

BC Water Legislation & Governance and the Role of the Ministry of Environment

A presentation to the
Okanagan Water Stewardship Council
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Water for BC:

Safe, sustainable & valued by all

Presentation Outline

- History of Water Law in BC
- *Water Act*
- Ground Water Protection Regulations
- Dam Safety Regulation
- Floodplain Governance
- *Dike Maintenance Act*
- *Environmental Management Act*
- MoE & the *Forest and Range Practices Act*
- Management of Okanagan Lake Regulation System
- The IJC and The Boundary Waters Treaty

HISTORY OF WATER LAW IN B.C.

RIPARIAN LAW

- Historically, water law in Canada followed the common law system of riparian law
- Rights to water attached to ownership of land adjacent to natural water course
- Riparian owner had no proprietary interest in water
- Had the right to receive water substantially undiminished in flow and quality, the unlimited right to use water for domestic purpose, and a restricted right to water for secondary purposes

INADEQUACIES OF RIPARIAN LAW

- Inadequacies recognised early during the Cariboo gold-rush days:
 - Needed assured supply of water for land remote from streams
 - Equally assured supply needed for farmers, ranchers and orchardists

GOLD FIELDS ACT OF 1859

- Introduced the concept of appropriation
- Exclusive rights to defined quantities
- Rental payments to the Crown
- Non-riparian owners able to obtain rights
- Cancellation for non-use or waste

LAND ORDINANCE ACT OF 1865

- Provided that every person living on and cultivating land could divert unoccupied water from a stream upon obtaining written authority of the magistrate
- These provisions re-enacted in statutes dealing with acquisition of Crown Land
- In 1870, a provision inserted that no person could acquire an exclusive right except under statutory water record

WATER PRIVILEGES ACT OF 1892

- First statute dealing exclusively with water rights
- Explicitly declared that the right to the use and flow of water in any stream was vested in the Crown

WATER CLAUSES CONSOLIDATION ACT OF 1897

- Amalgamated provisions regarding appropriation of water into one statute
- Continued the vesting of the right to use and flow of water in the Province
- No person could divert water except in accordance with a provincial Act
- Right appurtenant to land or mine
- Requirement of beneficial use

WATER ACT OF 1909

- Established the Board of Investigation
- Conducted hearings to determine terms of new licences
- Established priority and quantities for respective claimants on streams
- Order improvement of works
- Federal *Railway Belts Water Acts* of 1912 and 1913 recognised board's authority
- All water rights put under the same provincial system of administration

WATER ACT OF 1914

- Unrecorded riparian rights to be registered prior to June 1, 1916
- Failure to record - grant to another person
- Abrogated any riparian right to divert and use water except general right of the public to use water for domestic purpose where there was lawful access

WATER ACT OF 1925

- Established the province's proprietary interest in water
- Not an offence to divert unrecorded water for domestic purpose

WATER ACT OF 1939

- Board of Investigation abolished
- Established the Comptroller of Water Rights
- Regulations for procedure to acquire a water licence and expropriate land

WATER ACT OF 1951

- “Not an offence” provisions expanded to include domestic, extinguish a fire or prospect for mineral
- Burden on the person diverting the water to prove that it was unrecorded water.

WATER ACT OF 1960

- Provisions made to extend Water Act to groundwater
- Allowed for granting Approvals to make changes in and about streams and for short term use of water

1981 - 1982 STATUTES AND AMENDMENTS

- Environment Management Act established the Environmental Appeal Board
- Two levels of appeal - to Comptroller then to Appeal Board
- Regional Water Manager defined – power to grant Approvals (1981)
- RWM – issue licences, amend licences and transfer of appurtenancy (1982)

1987 AMENDMENTS

- RWM - power to apportion licences

WATER AMENDMENT ACT OF 1992

- RWM - cancel licences
- Appeal from cancellation to Environmental Appeal Board or Comptroller
- Brought in Regulations for changes in and about streams

WATER PROTECTION ACT OF 1995

- Prohibits bulk export of water from British Columbia
- Allows export in containers of 20 litres or less
- grandfathered existing licences
- required registration for existing unlicensed operations
- Prohibits large scale inter-basin diversions

1997 AMENDMENTS

- Changed appeal provisions
- All appeals to Environmental Appeal Board
- Fish Protection Act
 - No new bank to bank dams on specified rivers
 - Licensing restraints on sensitive streams

2003 Amendments

- Additional powers for the Regional Water Manager
- Expiry date for power purposes
- Power to reject incomplete applications

2004 Amendments

- Reorganized into 6 Parts
- Introduction of groundwater provisions
- New water management planning provisions

2005 Reg. Amendment Water Rentals

- 90 uses to 9 sector-based rental rates
- Modest increase in overall rentals
- Volume based rather than step based
- metric

FUNDAMENTAL PRINCIPLES

- Property vested in Crown
- Based on the doctrine of prior appropriation
- No right may be acquired by prescription
- Pay annual licence rental to Crown
- Perpetual right subject to continued beneficial use
- No bulk export

CONCEPTS

- Statutory decisions by designated (not delegated) officials
- First in time, first in right
- Beneficial use
- Highest and best use

The *Water Act*

- Part 1 – Definitions and Applications
- Part 2 – Licensing, Diversion and Use of Water and Related Matters
- Part 3 – Water Users Communities
- Part 4 – Water Management Plans
- Part 5 – Wells and Ground Water Protection
- Part 6 – General

Water Licences

A licence entitles its holder to:

- Divert & use beneficially , for the purpose and during or with the time stipulated, the quantity of water specified in the licence
- Store water
- Construct, maintain and operated the works authorized under the licence
- Alter or improve a stream or channel for any purpose
- Construct fences, screens and fish or game guards across streams for the purpose of conserving fish or wildlife

Approvals

- Section 8 – **Short Term Use of Water**
 - For a term not exceeding 12 months
- Section 9 – **Changes in and about a Stream**
- **Water Act Regulations – Part 7**
 - Section 44 – describes changes in and about a stream not requiring Approval
 - Notification provision (45 days)
 - Habitat Officer may specify terms

(**Note:** May also require additional authorizations, i.e., Fisheries Act)

Licensed Water Use in Okanagan

	Mainstem	Tributaries	Total
Volume (mcm)	212	258	470
%	45.1	54.9	100
% by Purpose			
Irrigation	56.3	76.0	67.1
Waterworks	42.0	23.0	31.7
Other	1.7	1.0	1.2

Part 4 – Water Management Plans

- The minister may, by order, designate an area for the purpose of developing a WMP to address or prevent:
 - Conflicts between water users
 - Conflicts between water users and instream flow requirements
 - Risks to water quality
- Preparation of plan must consider provincial or local government strategic, operational and land use or water use planning processes
- Implementation of plan by LGIC may effect statutory decisions and/or place restrictions on well drilling

Section 44 – Water Reservations

The LGIC may reserve all or part of the unrecorded water in a stream in order to

- enable a person to investigate the suitability of a stream for any purpose
- in order to make provision for a water supply for a waterworks, irrigation or power system or project; or
- the use of the Crown for any purpose

(exceptions are domestic, land improvement & STU)

Water Act (cont.)

- Section 85 – Powers of Comptroller and Regional Water Manager
- Section 88 – Powers of engineers and officers
- Section 93 - Offences

Part 5 – Wells & Ground Water Protection

- Activities related to wells and ground water protection
- Regulations required to bring Sections into effect
- Ground Water Protection Regulations (GWPR)

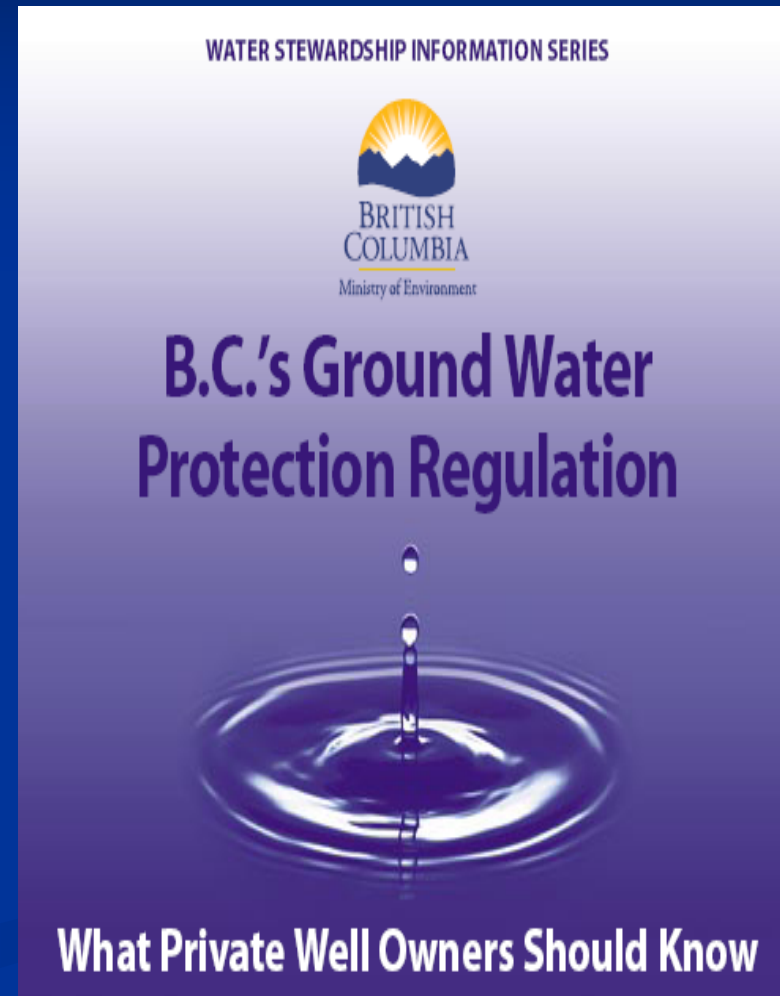
GWPR

■ Principles

- Results/outcome based
- Measurable
- Simple, practical, cost effective
- Clear responsibilities
- Enforceable

■ Emphasis

- Prevention/risk-based
- Industry-led certification process
- Greater role for qualified professionals



GWPR Apply to:

- Water supply wells – (a) domestic, and (b) non-domestic (e.g., irrigation, open-loop geothermal)
- Monitoring wells
- Recharge/injection wells
- Dewatering/drainage wells
- Remediation wells
- Geotechnical wells (i.e., boreholes, test pits, closed-loop geothermal)

GWPR Phase 1

- Qualification of Drillers and Pump Installers
- Well identification requirements (well identification plates, reporting requirements)
- Well Standards for construction, maintenance and closure:
 - Surface sealing of well casing
 - Closing or deactivating a well
 - Well caps and covers
 - Floodproofing community wells
 - Protection of the wellhead

GWPR Phases 2 & 3

Phase 2:

- Additional standards for well construction and well siting, flowing wells, flow testing, and well pump installation
- Water analysis for new and altered wells
- Well reports

Phase 3:

- Well operation
- Regulations in water management plan areas, including drilling authorizations
- Aquifer protection, quality and use

Floodplain Governance

Land Title Act

- Section 86 – Enables approving officers to require engineering reports and covenants on land subject to flooding, erosion, landslip, etc.
- Section 910 – Enables local government to adopt floodplain bylaws (which consider provincial guidelines) and grant exemptions to the requirements of the bylaw

Floodplain Governance (cont.)

Community Charter (formerly Local Government Act)

- Section 56 –
 - Where a building inspector considers that construction would be on land subject to flooding, mud flows, debris flows, debris torrents, erosion, etc. the inspector may require a report certified by a qualified professional that the land may be used safely for the use intended
 - As a condition of issuing a building permit may require a restrictive covenant

Floodplain Governance (cont.)

- Provincial “Flood Hazard Area Land Use Management Guidelines”
- Under Sec. 138 of the *Environmental Management Act* the LGIC may make regulations “respecting flood hazard management” for the purpose of:
 - Preventing, mitigating or reducing potential flood hazards
 - Protecting the environment and public from damage caused by flood waters or potential flooding
 - Restoring or enhancing the environment or public safety after a flood(s)

Dike Maintenance Act

- Establishes Provincial “Inspector of Dikes”
- Authorization required to construct, repair, replace, renew, alter, add to improve or remove a dike, other than a private dike
- Power to require inspection and reports
- Offences

Environmental Management Act

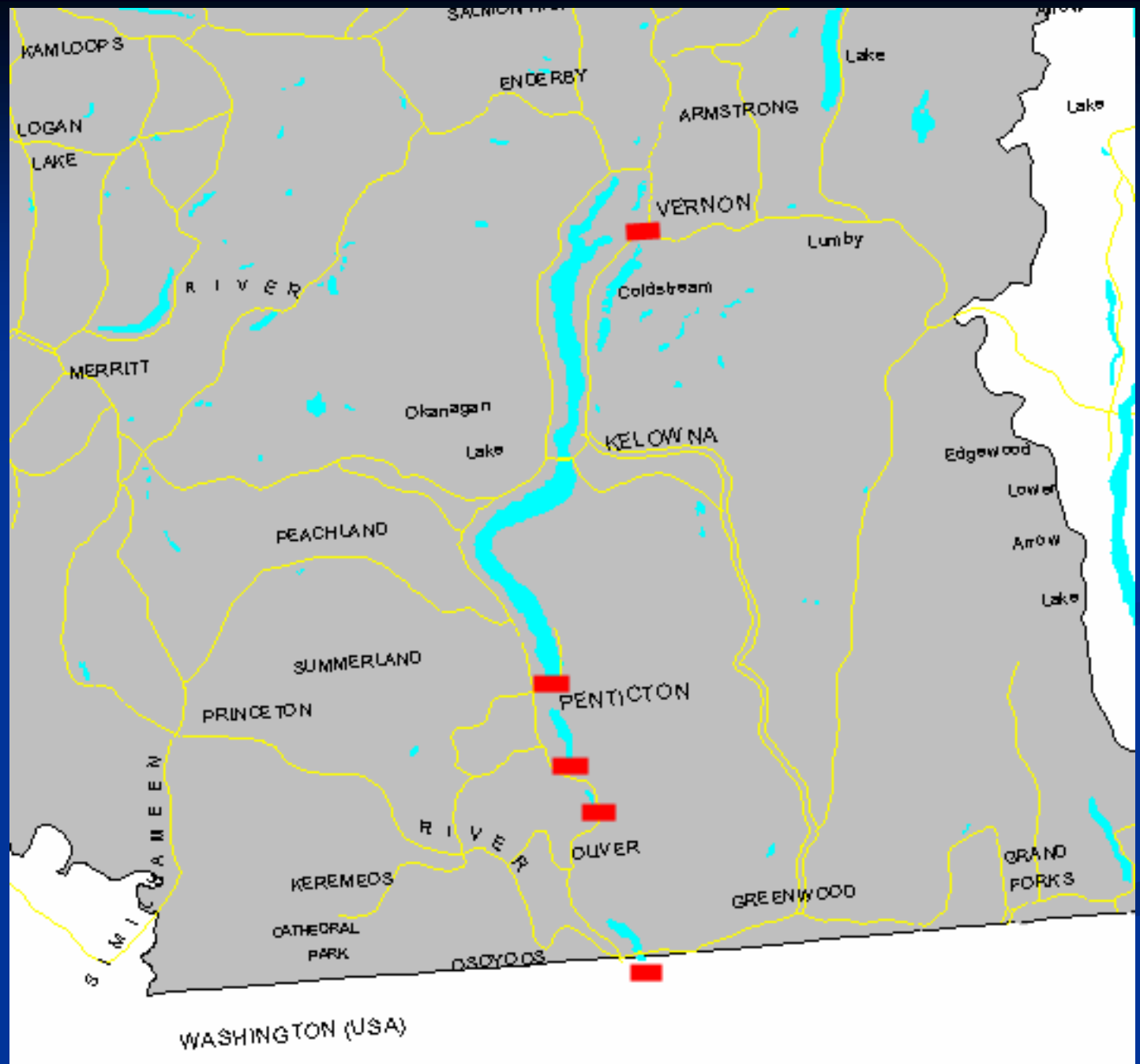
- Primarily a responsibility of the Environmental Protection Division
- Focus on Point Source Pollution
 - Contaminated Sites Regulation
 - Agricultural Waste Control Reg
 - Organic Matter Recycling Reg
 - Hazardous Waste Reg
 - Mushroom Composting Reg
 - Coal Bed Methane Reg

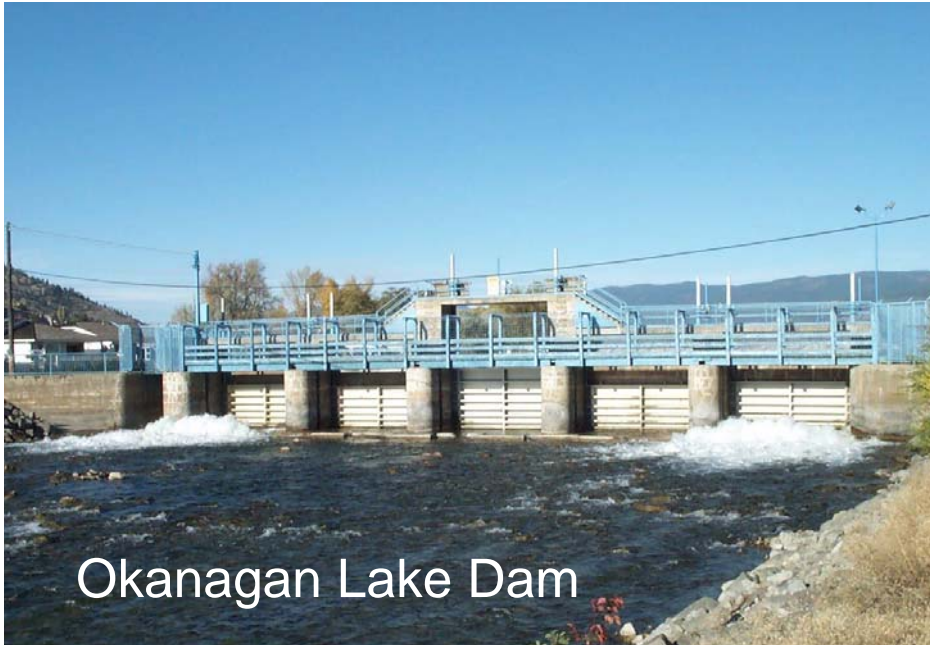
Forest and Range Practices Act

- Replaced Forest Practices Code
- Mostly “results based”
- MoE has statutory authority for:
 - designation of community watersheds
 - setting water quality objectives
- MoE participates in the development of:
 - Source to tap assessment tools
 - Forest policy tools

Okanagan Lake Regulation System

- Extends from Okanagan Lake to north end of Osoyoos Lake
- Constructed in early 1950's jointly by Canada & BC
- Formerly called "Okanagan Flood Control System"
- Managed to balance diverse & competing economic, social and environmental objectives (i.e., flood control, water supply, fisheries, navigation, recreation, aesthetic, instream flows, etc.)



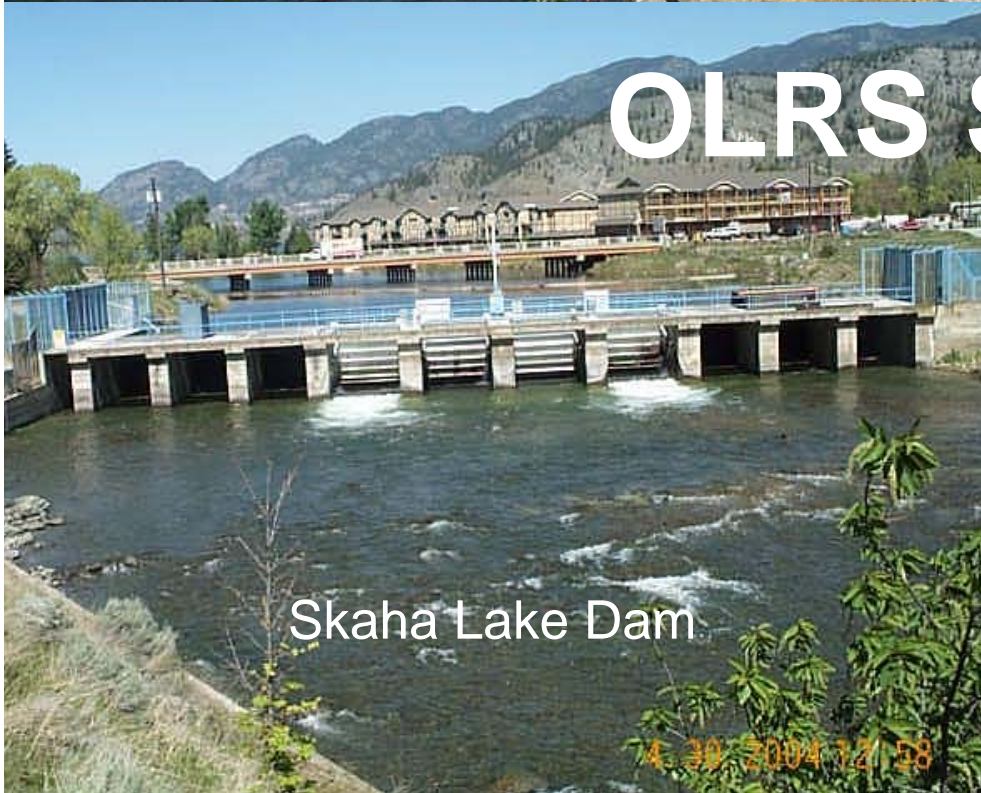


Okanagan Lake Dam

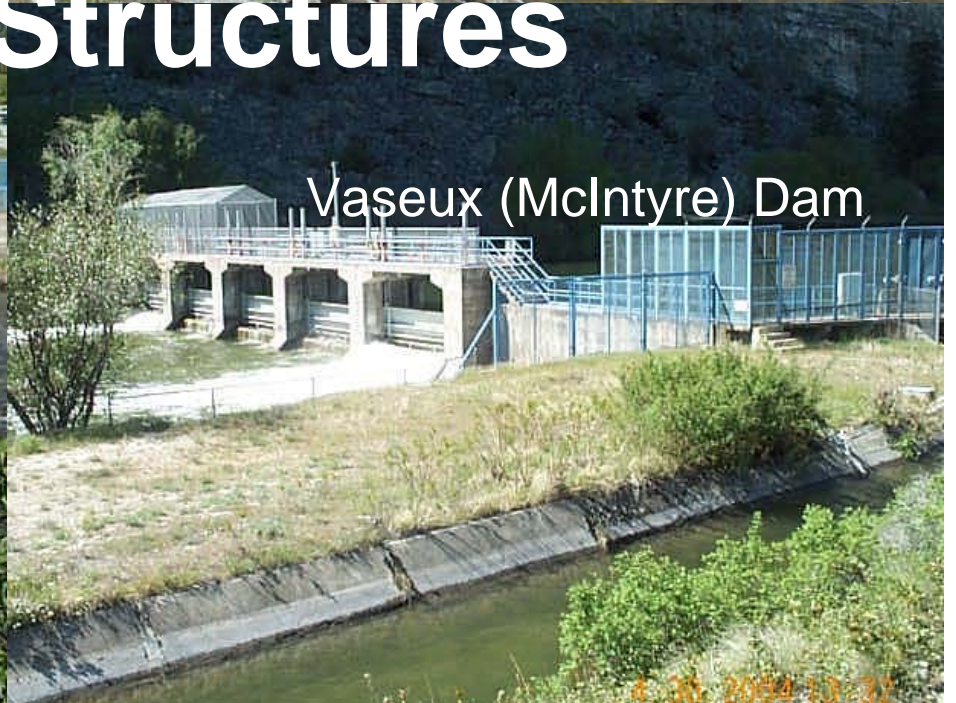


VDS 10

OLRS Structures



Skaha Lake Dam

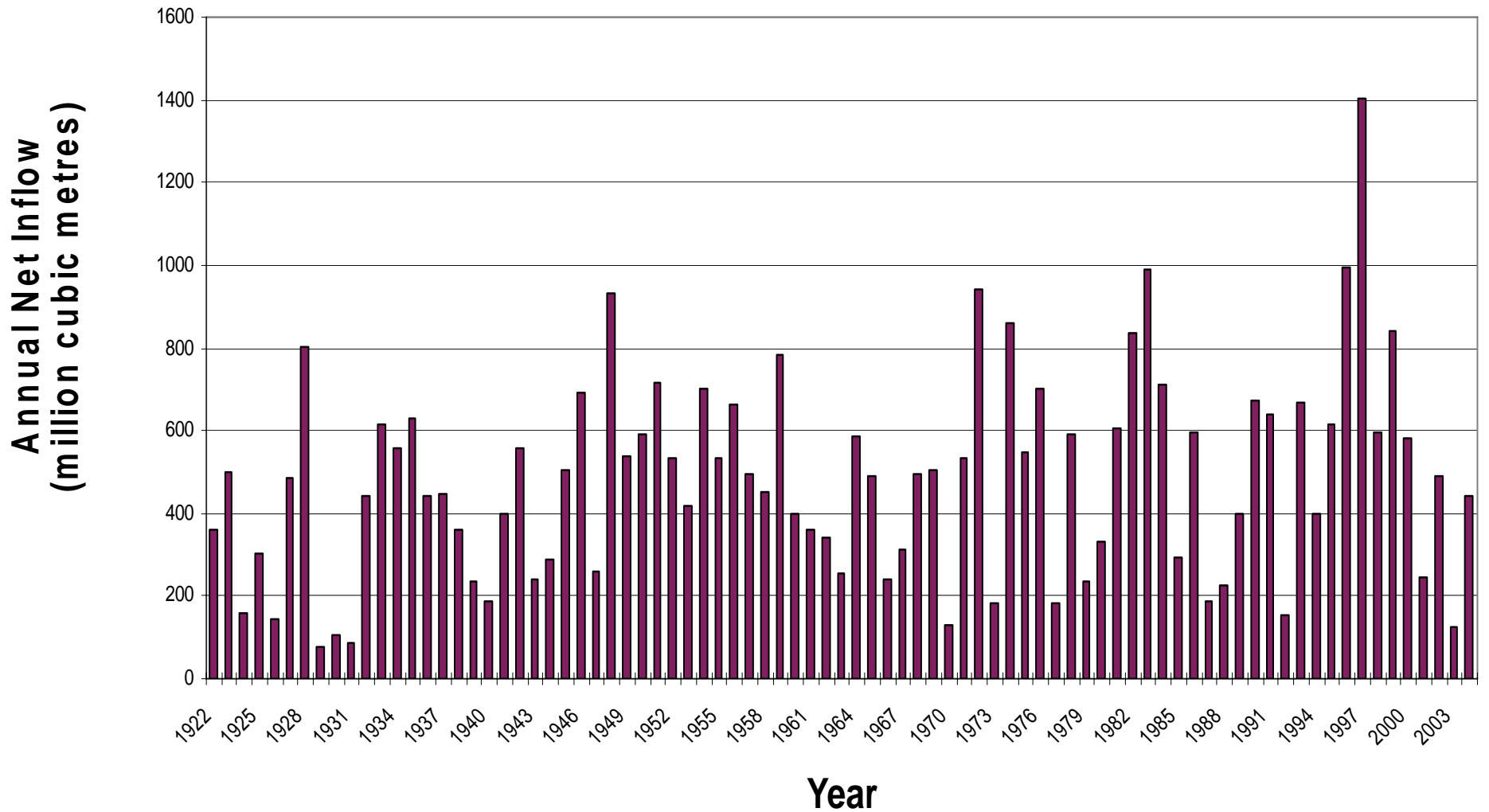


Vaseux (McIntyre) Dam

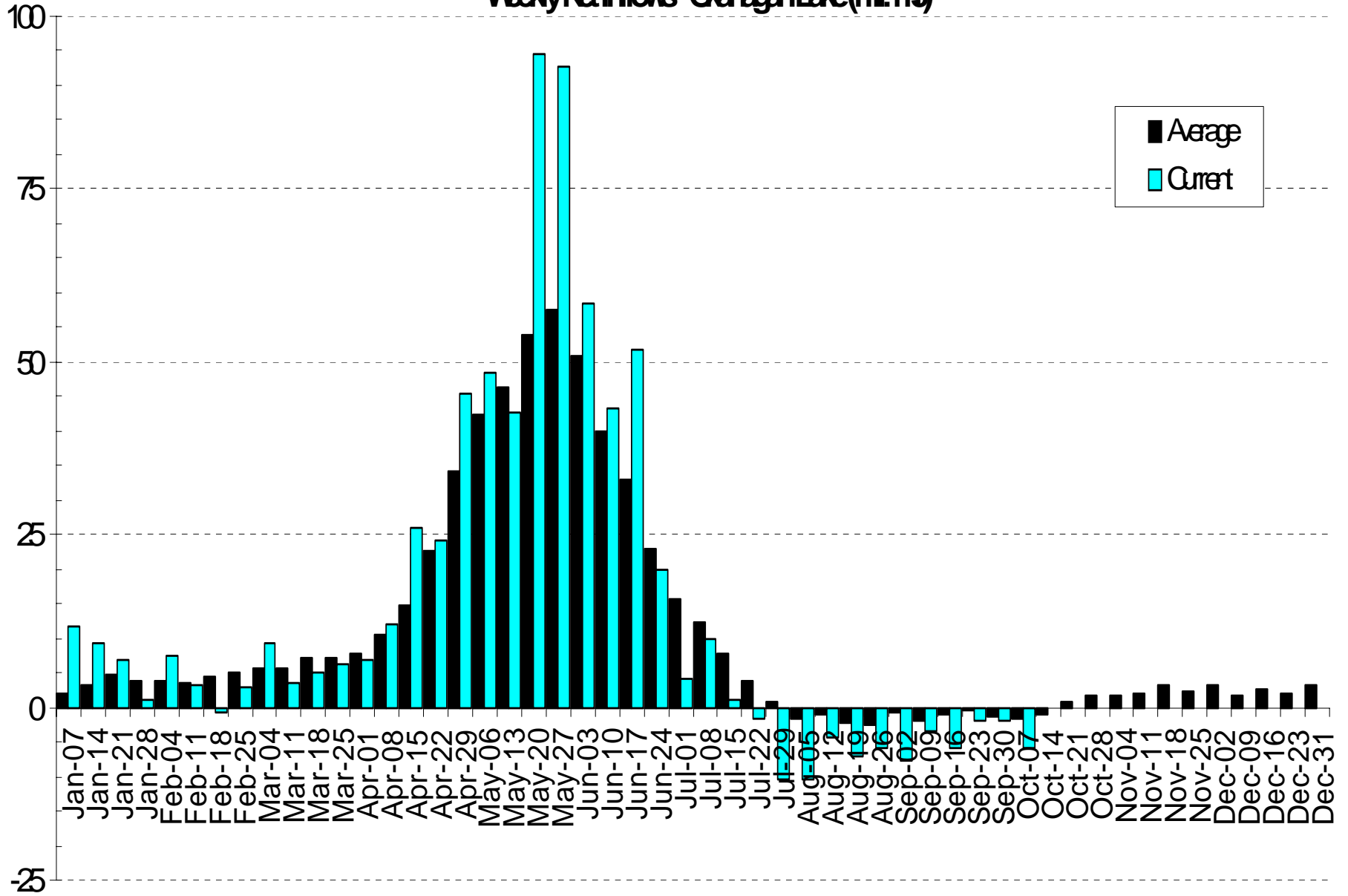
OLRS (cont.)

- General operating plan (i.e., target lake levels and flows) are set out in Okanagan Basin Agreement
- Annual operating plans determined by Water Stewardship staff in Penticton based on inflow forecasts, operational constraints, real time hydrometric and fisheries data, and other relevant information
- No legal requirement for minimum (or maximum) transboundary flows into USA

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



Weekly Net Inflows-Oranage Lake (mil. m³)



Boundary Waters Treaty (1909)

- Provides the principles and mechanisms to help prevent and resolve disputes along the boundary between Canada and the USA
- Primarily concerned with water quality and quantity
- International Joint Commission is binational organization established by the treaty

International Joint Commission

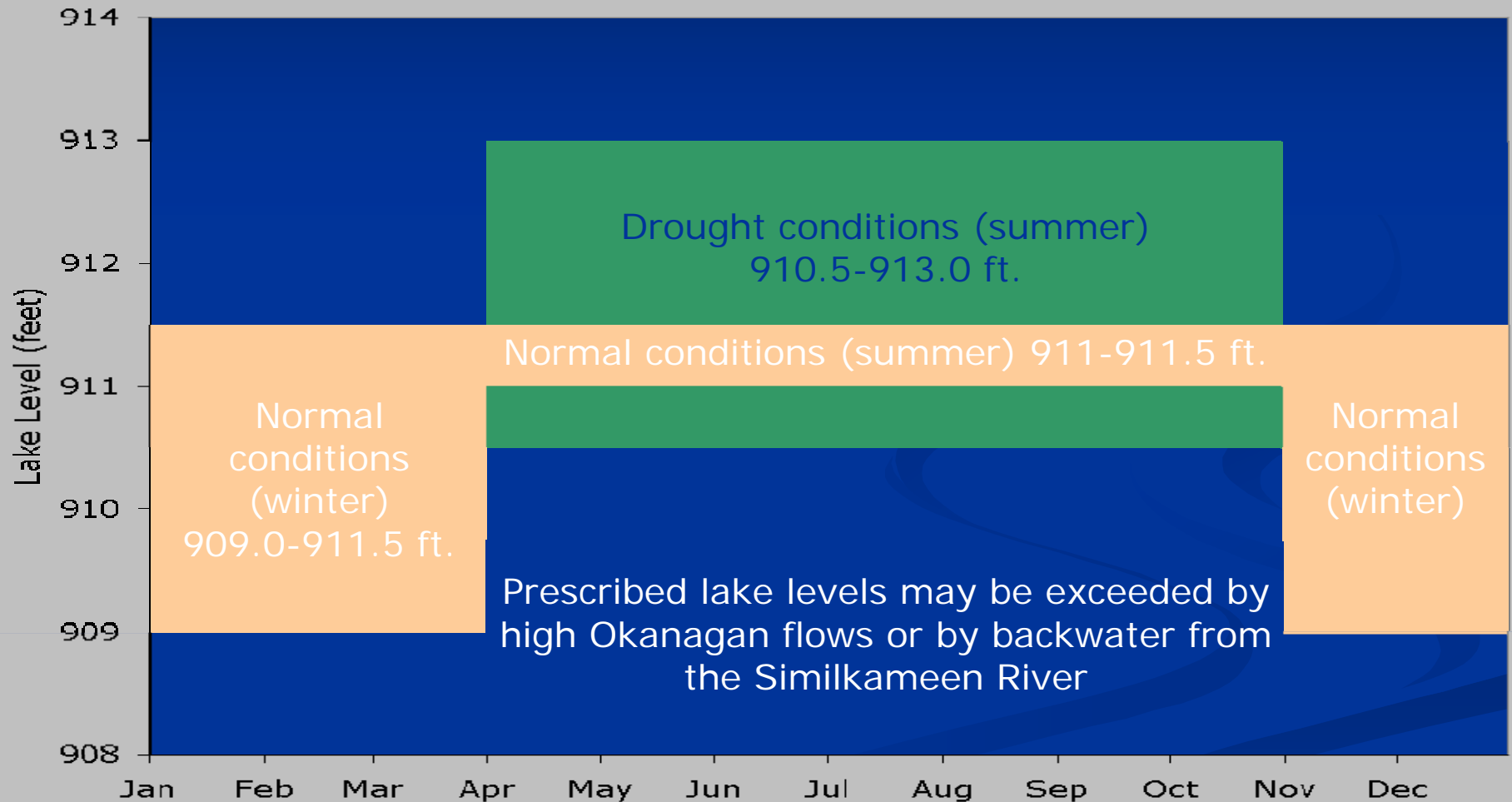
- Issues Orders in response to applications for the use, obstruction or diversion of waters which flow along or, in some cases, across the boundary if the use affects the natural levels or flows
- Investigates specific issues or monitors situations when requested by Governments (References)
- Appoints Boards of Control to report on compliance of Orders or assist in References
- International Osoyoos Lake Board of Control

IJC Orders for Osoyoos Lake

- IJC Orders relate to the operation of Zosel Dam in Oroville, Washington
- Specify allowable lake levels ranges during normal and drought years
- Contain drought criteria
- Terminate in 2013
- **Orders do not consider transboundary flows**



Prescribed Lake Level Range



A scenic landscape photograph of a large, deep blue lake. The lake is framed by green and brownish vegetation on the slopes in the foreground. In the background, there are rolling mountains under a clear, bright blue sky with a few wispy clouds. The text is overlaid in the center of the image.

*Water for BC :
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Valued by All*

Thank you