



Water Cleanup Plans

Inner Bellingham Bay Contaminated Sediment TMDL Review Draft

Introduction

The Washington Department of Ecology (Ecology) is seeking public comment on a water cleanup plan for sediments in Inner Bellingham Bay. Water cleanup plans are called total maximum daily load (TMDL) studies in the federal Clean Water Act. The Bellingham Bay water cleanup plan is one of the first of its kind in the nation; few others have used as broad a range of regulatory programs to clean up toxic pollution of marine sediments.

Background

Located in the most northern part of Puget Sound, 42-square-mile Bellingham Bay receives drainage from a 1,000-square-mile land base that includes the Nooksack River and Squaticum, Little Squaticum, Baker, Whatcom and Padden creeks.

Bellingham Bay fulfills many activities that require a high level of environmental quality, including commercial and recreational fishing and shellfishing. It provides valuable habitat for wild Chinook and other types of endangered salmon, as well as for numerous marine mammals and waterfowl. Bellingham Bay is also an essential feature of navigation, water-dependent commerce and recreation in northern Puget Sound.

Like many urban bays in the country, contaminated marine sediments are a legacy of past industrial practices that can pose a present threat to marine life and to public health. Most of the activity that affects Bellingham Bay occurs in or near the city of Bellingham. However, the bay is also affected by pollution sources located in watersheds that drain to the bay.

Contaminants in Bellingham Bay

A decade ago, scientists confirmed 25 toxic substances present in Bellingham Bay sediments that failed environmental standards. From cleanup and pollution prevention efforts carried out by businesses and government, and natural cleansing processes during the past decade, many areas of the bay are now considered safe to humans and aquatic life. However, ongoing sampling shows that remaining sediment contaminants of concern are within three Bellingham Bay areas – Whatcom Waterway, Cornwall Avenue Landfill, and the Harris Avenue Shipyard. Sediments in pockets of these three areas contain one or more of the following pollutants or conditions that fail environmental standards:

Mercury and other metals – Naturally occurring in the environment, but also used in, or a by-product of, manufacturing and mining processes. Many vehicle-use and maintenance activities produce heavy metal by-products.

Polychlorinated bi-phenols (PCBs) - Complex compounds with different chlorine content. PCBs were used in the manufacture of electrical equipment; also used in paints, adhesives, metals coatings and plastics until 1976, when its use was banned; a by-product of combustion.

Phenols - A large group of chemicals, including **4-methylphenol**, used in a variety of manufacturing processes and a major ingredient of such wood preservatives as creosote and pentachlorophenol.

Wood waste – Measured in the volume of wood-waste along key shoreline areas.

Sediment “bioassay” - Tests of fish and shellfish to determine whether contaminants such as mercury are accumulating in tissue.

Cleaning up polluted sediments

Under the federal Clean Water Act, a “total maximum daily load” (TMDL) analysis must be developed for waterbodies that fail environmental standards. A TMDL study determines how much pollution a waterbody can receive and still remain healthy.

The cleanup plan for Bellingham Bay builds on the Bellingham Bay Comprehensive Strategy developed by the Bellingham Bay Demonstration Pilot Work Group. The Bellingham Bay water cleanup plan is designed to:

- Identify the portions of Bellingham Bay that are on the state's 303 (d) list of impaired waterbodies due to sediment contamination;
- Summarize the degree of sediment contamination;
- Review the standards and regulatory procedures for improving sediment quality;
- Provide information on the technical analysis and modeling approach used for sediment remediation and source control;
- Identify facilities and stormwater sources that discharge directly into Bellingham Bay;
- Identify sediment cleanup and other pollution reductions needed (wasteload allocations); and
- Document the implementation strategy for achieving environmental compliance with Washington's sediment management standards.

The Bellingham Bay Comprehensive Strategy was developed by U.S. Fish & Wildlife Department, Environmental Protection Agency and Army Corps of Engineers; Washington State departments of Ecology, Natural Resources, Fish & Wildlife, Transportation and Puget Sound Water Quality Action Team; Lummi Nation and Nooksack Tribe; Whatcom County Health and Human Services, Port of Bellingham and City of Bellingham.

Public comment sought on Bellingham Bay sediments cleanup plan

Comments on the proposed Bellingham Bay TMDL will be accepted through **July 20, 2001**. The TMDL study and recommendations can be accessed at www.ecy.wa.gov/biblio/0110036.html or reviewed at the Bellingham Library or Ecology's Bellingham Office, 1204 Railroad Ave. Comments should be mailed to Pam Elardo, P.E., Department of Ecology, NW Regional Office, 3190 - 160th Ave. SE, Bellevue, WA 98008-5452. Comments may also be emailed to pam.elardo@metrokc.gov

Public meeting June 21

Ecology engineers will describe the water cleanup plan as part of a public meeting Thursday, June 21 at the Bellingham Cruise Terminal. Beginning at 5 p.m., status reports from the bay cleanup and restoration committees will be provided. At 6:30, information on the proposed Bellingham Bay TMDL will be presented. Following the presentations, scientists who've been working on the overall Bellingham Bay Comprehensive Strategy will be on hand until 8 p.m. to talk individually with citizens.

For more information

Bellingham Bay TMDL – Pam Elardo – (206) 263-3699

Bellingham Bay Comprehensive Strategy – Lucy Pebles McInerney – (425) 649-7272

Ecology is an equal opportunity agency. If you have special accommodation needs, please call Carmen Gilmore at Ecology's Bellingham Office, (360) 738-6250, or TDD at (425) 649-4259.