

## How can local government protect groundwater?

They can use their land regulatory powers to:

- ensure that rainwater is returned to aquifers and streams
- protect headwaters, riparian areas, and other vulnerable recharge areas
- prevent contamination in ground water recharge areas through zoning
- direct development to appropriate locations where sufficiency of groundwater has been assessed
- regulate the storage and application of fertilizers and compost
- obtain information about the location of existing and new wells when new development occurs



## Special thanks to the project Technical Advisory Committee members:

**Deborah Curran,**  
Deborah Curran & Company

**Doug Geller,**  
Summit Environmental  
Consultants & BC  
Groundwater Association

**Barbara Everdene,**  
Everdene Consulting

**Nelson Jatel,**  
Okanagan Basin Water Board

**Kellie Garcia,**  
Okanagan Basin Water Board

**Diana Allen,**  
Department of Earth Sciences,  
Simon Fraser University

**Andrea Barnett,**  
Ducks Unlimited

**Oliver Brandes,**  
POLIS Project,  
University of Victoria

**Todd Cashin,** City of Kelowna

**Antigone Dixon-Warren,**  
Township of Langley

**Gwyn Graham,**  
Environment Canada

**Rob Hawes,** Ducks Unlimited

**Murray Journeay,**  
Geological Service of Canada,  
Natural Resources Canada

**Jan Kirkby,**  
Canadian Wildlife Service

**Linda Nowlan,**  
Institute of Resources,  
Environment and Sustainability,  
University of British Columbia

**Anna Warwick Sears,**  
Okanagan Basin Water Board

**Vicki Carmichael,**  
Water Stewardship Division,  
Ministry of Environment

**Cecilia Wong,**  
Environment Canada

**Zee Marcolin,**  
Golder Associates

**Mike Adams,**  
Interior Health Authority

**Mike Wei,** Water Stewardship  
Division

**Brooke Marshall,**  
Planner, City of Vernon

Financial project support provided by:  
**Okanagan Basin Water Board**  
**Gas Tax: Innovation Fund**  
**BC Government: Infrastructure Planning Grant**

Well photo on cover provided by:  
[www.4dlandscapes.co.uk](http://www.4dlandscapes.co.uk)



Phone: (250) 469-6295  
Email: [nelson.jatel@obwb.ca](mailto:nelson.jatel@obwb.ca)  
[www.obwb.ca](http://www.obwb.ca)

## IMPLEMENTING THE GROUNDWATER BYLAWS TOOLKIT

An appendix to the Green  
Bylaws Toolkit

### What tools can local government use to protect groundwater?



## TABLE OF CONTENTS



### SECTION 1: THE CASE FOR GROUNDWATER PROTECTION



### SECTION 2: GROUNDWATER - JURISDICTIONAL FRAMEWORK



### SECTION 3: UNDERSTANDING GROUNDWATER RESOURCES



### SECTION 4: GROUNDWATER PROTECTION TOOLS



### SECTION 5: SAMPLE BYLAWS

## The case for groundwater protection in BC

According to Environment Canada, 44% of municipalities in BC rely on groundwater.

Local governments play an important role in understanding groundwater science, protecting aquifers, and maximizing the recharge of water into watersheds.

### Call to action

Develop and implement groundwater bylaws in your local government today!



## The toolkit includes eight policy & bylaw tools



Groundwater data collection and mapping



Water management and well protection planning



Regional growth strategies



Official community planning



Zoning for groundwater protection



Aquifer protection development permit areas



Aquifer protection development approval information areas



Subdivision servicing bylaws

For most of these tools, a sample policy or bylaw is provided that can be customized to the specific context and requirements of your local government.