

Ministry of Environment Climate Change Strategy

NAME OF POLICY:	Water Quality Objectives Policy

This policy applies to the development and application **APPLICATION:**

of water quality objectives.

Executive Director, Water Protection and **ISSUANCE:**

Sustainability Branch, ENV

IMPLEMENTATION: ENV staff

REFERENCES:

RELATED POLICIES: Water Quality Guidelines Policy

Water Sustainability Act Water Objectives

RELATIONSHIP TO

Updates have been made to clarify and guide the development and application of water quality **PREVIOUS POLICIES:**

objectives. This policy replaces Policy 6.10.03.02.

POLICY AMENDMENT: Any formal request for an amendment to this policy is

to be directed in writing to the Executive Director, Water Protection and Sustainability Branch, Ministry

of Environment and Climate Change Strategy.

Ted Zimmerman **Executive Director** Water Protection and Sustainability Branch Ministry of Environment and Climate Change Strategy

Date

EFFECTIVE DATE: February 19, 2021 **FILE**: 77530-00/Policy & Procedures

AMENDMENT NO:

APPROVED AMENDMENTS:				
Effective date	Briefing Note /Approval	Summary of Changes:		

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1. PURPOSE OF POLICY

- Clarify why water quality objectives (WQO) are developed;
- Specify the protocols and roles in developing consistent, credible, science-based WQOs;
- Enable collaborative, consent-based water quality policy development with Indigenous nations; and
- Define how WQOs are used to inform decisions that may affect water quality.

2. AUTHORITY TO SET WATER QUALITY OBJECTIVES

The purpose and functions of ENV are outlined in the *Ministry of Environment Act*. Section 4(2)(a) states that ENV is "to encourage and maintain an optimum quality environment through specific objectives for the management and protection of land, water, air and living resources of British Columbia".

Additionally, Section 5(e) of the *Environmental Management Act* authorizes the Minister to prepare and publish "policies, strategies, objectives, guidelines and standards for the protection and management of the environment".

3. **DEFINITIONS**

Ambient refers to the surrounding environment outside the zone in which water quality may be directly affected by a waste discharge or other source of contamination.

Water quality is a term used to describe the chemical, physical, and biological characteristics of water, usually with respect to its suitability for a specific value. Water quality includes the water column, the substrate, and the biota present.

A water quality guideline is a scientifically derived numerical concentration or narrative statement considered to be protective of water values and uses in generic ambient conditions.

A water quality objective is a scientifically derived numerical concentration or narrative statement considered to be protective of the water values and uses in ambient conditions for a specific waterbody.

A water use of value is an aspect of water use that is to be protected and includes the following:

- Human health including drinking water supplies and safe consumption of aquatic life;
- Aquatic life and its habitat;
- Wildlife and its habitat;
- Agriculture (livestock watering and irrigation);
- Recreational use and aesthetics; and
- Traditional, cultural, and social uses.

4. POLICY STATEMENT

WQOs are established on a priority basis for fresh, estuarine, and marine waterbodies of regional, provincial, inter-provincial, international, and Indigenous significance to inform

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resource management decisions and promote the stewardship of water resources. WQOs are water quality benchmarks used to inform resource management or land use decisions, promote water stewardship, and support long-term watershed planning. Waterbodies are selected on a priority basis depending on the current state of water quality, ENV's responsibility and jurisdiction, the level of impending development, available resources, and input from other governments.

WQOs are set with the goal of protecting water values by maintaining or improving existing water quality, or by protecting water quality for a specific use. They are developed to protect the most sensitive water use or value for a given waterbody and in doing so, all other water uses and values should be protected. WQOs apply to the whole waterbody unless specified otherwise.

WQOs are developed for specific parameters of concern and characteristics (chemical, physical, biological), and reflect levels considered to represent low risk, with consideration for past, current, and future land uses and development. They can be numerical values or qualitative statements. WQOs also consider the traditional, cultural, and social values associated with a waterbody.

The development of WQOs is informed by a water quality assessment using B.C.-approved water quality guidelines or similar information to evaluate the physical, chemical, and biological characteristics of the waterbody under consideration. The water quality assessment considers the best available information at the time of their derivation and includes consideration of the following characteristics of the waterbody:

- ambient water and its assimilative capacity;
- aquatic life and wildlife, and its habitat;
- hydrology;
- sediment quality; and
- potential contaminant loadings from point and non-point source waste discharges.

WQOs may be developed in partnership with other levels of government (Federal, Indigenous nations, local), and with input from regulated interests or non-governmental organizations. WQOs will be co-developed with Indigenous nations whose territorial lands include the waterbody in question where Indigenous nations wish to participate. WQOs will consider both Indigenous Knowledge and western science to derive the most appropriate objectives for a waterbody.

The attainment of WQOs is determined through monitoring programs designed specifically for that purpose. Monitoring results are also used to determine whether WQOs are under-or over-protective of the values identified for the waterbody.

The development of WQOs follows approved B.C. protocols (see Section 5). The process is led by the Water Protection & Sustainability Branch (WPSB) within ENV's Environmental Sustainability Division (ESD), with technical support from Regional Operations Branch (ROB) in the Environmental Protection Division (EPD).

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WQOs are approved by the Executive Director, WPSB, ESD. WQOs co-developed with Indigenous nations may be jointly approved by the Executive Director, WPSB, ESD and the Indigenous nation(s). Once approved, WQOs constitute official Ministry policy and must be considered in any decision affecting water quality made within ENV.

WQOs are not directly enforceable but may provide the basis for waste discharge limits specified in permits, approvals, and orders, which are enforceable. The attainment of WQOs does not relieve any other legislative obligations (e.g., *Environmental Management Act, Drinking Water Protection Act, Water Sustainability Act*).

5. PROCEDURES

Priority waterbodies for the development of WQOs are determined by ESD and EPD.

WQO reports are developed in accordance with current ministry procedures (*Guidance for the Derivation of Water Quality Objectives in British Columbia*).

Draft WQO reports undergo both an internal and external review prior to final approval. Completed WQO reports are approved by the Executive Director, WPSB, ESD.

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