2009
Subject: Update on OBWB activities

Background: The Okanagan Basin Water Board was established in 1970, with a mandate to coordinate activities and promote sustainable water management in the Okanagan. For many years, the Water Board focused on aquatic weed control and providing sewage facilities grants to local communities. In 2005, the three Okanagan regional districts permitted the Water Board to take on a broader range of activities, with an emphasis on providing science-based information and recommendations to decision makers. On June 22, I will be providing an update on these activities to the City of Kelowna Council. Highlights include:

The Okanagan Water Supply & Demand Project. The Water Board, in partnership with the Ministry of Environment and nine other BC and Canada agencies and universities is completing an assessment of current water availability in the Basin, and how this availability will be affected by global warming. This phase of the assessment will be completed in December 2009, at a budget of approximately \$2,400,000 in direct and in-kind contributions, including \$410,000 from the Okanagan. This phase provides scientific information, but will not include policy recommendations. The next phase, to be initiated in 2010, will focus on consultation and needed policy changes.

The Okanagan Water Stewardship Council. In 2006, the Water Board established the Council as a technical advisory committee, providing information from 27 different water sector and stakeholder groups and agencies. Members range from the Urban Development Institute to the Cattlemen's Association and the Okanagan Nation Alliance Fisheries Department. At the Water Board's request, the Council developed an Okanagan Sustainable Water Strategy – a set of 45 recommended actions to be taken by local and senior governments and other groups. The Water Board has moved forward on those considered most timely and feasible.

The Groundwater Bylaws Toolkit. British Columbia has a widely-recognized lack of groundwater legislation. This toolkit was developed to provide municipalities and regional districts with model bylaws and other tools to protect groundwater within their jurisdiction. It was developed

by legal and groundwater experts and reviewed by local government planners. The Groundwater Toolkit will be completed in June 2009.

Water Management Projects. The Water Board is moving forward with a number of smaller projects promoting water sustainability. These projects include a study of endocrine disrupters in wastewater discharge to the valley lakes, a basin-wide drought plan, improving communication and signage to protect valley lakes, and enhancing public awareness about water conservation.

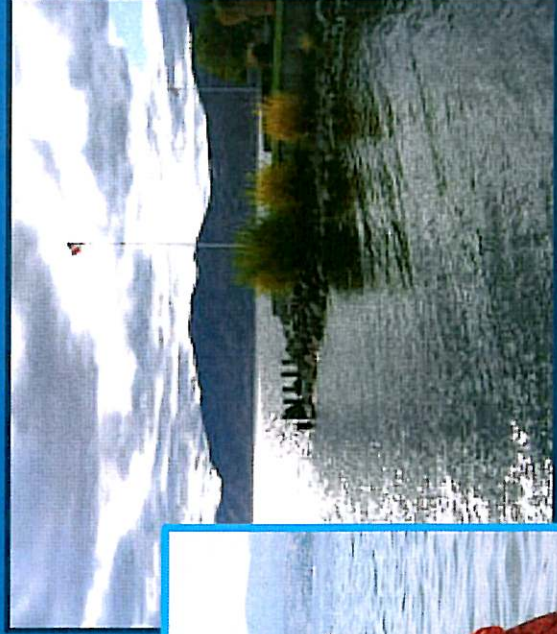
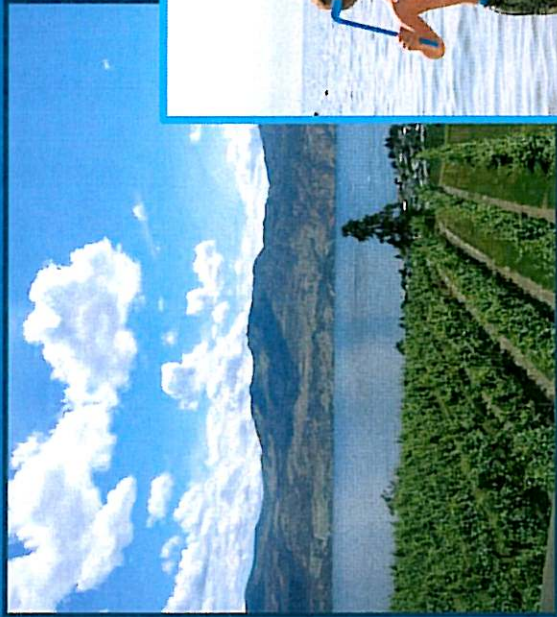
Water Governance. At the request of the three Okanagan regional districts, the Water Board has begun reviewing its own water governance structure. It is developing a Governance Manual outlining the Water Board's procedures and their enabling legislation – this manual will be given to Okanagan regional districts for review.

Water Management Policy. The Water Board has partnered with Okanagan local governments advocating protection of future water supplies by the non-sale of leased properties on drinking water reservoirs. This is an ongoing issue throughout the valley. The Water Board has worked with Interior Health on improving their policy for turbidity notification. It has worked with the Ministry of Environment to promote stronger groundwater legislation and increased monitoring of water levels in streams and lakes.

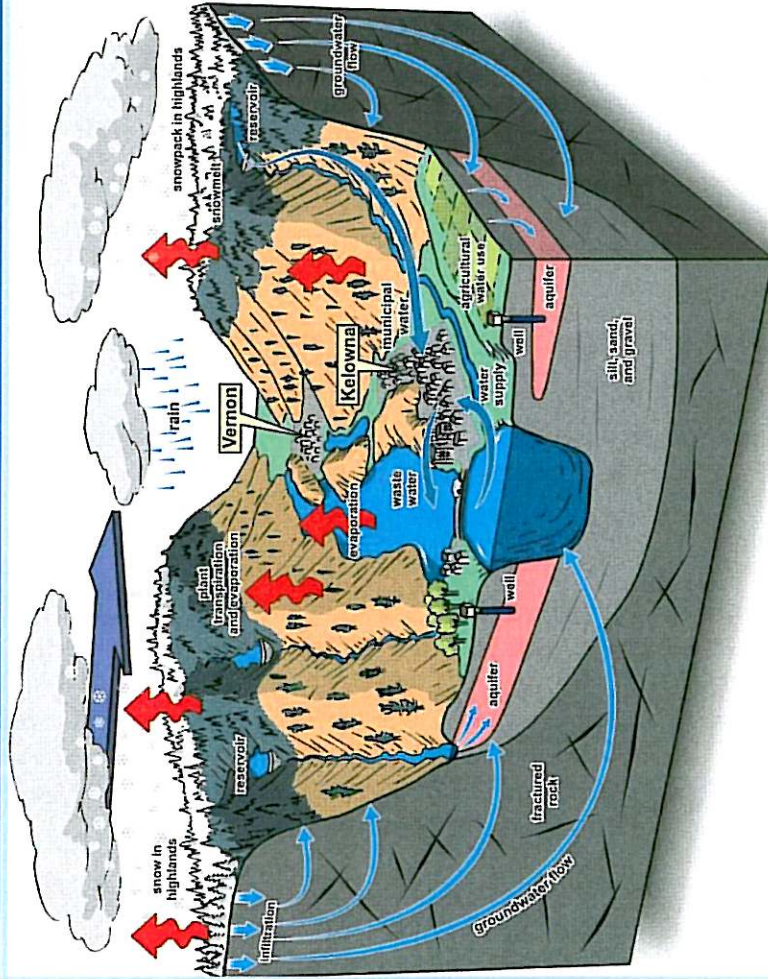
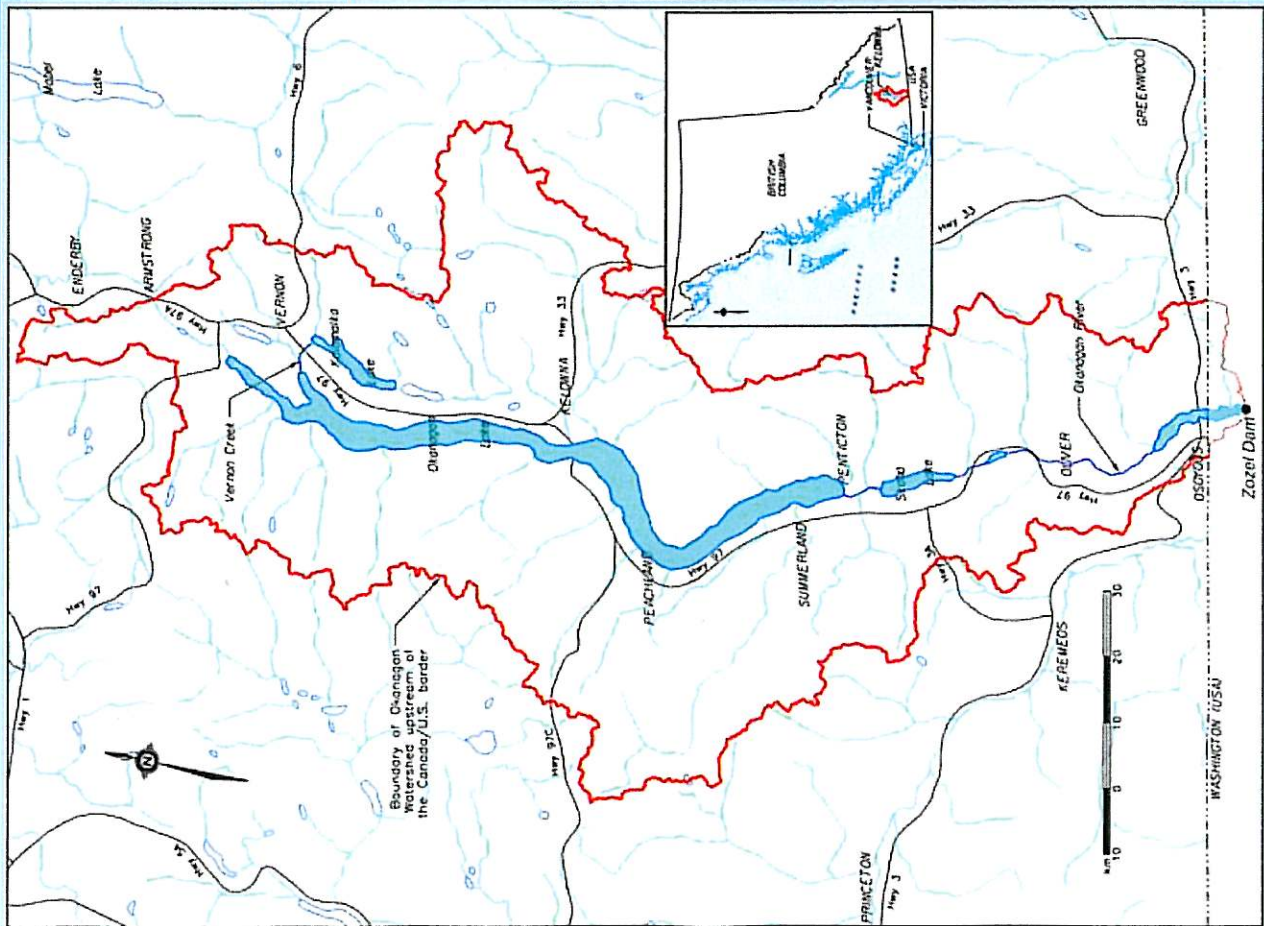
Water Conservation and Quality Improvement Grants. Over the past 4 years, the Water Board has given small grants to more than 70 projects by local governments, improvement districts, and non-profit organizations throughout the valley, including support of foreshore inventory mapping, domestic and agricultural water metering, watershed protection planning, and water conservation rebate programs. Grant recipients have matched these funds with direct and in-kind support from a range of different agencies, universities and organizations including Ducks Unlimited, the Vancouver Foundation, and the Ministry of Environment.

Information about all Okanagan Basin Water Board programs and projects is available on our website: www.obwb.ca.

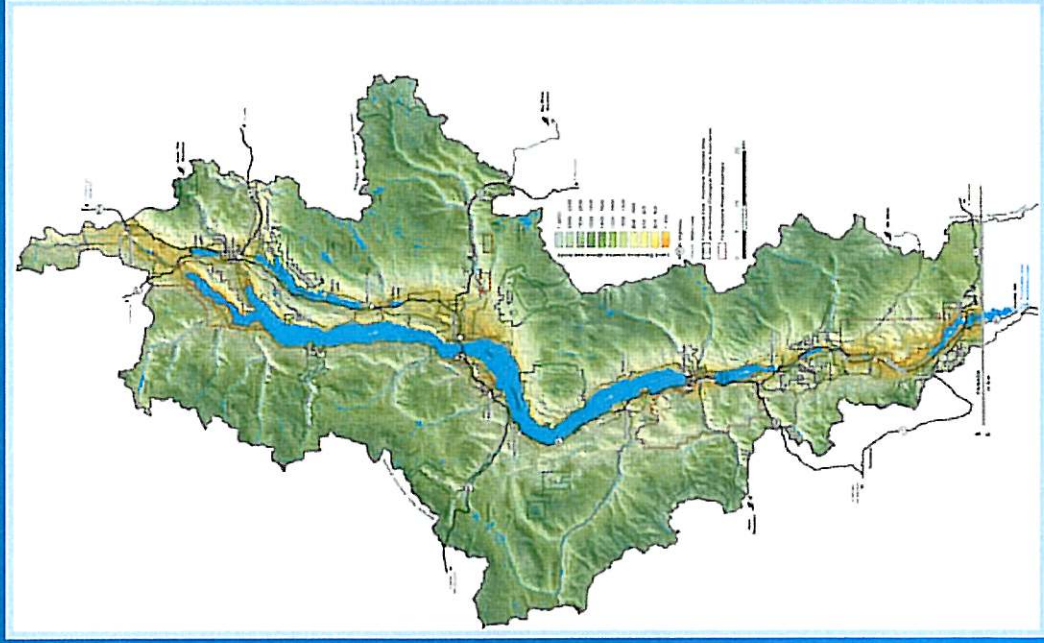
OBWB 2009 Update



Okanagan watershed



OBWB History and Structure

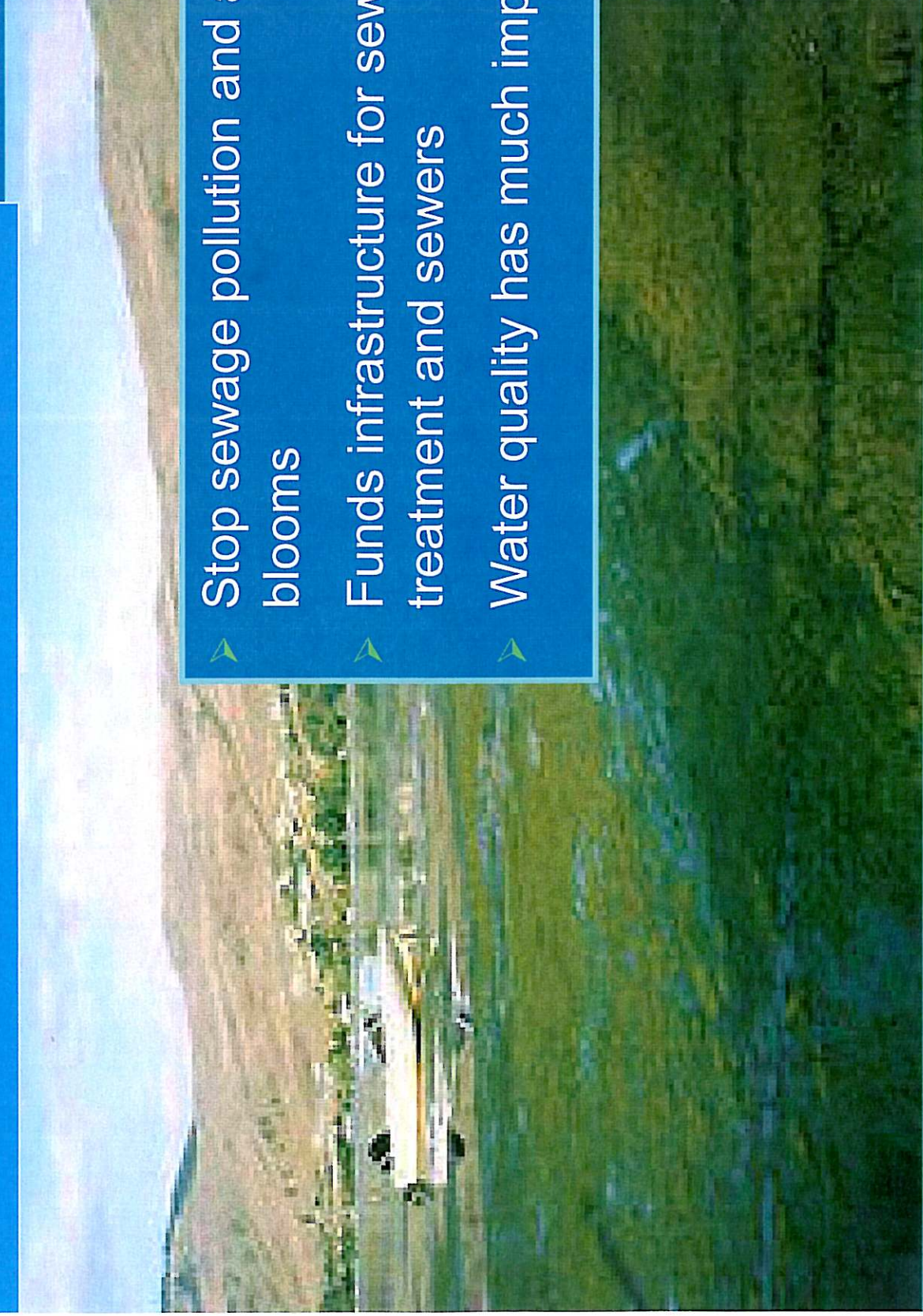


- Address Basin concerns about quality & supply
- Established in 1970
- Boundaries follow the watershed
- Directors from 3 Okanagan RDs
- Supported by property assessments

OBWB Background

- OBWB given mandate to support & coordinate Okanagan water management:
 - Bridge interests of all Okanagan jurisdictions
 - Okanagan voice to senior government
 - Get information to decision makers
 - Focus on valley-wide benefits
 - Share resources, leverage funding
 - Local stakeholder “Liaison Committee”
- First 35 years addressed sewage pollution and aquatic weed control
- Water Management Program initiated in 2006

Sewage Grant Program



- Stop sewage pollution and algae blooms
- Funds infrastructure for sewage treatment and sewers
- Water quality has much improved

Eurasian Watermilfoil Program

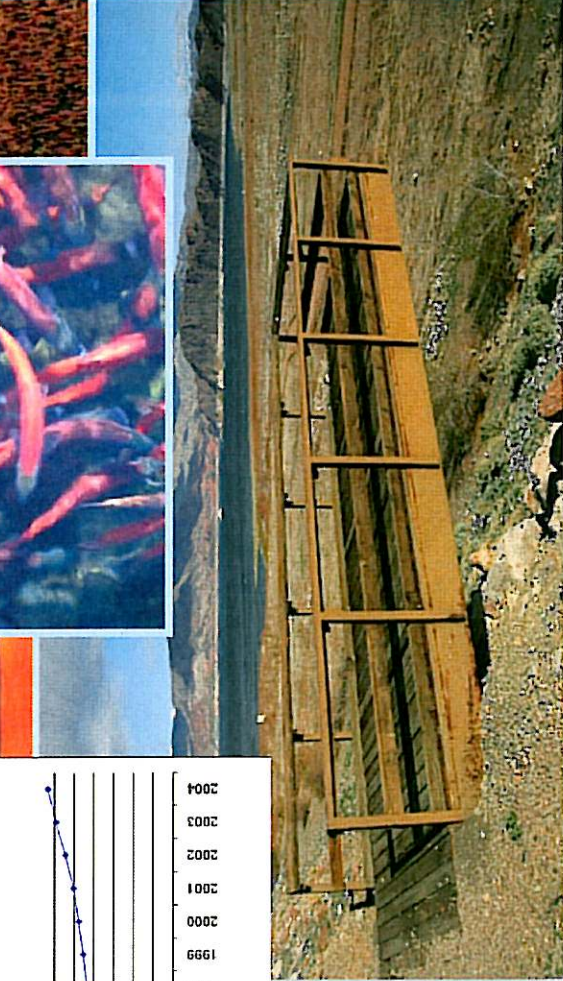
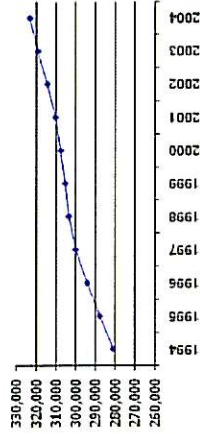
- Invasive aquatic weed along shallow lakeshore
- Obstructs boating & swimming
- Managed with harvesting & rototilling



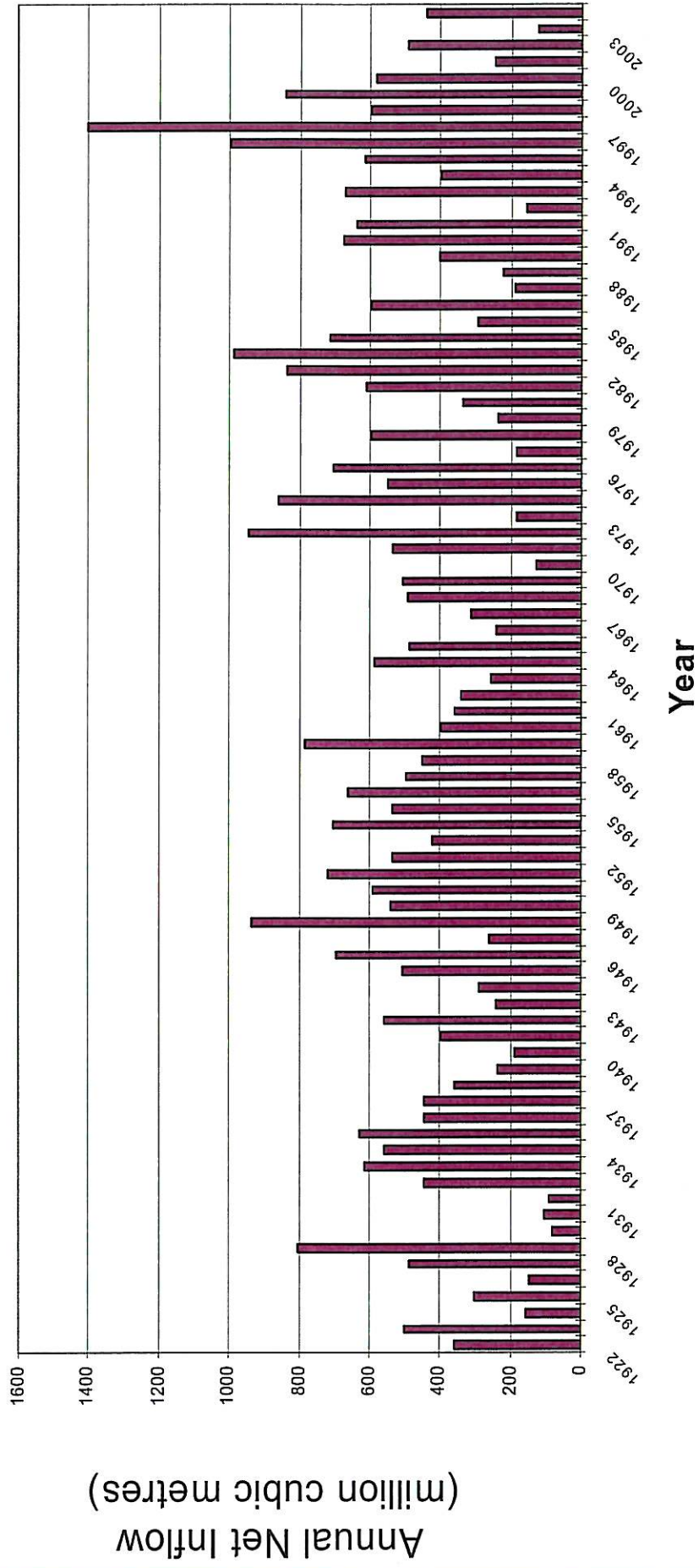
Entering the new millennium



Population Growth In Okanagan
(1994 - 2004)



Okanagan Lake - Annual Net Inflow Volume (1921-2004)



Climate Change: *less supply, more demand*



- More rain
- Less snow
- Earlier melt
- Hotter summers
- More evaporation

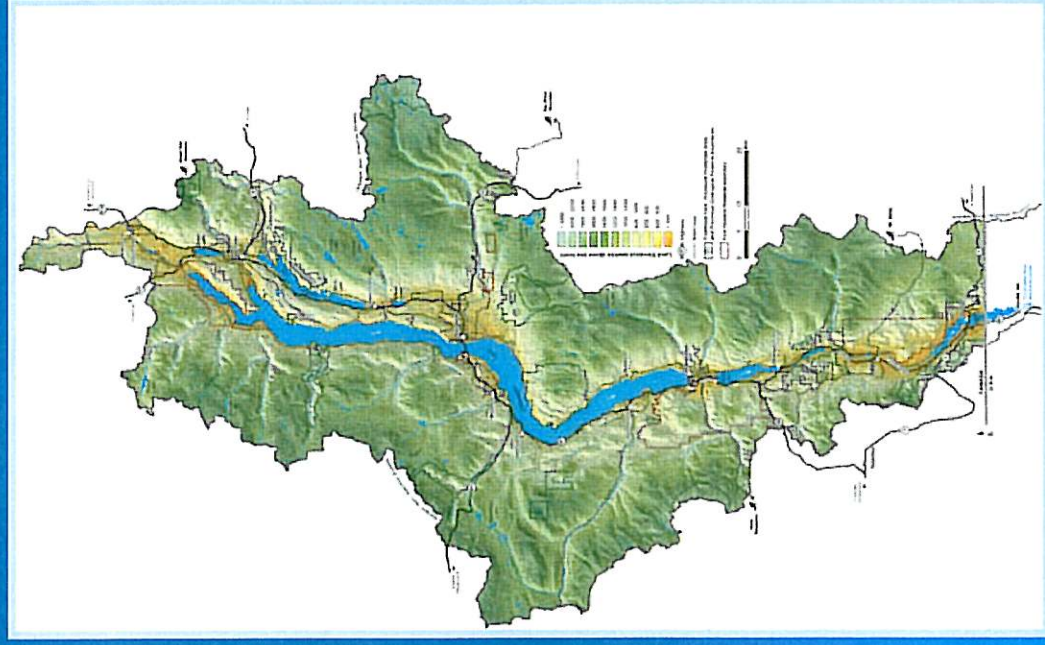
Challenging questions

- Is our water over-allocated?
- How do we protect groundwater?
- How will we share during shortages?
- How do we reduce risks to water quality?



Rising public concern, need good information to make decisions

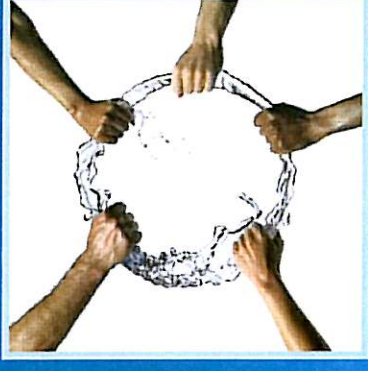
Calls for OBWB Participation in Water Management – 2006 Restructuring



- 3 New Directors from ONA, WSABC, OWSC
- Water Management Initiative
- Okanagan Water Stewardship Council
- Communication, coordination, and technical information
- Facilitate regional decision-making
- No regulatory authority

Renewing OBWB's Original Role

- *... protect and enhance quality of life in the Okanagan through sustainable water management*
- Bridge interests of all Okanagan jurisdictions
- Okanagan voice to senior government
- Get information to decision makers
- Focus on valley-wide benefits
- Shared resources, leveraged funding

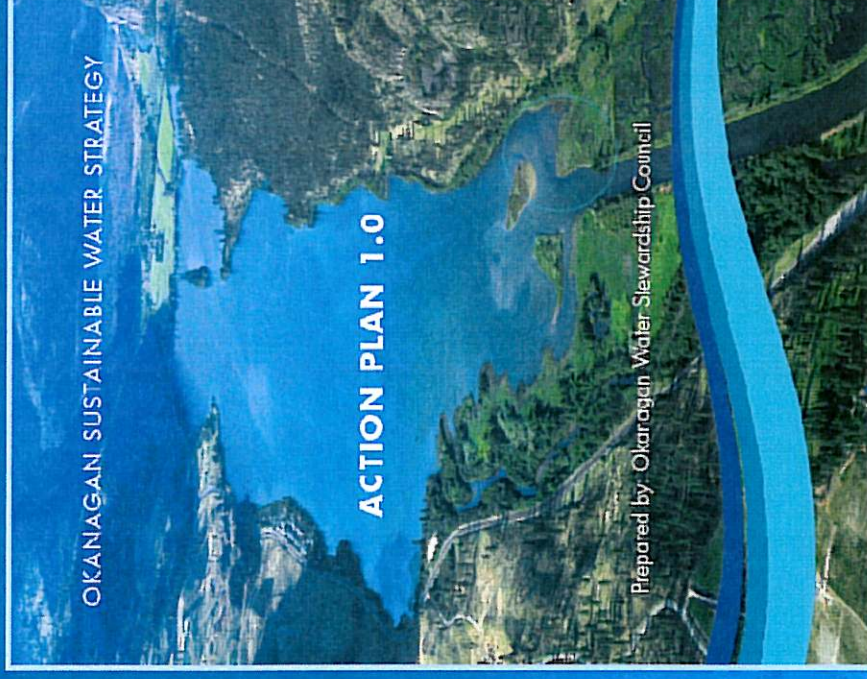


Water Management

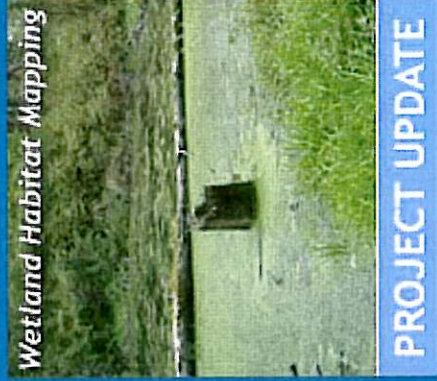


Water Stewardship Council

- Provides stakeholder input & advice – Liaison TAC
- Recommendations based on technical experience
- 27 member organizations
- Sustainable Water Strategy
- Supports OBWB
- More eyes & ears for local government



Water Conservation & Quality Improvement Grants - \$300K/yr



PROJECT UPDATE



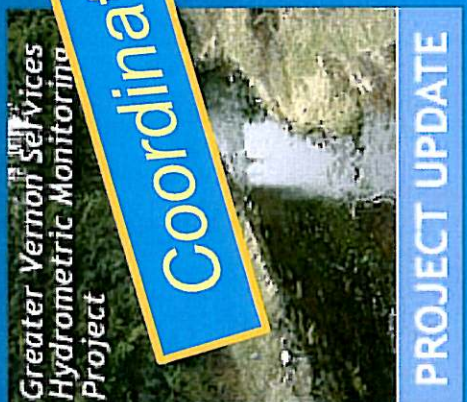
PROJECT UPDATE



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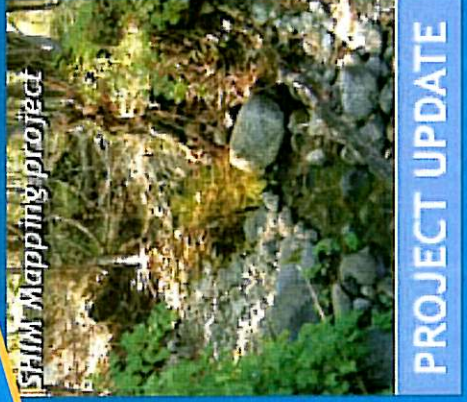
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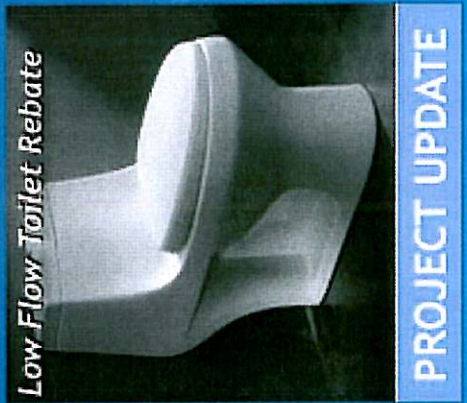
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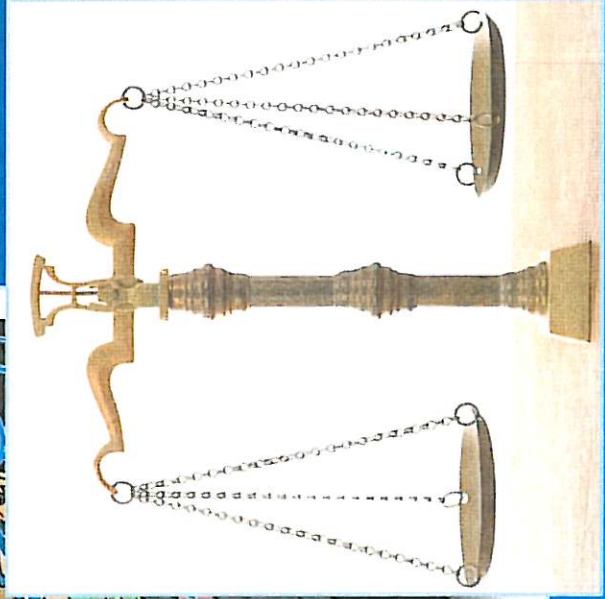
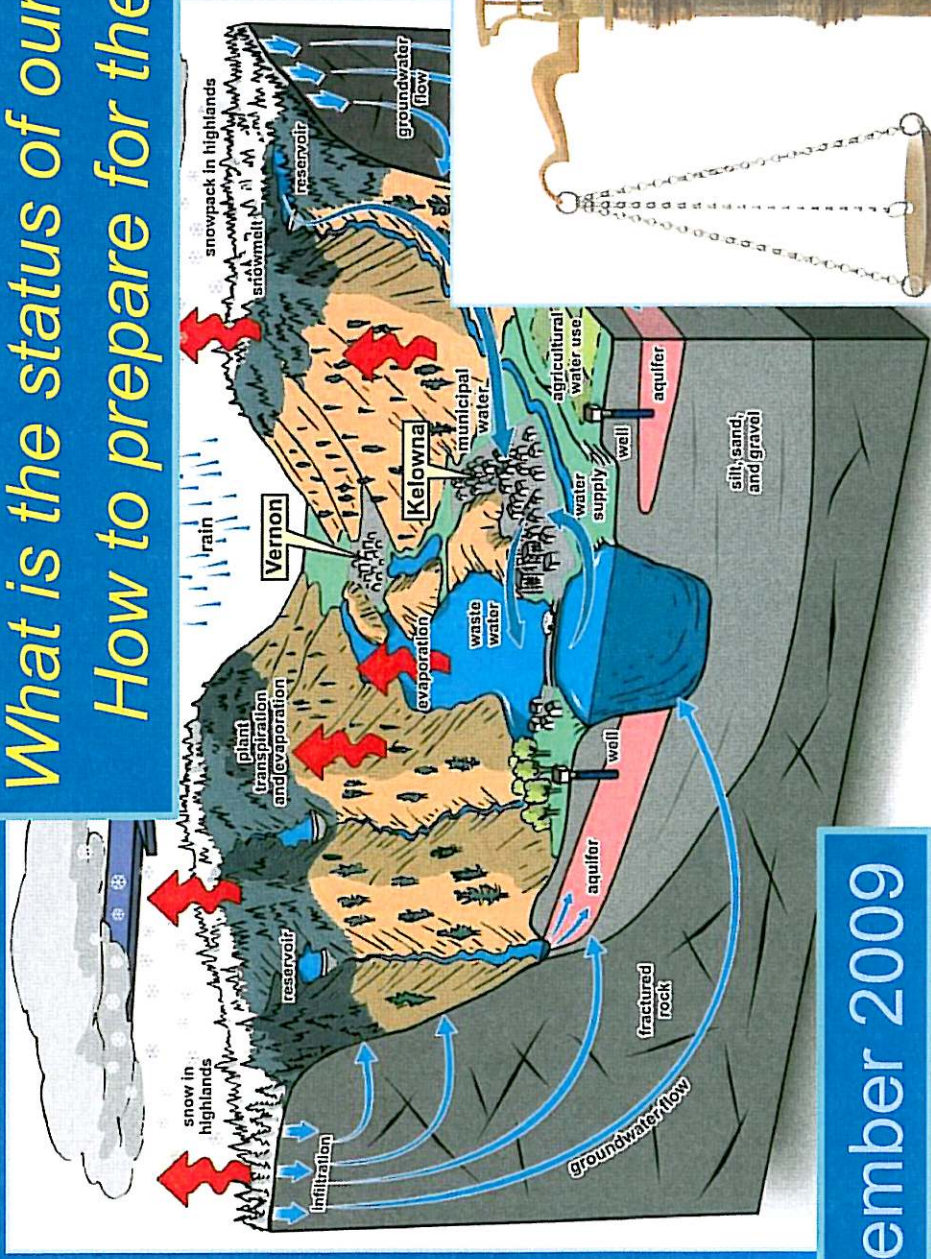


PROJECT UPDATE

Coordinating efforts Basin-wide, fund leveraging

Water Supply & Demand Project

*What is the status of our supplies?
How to prepare for the future?*



December 2009

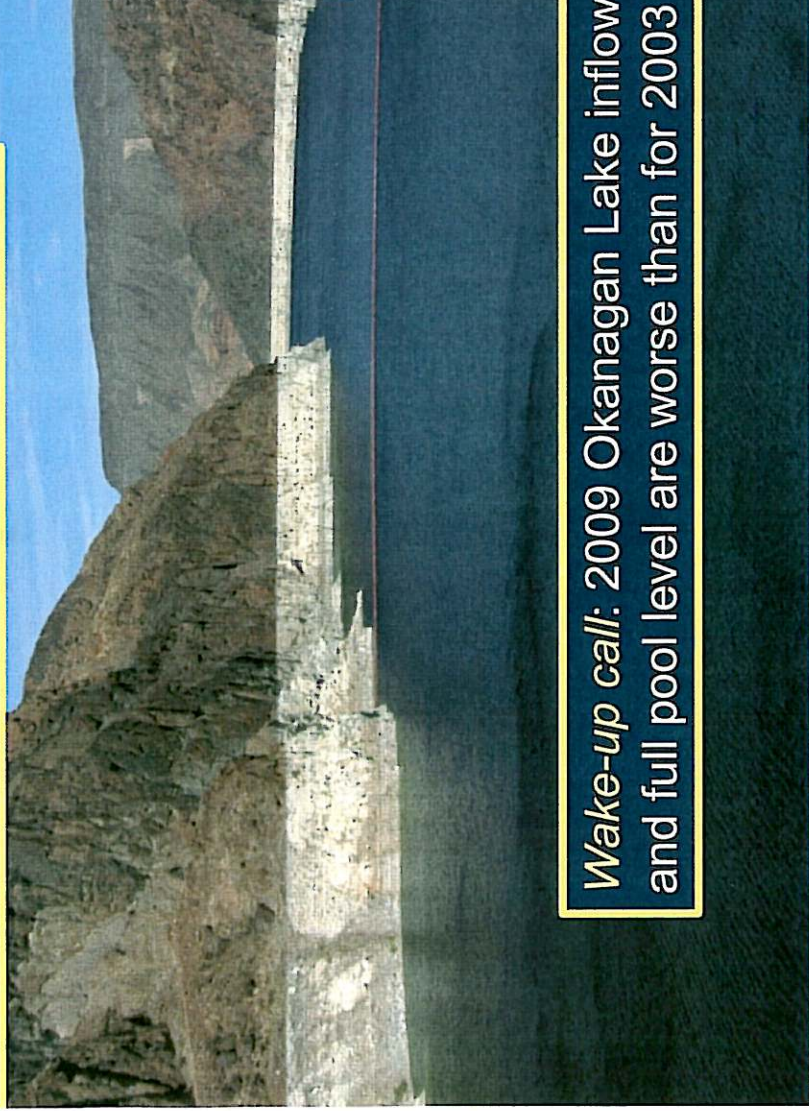
Groundwater Bylaws Toolkit: What Local Government Can Do Right Now



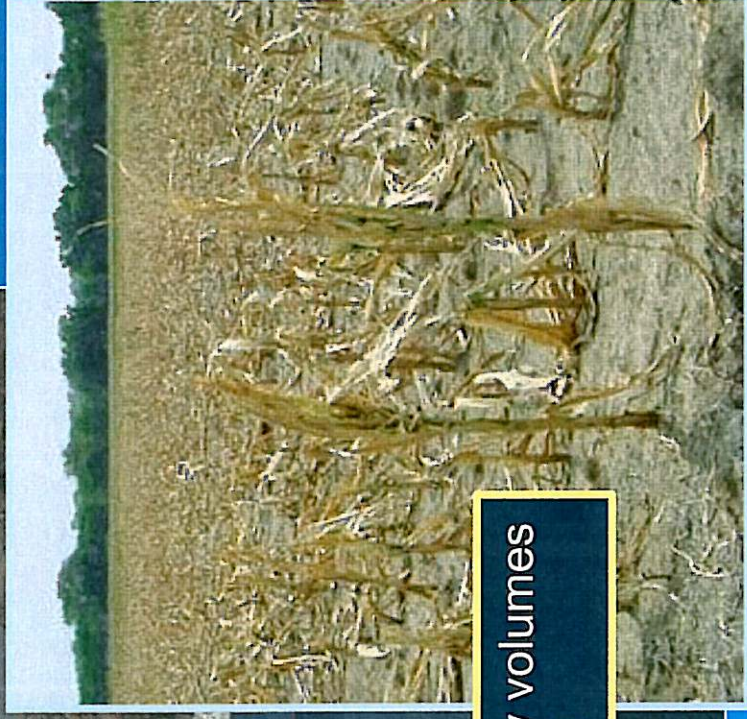
- Each municipality can customize
- Tools for staff & planners
- Primer on Jurisdiction
- Groundwater handbook
- Model bylaws: e.g.,
 - Geothermal
 - Proof of water
 - Aquifer protection

Coordinated Basin-wide Drought Planning

If you knew that there would be an Australia-type drought in 3 years, how would you prepare?

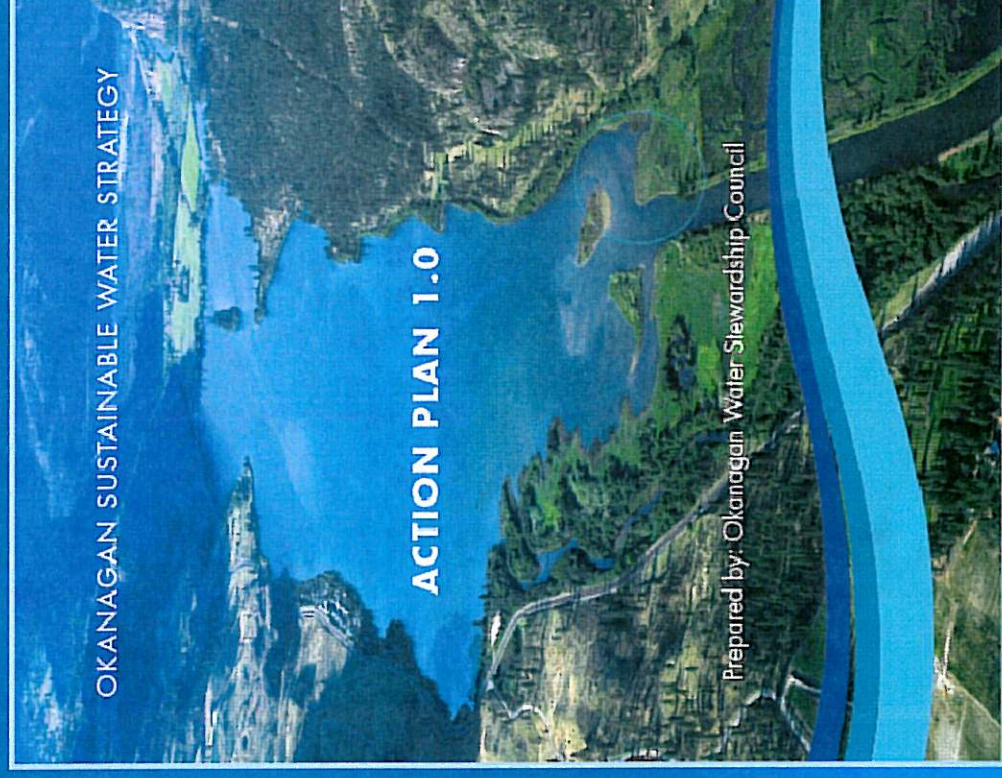


Wake-up call: 2009 Okanagan Lake inflow volumes and full pool level are worse than for 2003



Other Planned Projects

- Groundwater protection
- Water education & outreach
- Protecting water sources
- Managing water information
- Water cost & pricing review





Questions?

Contact Anna.Warwick.Sears@OBWB.CA

Website: www.obwb.ca