**PUBLIC COMPLAINT**

Date: April 27, 2004

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And

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RE: State SEPA review of the Port of Vancouver Flushing Channel Dredging proposal # PRJ2003-01750/SEP2003-00056 Determination of Non Significance granted by the City of Vancouver, WA

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The City of Vancouver has declared a Determination of Non Significance for the Flushing Channel Maintenance Dredging. This determination cannot be appealed, and the nature of this decision is predicated upon a "valid operations plan/maintenance plan." We have reviewed archives from the Port of Vancouver, the State of Washington, and the Environmental Protection Agency (EPA) and we have obtained copies of the Port of Vancouver's 1984 Maintenance Operations Handbook and the 1980 Dames & Moore Operations Plan for the Rehabilitation of Vancouver Lake (from which the Handbook is derived) regarding the contract specifications for the building, maintenance, and operation of the Flushing Channel.

Our contention is that the Port's secondary 1984 Operations Handbook represents the Port's attempt to limit its responsibilities that were clearly defined under the 1980 Operations Plan. The 1980 Operations Plan was developed with interagency cooperation and was approved by the State Department of Fisheries, the Army Corps of Engineers and the Environmental Protection Agency (EPA). The 1984 Operations Handbook was developed internally by Port staff without public process. The requirements of the original EPA approved 1980 Operations Plan are much more extensive than those listed in the Port's 1984 Operations Handbook. The Port has not even abided by the more lenient Handbook.

This document is organized into three sections. Section I analyzes portions of the 1980 Operations Plan, and shows where compliance with this plan is lacking. Section II analyzes the 1984 Operations Handbook, shows where compliance is lacking, and also shows where the Handbook falls short of the requirements of the 1980 Operations Plan. Section III provides a general overview of action steps that are not being implemented to improve the water quality of Vancouver Lake and its tributaries – these steps are mandated by contractual obligations as well as policy set by the City of Vancouver, Clark County, and the Port of Vancouver, as well as contract requirements stipulated by the EPA.

Since both the Department of Ecology and the US Army Corps of Engineers will review the SEPA application for maintenance to the Flushing Channel, we ask that you review the following information and withhold approval of the SEPA applications and the contingent permits until such time as the operation and maintenance of the Flushing Channel is in compliance with the 1980 Operations Plan, the City of Vancouver's Shoreline Master Program, the EPA's Clean Lake Award Contract Specifications, and all applicable State and Federal regulations, such as NPDES requirements.

## SECTION I

Following are quotes taken directly from the **1980 Dames & Moore Operations Plan for the Rehabilitation of Vancouver Lake.** Following the quotes from the Operations Plan are responses that indicate the compliance status with each listed action item.

- **Page 3 -- Item #6**
  "Operation of the flushing system will evolve on the basis of periodic water quality monitoring after completion of dredging and on results of fisheries monitoring after the channel is complete."

  **Response :**
  No periodic water quality monitoring has taken place, nor have fishery results been completed, nor has the operation of the Flushing Channel been ongoing according to the best available science as applied to results of data analysis compiled from monitoring activities.

- **Page 3 – Item # 7**
  "Supplemental well water, if needed for additional improvement in water quality at the swimming beach, should flow in a lined channel about 100 feet long for aeration and warming of the water."

  **Response:**
  No systematic water quality monitoring other than the now defunct Citizen Volunteer Water Monitoring Program has been done anywhere in the lake. Occasional monitoring by the Citizen Volunteer Water Monitoring Program has shown that (under minimal flow conditions that take place every summer) the lake is not safe for swimming. The validity of the well-water diffusion has never been tested at this site.

- **Page 6 -- Item #1**
  "The flushing channel-lake system will consist predominantly of periodic dredging to remove materials deposited in the Flushing Channel, Flushing Channel Sediment Trap, and Lake River Sediment Trap."

**Response:**
None of the 11 sediment traps created within Vancouver Lake for this project have ever been monitored or maintained.

- **Page 7 -- Item # 4**
  "It is anticipated that maintenance dredging of the Flushing Channel and Lake River Sediment Traps will be required at intervals of approximately 10 and 25 years, respectively."

  **Response:**
  None of the 11 sediment traps created within Vancouver Lake for this project have ever been monitored or maintained, no funding for maintenance has been allocated, nor has a maintenance schedule for these elements been devised.

- **Page 7 – Item #5**
  "Land sites should be provided near the two sediment traps for the disposal of maintenance spoils."

  **Response:**
  After prompting from the City Planning Department, the Port of Vancouver applied for an exemption from the Shorelines Permit for dredging. This was allowed under the premise that the dredging would be characterized as "regular maintenance." However, the Vancouver Shoreline Master Program requires that all elements of permit applications are to be available for review and commentary by other agencies as well as the general public. The original SEPA application for this "Maintenance" dredging did not indicate the location of the proposed fill site. The City allowed the applicant to substitute a previously approved fill site on the Alcoa property, which is a violation of the permit process. A separate SEPA application would have been required for the placement of the fill materials at the Alcoa site since it was not included in the original application. Otherwise, the entire SEPA application for maintenance to the Flushing Channel would have to be revised and resubmitted for approval to include the substitute fill location. The premise for exemption is not germane to the exemptions designated in the Vancouver Shoreline Master Program. Furthermore, there is no process identified to address the fact that the dredge materials are contaminated – no precautions have been outlined to contain the contaminants or treat the dredge material to remove the contaminants. The proposed landfill site is currently a retired Superfund site.

- **Page 40 -- Item #1**
  "Flushing Channel shall be closed during the peak of the Juvenile (Salmon) migration (approximately April 1 to June 1). Monitoring studies shall be conducted by the applicant as approved by the Department of Fisheries to ascertain the multitude of juvenile fish that pass through the flushing channel complex."

  **Response:**
  This action item shows how the structure was supposed to be actively managed. The change to passive operation procedures (that appears in the Port of Vancouver's 1984 Maintenance and Operations Handbook and Project Summary) was not developed through interagency cooperation. Furthermore, even the less-structured passive operation procedures are not being maintained. The original EPA approved 1980 Operations Plan should be implemented with interagency oversight to assure compliance with the original design of the project.

- **Page 40 – Item # 2**
  "Monitoring studies shall be conducted by the applicant as approved by the Department to ascertain the numbers of adult salmonids attracted to Vancouver Lake and to the Flushing Channel."

  **Response:**

The full extent of this study as described in the 1980 Operation Plan was never completed and recommendations from other agencies were not solicited nor included in the Port of Vancouver's 1984 Handbook. Comments were provided by the EPA, Department of Fisheries, Department of Ecology, and the US Army Corps of Engineers, but these comments were excluded from the 1984 Handbook.

- **Page 40 – Item #3**

"The Department of Fisheries reserves the right to require installation of adequate juvenile screening and bypass systems and adult passage facilities of a design acceptable to the Department of Fisheries, if in the Departments judgment they are found necessary."

**Response:**

There is no documentation to substantiate the claim that the switch to passive management of the Flushing Channel was recommended or approved by the Department of Fisheries. The Flushing Gates were intended to be closed under specific seasonal conditions as well as when water quality of the Columbia River is poor.

- **Page 44 to 51 – "Flushing System Operation" (selected quotes)**

"The operation of the flushing system should evolve on the basis of periodic water quality monitoring after completion of the dredging in the lake. As required by WDF conditions, the culvert gates will be closed during the month of April and May. Flushing should commence in early June, provided turbidity levels in the Columbia River are acceptable. The Master Plan calls for one month of flushing prior to use of the lake for water contact sports, so this schedule would permit this type of recreation starting in early July. During winter freshets and normal spring flood run-off and short duration periods of very high turbidity (when the level of suspended solids exceeds 150 mg/l) the culvert gates should be closed.

Closure may also be required (at times other than April and May) to prevent entry of migrating juvenile salmonids. Operation of the flushing system should be coordinated with data obtained from the fisheries monitoring program outlined below…

Predator Studies

Variable mesh gill nets will be set in the lake at the outlet of the flushing channel for 2 consecutive 12 hour periods during March, June and August to capture potential predators preying on concentrations of juvenile salmonids exiting the flushing channel.

In addition, potential fish predators on juvenile salmonids will be retained when captured in beach seining and in the adult trap. Stomachs will be injected with formalin or extracted in the field and preserved in formalin for later identification of contents.

Reporting

Reports on approximate catch rates in beach seining and adult trapping will be telephoned to the designated WDF contact daily or upon the completion of each sampling period as desired by WDF. If desired, WDF will be notified prior to the conduct of juvenile or adult tagging and tracking studies.

An interim report will be prepared after 9 months of study summarizing results to that time and recommending studies of the second year to focus on as yet unanswered questions.

A final report will be prepared within 3 months of the end of the first annual cycle. This report will describe in detail the methods and results of the monitoring program and will analyze in depth the apparent impacts of the lake rehabilitation project on the salmonid resources of the Columbia River. Potential delays and/or losses of both adults and juveniles of the many races present will be estimated and related to total numbers estimated to be present in this research of the river. Appropriate graphics and statistical summaries will be utilized. An executive summary in lay language will also be provided."

**Response:**

The predator study was never carried out. The study on salmonid impact was not completed. It is evident that the flushing channel was supposed to be actively managed and operated. It is also evident that the Port of Vancouver has not monitored Columbia River waters or updated applicable fishery data in order to operate this licensed facility within the requirements of Best available science or contracted requirements. Valid public commentary on the SEPA application for maintenance dredging was submitted to the City of Vancouver's Planning Department, but the commentary was never addressed either by the City, the Port of Vancouver, or any other agency. The files on this project do not include commentary by the Department of Fisheries that note a concurrence with the theory that the Flushing Gates should always remain open. In the 1984 Handbook, a "fisheries consultant" is noted as having concurred with the assessment to leave the flushing gates open. This consultant was not identified as being part of Department of Fisheries staff.

- **Page 58 - 61 Disposal Site Capacities—Table 8**

"Eight disposal sites were identified in the recommended dredging plan discussed in the 1977 Master Plan. Subsequent coordination with resource agencies, upland owners and recommendations by the consultant team during preparation of this operation plan has provided consideration of the 9 sites shown on figure 5. Table 8 identifies the sites and their disposal capacity in cubic yards at different elevations of fill. (Table 8 lists an Alcoa site with a capacity of 500,000 cubic yards.)"

**Response:**

The site that has been approved by the City of Vancouver through a permit exemption is not the same Alcoa site that was sited in the Dames & Moore study. The Alcoa site attributed to the proposed "maintenance" dredging of the Flushing Channel is a retirement of a current Superfund site. The dredge material from the Flushing Channel will be saturated with contaminated, organic material that will shrink and oxidize and cause difficulties with future building plans. This landfill site will, therefore, serve as an onshore dewatering facility that was not part of the original application. No pre-application has been completed for this portion of the project nor were the final landfill sites included with the SEPA application.

## SECTION II

The 1980 Dames & Moore Operations Plan was developed and approved by the EPA, the US Army Corps of Engineers, the Washington State Department of Fisheries, and the Washington State Department of Ecology. Current operation and maintenance of the Flushing Channel does not adhere to the terms and conditions of operations and maintenance as outlined in the **Vancouver Lake Restoration Project Maintenance and Operation Handbook and Project Summary (1984, prepared by the Port of Vancouver).** In this section, quotes are presented from the Port of Vancouver's Handbook, followed by responses that indicate the compliance status with each listed action item

- **Page 1**

"This handbook is intended as a quick reference to the maintenance and operation needs of the Vancouver Lake Restoration Project. The annual operations and maintenance program can be planned and budgeted using the information provided here. Readers needing more scientific and detailed information are referred to the 1980 Operations Plan and the monitoring reports which cover water quality, fisheries, and sedimentation."

**Response:**

The 1984 Handbook excludes many elements outlined in the 1980 Operations Plan, as approved by multiple agencies. When the 1984 Handbook conflicts with the purpose and intent of the 1980 Operations Plan, the 1980 Operations Plan must prevail in order to provide the best chance of success of the original Clean Lake Award investment.

- **Page 2**

  "All equipment and structural components of the flushing channel shall be maintained as required by conditions in the field, by the manufacturer's maintenance manual, and at least, initially, as recommended in the scheduled maintenance as described in the 1980 Vancouver Lake Operations Report by Dames & Moore…the 1980 Vancouver Lake Operations Report by Dames & Moore presents a detailed scheduled maintenance plan for the flushing channel system. That plan outlines increasingly detailed inspections and investigations (on 60-day, 180-day, and annual intervals) and will not be repeated here…"

  **Response:**

  The Port of Vancouver has failed to create or abide by maintenance schedules as outlined, beyond minimal requirements. The sections of the Handbook and the Operations Plan that pertain directly to water quality monitoring associated with recreational use of Vancouver Lake have been totally ignored. Furthermore, monitoring and dredging of maintenance sediment cells within Vancouver Lake and the surrounding tributaries has also been ignored. The Operations Plan outlined the need for a two-year water quality-monitoring program, working with the Department of Ecology and the Department of Health, in order to determine if the Flushing Channel operations were sufficient to improve the water of Vancouver Lake for recreational use. The Master Pan indicated that water treatments in addition to the flushing channel operations might be needed to improve the swimming areas. Additional treatments included the discharge of groundwater through a well near the swimming area. This additional treatment was never employed even though Citizen Monitoring consistently noted that the lake water was not safe for swimming from 1985-1995.

- **Page 2**

  "Summary of maintenance recommendations -- Dredge the flushing channel entrance of 60,000 cubic yards of sandy material on a 3 to 5 year frequency."

  **Response:**

  Since 1983, there only one minor, maintenance-dredging project has been performed, which fails to abide by the recommendation as noted.

- **Page 4**

  "Apart from monitoring the in-lake sediment traps, no routine maintenance is required inside the lake."

  **Response:**

  The statement from the 1984 Handbook is not consistent with the intent and purpose of the 1980 Operations Plan. Eleven sediment traps were created within Vancouver Lake and the tributaries. These sediment traps were to be monitored and maintained on a regular schedule.

- **Page 7**

  "The Vancouver Lake Restoration Project is a significant element of the Clark County 208 clean waters program…However, other elements of the program (and of the NPDES and 201 programs) have direct bearing upon the waters of Vancouver Lake. Work on these additional elements needs to be continued in order to further enhance the Vancouver Lake water quality and to protect the present investment made in restoration. Specifically, the following need continued efforts:"

  a) "Storm drainage plans and controls to minimize the contaminants and sediments entering the lake through its tributaries Burnt Bridge Creek, Salmon Creek, and Lake River (primarily the responsibility of Clark County and Vancouver under Clark County 208 comprehensive plan)"

  b) "Continued installation of sanitary sewers in the Burnt Bridge Creek and Salmon Creek…(primarily the responsibility of Clark County, Vancouver, and the Department of Ecology)"

c) "Continued and enhanced efforts to control non-point sources (primarily the responsibility of Clark County and Vancouver)"

d) "Continued water quality monitoring in the drainage basins tributary to the lake, thereby detecting problems before they become severe (primarily the responsibility of the Southwest Washington Health District funded by Clark County and Vancouver)"

**Response:**
All responsible jurisdictions have substantially retreated from these contracted requirements. Public commentary was submitted under the SEPA application relative to inter-jurisdictional failure to abide by the approved 208 Clean Waters Program (as stipulated in the Clean Lake Award contract with the EPA). This public commentary was not addressed, which is a violation of the SEPA process.

Monitoring and inspection of septic tanks in the Burnt Bridge Creek Basin does not consider the anaerobic state caused by high water tables in the winter months. High water tables cause most septic systems to malfunction, especially those located within heavy clay-based soils (such as those soils found in the Burnt Bridge Creek Basin). The Health Department continues to permit new septic tanks within the basin within 50 feet of the shoreline (rather than the 200 foot limit in the EPA approved 208 Clean Waters Program), which causes further degradation of the watershed during episodes of high water.

There has been no funding allocated to conduct water quality monitoring in order to qualify a net benefit of the Flushing Channel Operations. Furthermore, no agency has initiated a Total Maximum Daily Load study for Burnt Bridge Creek or Vancouver Lake, even though the creek has 14 Category 5 assessments in Department of Ecology records (one Category 5 assessment is enough to trigger a TMDL study).

Since Vancouver Lake is a 303(d) listed water-body of state significance, analysis must show that a net benefit to the Lake's water quality is achieved through the introduction of Columbia River water through the Flushing Channel. The Port has failed to prove that such a net benefit has been achieved. Annual incidents of Blue Green Algal Bloom, fish kills, and poor water quality conditions are all indicators that the Flushing Channel is not working to improve the water quality of the Lake. Legal advisors note that since a licensed facility (Flushing Channel) outfalls into significant waters of the state (Vancouver Lake), an NPDES permit is therefore required for operation of the licensed facility. Such a permit has never been obtained, which is a violation of the Clean Water Act. The current operation of the Flushing Channel is ineffectual, and alternate methodologies should be studied to aid in the restoration of the lake.

- **Page 16**
"The third goal, controlling the pollution entering the lake, is being addressed under the Clark County 208 Comprehensive Plan. The restoration program is not complete, as progress continues on cleaning up the pollutant sources in the Burnt Bridge Creek Basin."

**Response:**
The City of Vancouver has annexed most of this area, and has withdrawn from the Burnt Bridge Creek drainage utility that was formed as a result of the Lake Restoration Project. The City rejected the 1995 Burnt Bridge Creek Master Watershed Management Plan (achieved through inter-jurisdictional cooperation) which makes compliance with this third goal impossible.

- **Page 17**
"In order to meet…the requirements of the regulations governing the clean lake program, a water-quality monitoring program was developed and described in the 1980 operations plan."

**Response:**
This monitoring program (as predicated by the approved 208 Clean Waters Program) was not implemented, which is in violation of the contracted Clean Lake Award regulations. Without data that is collected during monitoring programs, it is impossible to evaluate the progress of the Lake Restoration Project as implemented by the operation of the Flushing Channel. This failure to meet regulations was also noted in public commentary during the SEPA application process, but no response was given.

- **Page 17**
  "The restoration program goals included…reducing bacterial contamination by controlling sources in Burnt Bridge Creek and reducing algal growth by lowering the concentration of algal nutrients by flushing."

  **Response:**
  The Burnt Bridge Creek Microbial Source Tracking Report (Oct 1999) indicates that "the most frequently identified source of E-coli bacteria in Burnt Bridge Creek is of human origin…and the data strongly indicates that the source of human E-coli in Burnt Bridge Creek is from septic tank systems…." The primary recommendation of this report, purchased by the City of Vancouver, was to "reduce the number of septic tank systems in the watershed, especially those closest to Burnt Bridge Creek." The City has not implemented an approved watershed management plan. Dangerous algal blooms reoccur seasonally, even with the operation of the channel. Clearly, contaminants from the tributaries are not being adequately addressed. This restoration program goal has not even been attempted, as is evidenced by the fact that there is no current water-monitoring program in place.

## SECTION III – SUMMARY

The Port of Vancouver has failed to uphold the terms and conditions of its own 1984 Vancouver Lake Maintenance and Operations Handbook as well as the 1980 Dames & Moore Operation Plan. Following are noted action items that are not being implemented:

- The need to actively operate the flushing channel by closing the flood gates when Columbia River waters are more turbid and more polluted than Vancouver Lake.

- The need to continue to update the management of the flushing channel in keeping with Best Available Science, including the provisions for updates when on-site conditions change, or improved methods of operation are discovered.

- The need to continue the active reduction of nutrient loading and turbidity from the Burnt Bridge Creek and Salmon Creek basins, such as septic tank abatement (especially those facilities closest to the creeks), adequate storm-water treatment, and adequate flood control. .

- The need for continuous water quality monitoring to qualify when Columbia River water is too dirty to be flushed into Vancouver Lake.

- The requirement for all appropriate permits for maintenance of the flushing channel per the City of Vancouver's Shoreline Management Master Program, as noted below:

  **Shoreline Master Program**
  **Dredging and Dredge Material Disposal – Modification 5-12**

  "Dredging is normally done for specific purposes or uses such as constructing and maintaining canals, navigation channels, turning basins, harbors, and marinas…dredge material…is considered landfill, and is subject to landfill policies and regulations of this Master Program."

Exemptions: the following actions are exempt from the requirement for a Shoreline Substantial Development Permit:

1. "Operations, maintenance or constructions of canals, waterways, drains, reservoirs or other facilities that not exist or are hereafter created or developed as part of an irrigation system for the primary purpose of making use of system waters, including return flow and artificially stored ground water from the irrigation of lands;

2. "Operation and maintenance of any system of dikes, ditches, drains or other facilities existing on September 8, 1975 which were created, developed or utilized primarily as part of an agricultural drainage or diking system."

3. "Normal maintenance and repair limited to maintaining existing navigational channel for the purpose of periodically maintaining previously authorized channel configuration."

**Response:**
The maintenance dredging (awarded an exemption by the City of Vancouver Planning Department) does not fall into any one of these three categories for allowed exemptions to dredging permits. Allowing this exemption based on this false premise is a violation of Vancouver's Shoreline Master Program, and disallows public process to inspect the plans and comment during the SEPA process.

**Vancouver Shoreline Master Program -- Regulation 230**
Applications for dredging and dredge material disposal shall provide the following information:

3) "the suitability of the proposed disposal site."

b. "dredging volumes, methods, schedule, frequency, hours of operation and procedures"

c. "method of disposal, including the location, size, capacity, and physical characteristics of the disposal site, transportation method and routes, hours of operation, schedule."

**Response:**
None of this relevant information was included in the SEPA application, and therefore the public could not comment.

- **EPA's Environmental Impact Statement (Final) – Vancouver Lake Reclamation Study**

**Page v – Item #12**
"In addition, no funds for construction (of the flushing channel) shall be expended (by the EPA) until such time as the following list of recommendations from the 208 Water Quality Management Plan for Burnt Bridge Creek Basin are implemented:"

**Subsection 12-c**:
"Enact ordinance(s) which prohibits septic tanks in groundwater sinks, flood plains, and area with high groundwater tables or poor soil within 200 feet of streams or direct drainage to streams."

**Subsection 12-e:**
"Document significant progress toward implementation of the following recommendation: Require areas with known septic tank problems and all existing and new urban density development (3 or more d/acre) to connect to sanitary sewers as rapidly as possible. A quarterly report, starting with the first quarter of 1978, will be required to document this progress."

**Subsection 12-f:**
"Document significant progress toward implementation of effective management and funding arrangements for full implementation of 208 Water Quality Management Plan. Documentation will be provided on a quarterly basis to show progress in attaining this goal."

**Page 3 (EPA's EIS Continued)**
"The restoration program recommended by the Grant Applicant has three major components: 1) dredging the lake to remove the most polluted sediments and enhance the recreational use opportunities; 2) construct a flushing channel to bring Columbia River water into the lake, and 3) reducing the non-point waste sources which have contributed to the present water quality degradation. The applicant believes that all three efforts are necessary in order to restore the lake's water quality and enhance public recreation use."

**Response to Pages v and 3 combined:**
At the time the Clean Lake Award was granted, the Port of Vancouver was under management of the City of Vancouver; they are now separate entities. However, all permits for the Port of Vancouver are reviewed and approved by the City of Vancouver.

The Port of Vancouver and the City of Vancouver are in violation of the contract with the EPA regarding the Clean Lake Award. The City was required to abate septic tanks within 200 feet of Burnt Bridge Creek, and develop a plan to abate the remaining septic systems in a timely fashion. However, even new septic tanks are still being permitted within 50 feet of the creek. The City was also required to develop and implement a Watershed Management Plan for the Burnt Bridge Creek Basin since it was one of the main contributors of contamination to Vancouver Lake. These required (contracted) action steps were part of the EPA's approved "208 Plan."

The EPA approved the grant and awarded the financing of the Clean Lake Project based on these (as well as several other) stipulations. The City did not abide by these terms, and the action steps outlined above were not implemented. Septic Tank use is dependent upon good soil conditions. The soils in the Burnt Bridge Creek Basin are shallow, full of gravel, and are limited by a vast expanse of clay less than 2' below the surface. Thus, since the basin's soil will not support the proper functioning of septic tanks, the malfunction of such systems is directly contributing to the degradation of the creek as well as Vancouver Lake. Septic systems are not being maintained, monitored, or inspected within the Burnt Bridge Creek Basin, even though the Health Department, the City of Vancouver, and the Department of Ecology have all been shown where storm-drains are dumping storm-water that is contaminated with septic waste directly into the creek. Therefore, the City of Vancouver has failed to address the non-point sources of contamination to the Burnt Bridge Creek Basin as required by the EPA, and the lack of improvement to Vancouver Lake's water quality is a direct result of non-point source pollution.

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The following commentary was submitted to the City of Vancouver as well as the Port of Vancouver relative to the Flushing Channel SEPA process. No response was ever received.

**To: Jon Wagner, Senior Planner**
**Date: December 23, 2003**
**From: Dvija Michael Bertish, Chairman**
**Rosemere Neighborhood Association**

## Re: SEPA Determination of Non Significance For Flushing Channel Maintenance Dredging PRJ2003-01750/SEP2003-00056

This correspondence serves as public commentary regarding the proposed redredging project for the Flushing Channel, and it serves as notice of the opinion that the proposed project will have a definite significant adverse impact to the environment, and an environmental impact statement and study should be conducted to address the issues raised below.

First and foremost, no jurisdiction has claimed responsibility for Vancouver Lake itself. The Port of Vancouver is responsible for the Flushing Channel only, and has made no claim to Vancouver Lake thus far, other than the Lake's rehabilitation project from 1978-1982, funded, in part, by a Clean Lake Award from the EPA. Thus, there is insufficient baseline data from either the Port of Vancouver, The City of Vancouver, or Clark County to determine that there is no significant adverse impact resulting from the Flushing Channel's operation (pouring the flow of the Columbia and Willamette Rivers into Vancouver Lake.) There has been insufficient water quality testing of any of these waterbodies in order to substantiate a claim of determination of nonsignificance relative to this project. The net result therefore, is a lack of consistency of environmental study of impacts from any of the aforementioned jurisdictions.

Before this proposed permit is approved, there should be an interjurisdictional and interlocal agreement to study the environmental impacts of the Flushing Channel. The interlocal agreement should bring the Port of Vancouver, the City of Vancouver, and Clark County together to allow for the best science to be applied as well as the best water quality management practices. Without such an agreement, there will be a complete lack of consistency in dealing with the myriad of environmental contaminant issues that arise with this proposed project. A formal watershed council should also be formed in order for all interested stakeholders to participate in the problem-solving process as committed stewards of the community. The contamination of these various waterbodies precludes any single jurisdiction's ability find resolution to the contaminant issues.

Furthermore, there has been no baseline studies of significant outfalls from local industry that directly effect the water quality of the Columbia/Willamette flows and the Flushing Channel, or the Lake. Nor have baseline studies been performed to identify the effects of stormwater outfalls into these same waterbodies, nor have there been baseline studies to determine the adverse effects of nearby wastewater treatment facilities that contribute to the contamination in like fashion. The operation of the Flushing Channel has a direct effect upon the flows of Salmon Creek, Burnt Bridge Creek, and Lake River, and there is insufficient baseline study to determine the amount of contamination added to the lake via these waterbodies. There are far too many unknown variables that contribute to the eutrophication of Vancouver Lake, and the operation of the Flushing Channel only worsens the water quality of the Lake. Spending funds to re-dredge the Flushing Channel without all of the baseline data referenced above will have a zero net effect of positive gain, and it will, literally, only serve to flush more money down the drain.

The Flushing Gate allows contaminated water from the Columbia River and Willamette River to flow directly into Vancouver Lake. Fish that have been caught in this Flushing Channel have been found to contain toxic elements that exceed 10 of 11 of the EPA's toxic substance thresholds, including heavy metals, pesticides, dioxins, phisteria, benzene carcinogens, and chlorinated biphenals (solvents). This federal study of the Lower Columbia Estuary was conducted by CH2M Hill. Thus contaminated waters are used by endangered species of Salmon, and these fish are being poisoned. The Flushing Channel should only be operated at times when the source (Columbia and Willamette River waters) meet water quality standards.

A lack of proper management has allowed the Flushing Channel and Vancouver Lake to become blocked with year's of accumulated sediment. The operation of this Flushing Gate creates tidal influences that cause Salmon Creek and Lake River to flow backwards, thus dumping high levels of contamination from Salmon Creek and Lake River back into Vancouver Lake. Salmon Creek and Burnt Bridge Creek are well known to be adversely impacted from contaminants resulting from failed septic tanks, and the flows of these creeks are known to

exceed water quality standards of E-coli (among other dangerous contaminants).

An attempt was made from 1978-1982 to rehabilitate Vancouver Lake. This project, including the design and implementation of the Flushing Channel, cost the taxpayers more than $17 million. The Environmental Protection Agency provided half of this cost in a special grant from the Clean Lake Fund, a predecessor to the Superfund program.

According to stipulations from the EPA Grant (as found in the approved "208" plan) the Port of Vancouver (or its designated maintenance contract personnel) were required to perform scheduled maintenance and inspections of the Flushing Channel equipment. The scheduled maintenance included work on the following equipment:

1. Flap gate, sheaves, winch and brackets
2. Sluice gate, stem, gear pedestal lift and brackets
3. Ladder, platform and railings
4. Concrete gate well structure and grating
5. 84 inch diameter pipe and air vents
6. Concrete headwalls, trash racks and rip-rap
7. Fencing, guard rails and culverts
8. Roads, ditches, pads and embankments

There are no maintenance files available for the listed equipment above, and the creation of a maintenance file for each piece of equipment was required. Scheduled reports on this work were also to be kept, but none can be found. The working parts of the Flushing Channel were inconsistently maintained until about 1998 when a Port Employee made an arbitrary decision to simply stop doing the scheduled maintenance because it was "too much of a hassle" to acquire the necessary permits to do the work. This arbitrary decision did not involve the Port Directors and did not represent set policy, yet it added to the many failures of the Flushing Channel. Resulting from this failure, the Port of Vancouver is now seeking a fast-paced permit to re-dredge the flushing channel since it is now nearly completely blocked with sediment and it is malfunctioning.

Maintenance was required to regularly clean the eleven sediment cells that were created as part of the continued operation of the Flushing Channel, and careful records were to be kept to track the layers of sediment collected and water quality measurements were to be maintained during the many years of operation of the flushing channel. Only one sediment cell was ever inspected, and none of them were ever cleaned or maintained, thus they eventually plugged up. Water quality tests were performed through Burnt Bridge Creek Utility Funds, but this minimum amount of testing stopped in about 1990 when the city vacated this utility program. What little testing was left was performed by the Department of Ecology, and that completely stopped in about 1995. The lack of required maintenance files, the lack of maintenance of the sediment cells, the lack of water quality monitoring, and the lack of implemented groundwater protection plans (also required as part of the approved "208" plan) are all violations of the terms and conditions of the EPA's Clean Lake Award.

All of these oversights were a direct cause of buildup of pollutants and contaminants in Vancouver Lake, along with a lack of required maintenance and cleanup of Burnt Bridge Creek, including failed septic systems in the Burnt Bridge Creek Basin. All of these facts add up to violations of the Clean Water Act as the contamination is being introduced into the Columbia River. Flushing the contaminant from Vancouver Lake into the Columbia River (which feeds into the Pacific Ocean) would result in the dumping of hazardous materials into a marine environment, a habitat for various priority species covered under the Endangered Species Act. Therefore, flushing Vancouver Lake could result in a Violation of the Safe Harbor Act.
Contaminated water from the Flushing Channel flows directly into the wading waters of the public's Vancouver Lake Beach. This is a human health risk.

The Columbia River, where it flows into the Flushing Channel, also contains a stream of water coming directly from the Willamette River. The Willamette River (and the whole lower Willamette Basin) is currently a

Superfund site due to extreme contamination. The influences of the Willamette can be seen in aerial photographs that indicate how the Willamette's water does not immediately mix with the Columbia's flow. The Willamette water can be seen as a separate stream line of tremendous force within the Columbia's flow (even far downstream from the Flushing Channel). The ultra fine sediments from the Willamette are unique to that watershed, and they are present in the sediments deposited in and around the Flushing Channel as well as within Vancouver Lake. This is a clear indicator that the Willamette's water flows directly into the Flushing Channel, and therefore, directly into Vancouver Lake, carrying toxic contaminants with it. There are no such ultra fine sediments found in the Columbia's flow upstream of the Flushing Channel. Prior to the installation of the Alcoa Aluminum Plant, the Willamette used to flow through the Alcoa site and directly into Vancouver Lake and Lake River. At present, the Willamette flows into the channel at the shores of the Alcoa site, upstream of the Flushing Channel. Additional contaminants enter Vancouver Lake via Burnt Bridge Creek, Salmon Creek, and the many outfalls from stormwater sources throughout the shoreline of the lake.

Runoff from the proposed Gateway project could also end up right in the flow of the Flushing Channel, which could dump even more concentrated pollutants into the already overwhelmed Vancouver Lake. A study needs to be conducted to determine the inter-related effects of the Gateway Project relative to the operation of the Flushing Channel, especially since vast plots of land are to be developed for the Gateway Project. Interjurisdictional cooperation is required to properly analyze the environmental effects of the Gateway Project. A garbage sorting company known as Columbia Resources has been suspect of causing pollution through the use of garbage barges on the Columbia River. This source of pollution can directly effect the shoreline of the Gateway project as well as the water quality of the Flushing Channel. Any development of the Gateway property will result in stormwater outlets that will drain near the shoreline of the Columbia River. This development, which is contiguous with the Columbia River shoreline, creates an elevated potential for heavily concentrated pollutants to end up in the Columbia River due to the fact that near shoreline outlets cannot mix properly.

**THE FLUSHING CHANNEL WILL NOT WORK FOR VANCOUVER LAKE**

During the planning phase of the Flushing Channel, there were a number of design elements that were included in its creation. Eleven separate sediment cells were designed, each one being about as long as a football field, and 15-20 feet deep. Four of these cells were associated with Burnt Bridge Creek, four were associated with the Flushing Channel itself, and three were placed at the north end of the lake where it connects to Salmon Creek.

The design of these sediment cells required repeated cleaning of the cells themselves (removing sediment buildup) followed by a re-evaluation of the design to determine if the flushing action was working. Wording from the Clean Lake Fund grant specified that these sediment cells needed to be "maintained and evaluated in perpetuity" in order for the flushing plan to work. If the cells were to become clogged, there would be no water circulation, which was the whole point of the project to begin with. Despite the noted requirements within the grant, these sediment cells were not cleaned or evaluated. Had the evaluation been completed, data would have shown that the flushing action was not taking place as was thought, and that the flushing channel was ineffective. There is no baseline information available that indicates each of these individual sediment cells were working as planned. One witness to the failure of the original design of the flushing channel is Steve Willie, a biologist currently working with the US Fish and Wildlife Department.

The Clean Lake Fund award stipulated that the source of contamination to Vancouver Lake must also be addressed, and this source was clearly identified as Burnt Bridge Creek. The leading source of contamination to Burnt Bridge Creek is failing septic systems, as well as other producers of fecal coliform. Clearly, in order to correct the contaminant problem in Vancouver Lake, the septic issue must first be corrected. Unfortunately, Burnt Bridge Creek was not cleaned up as stipulated by the Clean Lake Fund award, for the project was abandoned. Clark County and the City of Vancouver worked on a joint Burnt Bridge Creek Watershed plan, which was adopted by the County, but the city never formally adopted this plan.

There were a number of design flaws with the implementation of the flushing channel:

1) Engineers did not account for the backflow action of Salmon Creek as it reversed course and flowed back into Vancouver Lake, causing additional contamination from other creeks. The Backflushing of Salmon Creek was never factored into the hydrological assessment regarding the workings of the flushing channel, despite the fact that Lewis (of the Lewis and Clark team) recorded a 30"-36" tidal influence in Vancouver Lake due to backflow from Salmon Creek. Lake River, another tributary of Vancouver Lake, can also reverse flow in this same manner. As a result of the backflow, Vancouver Lake becomes the depository for contaminants from all of the following: Lake River, Whipple Creek, Flume Creek, Salmon Creek, and Gee Creek. Lake River then flows into the Columbia River near Bachelor Island. In effect, through the implementation of the flushing channel, the septic contamination from these connected waterbodies backflows into Vancouver Lake, where it is then discharged into Lake River, and then into the Columbia, where well-documented chum salmon runs are adversely impacted even though they are identified as priority species under the Endangered Species Act.

2) The dredged material from the channel was to be used to build two islands which would serve as "splitters" that would help direct the circulatory flow coming from the flushing channel. The material that was dredged to form the channel was comprised of unstable materials, and when attempts were made to build the islands, the dredged material would pool away instead of becoming compact. According to observers, it was a matter of luck that even one island could be formed (now called Turtle Island). These islands were intended to create a directional flow that would flush the beachfront of Vancouver Lake as much as possible to keep the contaminants away from the beach. The water was to travel through the flushing channel, work through the "splitter" islands in a directional flow like bumpers, and then flush the beach. This water circulation did not occur sufficiently as planned, and contaminant merely reached toxic levels on a seasonal basis.

3) The flushing channel was designed to be a one-way flow from the Columbia River, through one-way gates in the flushing channel, which would then flow into Vancouver Lake. When the flushing channel was opened (one-way gates opened) this created tidal influences within the lake that caused Lake River and Salmon Creek to backflow. This action caused the one-way gates to close, and this, in turn, caused the fecal contaminants (among other pollutants) from Lake River, Salmon Creek and others, to be siphoned right back into Vancouver Lake. In effect, the flushing channel made the nutrient contamination of Vancouver Lake much worse, even during high tide.

4) A float study was performed when the flushing channel was complete in order to identify how the water was being circulated in Vancouver Lake. A line of cans (all strung together) was dropped in the water across the lake to determine flow directions. Each submerged can was to act like a sea anchor, and water movement could be detected by this tool. The test did not anticipate that wind was a factor, and satisfactory test results were not collected. However, this float test did determine that water was not circulating in the Lake as was anticipated, and there was insufficient flushing to the beachfront on the Lake. This test was never repeated, even though it should have been conducted many times to monitor the progress of the flushing channel.

Many of the faulty aspects to the flushing channel were not discovered until the building of the channel had begun. There were a number of compromises in the design of the channel, and it has never functioned properly. The fact that the channel has become clogged with sediment is testimony that the sediment cells were not maintained, cleaned, or evaluated. The backflow of contamination has not been properly evaluated. The main source of contaminant (failed septic systems) within the Burnt Bridge Creek basin (as well as Salmon Creek and other creeks) has not been addressed. There is no official watershed plan for Burnt Bridge Creek to rectify the contaminant source. Spending a mere $190,000 (permits and dredging costs) to re-open the flushing channel will be as ineffectual now as it was more than 30 years ago, and will only make Vancouver Lake a bigger toilet. The Clean Lake Award was many millions of dollars, and as a community, we have nothing to show for these efforts and expenses except a polluted lake and polluted tributaries. The stipulations of the grant award, therefore, were not sufficiently met.

The re-dredging of the flushing channel is not environmentally sound, nor does it serve it purpose as designed. It simply does not work. Alternatives to this proposed re-dredging of this channel must be discussed in open community forums without trying to rush a faulty permit through the system. Granting this permit will only make the contaminant problem worse.
Flushing Vancouver Lake will not address a major source of the contaminant, the failed septic systems in the surrounding area. In turn, this could threaten fragile salmon and steelhead runs, and, in the end, fecal coliform will end up in the ocean. There have been a number of beachfronts recently closed along the Columbia due to fecal coliform contaminant, and it does not seem prudent to diffuse or dilute the contaminant in Vancouver Lake by flushing it through other waterbodies when the source of the contaminant is not being addressed.

Lake River, one of the tributaries that will be effected by the proposed flushing, is a known source of archaeological artifacts attributed to Native American tribes; there have been a great number of Native American arrowheads discovered there, and any dredging activity (designed to increase water flow) may impact the ability to study historically significant finds. The Port should include the Bureau of Indian Affairs and local tribal councils in the discussion about the flushing of these waters and any future dredging plans.

Working together, in a watershed council, we can, through the process of constructive engagement, come up with a better plan that will work to protect our waterways. No one wants to see our drinking water become contaminated with infectious materials -- that would cause a bio-hazard of immense proportions. Working together, we can come up with a better solution.