

**Seattle-Tacoma
International Airport
Groundwater Study****Public Comment Period:
March 5 to April 4, 2008**

Public Meeting

There will be an open house for the public to learn more about the Sea-Tac Airport Groundwater Study and submit comments. Attendees will hear first hand how the computer modeling was conducted and other details about the study and study area. You will have an opportunity to talk with Ecology and Port staff members, get answers to any questions or concerns you may have, and provide your comments at the meeting and following the meeting.

Date: Monday, March 17, 2008**Agenda:** 6 to 7 p.m. Open House
7 to 8 p.m. Presentation/Question & Answer**Location:** Burien Library, Margrette Lemon Room
14700 Sixth Ave. S.W., Burien, WA 98166

Seattle-Tacoma International Airport Groundwater Study

The Washington State Department of Ecology (Ecology) invites comments on the Sea-Tac Airport Groundwater Study. The airport is located at 17801 Pacific Highway S., Seattle, WA.

Beginning March 5, 2008, the Groundwater Study Report can be viewed at the various locations listed in the column on the right. We encourage you to review and comment on this document through April 4, 2008.



Agreed Order for the Groundwater Study

On May 25, 1999, Ecology and the Port of Seattle (Port), which operates the airport, entered a legal agreement called an **Agreed Order**, under which the Port completed a comprehensive study of the groundwater throughout the airport property. The purpose of the modeling study was to determine if contamination associated with airport operations affected public drinking water supply wells or surface water bodies outside airport property (for example, Bow Lake, Des Moines Creek and Miller Creek).

The study was conducted under the Model Toxics Cleanup Act (MTCA), Washington's cleanup law. The Agreed Order listed 13 sites within the airport operations maintenance area (AOMA) that were known or suspected to have contaminated groundwater in the Qva aquifer. The Qva aquifer is an underground water body that extends below the airport and much of the surrounding region. Only a small portion of the aquifer was contaminated.

The Port identified 1 known and 13 potential contamination sites in addition to the listed sites, bringing the total number of study sites to 27. The Port then analyzed 11 of the 27 sites, using a groundwater flow and contamination-transport simulation model. The remaining 16 sites were not modeled either because the data did not indicate an impact to the aquifer, or excavations during construction in the area confirmed that no contamination was present.

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Seattle-Tacoma International Airport
Groundwater Study Web site:
http://www.ecy.wa.gov/programs/tcp/sites/seatac/seatac_hp.htm

**Review the documents at the
following locations:**

Washington State Department of Ecology
Northwest Regional Office
3190 160th Ave. S.E.
Bellevue, WA 98008
Call for an appointment:
Sally Perkins
(425) 649-7190
Fax: (425) 649-4450
Email: sper461@ecy.wa.gov
Hours: Tuesday through Thursday
8 a.m. to noon and 1 to 4:30 p.m.

Seattle-Tacoma International Airport
Port of Seattle
Main Terminal/Airport Office Building
#A6012M
17801 Pacific Highway S.
Seattle, WA 98158
(206) 988-5525

Burien Library
14700 Sixth Ave. S.W.
Burien, WA 98166
(206) 243-3490

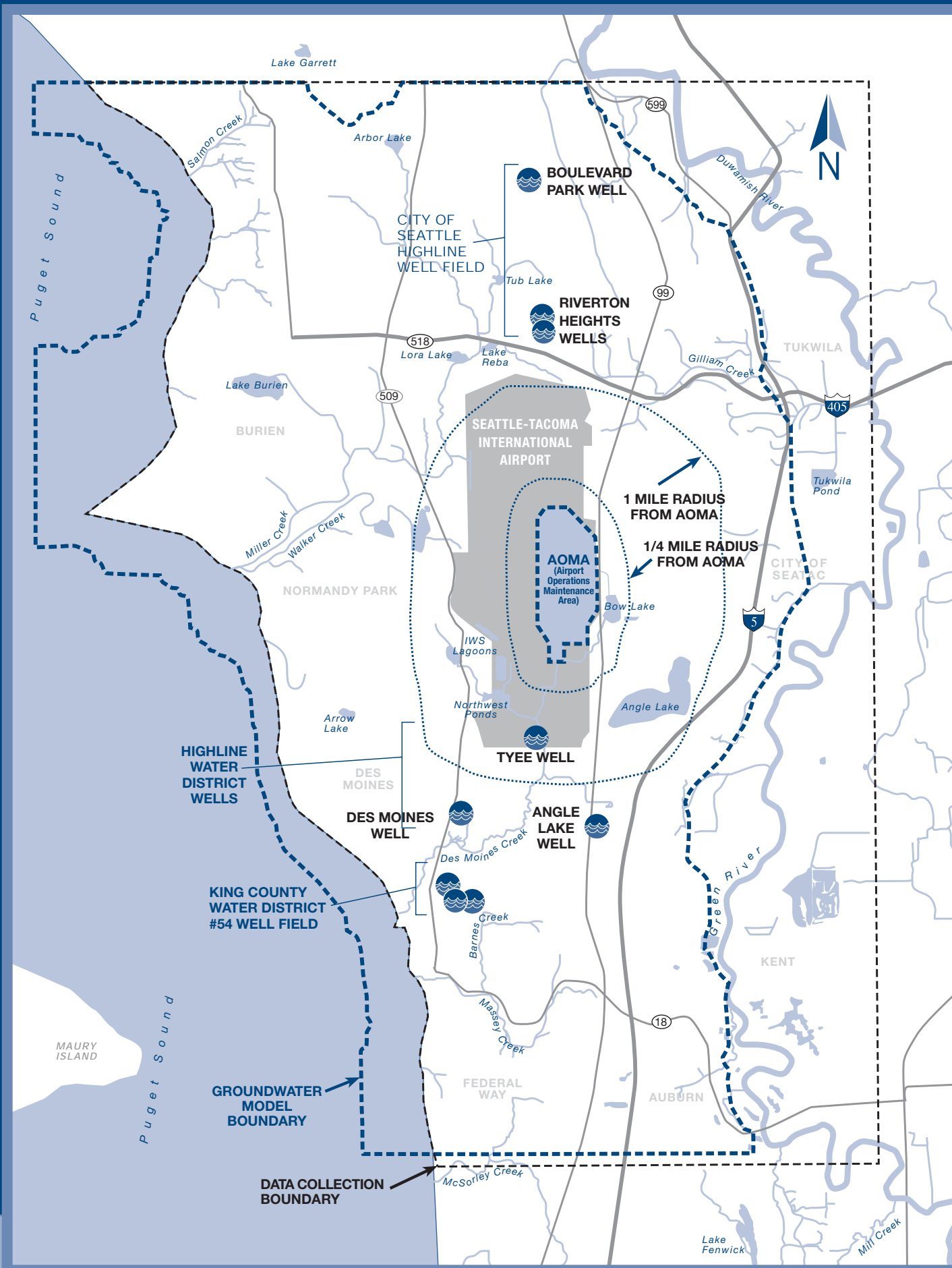
Des Moines Library
21620 11th Ave. S.
Des Moines, WA 98198
(206) 824-6066

Valley View Library
17850 Military Road S.
SeaTac, WA 98188
(206) 242-6044

Send Comments to:

Ching-Pi Wang
Washington State Department of Ecology
Toxics Cleanup Program
3190 160th Ave. S.E.
Bellevue, WA 98008
Email: cwan461@ecy.wa.gov
(425) 649-7134

Facility ID#: 2291



Sea-Tac Airport Agreed Order Groundwater Study Area

Site Background

The contaminants originated from the AOMA, which is located on the east side of the airport property. Contaminants were released by leaking underground fuel storage tanks and pipes. The known contamination in the aquifer consists mostly of jet fuel, and smaller amounts of gasoline and industrial solvents also were detected.

What was done during the Groundwater Study?

The Port established a comprehensive environmental and hydrogeological database of information from the study area (see modeling diagram, left) in order to produce a computer simulation of contaminants moving in groundwater. This database included approximately 45,000 laboratory results, 955 well logs, and about 500 references.

Computer modeling or simulation is a common tool used to identify the potential for contaminating drinking water supplies and water bodies, such as creeks, lakes and wetlands. The computer modeling for this study simulated the following:

- How groundwater moves through the aquifers below the airport and surrounding area.
- How contamination in the Qva aquifer would travel in moving groundwater.

What has happened so far?

Completion of the modeling study demonstrated that contamination located in the Qva aquifer below the airport will not migrate off the airport property or impact area water resources. The airport groundwater modeling results were reviewed by independent experts at Pacific Groundwater Group and Keta Waters, selected by the Port with Ecology's approval.

In addition to modeling, the Groundwater Study required that the Port and Ecology take steps to help prevent further soil and groundwater contamination by the airport fueling systems.

Between 1999 and 2003, the Port developed a tank and fuel system information database. The database was updated annually with information obtained by surveying tank owners/operators. During this time:

- Ecology inspected the fuel tanks and reported results to the Port.
- The Port repaired the tanks as needed.

Between 1997 and 2006, all existing aircraft fueling systems, which were installed in the 1960s, were decommissioned and removed. In 2006, the Port opened a renovated fuel storage facility and completed a new underground delivery system. This new system has leak detection technology. It also increases safety, improves efficiency and reduces air emissions associated with the large trucks that previously transported fuel from tanks to the aircraft.

Summary

The results of the study are based on computer modeling that predicted the potential contamination migration over the next 30 years. The results show the local drinking water, creeks, wetlands, and other water bodies will not be affected by any current or future aquifer contamination from airport sites. According to the 30-year groundwater modeling, if any contamination occurs, it will not migrate beyond the airport boundary.

What happens next?

The Port will do the following:

- Monitor existing and newly installed groundwater wells for at least 5 years, in accordance with MTCA standards.
- Confirm study conclusions by comparing monitoring data results with the results of groundwater computer modeling.