# Department of Environmental Conservation Division of Water

# 2008 Integrated Water Quality Monitoring and Assessment Report

**Responsiveness Summary** 

**Public Noticed** 

February 1, 2008 - March 3, 2008

**DATE March 26, 2008** 

# Introduction

#### **Summary of Project**

Every two (2) years the Department of Environmental Conservation (DEC) is required to report on the condition of Alaska's waters in accordance with the Clean Water Act. The Integrated Water Quality Monitoring and Assessment Report (Integrated Report) categorizes known waterbodies in Alaska and includes the federal Clean Water Act (CWA) reporting requirements for the 305(b) report and the 303(d) list of polluted or impaired waters. The Integrated Report also helps the State prioritize waters for data gathering, watershed protection and restoration of impaired waters.

There are five categories used in the report to which a waterbody can be assigned:

- Category 1. All the water quality standards for all designated uses are attained.
- Category 2. Some of the water quality standards for the designated uses are attained, but data and information to determine if the water quality standards for the remaining uses are attained are insufficient or absent.
- Category 3. Data or information is insufficient to determine that the water quality standards for any of the designated uses are attained.
- Category 4. The waterbody is determined to be impaired but does not need a Total Maximum Daily Load (TMDL).
  - Category 4a. Impaired waters with an established and EPA-approved TMDL.
  - Category 4b. Impaired waters with established "other pollution control requirements" to meet water quality standards.
  - Category 4c. Impaired waters that fail to meet a water quality standard which is not caused by a pollutant, but instead is caused by other types of pollution.

**Category 5.** Water quality standards for one or more designated uses are not attained and the waterbody requires a TMDL or recovery plan. Category 5 waters are the Section 303(d) list of impaired waters.

Among the changes from the 2006 report, the Department proposed to change the category of a number of waterbodies. Specifically:

- Cheney Lake is now place in Category 2 since recent monitoring shows the water is attaining the fecal coliform bacteria criterion;
- Pederson Hill Creek is now placed in Category 4a as a final TMDL for fecal coliform bacteria was submitted to EPA;
- Thorne Bay log transfer facility is now placed in Category 4a as a final TMDL for residues has been approved by EPA;

- St. Paul Island Lagoon is now placed in Category 2 since recent evaluations demonstrates the waterbody is attaining the petroleum hydrocarbon standard;
- Kenai River is now placed in Category 4b since other pollution controls are now in place to enable the waterbody to meet standards;
- Hobart Bay, Twelvemile Arm and Schulz Cove are now placed in Category 2.
   These waters are associated with historic log transfer and/or log storage from timber harvest activities;
- Tongass Narrows 2 is now placed in Category 2 since it is attaining the residue water quality criterion and the water quality impairment no longer exists;
- Eagle River Flats is now placed in Category 2 since it is attaining the toxics water quality criterion;
- Sawmill Creek is now placed in Category 2 since it is attaining the residue standards; and
- Eleven new waters were added to Category 3, which require more information to be fully evaluated.

#### **Opportunities for Public Participation**

The Department formally published public notice of the proposed report on February 1, 2008. The Department posted the notice online in accordance with state requirements, provided downloadable files of the report on the Department website, and published the public notice in the Anchorage, Fairbanks, Juneau and Mat-su newspapers. The notice was also published on a well known and used electronic newsletter of general circulation with environmental issues.

The Department received comments from six (6) interested parties on the proposed 2008 report. An additional comment was received after the deadline. The Department also consulted with the Department of Natural Resources (DNR), the Department of Fish and Game (DFG) and the U.S. Environmental Protection Agency regarding the information in the report.

#### **2008 Final Report**

The final report was submitted to the U.S. Environmental Protection Agency (USEPA) on April 1, 2008. Additional information on waters including the demonstration for the Kenai River to show other pollution controls and expected to result in attainment in a reasonable amount of time (Category 4b) was also submitted.

Several changes were made to the final report. Kenai River has been moved to Category 4b since actions by DNR and DFG will result in the waterbody attaining standards. Other changes included: providing additional information on specific waterbodies; clarification of the use of the turbidity listing criteria; additional program descriptions; including the TMDL schedule for the remaining Noyes Slough impairments, and editorial corrections such as noting the date data was obtained.

Finally, the residue criteria which was adopted by the state on August 1, 2006 has not yet been approved by EPA. As such, guidance associated with the prior criteria was included in the final report (Appendix G).

# **Specific Comments**

#### 1. Specific Listings

### **Report Summary**

The report provides detailed information on waterbodies in Categories 2, 4 and 5. Limited information is provided on Category 3 waterbody; DEC maintains files on all waterbodies in the report. Although DEC accepts waterbody information throughout the year, a separate public notice was advertised to gather information for the report. Decisions as to attainment/non-attainment of standards are done based on specific parameters for designated areas.

#### 1.1. Comment Summary

The Department received comments on a number of specific waterbodies. Comments ranged from support of listing decisions to questioning reclassification. Comments were also submitted questioning the use of "other pollution controls" (4b) designations and requesting DEC acknowledge progress toward meeting standards.

#### **Response:**

DEC carefully reviewed data submitted to evaluate whether listing decisions were accurate. DEC used the thresholds described in the Report for each of the listings. As noted in the Report, sufficient and credible waterbody information is needed to evaluate if persistent exceedences exist. Data quality is imperative although DEC may use screening data to warrant more comprehensive evaluations. Listing decisions are parameter specific resulting in a given waterbody being considered impaired for one parameter while attaining standards for other parameters. Delisting decisions require the same level of analysis as done for the initial listing.

#### 1.2. Comment Summary

The Department received comment questioning the use of Category 4b.

#### **Response:**

EPA's Integrated Report guidance provides specific requirements in order for a waterbody to be classified as 4b. Six elements must be evaluated; included in the elements is an estimate or projection of time when water quality standards will be met. Copies of 4b demonstrations for specific waterbodies are available upon

request. DEC has noted significant progress toward achieving water quality standards when using these other pollution controls.

#### 1.3 Comment Summary

Comments noted that the 1.5 acre definition of impairment is scientifically unsupportable, violates applicable listing criteria and violates DEC's recent revisions to the residue criteria. Comments requested more site specific evaluations.

#### **Response:**

The 1.5 acre definition is based on some scientific literature. One and one-half (1.5) acres has been accepted as policy for implementing the Log Transfer Facility (LTF) guidelines from the Alaska Timber Taskforce. Mandating further investigation to re-evaluate on a site-specific basis to determine impacts has been applied to higher impact, high risk sites on a case-by-case basis (e.g., Ward Cove, Thorne Bay) as outlined in the residue guidance. The 1.5 acre value provides the correct balance for the protection of a balanced population of shellfish, fish and wildlife given resource constraints.

It should be noted that the waterbodies which have moved from impaired to attaining standards (Hobart Bay, Twelvemile Arm and Schulze Cove) were based on extensive assessments including a biological indicator assessment.

#### **1.4 Comment Summary**

Comments requested additional information, including data on Category 3 waterbodies and delisting decisions.

#### **Response:**

The report was modified to include additional information where available and feasible to include in summary format. Additional waterbody specific information may be obtained upon request.

# 2. Listing Methodology and Relationship to Other Programs

#### **Report Summary**

The report provides an overview of the approach and criteria for impaired waterbodies. The term "persistent" is used as a key element in evaluating exceedances of Alaska's water quality standards and determining if a waterbody is impaired. Best professional judgment and ensuring credible data is used are among the other factors used. The report also provided detailed description of the process used to make listing decisions for turbidity.

The report also provides information on the AWCA rankings and the relationship between this process and the Integrated Report as well as other program descriptions. The implementation of the residue criteria is included.

#### 2.1. Comment Summary

A number of commenter's questioned the use of the Integrated Report for listing decisions. The triennial review process was cited as a more appropriate mechanism. Comments also questioned the use of natural condition in making listing decisions. A list of common impairments and their impacts was also requested.

#### **Response:**

The Department considers the listing methodology described only when making attainment or impairment decision for purposes of the Integrated Report. The Department evaluated a number of other states listing criteria and the criterion is similar to elsewhere. The methodology described will not be used to make compliance decisions; violations of the waterbody standard may be addressed prior to the waterbody becoming impaired. In addition, the turbidity standard contains the natural condition as a part of the threshold evaluation. The listing methodology described did not change the water quality standard. The Department has modified the report to more accurately describe this relationship.

The report was also modified to include a list of the most common impairments and their typical impacts on designated uses.

#### 2.2. Comment Summary

Comments questioned a number of the ACWA rankings and the ability to obtain waterbody information.

#### **Response:**

DEC recognizes that the information contained in Appendix H is dated. DEC is in the process of upgrading the ACWA database and plans on conducting a systematic review of the data accuracy. Unfortunately, the upgrade and review was not completed prior to the deadline for the report. During FY09 DEC plans on enabling the public to independently access the data in Appendix H on an as needed basis.

#### 2.3. Comment Summary

Clarifications on program descriptions were requested.

#### **Response:**

The report was modified to clarify DEC's Non-point Source Program, including Alaska's Coastal Nonpoint Source Program.

#### **2.4.** Comment Summary

Comments were received that AK residue criteria (adopted August 2006) has not yet been approved.

# **Response:**

Report has been modified to reflect EPA's approved criteria.

#### 2.5. Comment Summary

Comments were received on the impact of global warming on AK waters.

#### **Response:**

The report has been modified to reflect activities evaluating impacts from non-Alaska sources.

# 3. Editorial Corrections and non-applicable comments

#### **Report Summary**

The report contains a number of web links and cross references.

#### 3.1. Comments Summary

Comments noted broken web links and incorrect references.

#### **Response:**

The final report has been corrected.

#### 3.2. Comments Summary

Comments were noted on other programs such as water quality standards and monitoring.

#### **Response:**

Comments have been directed to the appropriate program.

# 3.3 Comment Summary

The TMDL for Thorne Bay was approved since the 2006 report. Although the waterbody is correctly listed in Category 4a, it is not included the summary of changes.

# **Response:**

The report has been corrected.