



Drinking Water Protection Act & Interior Health Water Program

Okanagan Basin Water Board
Water Stewardship Council

Fall 2006



Objectives

- To provide an overview of the development of the DWPA
- To review the key provisions of the legislation
- To identify IH Water Program Framework & Priorities



Introduction

- *Drinking Water Protection Act* brought into force May 16, 2003
- Provides a comprehensive legal framework for drinking water protection
- Replaced the *Safe Drinking Water Regulation* (SDWR) under the Health Act
- Two key themes are oversight and accountability



History of the DWPA

- Health Act
- Safe Drinking Water Regulation (1992)
- Auditor General's Report (1999)
- Provincial Health Officer's (PHO) (2000)
- Drinking Water Consultations (2000-2001)



History of the DWPA (cont.)

- Drinking Water Protection Act (2001)
- Drinking Water Review Panel Report (2002)
- Action Plan for Safe Drinking Water in BC (2002)
- Drinking Water Protection Amendment Act (2002)



Part I – Introductory provisions

- Drinking Water Officer established as statutory decision-maker
- Subject to guidelines and directives established by minister
- Can delegate functions to any person



Part 2 – Drinking Water Supply

- Requirement to provide “potable water” (s. 6)
- Applies to all systems - other than systems serving one single-family residence or otherwise excluded by regulation
- Must be safe for consumption
- Must meet any additional requirements set out in regulation or operating permit
 - Regulation focuses on E. coli/coliform levels
 - DWO discretion to guide in respect of other matters
 - Disinfectant of surface water required. (Also ground water required if DWO feels it is a risk)



Part 2 – Drinking Water Supply (cont.)

- Construction of systems (s. 7)
 - Need permit to construct a “water supply system”
 - Construction permits given by “issuing official”
 - May contain any terms and conditions issuing official considers advisable



Part 2 – Drinking Water Supply (cont.)

- Operating requirements (s. 8)
 - Need permit to operate a water supply system
 - Must comply with terms and conditions of permit and regulations
 - Terms and conditions can be changed, after consultation
 - DWO may order additional monitoring and testing



Part 2 – Drinking Water Supply (cont.)

- Operator qualifications (s. 9)
 - Applies to operation, maintenance and repair
 - Operator must meet requirements set out in regulation, or work under supervision of a qualified person
 - Qualifications based on EOCP program (gradual implementation)
 - Water supplier must ensure requirements are met



Part 2 – Drinking Water Supply (cont.)

- Monitoring (s. 11 and 12)
 - Must be done as required by regulations, operating permit and DWO
 - Regulations require testing for E. coli/coliform - frequency to vary with size and complexity
 - Other monitoring requirements to be set by DWO
 - Labs need to be approved by PHO and must report results to both the DWO and the water supplier
 - Immediate reporting required in specified circumstances



Part 2 – Drinking Water Supply (cont.)

- Reporting threats and public notification
 - Water supplier must report threats to potability of water to DWO (s. 13)
 - DWO has discretion to order public notice in various circumstances (s. 14)
 - Water supplier must notify users if risk exists and DWO cannot be immediately contacted (s. 14(2))
 - General public reporting requirements (s. 15)



Part 2 – Drinking Water Supply (cont.)

- Other protection measures
 - Written emergency response plans required for all systems, enhanced from SDWR (s. 10)
 - Flood proofing required for wells (s. 16)
 - DWO can require one of multiple owners to be designated as responsible contact (s. 17)



Part 3 – Water Source Assessments and Plans

- Assessments must be done if required by regulation or DWO orders (s. 18(1))
- DWO can order if reason to believe it is necessary to identify and assess threats (s. 19)
- Purpose is to assess source, water supply system, monitoring and threats (s. 18(2))

Part 3 – Water Source

Assessments and Plans (cont.)

- Process and terms of assessment set by DWO after consulting with MHO (s. 20)
- May include technical advisory committee (s. 20)
- Public notice required for pending assessments and results (s. 21)
- Assessment response plan may be ordered if threats identified (s. 22)



Part 4 – Drinking Water Protection

- Must not contaminate water or tamper with system (s. 23)
- Reporting requirements under other acts may also require reporting to DWO (s. 24)
- DWO may make abatement and prevention orders respecting drinking water health hazards (s. 25)



Part 4 – Drinking Water Protection (cont.)

- DWO may make orders to correct contraventions (s. 26)
- DWO can take actions to remedy concerns if necessary, at owners expense (s. 27 and 28)
- Anyone can request an investigation by DWO (s. 29)
- Provision for “Decision Makers” under other acts to be subject to consultation with DWO’s, water suppliers and local authorities (s. 30)



Part 5 – Drinking Water Protection Plans

- PHO may recommend minister designate area for drinking water protection plan (s. 31)
- Minister establishes process and terms of reference for plan (s. 32)
- Must consider local government and provincial land use planning (s. 32(5))



Part 5 – Drinking Water Protection Plans (cont.)

- DWO can order water supplier to participate and undertake investigations (s. 33)
- Plan must be reviewed by PHO and presented to Cabinet for approval (s. 34)
- Plan must be made public (s. 34(3))



Part 5 – Drinking Water Protection Plans (cont.)

- To implement plan, Cabinet can:
 - Require that decision-makers under other acts consider plan
 - Restrict issuance or amendment of licences and approvals under other acts
 - Restrict exercise of powers under other acts (s. 35)
 - Require local and provincial planning processes to be considered by and consistent with the plan (s. 35.1)
 - Restrict drilling and alteration of wells and flow testing (s. 36)
 - Establish source protection standards and prohibit anyone from doing anything that results in standards not being met (s. 37)



Implementation

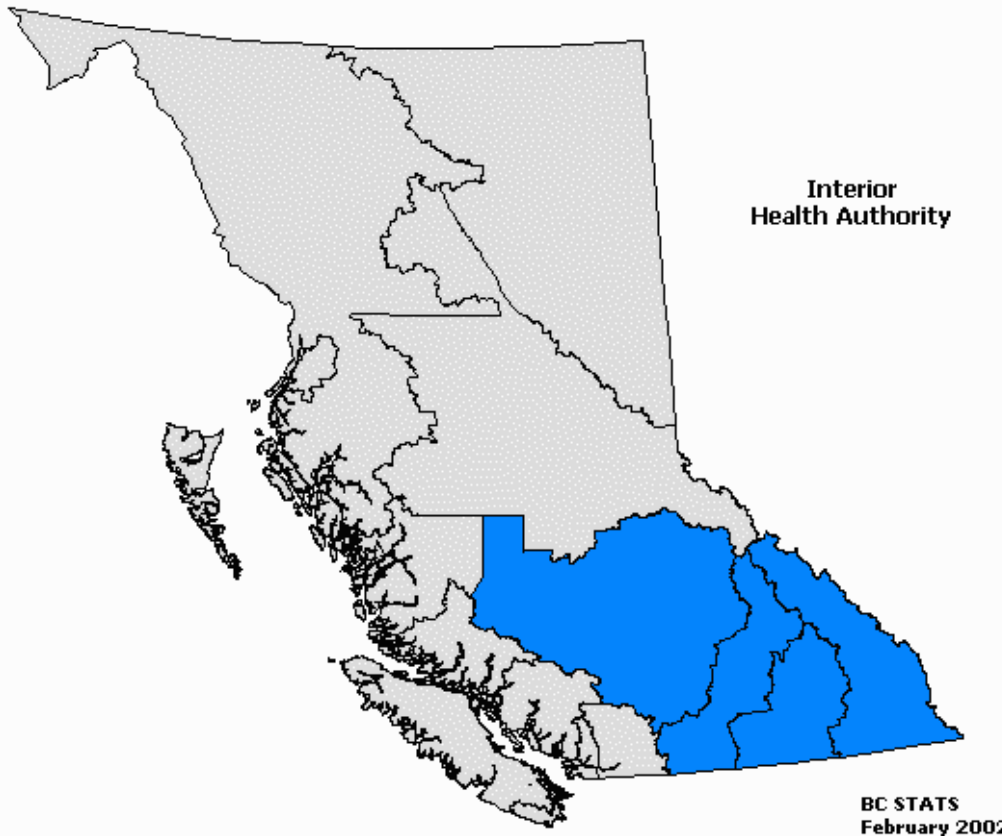
- DWPA and regulations brought into force May 16, 2003
- Regulations initially limited, but have been developed further-SWS provisions
- Amendments to other Acts and Regs. (e.g. Water Act, Violation Tickets Reg.)



Ongoing work

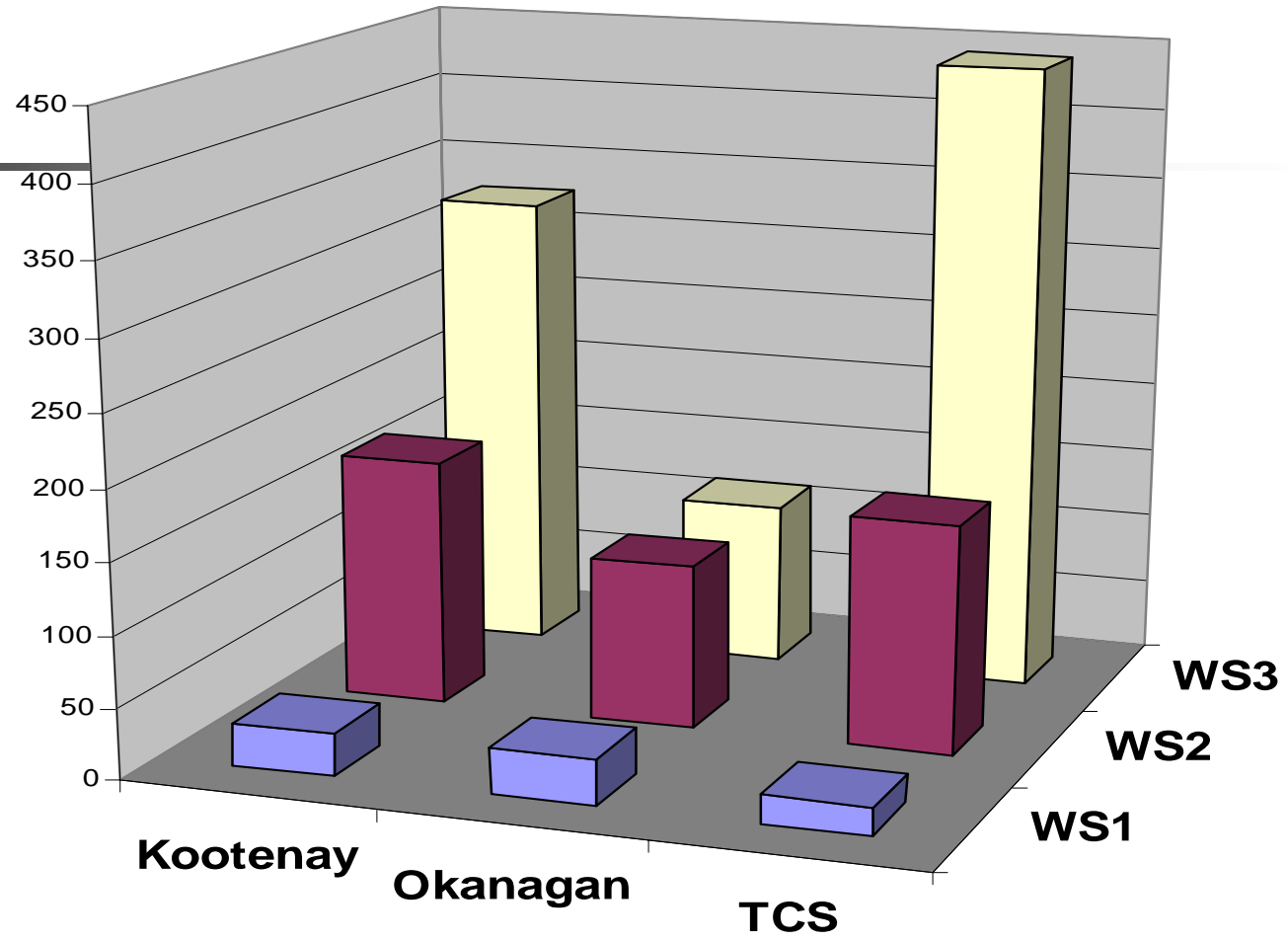
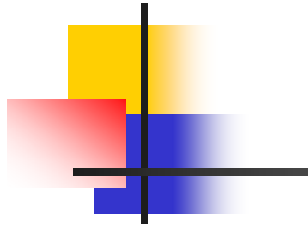
- ADM Inter-agency Committee-MOU
- Drinking Water Leadership Council
- Assessment tools-MOE Source to Tap
- Guidelines (s. 4(a))-Provincial DWO Guide
- Directives (s. 4(b))-Public Notification Requirements

Interior Health Framework

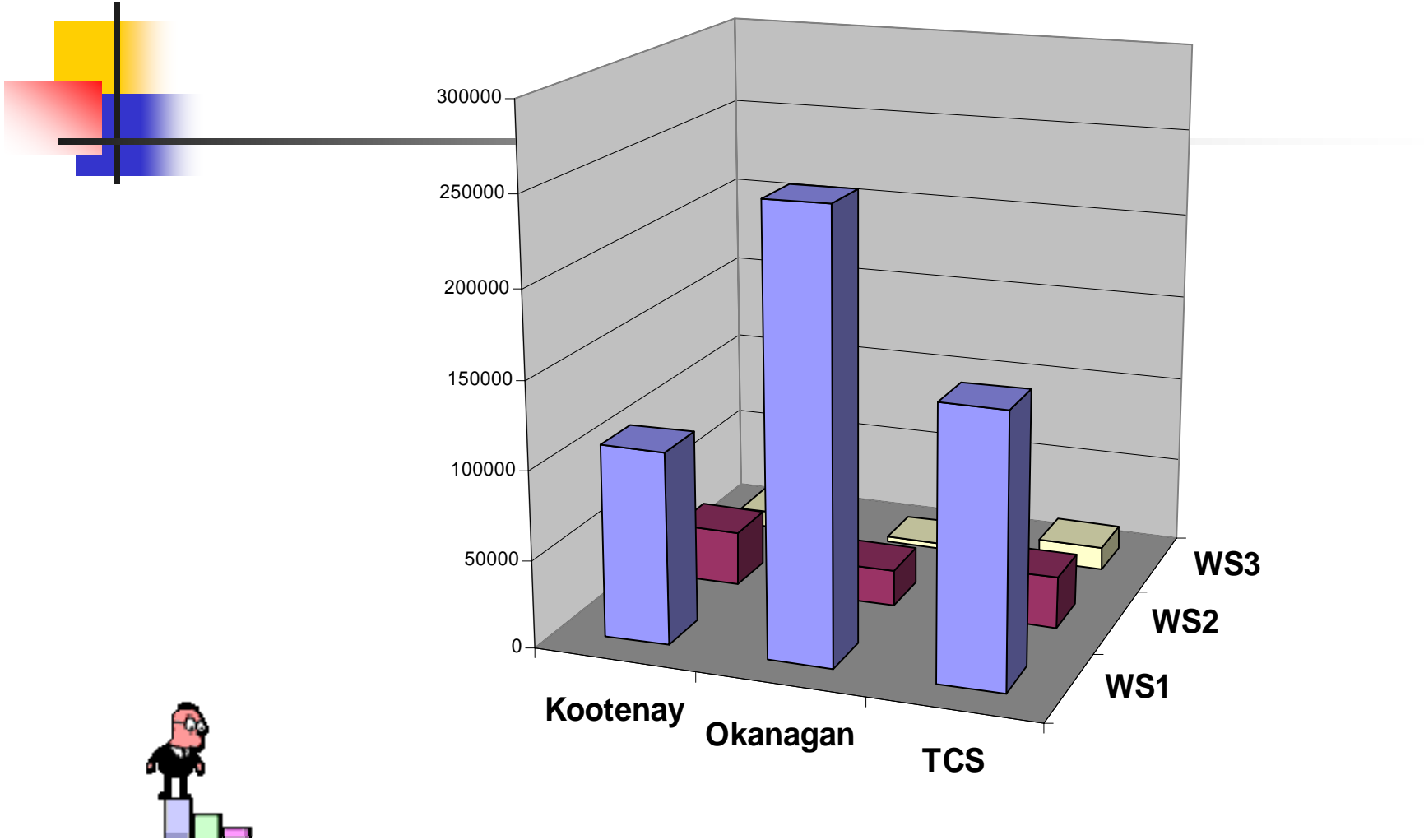


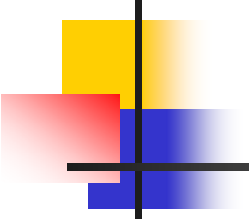
- 50 DWOs
- 1600+ water supply systems

Interior Health Drinking Water Supply Systems

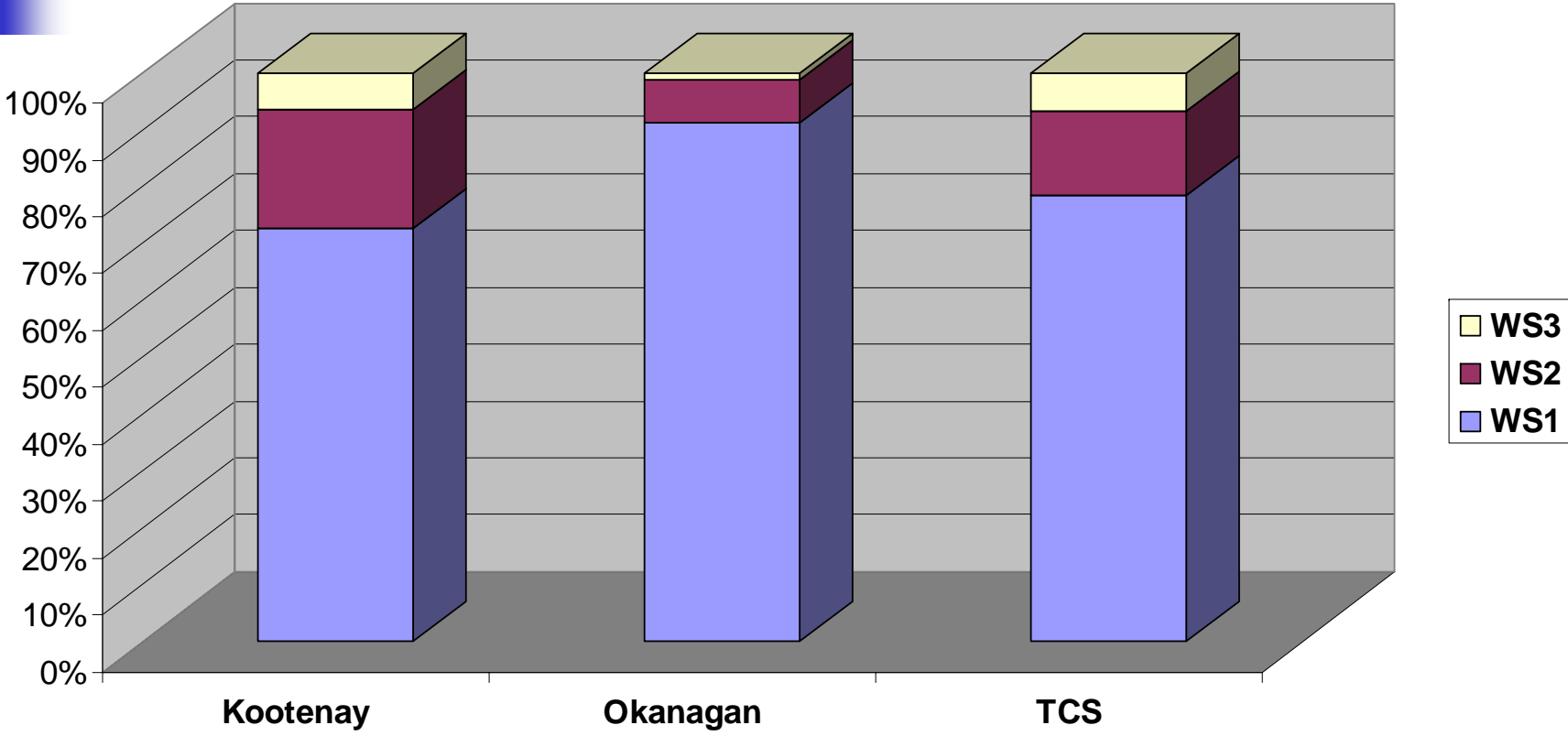


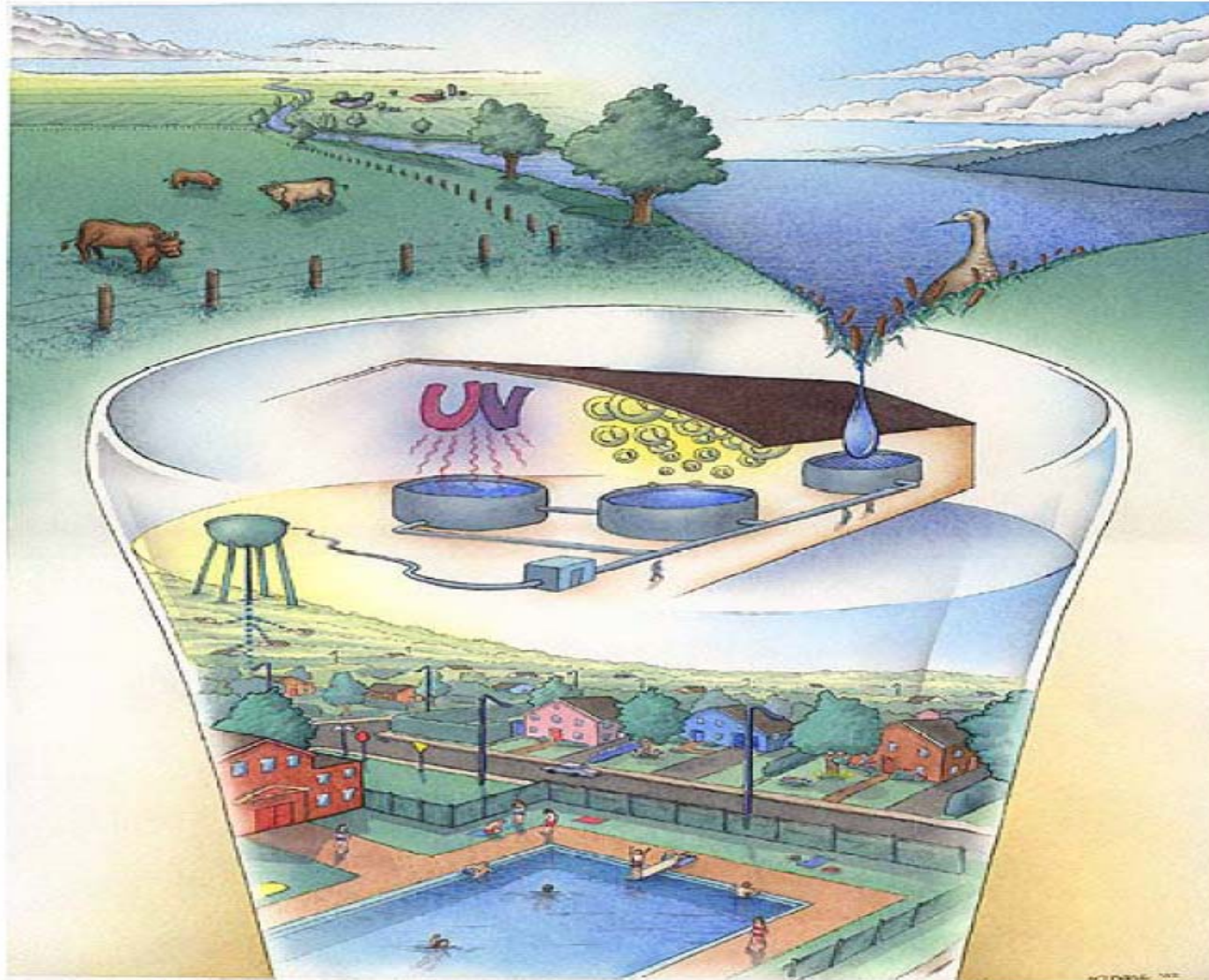
Interior Health Populations served by Water Supply Systems





Interior Health Percent of Populations Served by Water Supply Systems





From Source to Tap

The multi-barrier approach to safe drinking water



Interior Health Water Program

- Drinking Water Quality Improvement Program-Conditions on Permit
- 43210 Drinking Water Objective
- Source Water Protection
- Turbidity Education and Notification Campaign



Interior Health

PERMIT TO OPERATE

**Water Supplier
SYSTEM
Address**

CONDITIONS

The water supplier shall:

- Provide a Source Protection Plan for each Source
- Provide a Certified Operator to Operate Water System
- Operate According to your Water Quality Sampling Program
- Operate According to your Cross Connection Control Program
- Provide a Turbidity Monitoring Program
- Provide Continuous On-Line Monitoring of the Chlorination Disinfection Process
- Provide Long-Term Plans for Source, Treatment and Distribution System Improvements
- Review and update Emergency Response Plans Annually
- Provide Monthly Reports and an Annual Summary

Effective Date

Public Health Inspector

OBWB Water Stewardship Council
DWPA Presentation-Fall 2006



Drinking Water Quality Improvement Program

**The 43210 treatment objective is based on
*Canadian Drinking Water Quality Guidelines:***

- 4 log (99.99%) inactivation of viruses
- 3 log (99.9%) inactivation or removal of *Giardia* and *Cryptosporidium*
- 2 treatment processes for surface water (typically this includes filtration and disinfection)
- 1 for <1 NTU of turbidity (with a target of 0.1 NTU)
- 0 fecal coliform and *E. coli*



turbidity index

GOOD

FAIR

POOR

Interior Health and (water supplier name) remind customers of the provincial recommendation that newborns and people with weakened immune systems drink boiled water or a safe alternative at all times if served by an unfiltered surface water source.

*Health risks increase as turbidity rises.
Stay Safe.*

Water Supplier Name

Website Address and Phone Number

Websites/Print

Personalized by APS

turbidity index

GOOD

FAIR

POOR

Due to increased turbidity (cloudiness), Interior Health and (water supplier name) recommend that children, the elderly, people with weakened immune systems, and anyone seeking additional protection drink boiled water or a safe alternative.

*Health risks increase as turbidity rises.
Stay Safe.*

Water Supplier Name

Website Address and Phone Number

turbidity index

GOOD

FAIR

POOR

Due to increased turbidity (cloudiness), Interior Health and (water supplier name) recommend that all users drink boiled water or a safe alternative. Tap water intended for drinking should be boiled for one minute.

*Health risks increase as turbidity rises.
Stay Safe.*

Water Supplier Name

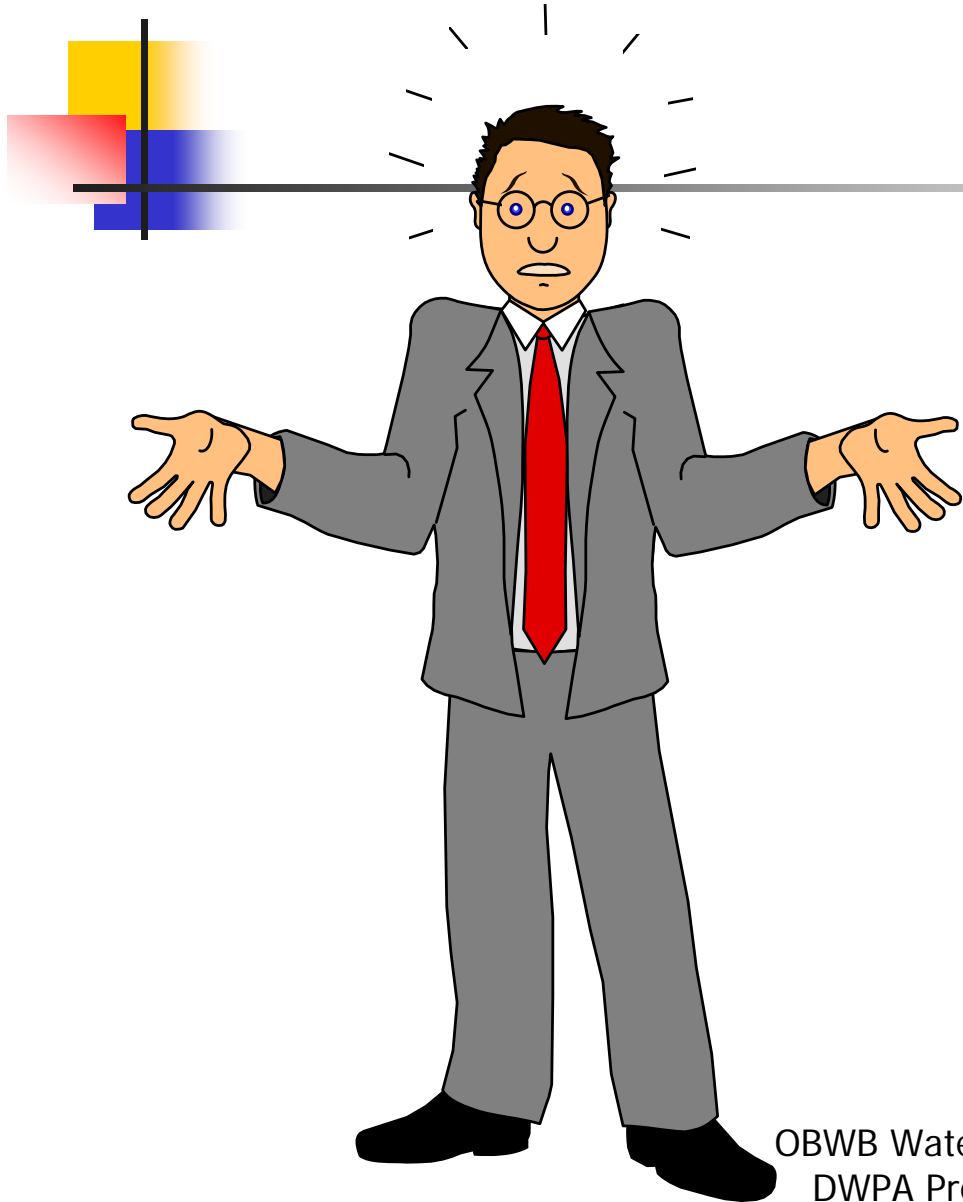
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Interior Health Water Program

- Small Water Systems Strategy
- POE/POU Devices
- Long-Term Boil Water Notification

“POTABLE WATER FOR ALL”



➤ Questions?

➤ Comments?

➤ Concerns?