DEPARTMENT OF ECOLOGY
State of Washington

# Public Participation Plan

## Boeing Auburn Fabrication Site
## 700 15th St SW Auburn, WA 98001-6533

*Facility Site ID: 2018*
*Cleanup Site ID: 5049*

July 2018
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# Publication and Contact Information

This plan is available on the Department of Ecology's website at:
ecology.wa.gov/BoeingAuburnCleanup

For more information contact:

Northwest Regional Office
3190 160th Ave. SE
Bellevue, WA 98008-5452
425-649-7000

Washington State Department of Ecology — www.ecology.wa.gov

- Headquarters, Olympia 360-407-6000
- Northwest Regional Office, Bellevue 425-649-7000
- Southwest Regional Office, Olympia 360-407-6300
- Central Regional Office, Union Gap 509-575-2490
- Eastern Regional Office, Spokane 509-329-3400

*To request ADA accommodation including materials in a format for the visually impaired, call Ecology at 360-407-6700 or visit https://ecology.wa.gov/accessibility. People with impaired hearing may call Washington Relay Service at 711. People with speech disability may call TTY at 877-833-6341.*

# Public Participation Plan
# Boeing Auburn Fabrication Site

Hazardous Waste and Toxics Reduction Program
Northwest Region
Washington State Department of Ecology
Bellevue, Washington

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# Table of Contents

# Public Involvement in Contamination Cleanup

The Washington State Department of Ecology (Ecology) developed this public participation plan (plan) in cooperation with The Boeing Company, the party responsible for cleanup costs. The purpose of the plan is to promote meaningful community involvement during cleanup.

The plan describes ways we will inform the public about contamination investigations and cleanup options throughout the cleanup process. We encourage the public to learn about and get involved in decision-making opportunities. This plan identifies how and when the public can get involved during different stages of the investigation and cleanup of contamination.

This plan is for the Boeing Auburn Fabrication (site).

# Site contacts

To be included in the site record, comments about the cleanup process must be submitted during comment periods. Questions and informal comments or information about the site's history are welcome anytime.

## Ecology

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3190 160th Ave. SE
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Seattle, WA 98124-2207

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206-898-0438

## Algona Public Awareness Coalition (APAC)/Futurewise

Futurewise
816 Second Avenue, Suite 200
Seattle, WA 98104

Marisol Diaz
marisol@futurewise.org
206-343-0681

## Public participation grants

Qualified individuals and not-for-profit public interest organizations are eligible to apply for a Public Participation Grant (PPG) from Ecology. For contaminated sites, these funds may be used to:

- Contract with an expert to help interpret technical jargon and information.
- Conduct activities that enhance the public's understanding of, and participation in, the site cleanup process.

For more information about PPGs, please contact Lynn Gooding at 360-407-6062 or lynn.gooding@ecy.wa.gov. You may also visit Ecology's Public Participation Grant website.[1]

# Washington's Cleanup Laws

Ecology uses the Model Toxics Control Act (MTCA) and accompanying regulations for cleanup activities.

This plan is required under MTCA, a law that passed in 1989. MTCA provides guidelines for contaminated site cleanup in Washington State and sets standards to ensure the cleanup protects human health and the environment.

## Model Toxics Control Act (MTCA)

MTCA began as a grassroots citizen's initiative in 1988, and started the process of systematically cleaning up contaminated sites in Washington. Under MTCA, a current or past property owner or operator may be held responsible for cleaning up contamination on, or coming from, their property to standards that are safe for human health and the environment.

Ecology enacts MTCA and oversees cleanups in the state and issues regulations and guidance governing those cleanups. The regulations are found in Chapter 173-340 Washington Administrative Code (WAC).[2] Ecology investigates reports of property contamination, and if the contamination is seen as a significant threat to human health or the environment, the contaminated property is placed on the Hazardous Sites List and the cleanup process begins.

[1] ecology.wa.gov/About-us/How-we-operate/Grants-loans/Find-a-grant-or-loan/Public-participation-grants
[2] https://fortress.wa.gov/ecy/publications/publications/9406.pdf

Public participation is an important part of cleanup under the MTCA process. Participation needs are assessed at each cleanup site according to the level of public interest and the degree of risk posed by the contamination. Individuals who live near the site, community groups, businesses, government, other organizations, and interested parties have the opportunity to get involved by commenting on the cleanup process.

Under MTCA, the cleanup process generally includes five phases. Each phase includes an opportunity for the public to review and comment on cleanup documents.

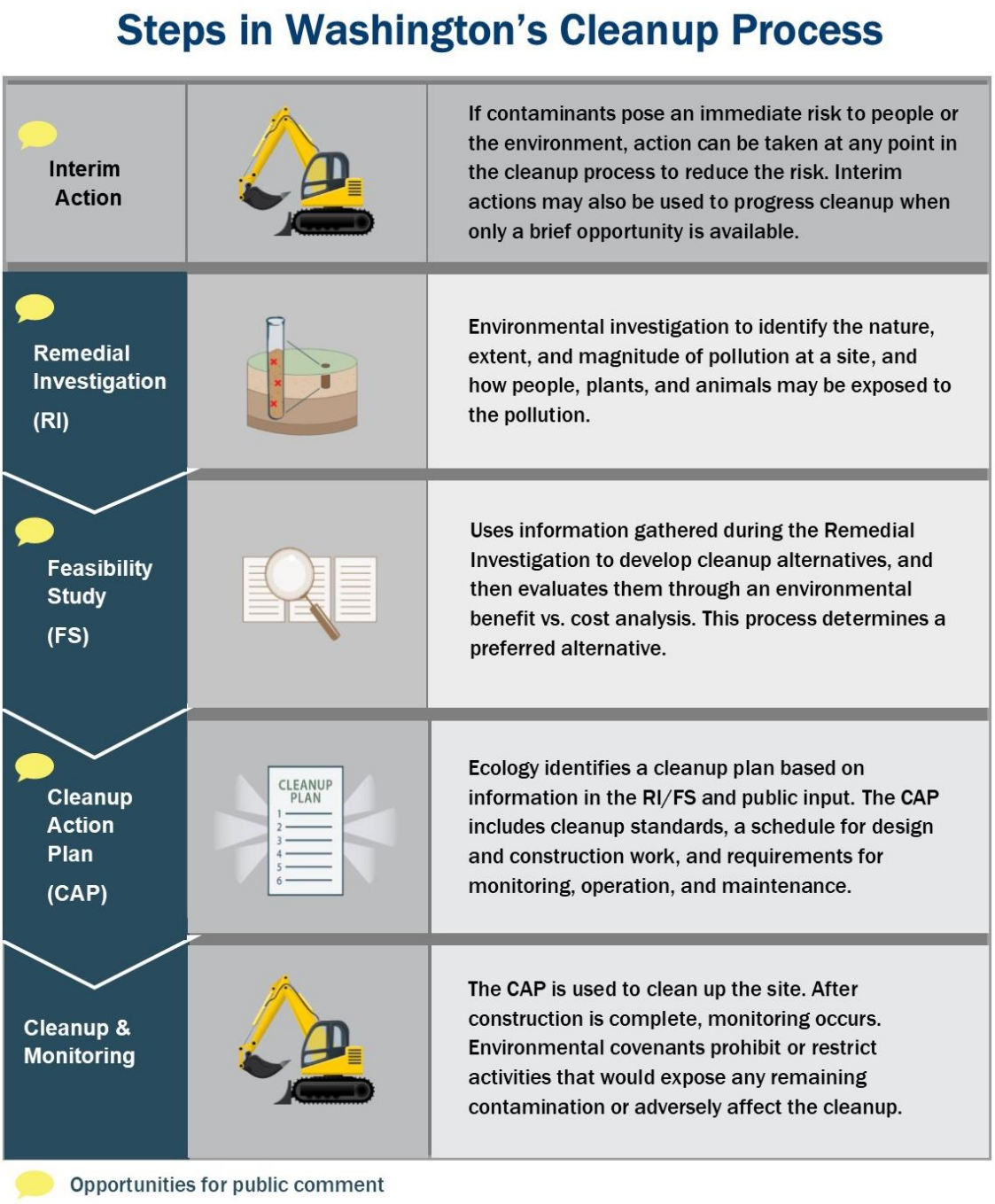



**Figure 1. Steps in Washington's Cleanup Process**

# State Environmental Policy Act

The State Environmental Policy Act (SEPA) is followed during review and development of cleanup plans.

# Public Participation Activities

Members of the public may ask questions, submit informal comments, or share site information at any time. Interested parties do not need to wait for a formal public comment period to contact Ecology.

However, to be included in the formal site record, comments about the site investigation, cleanup alternatives, or cleanups must be submitted during formal comment periods. In addition, the public is invited to review site documents before they become final. This is the most direct and influential way to learn more about the site and be involved in the cleanup's decision-making.

## Goals and objectives

In this process, you, the public, play a consultative role, providing input on analysis and clean up alternatives, actions, and monitoring.

| Public Participation Goal | Our Promise to You |
|---|---|
| To obtain your feedback on analysis, alternatives, and/or decisions | We will keep you informed, listen to and acknowledge concerns and provide feedback on how your input influenced the decision |

The following objectives will guide our outreach and information sharing:

- Maintain a continuous, accountable presence in the community
- Build trust by being transparent about the decision-making process and how you can influence that process
- Demonstrate progress of the cleanup process
- Help you understand what kind of comments are helpful to us at each stage of the cleanup process and provide feedback on comments received in a timely fashion
- Clearly communicate technical information

## Roles and responsibilities

### Boeing

Boeing is responsible for conducting the remedial investigation and feasibility study that informs the Cleanup Action Plan under our oversight. Once the Cleanup Action Plan up is finalized, Boeing and its contractors will implement the plan for cleanup and monitoring. Boeing pays for the analysis, clean up, and monitoring.

### Ecology

Ecology will oversee the MTCA process and review all studies, plans, and data submitted by Boeing. During each step of the process, we will hold comment periods before final decisions are made. We must review and approve Boeing's cleanup and monitoring plans before they are implemented.

### Algona/Auburn Public Awareness Coalition (APAC)

APAC is a partnership between Home Town Community Services and Futurewise. The coalition's goal is to engage with the community on the topic of groundwater contamination in Algona and Auburn. APAC helps translate technical information, make it accessible, and encourage public participation through door-to-door visits and community events.

## How we share information with the community

During specific stages of the cleanup, Ecology will mail notices about public comment periods to addresses surrounding the site. The mailing list area will vary depending on the type of contamination and where it's located, but the list will at least include addresses within a 1/4-mile radius of the site and other interested organizations and individuals. These notices will provide general information about the site, contact information for submitting comments, and times and locations of public meetings or hearings or how to request one if not yet scheduled.

Ecology may also develop documents outside of comment periods to keep the community updated on the site's status. These informational documents will be available online and at document repositories. Print copies may be mailed to the nearby community if we feel the message warrants the associated cost and resources.

Comment period notices and other site announcements may also be posted in various locations throughout the community (for example, local businesses, schools, libraries).

### Postal mailing list

Ecology maintains a mailing list that includes individuals, groups, public agencies, elected officials, private businesses, potentially affected parties, and other known interested parties.

These people receive public comment notices when draft documents are available.

We will add additional individuals, organizations, and other interested parties to the mailing list as requested. If you would like to be added to the mailing list for this site, please contact Thea Levkovitz at 425-649-7286 or Tlev461@ecy.wa.gov.

## Site Register

Public comment periods, events, and other cleanup notices are published in Ecology's *Site Register*.[3] To receive the *Site Register* by email, please contact Cheryl Ann Bishop at 360-407-6848 or cherylann.bishop@ecy.wa.gov, or subscribe online.[4]

## Newspaper display ads or legal notices

We announce public comment periods and events in ads or notices published in Auburn Reporter and Tu Decides and/or El Mundo. We will also publish notice on our Public Input & Events Listing.[5]

## Email lists

Ecology maintains an email list to update interested persons about this site. If you would like to be added to the email list for this site, please contact Thea Levkovitz at 425-649-7286 or Tlev461@ecy.wa.gov.

## Ecology's website and social media platforms

We maintain a website for the Boeing Auburn site.[6] The website provides site information, and you may download cleanup documents.

We may also share information about cleanup sites through news releases, our ECOconnect blog, and social media.[7]

[3] https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Site-Register-lists-and-data
[4] http://listserv.ecology.wa.gov/scripts/wa-ECOLOGY.exe?SUBED1=SITEREGISTER&A=1
[5] https://ecology.wa.gov/Events/Search/Listing
[6] https://ecology.wa.gov/Spills-Cleanup/Contamination-cleanup/Cleanup-sites/Toxic-cleanup-sites/Boeing-Auburn-Fabrication-Site
[7] https://ecology.wa.gov/About-us/Get-to-know-us/News

## Document repositories

During public comment periods, you can find print documents at the following locations:

Auburn Public Library
1102 Auburn Way S
Auburn, WA 98002
253-931-3018

Algona Pacific Library Information Services
255 Ellingson Rd.
Pacific, WA 98047
253-833-3554

Washington Department of Ecology
Northwest Regional Office
3190 160th Ave SE
Bellevue, WA 98008
425-649-7100
To schedule an appointment, please contact Sally Perkins
Hours: 8:30 am – 4 pm

## Language accommodations

Ecology translates key project information into Spanish and makes these materials available online on the Ecology Boeing Auburn website and in print. We also offer a phone translation service for those who like to receive project information in a language other than English.

We have instructions on accessing this service written in Spanish, Tagalog, Ukrainian, and Punjabi.

*En español*

Para más información acerca de la contaminación del agua subterránea en Algona y Auburn en español, favor de contactar a Luis Buen Abad al (425) 649-4485.

*Tagalog*

Kung nais mo ang impormasyon na ito sa Tagalog, pakitawagan ang 425-649-7232 upang makipag-usap sa isang tauhang miyembro ng Ekolohiya at isang tagapagsalin ng wika. Pakibigyang pansin, mangangailangan ang Ekolohiya na dumayal ng isang nasa labas na partido upang maabot ang isang tagapagsalin ng wika, na maaring abutin ng hanggang isang minuto.

*Ukranian*

Якщо ви хочете отримати цю інформацію українською мовою, будь ласка, зателефонуйте 425-649-7232, щоб поговорити зі співробітником Департаменту Екології та перекладачем. Будь ласка, зверніть увагу, що співробітнику Департаменту Екології необхідно буде запросити для розмови перекладача, що може зайняти до однієї хвилини.

*Punjabi*

ਜੇ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਪੰਜਾਬੀ ਵਿੱਚ ਲੈਣੀ ਚਾਹੋ, ਤਾਂ ਈਕੋਲੋਜੀ ਸਟਾਫ ਦੇ ਕਿਸੇ ਮੈਂਬਰ ਅਤੇ ਇੱਕ ਦੁਭਾਸ਼ੀਏ ਨਾਲ ਗੱਲ ਕਰਨ ਵਾਸਤੇ ਕਿਰਪਾ ਕਰਕੇ 425-649-7232 ‘ਤੇ ਕਾਲ ਕਰੋ। ਕਿਰਪਾ ਕਰਕੇ ਨੋਟ ਕਰੋ, ਦੁਭਾਸ਼ੀਏ ਤਕ ਪਹੁੰਚਣ ਲਈ ਈਕੋਲੋਜੀ ਨੂੰ ਕਿਸੇ ਬਾਹਰੀ ਪਾਰਟੀ ਨੂੰ ਕਾਲ ਕਰਨ ਦੀ ਲੋੜ ਹੋਵੇਗੀ, ਜਿਸ ਵਿੱਚ ਇੱਕ ਮਿੰਟ ਤਕ ਲੱਗ ਸਕਦਾ ਹੈ।

# How to share information with us

At minimum, MTCA requires 30-day public comment periods for draft cleanup documents and 14-day comment periods SEPA documents. SEPA documents are often made available for review with other cleanup documents. We may hold comment periods longer than 30 days.

We may also identify public concerns and cleanup goals by meeting with and soliciting information from interested community members and organizations. To collaborate with us about this site, please contact Thea Levkovitz at 425-649-7286 or Tlev461@ecy.wa.gov.

You may also contact Marisol Diaz at APAC/Futurewise at 206-343-0681 or marisol@futurewise.org.

## Public comment periods

Formal 30-day comment periods allow interested members of the public to comment on draft documents, legal agreements, and proposed cleanup actions. If there is significant interest, Ecology may extend the public comment period. When Ecology oversees SEPA determinations, we hold comment periods for at least two weeks.

Following a comment period, we publish all the input we received and respond to significant comments and questions. If the comments result in significant changes to the cleanup documents, then the documents will be revised and re-issued for public review. If the comments do not result in significant changes, then they become final.

We will hold comment periods for the following project documents:

- Remedial investigation (RI) to understand the source and extent of the contamination at the site.

- Feasibility study (FS) to identify appropriate cleanup alternatives.
- Cleanup action plan (CAP) to implement the approved cleanup action.

## Responsiveness summaries

After comments periods, we will review comments, make final decisions, and prepare a responsiveness summary - which is a compilation of your comments and our responses to them. We will mail copies to anyone who commented or asked for copies and post it on our website.

## Public events

We hold public meetings, workshops, open houses, and public hearings based on community interest. If we have not scheduled a meeting, we will hold one if 10 people request it; this may cause us to extend a public comment period so the meeting occurs during it.

Events are held at locations close to the site that meet Americans with Disabilities Act standards. Public meetings, workshops, open houses, and hearings are always announced in advance using a variety of methods.

## Evaluation

We will evaluate the public involvement process periodically to ensure that objectives are being met. We will collect informal feedback on our process through conversations with you and other participants. We will also debrief following all public participation activities and document lessons learned. We and/or APAC will survey you periodically to hear your input on the participation process. We may adjust our process to improve how we engage you.

# Plan Amendments

Ecology developed this plan following MTCA regulations (WAC 173-340-600). We review it as the cleanup progresses and amend it as necessary. You may suggest amendments to Thea Levkovitz at 425-649-7286 or Tlev461@ecy.wa.gov.

This plan includes information for the public regarding opportunities for public involvement and comment. The outreach activities discussed in this section reflect Ecology's current plans for keeping the public informed and providing ways for those interested in the site to communicate their concerns and questions to us.

If you feel the planned outreach activities and mechanisms described in this plan are insufficient, or should otherwise be modified, we will work to find solutions. New outreach activities or outreach tools established as a result can be implemented right away, with or without amending this plan.

# Site History

## Land use

The Boeing Auburn facility is located at 700 15th Street SW in Auburn, Washington. The facility produces parts, tools, and assemblies for commercial aircraft. During the production process, Boeing generates and manages dangerous waste at their facility. Trichloroethene (TCE), the primary groundwater contaminant, was used historically at the facility. Boeing thinks the contamination occurred during this timeframe.

The Boeing Company is and has been the owner and operator of the Auburn facility since 1966. In the past, Boeing treated, stored, and disposed of dangerous waste at the facility. The federal Resource Conservation and Recovery Act (RCRA) requires Boeing to have a permit for these activities. On November 17, 1980 Boeing applied for its original RCRA part A permit for the storage of dangerous wastes as required by the US Environmental Protection Agency (EPA). On July 13, 1987, Ecology jointly issued a dangerous waste permit (RCRA Permit) to Boeing with the EPA which allowed them to continue to treat and store dangerous waste at the Auburn facility.

## How the site became contaminated

In the late 1980s, Boeing documented a release of TCE from the facility. In the 1990s, Boeing began early investigations of the soil and groundwater at the Auburn facility. In addition, Boeing conducted soil cleanup work in specific areas at the facility where contaminants were found. In June 2002, Ecology signed an agreed order with Boeing to fully investigate the groundwater contamination in compliance with the state law (MTCA). The agreed order required Boeing to conduct a facility-wide RCRA Facility Investigation, also referred to by the state cleanup regulations as a remedial investigation.

Boeing reported high levels of TCE contamination on their property. Ecology required an interim cleanup action to bring TCE amounts below state cleanup levels. This interim action is not the final cleanup. Boeing successfully cleaned up the original TCE release area under the former 17-05 Building. Boeing also closed their permitted treatment and storage units, and they no longer conducted these dangerous waste activities at their facility. As a result, Boeing's dangerous waste management practices are now less complex, and therefore safer, than they were in the past. Ecology tested the treatment and storage areas before they closed to make sure they met the state cleanup standards. Boeing is no longer required to have a permit covering these dangerous waste management units. However, Boeing is still required to have a permit to conduct the cleanup of the rest of the site.

In 2006, we, with EPA's approval, replaced the RCRA Permit with a State of Washington Dangerous Waste Management RCRA Permit for Corrective Action. The original permit was replaced because it had expired, and because it did not incorporate the requirements for site cleanup (also known as corrective action). During this time, Ecology also replaced the agreed order with an amended agreed order because of property owner transitions.

In 2009, we directed Boeing to investigate whether groundwater was contaminated beyond the Auburn facility's boundary. Boeing installed groundwater monitoring wells to the north, northwest, and northeast of the Auburn facility to measure the full extent of the contamination. In 2011, monitoring wells found groundwater contamination beyond the property. Ecology notified water districts and the cities of Algona, Auburn and Pacific. A year later, the Department of Health published a report confirming that the public drinking water systems are safe.

In 2013, we held our first public meetings in Algona to discuss the investigation and air quality testing. This started a robust process to inform you, the public, of the contamination. By 2017, Boeing completed the remedial investigation report that identified the boundaries of the groundwater contamination and potential impacts. This report was shared with the public for comment. For more details on the results of the investigation, please see the Key Findings section on the Ecology Boeing Auburn website[8].

In 2018, we will issue a new RCRA permit. RCRA Permits are set to expire after ten years. As part of this process, we will hold a 45-day comment period. Boeing is required by the dangerous waste regulations to continue to comply with the conditions of the expired permit until the new permit is issued. The cleanup, with our oversight, will continue during the time it takes to issue the new RCRA Permit.

In 2019, we anticipate releasing the feasibility study for public comment. The feasibility study identifies and evaluates cleanup alternatives. After public review, we will select an optimal alternative and incorporate it into the Cleanup Action Plan. Ecology will propose a cleanup action plan for public comment and Boeing will implement the cleanup. We will continue to review Boeing's monitoring and cleanup to ensure it is effective and protects human health and the environment.

# Contamination

During the remedial investigation, we required Boeing to test places where people can come into contact with the contaminated groundwater as it enters surface waters (like ditches, ponds and creeks) or the air (through air in soil pockets or indoor air). We consistently found chemical levels low enough that they do not risk human health.

[8] ecology.wa.gov/BoeingAuburnCleanup

The study found the following:

- Trichloroethene (TCE), a degreasing solvent once commonly used to clean metal parts
- Tetrachloroethene
- Cis-1,2-dichloroethene
- Trans-1,2-dichloroethene
- Vinyl chloride

The groundwater flowing away from the Boeing Auburn facility is contaminated with TCE and volatile organic compounds (VOCs). Some of the contaminated groundwater flows north and northwest from the Boeing property, into portions of Algona and Auburn. The area of contaminated groundwater is called a "plume." There are two plumes associated with the Boeing property; however, the plumes are not completely separate. Boeing, under our supervision, has installed a network of monitoring wells throughout the site to measure the locations and concentrations of contaminants over time. The wells are sampled at three levels of groundwater. The approximate depths are listed below:

- Deep zone (75 - 100 ft. deep)
- Intermediate zone (40 - 60 ft. deep)
- Shallow zone (1 - 30 ft. deep)

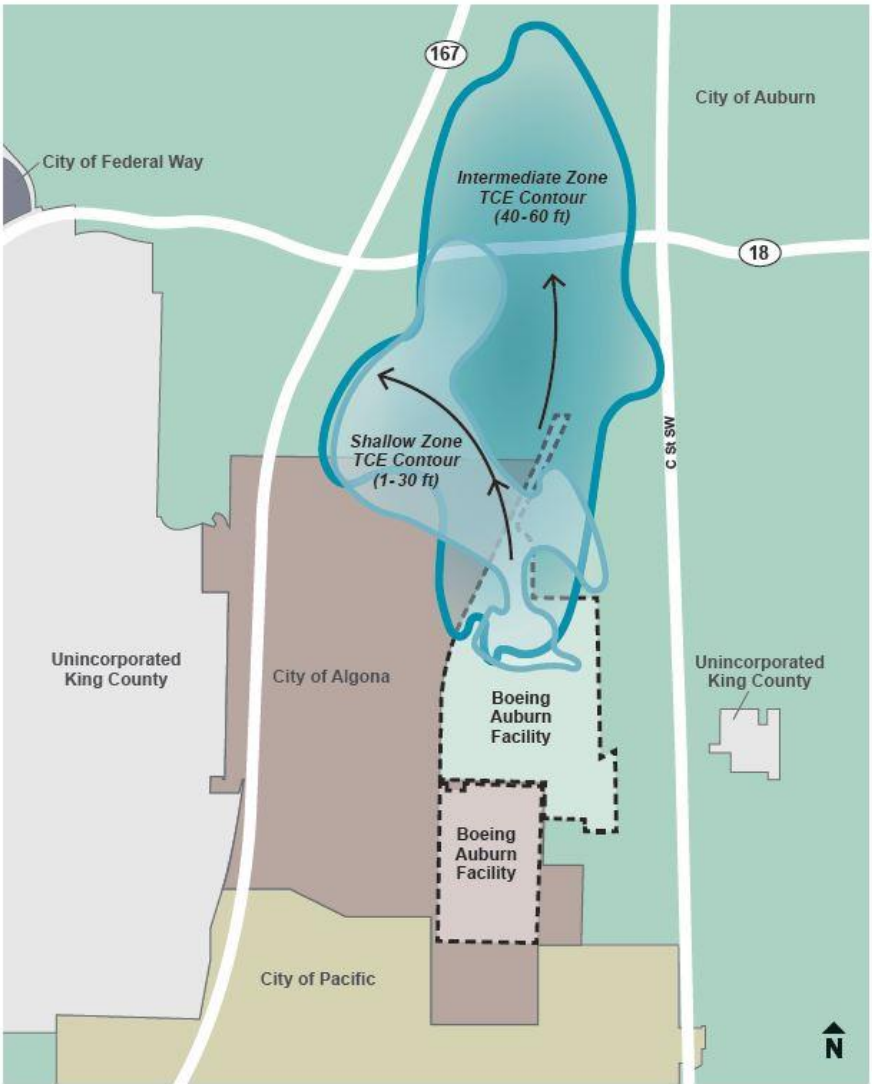



**Figure 2. Map of intermediate and shallow TCE zones**

## Trichloroethene (TCE)

TCE is a colorless liquid used as an industrial degreaser, but it can also be found in common household products, such as paints, glues, spot removers and pepper spray. TCE is a volatile organic compound (VOC) which means it can evaporate easily into the air. In water, it slowly breaks down into other volatile organic chemicals, such as vinyl chloride.

If TCE gets into groundwater, it dissolves and then moves with the natural flow of the water. TCE is heavier than water, so it tends to move downward as well as horizontally with groundwater flow. Ecology has groundwater cleanup standards for TCE.

The area near the Boeing Auburn facility has a high water table. This means contaminated groundwater is fairly close to the surface of the ground in some locations. When groundwater levels are higher than the surrounding land, it can discharge into nearby ditches, ponds, or yards in low-lying areas. This type of water is called surface water. People and animals could potentially be exposed to TCE by breathing, swallowing, or touching contaminated surface water in ditches and ponds.

It is hard to determine how a chemical will affect someone, especially without knowing exactly how much that person was exposed to, for how long and how often. When Ecology investigates contaminated sites, we use precautionary pollution levels during initial testing, called screening levels, which are often more stringent than cleanup levels. Chemical concentrations below a screening level are unlikely to pose a threat to public health, safety or the environment.

## Volatile Organic Compounds (VOCs)

VOCs are chemicals that easily enter the air as gases from some solids or liquids. They are ingredients in many commonly used products and are in the air of just about every indoor setting. When you use a product containing VOCs indoors, the levels of these chemicals in the air increase, and then decrease over time after you stop using them. Products containing VOCs can release chemicals when they are used and stored. Building materials and furnishings, such as new carpet or furniture, slowly release VOCs over time. VOCs can also get into indoor air from contaminated soils and groundwater under buildings through a process known as vapor intrusion. Vapors can enter your home through open windows and nearby vents if VOC-containing products are being used outdoors near your home.

The amount of time a chemical stays in the indoor air depends on how quickly fresh air enters the room and the amount of chemical used. Levels of VOCs will decrease faster if you open windows or doors, or use exhaust fans.

People come into contact with VOCs by breathing, swallowing, or touching contaminated air, groundwater, or soil. This is referred to as exposure. Whether or not a person will have health effects after exposure to VOCs depends on a variety of factors. Short-term exposure to high levels of some VOCs can cause headaches, dizziness, light-headedness, drowsiness, nausea, and eye and respiratory irritation. These effects usually go away after the exposure stops. In laboratory animals, long-term exposure to high levels of some VOCs has caused cancer and affected the liver, kidneys, and nervous system. Ecology recommends minimizing exposure to all toxic chemicals, whenever possible.

## Drinking water

The water in homes and businesses in the area comes from public water systems that are regularly monitored by the Washington State Department of Health. The contamination discovered has not affected municipal drinking water supply wells, and the contaminated groundwater flows away from the drinking water wells. Testing required by the Department of Health has not detected any chemicals of concern from the Boeing Auburn Site in public water systems in the past 10 years.

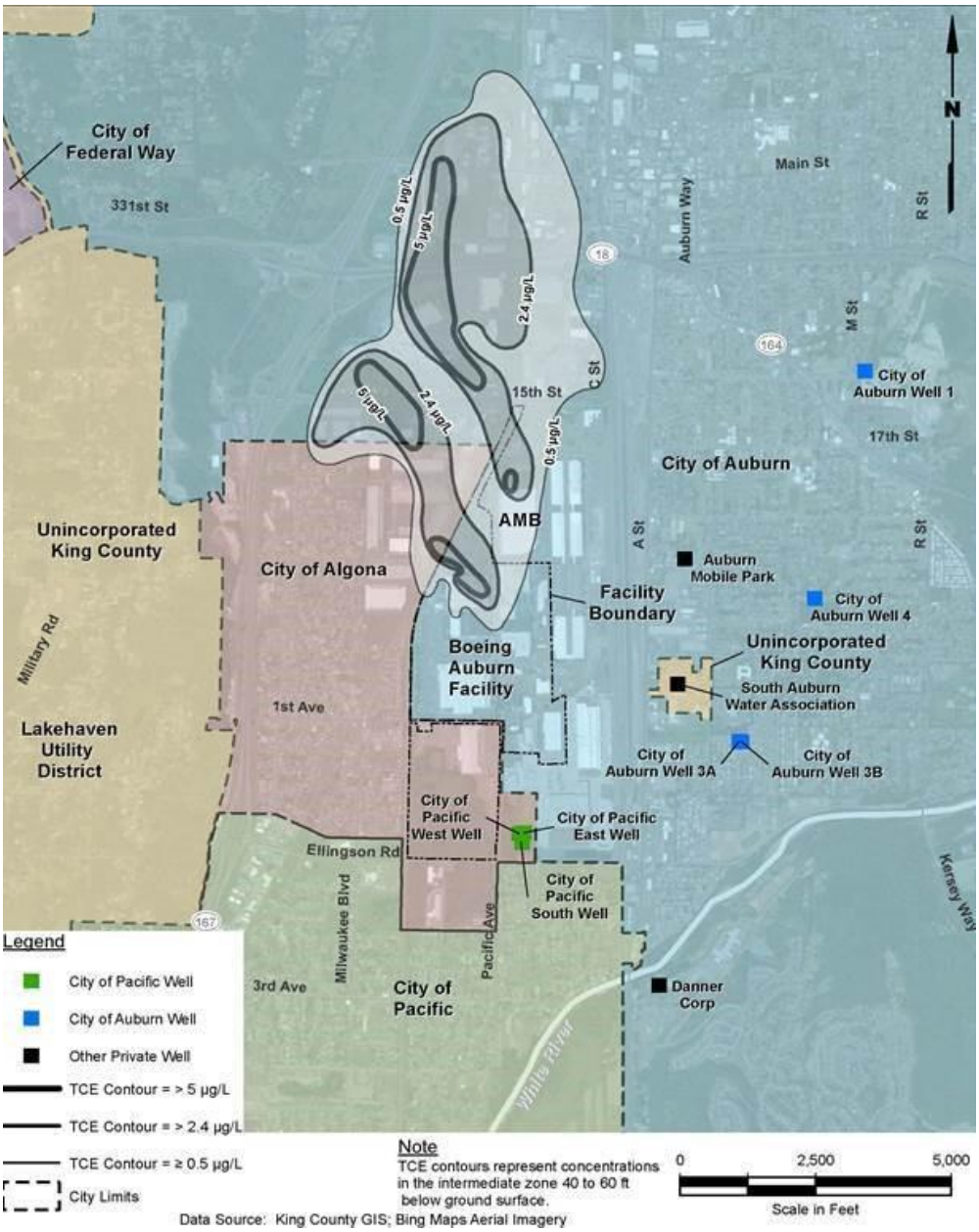



**Figure 3. Location of City of Auburn drinking water wells relative to the contaminated groundwater**

Private wells are not monitored by the Department of Health. Residents should contact us if they have a private well. (To see if your well may be in the plume area, please refer to the shaded area shown in Figure 2. *Map of Intermediate and Shallow TCE Zones*.)

## Gardening

Studies of garden sites[9] have been done in areas that have higher levels of the chemicals in soil and groundwater than we find at the Boeing Auburn site. Those studies suggest that fruit and vegetables from gardens irrigated with groundwater containing these chemicals are safe for adults and children to eat. The chemicals do not build up in the plant or fruit tissue.

## Pets

We compared the results of samples taken from surface water in Algona to a study conducted by the National Parks Service[10] on the impacts of TCE on wildlife. None of the samples we evaluated had concentrations high enough to harm wildlife or domestic pets.

## Water in ditches

TCE and its breakdown products are colorless and odorless at the concentrations found in groundwater and surface water. The sheen seen in ditches most likely relates to bacteria commonly found in wet areas, such as roadside ditches. It could also be related to runoff from cars.

Department of Health[11] found that touching and accidentally ingesting Chicago Avenue ditch water would result in low-level exposure to trichloroethene, perchloroethene, cis-dichloroethene, trans-1,2-dichloroethene and vinyl chloride. This low-level exposure should not harm children's health. Ditches are not safe places to play and may contain contaminants unrelated to the Boeing Auburn Facility, such as fecal contamination from animals and contaminated stormwater.

[9] Minnesota Department of Health Site Assessment and Consultation Unit, 2012, Trichloroethylene (TCE) and Gardening
[10] National Park Service, 1997, Environmental Contaminants Encyclopedia Trichloroethylene Entry
[11] Department of Health Consultations can be found on the Ecology Boeing Auburn Website (ecology.wa.gov/BoeingAuburnCleanup)

# Cleanup plans

Boeing discovered high levels of contamination on their property in the 1990s and notified us. The Boeing Auburn remedial investigation began in 2002. The data from the 1990s, combined with newer findings, showed that groundwater at the site of Building 17-05 had very high concentrations of TCE. We required an interim action (cleanup) using bioremediation to lower TCE concentrations below state cleanup levels. Bioremediation is a process that uses bacteria to break down chemicals. The process took about a year. Since then, monitoring shows that TCE concentrations remain below levels of concern. This interim action will not be the final cleanup.

The following studies have been conducted throughout the cities of Algona, Auburn, and Pacific:

- Ditch water sampling
- Yard water sampling
- Groundwater well sampling
- Vapor intrusion (air) sampling

Ecology continues to monitor groundwater throughout the project area. If new concentrations are found to exceed safe levels at any time, we will direct Boeing to conduct further interim action proposals.

# Area community

## Algona

Algona is a city in King County, Washington, surrounded by the suburbs of Auburn to the north and east, Pacific to the south, and unincorporated King County to the west. The population was 3,070 in 2012, according to an estimate from Office of Financial Management. Due to Algona's close proximity to the city of Pacific, the two communities are sometimes referred to collectively as Algona-Pacific or Algona/Pacific.

During the 1930s, farmers used the valley from Seattle to Tacoma, including Algona, to grow crops. Large farms operated mostly by Japanese and Filipino immigrants produced large quantities of fruits and vegetables, which were hauled to public markets in Seattle and Tacoma. The large-scale agricultural era came to an end with the relocation of the Japanese population during World War II. Algona was officially incorporated as a city of 1.29 square miles on August 22, 1955. In 1962, the U.S. Army transferred jurisdiction of some of its supply depot property (approximately 177 acres) to the U.S General Services Administration (GSA); and the remaining property was sold to private developers. In 1966, Boeing purchased several hundred acres of land from both GSA and other adjacent private properties to house the Boeing

Company's Fabrication Division Auburn Plant (Boeing Auburn). GSA still owns approximately 129 acres along Boeing Auburn's eastern property boundary.

Some of Algona's residents live close to the Boeing Auburn site and over the plume of contaminated groundwater which extends to the northwest from the Boeing Auburn facility. During the cleanup project, Algona residents have been the most interested in the project. Many residents first learned of the contamination around 2012 by seeing monitoring well covers in their area or by watching TV news stories. At this time, Boeing was conducting expedited sampling to identify the extent of the contamination. Many residents in Algona were very upset to learn of the contamination.

Ecology recognizes that at the time the quarterly technical reports sent to Auburn and Algona city governments did not clearly describe investigation activities in lay terms. Ecology also should have informed residents and businesses, especially the northeastern Algona residential community, as soon as the investigation moved to the north and west beyond Boeing Auburn's property boundary. Since then, we have worked extensively with community residents and the city government to provide timely information about all investigation activities and to make all data produced in the investigation available to the public as soon as possible. Some houses above the plume in Algona were tested for vapor intrusion. No homes were found to have air quality contamination at unhealthy levels.

The state cleanup laws address the existing contamination and its cleanup. The court system provides a mechanism to address possible historic damage or injuries. We are aware that a lawsuit has been filed, and that Algona residents are making use of the opportunity for redress available to them.

In addition to hosting events for Algona residents and the city government, we also attend community events such as Algona Days, the Algona Family Social, and the Algona City Hall Grand Opening.

## Auburn

Auburn is a city in both King and Pierce counties, Washington, with the majority of its land area in King County. The population was 70,180 at the 2010 census. Auburn is currently ranked the fourteenth largest city in the state of Washington.

Located 20 miles south of Seattle, Auburn was home to some of the first European settlers in King County. Nestled in a fertile river valley, Auburn has been both a farm community and a center of business and industry for more than 150 years. Auburn is located near the original

confluence of the Green and White rivers, both of which contain runoff water from the Cascade Mountain range.

The Boeing Fabrication Division, Auburn Plant which opened in 1966, is the largest airplane parts plant in the world. With approximately 11,000 employees, the Boeing plant is the third major employer in Auburn.

In addition to hosting events for Auburn residents and the city government, we also attend existing community events such as Auburn Kids Day and City Council meetings.

## Pacific

Pacific is a city in King and Pierce counties in the State of Washington. Located primarily in King County, the population was 6,606 during the 2010 census. Pacific was officially incorporated on August 10, 1909. According to the United States Census Bureau, the city has a total area of 2.43 square miles.

Originally, we thought Pacific might be impacted by the groundwater contamination. The remedial investigation showed that Pacific is not affected. We continue to keep the city government informed about the project, but do not focus our outreach on the residents of Pacific.

## Languages

Ecology will reach out to cultural community organizations as part of our outreach and provide information in other languages as appropriate following federal guidance.[11] The non-English languages most widely spoken in the project area are Spanish, Tagalog, Ukrainian, and Punjabi. When appropriate, Ecology will provide outreach in these languages. We strive to make our public participation efforts as inclusive as possible and welcome your input about how to best reach the nearby community.

## Tribes

The Muckleshoot Tribe is a federally recognized tribe that relies on resources that could be affected by the contamination. Ecology will ensure that the Tribe will be engaged with any

[11] Guidance to Environmental Protection Agency Financial Assistance Recipients Regarding Title VI Prohibition Against National Origin Discrimination Affecting Limited English Proficient Persons, 69 Fed. Reg. § 35602 (June 15, 2004).

decision-making process for this site and has ample opportunity to be involved throughout the process on a government-to-government basis. We will also engage with the Duwamish Tribe.

# Key concerns and issues

Ecology has compiled the following summary of concerns from news media coverage, emails, phone calls, community events, and several public meetings. Ecology works to address these concerns and issues; these actions are documented in the table below.

**Table of key concerns and issues and Ecology's response**

| Concerns and Issues | Description | Action |
|---|---|---|
| Community updates and notification | Community members, both in Pacific and in Algona, asked that they be kept informed about any sampling activities and results of testing in their cities. The community was frustrated that they were not notified sooner about the contamination or monitoring wells. | Ecology sends quarterly status reports showing work conducted and monitoring data. |
| Public meetings | Community members asked to be notified of public meetings in a timely manner, and that meetings need to be more broadly publicized. | Ecology now uses listservs, newspaper and radio ads, fliers, and other tools to publicize all public meetings. |
| Wildlife and pets | We have received numerous questions about how the groundwater could impact the health animals. | Ecology provided information about wildlife studies and TCE and how they might relate to pets. |
| Surface water | Residents asked about the safety of children who played in surface water, pond water in yards and/or the Chicago Avenue ditch. Residents were also concerned about children tracking mud with contaminated water into the homes. | The Department of Health evaluated the exposure to chemicals in Chicago Avenue ditch and Government Canal. It is unlikely that the level of contamination in groundwater and mud poses a risk to human health. Ecology will monitor groundwater entering Chicago Avenue ditch and Government Canal. Department of Health documents can be found on the Ecology Boeing website[12]. |

[12] ecology.wa.gov/BoeingAuburnCleanup

| Concerns and Issues | Description | Action |
|---|---|---|
| Sources of TCE contamination | Meeting participants noted that the sources of the TCE contamination had not yet been identified. | Ecology has published the remedial investigation report which identified the boundaries of the plume and the potential impacts. |
| Biomonitoring | The public asked that Boeing provide personal biomonitors to test individuals for exposure to chemicals of concern. | The Department of Health conducted a health consultation. |
| Drinking water | People were concerned about contamination entering their drinking water through aging pipes. | The Department of Health regularly monitors the public water system. |
| Vegetable gardens and fruit trees | Several residents expressed concern about possible effects on food they were growing in their yards and whether their fruit trees and vegetables could be contaminated by water with TCE. | Ecology studied garden sites in the area and found that fruits and vegetables growing in them do not pose a threat to people. |
| Health issues | Residents were concerned their allergies, breathing problems, cancer and other health concerns may be caused by the TCE. | TCE and VOC levels are currently low and not expected to cause health effects. Ecology cannot determine if people were exposed to these chemicals in the past. |
| Real estate | Home owners and realtors were concerned about impacts of the contamination on real estate values in Auburn and Algona. | Ecology recommended residents and potential residents of Algona consult with a real estate professional about real estate laws and property values. Contact the Algona Public Awareness Coalition (APAC) for more information. |
| Indoor air quality, especially for young children | Many residents asked to have air quality tested inside homes in Algona and in the Alpac Elementary School. | Boeing, under Ecology's supervision, conducted vapor intrusion testing in Algona homes nearest the plume. The Department of Health reviewed results from air sampling data. None of the data indicates human health risks from breathing air in these locations. |
| Sheens or discoloration in ditches | People were concerned that sheens or discoloration in ditches | Ecology tested surface water. TCE and its breakdown products are colorless and odorless at the |

| Concerns and Issues | Description | Action |
|---|---|---|
| | and puddles came from TCE contamination. | concentrations found in groundwater and surface water. The sheen of rainbow colored oil sometimes seen in ditches is likely from bacteria commonly found in wetlands. |

# Appendices

## Appendix A. Glossary

The following terms are used throughout the cleanup process:

**Agreed order**: A legally binding administrative order issued by us and agreed to by Boeing. An agreed order describes the site activities that must occur for us to agree not to take enforcement action for that phase of work.

**Bioremediation:** A process that uses bacteria to break down chemical contaminations.

**Cleanup action plan (CAP):** The third major step in the MTCA cleanup process; a description of the standards, methods, schedule, steps and monitoring to be undertaken during or after cleanup.

**Cleanup and monitoring:** The fourth major step in the MTCA cleanup process; the implementation and oversight of the CAP.

**Facility:** The Boeing Auburn Fabrication Facility, also known as Boeing property.

**Feasibility study (FS):** The second major step in the MTCA cleanup process; an evaluation of methods of cleanup.

**Interim cleanup:** Cleanup actions taken at any time during the cleanup process when there is a risk to human health or the environment. This is not the final cleanup.

**Model Toxics Control Act (MTCA):** Washington's pollution cleanup law for contaminated sites.

**Plume:** The area covered by the spread of contaminated groundwater.

**Resource Conservation and Recovery Act (RCRA):** The principal federal law in the United States governing the disposal of solid waste and hazardous waste. Congress enacted RCRA to address the increasing problems the nation faced from its growing volume of municipal and industrial waste

**Remedial investigation (RI):** The first of four major steps in the MTCA cleanup process; a detailed study of a site's contamination.

**Site:** The Boeing property, the plume and all affected areas.

**Trichloroethene (TCE):** A liquid degreaser used to clean grease and oil from metal objects; a volatile organic compound.

**Vapor intrusion:** Occurs when vapor forming chemicals (VOCs) migrate from a subsurface source (groundwater) into an overlying building through cracks or other openings in building foundations.

**Vinyl Chloride**: A breakdown product of TCE; a volatile organic compound.

**Volatile Organic Compound (VOC):** Compounds that easily evaporate from water into air at normal air temperatures. Examples of household products that contain these compounds include gasoline, dry cleaning fluid, solvents and paint thinners.

# Appendix B. Community outreach overview

DEPARTMENT OF ECOLOGY
State of Washington

# Boeing Auburn Fabrication Site Cleanup

## Community Outreach

Ecology is committed to listening to the community and community engagement is a key requirement of the State's Model Toxics Control Act's (MTCA) cleanup process. Public input directs us toward the issues that our communities feel are the most important.

Ecology strives to provide a variety of ways to learn about the project and meet project staff. We have listed just some of the community events we have participated in or hosted.

### 2017

- Remedial Investigation Public Hearing – April 25
- Remedial Investigation Open House – March 23
- Remedial Investigation Online Open House – March 8 through May 8
- Remedial Investigation Comment Period – March 8 through May 8
- Auburn Kids Day - June 23, 2017
- Auburn City Council Meeting - September 11
- Algona City Council Meeting - September 26
- Informational Displays, Algona City Hall - September
- Informational Displays, Auburn Annex - October

### 2016

- Auburn City Council Meeting – October 24
- Algona Days – July 16
- Open House – February 27
- Informational Displays at Algona-Pacific Public Library, April 27
- Informational Displays at Auburn Public Library, April 20

### 2015

- Auburn City Council Meeting – October 26
- Algona City Council Meeting – October 13, 27
- Algona Days – July 18

### 2014

- Online Open House – October 27 through November 28
- Walking Tour along Chicago Ave Ditch – August 5

November 2017

# Appendix C. Environmental Justice Screen Report

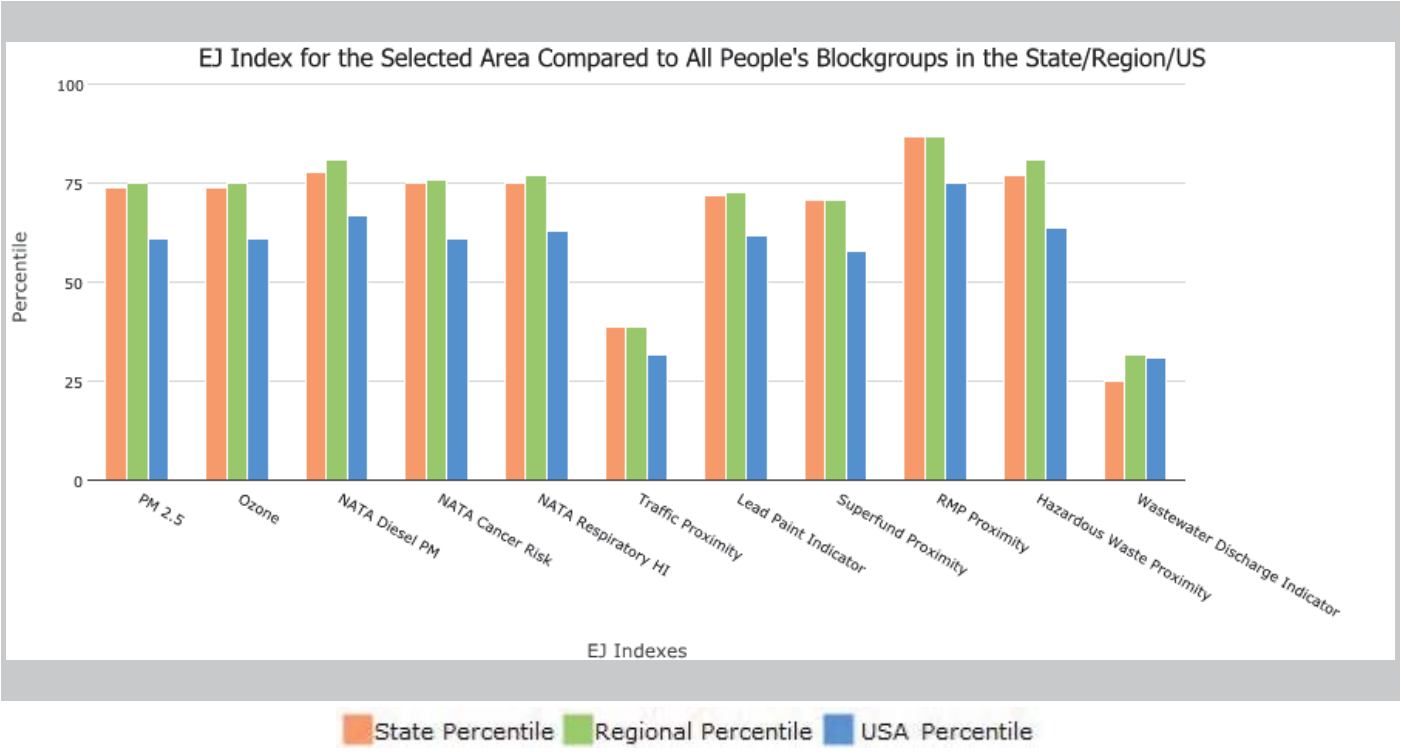
# EJSCREEN Report (Version 2017)

**the User Specified Area, WASHINGTON, EPA Region 10**

**Approximate Population: 10,873**

**Input Area (sq. miles): 10.91**

| Selected Variables | State Percentile | EPA Region Percentile | USA Percentile |
|---|---|---|---|
| **EJ Indexes** | | | |
| EJ Index for PM2.5 | 74 | 75 | 61 |
| EJ Index for Ozone | 74 | 75 | 61 |
| EJ Index for NATA* Diesel PM | 78 | 81 | 67 |
| EJ Index for NATA* Air Toxics Cancer Risk | 75 | 76 | 61 |
| EJ Index for NATA* Respiratory Hazard Index | 75 | 77 | 63 |
| EJ Index for Traffic Proximity and Volume | 39 | 39 | 32 |
| EJ Index for Lead Paint Indicator | 72 | 73 | 62 |
| EJ Index for Superfund Proximity | 71 | 71 | 58 |
| EJ Index for RMP Proximity | 87 | 87 | 75 |
| EJ Index for Hazardous Waste Proximity | 77 | 81 | 64 |
| EJ Index for Wastewater Discharge Indicator | 25 | 32 | 31 |



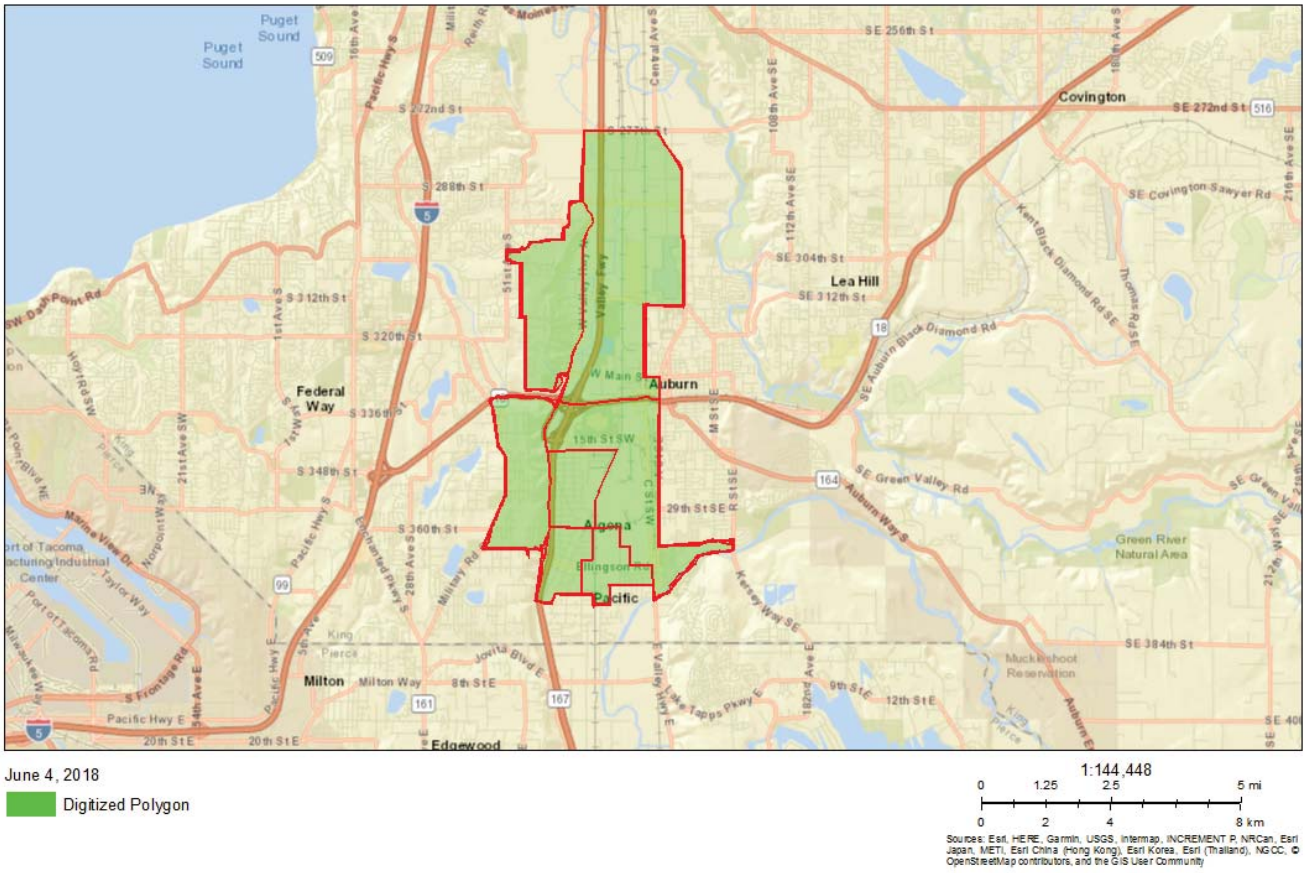

This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

# EJSCREEN Report (Version 2017)

**the User Specified Area, WASHINGTON, EPA Region 10**

**Approximate Population: 10,873**

**Input Area (sq. miles): 10.91**




| Sites reporting to EPA | |
|---|---|
| Superfund NPL | 0 |
| Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF) | 0 |

# EJSCREEN Report (Version 2017)

**the User Specified Area, WASHINGTON, EPA Region 10**

**Approximate Population: 10,873**

**Input Area (sq. miles): 10.91**

| Selected Variables | Value | State Avg. | %ile in State | EPA Region Avg. | %ile in EPA Region | USA Avg. | %ile in USA |
|---|---|---|---|---|---|---|---|
| **Environmental Indicators** | | | | | | | |
| Particulate Matter (PM 2.5 in µg/m$^3$) | 8.45 | 7.79 | 65 | 8.11 | 56 | 9.14 | 30 |
| Ozone (ppb) | 31.5 | 32.3 | 61 | 33.7 | 43 | 38.4 | 2 |
| NATA* Diesel PM (µg/m$^3$) | 1.7 | 1.39 | 73 | 1.06 | 80-90th | 0.938 | 80-90th |
| NATA* Cancer Risk (lifetime risk per million) | 46 | 40 | 70 | 39 | 70-80th | 40 | 70-80th |
| NATA* Respiratory Hazard Index | 3.7 | 2.8 | 76 | 2.8 | 70-80th | 1.8 | 95-100th |
| Traffic Proximity and Volume (daily traffic count/distance to road) | 600 | 440 | 81 | 380 | 83 | 590 | 80 |
| Lead Paint Indicator (% Pre-1960 Housing) | 0.18 | 0.24 | 57 | 0.23 | 57 | 0.29 | 48 |
| Superfund Proximity (site count/km distance) | 0.098 | 0.2 | 50 | 0.14 | 63 | 0.13 | 66 |
| RMP Proximity (facility count/km distance) | 1.4 | 0.61 | 87 | 0.62 | 87 | 0.73 | 84 |
| Hazardous Waste Proximity (facility count/km distance) | 0.093 | 0.073 | 79 | 0.058 | 84 | 0.093 | 71 |
| Wastewater Discharge Indicator (toxicity-weighted concentration/m distance) | 4.5E-05 | 0.06 | 66 | 0.039 | 60 | 30 | 53 |
| **Demographic Indicators** | | | | | | | |
| Demographic Index | 38% | 30% | 74 | 30% | 75 | 36% | 61 |
| Minority Population | 44% | 29% | 78 | 26% | 83 | 38% | 63 |
| Low Income Population | 33% | 30% | 61 | 33% | 54 | 34% | 52 |
| Linguistically Isolated Population | 6% | 4% | 77 | 3% | 80 | 5% | 75 |
| Population With Less Than High School Education | 16% | 10% | 82 | 10% | 81 | 13% | 68 |
| Population Under 5 years of age | 6% | 6% | 49 | 6% | 48 | 6% | 50 |
| Population over 64 years of age | 9% | 14% | 30 | 14% | 29 | 14% | 28 |

* The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: https://www.epa.gov/national-air-toxics-assessment.

For additional information, see: www.epa.gov/environmentaljustice

# EJSCREEN ACS Summary Report

Location: User-specified polygonal location
Ring (buffer): 0-mile radius
Description:

| Summary of ACS Estimates | 2011 - 2015 |
|---|---|
| Population | 10,873 |
| Population Density (per sq. mile) | 1,010 |
| Minority Population | 4,759 |
| % Minority | 44% |
| Households | 4,095 |
| Housing Units | 4,459 |
| Housing Units Built Before 1950 | 558 |
| Per Capita Income | 28,045 |
| Land Area (sq. miles) (Source: SF1) | 10.76 |
| % Land Area | 100% |
| Water Area (sq. miles) (Source: SF1) | 0.04 |
| % Water Area | 0% |

| | 2011 - 2015 ACS Estimates | Percent | MOE (±) |
|---|---|---|---|
| **Population by Race** | | | |
| Total | 10,873 | 100% | 593 |
| Population Reporting One Race | 9,831 | 90% | 1,585 |
| White | 7,911 | 73% | 559 |
| Black | 332 | 3% | 148 |
| American Indian | 317 | 3% | 325 |
| Asian | 796 | 7% | 205 |
| Pacific Islander | 231 | 2% | 128 |
| Some Other Race | 244 | 2% | 220 |
| Population Reporting Two or More Races | 1,043 | 10% | 234 |
| Total Hispanic Population | 2,139 | 20% | 567 |
| Total Non-Hispanic Population | 8,734 | | |
| White Alone | 6,115 | 56% | 342 |
| Black Alone | 326 | 3% | 148 |
| American Indian Alone | 291 | 3% | 325 |
| Non-Hispanic Asian Alone | 796 | 7% | 205 |
| Pacific Islander Alone | 231 | 2% | 128 |
| Other Race Alone | 0 | 0% | 12 |
| Two or More Races Alone | 976 | 9% | 234 |
| **Population by Sex** | | | |
| Male | 5,337 | 49% | 330 |
| Female | 5,536 | 51% | 339 |
| **Population by Age** | | | |
| Age 0-4 | 643 | 6% | 160 |
| Age 0-17 | 2,786 | 26% | 225 |
| Age 18+ | 8,088 | 74% | 278 |
| Age 65+ | 952 | 9% | 93 |

**Data Note:** Detail may not sum to totals due to rounding. Hispanic population can be of any race. N/A means not available.
**Source:** U.S. Census Bureau, American Community Survey (ACS) 2011 - 2015.

# EJSCREEN ACS Summary Report

Location: User-specified polygonal location
Ring (buffer): 0-mile radius
Description:

| | 2011 - 2015 ACS Estimates | Percent | MOE (±) |
|---|---|---|---|
| **Population 25+ by Educational Attainment** | | | |
| Total | 7,076 | 100% | 259 |
| Less than 9th Grade | 576 | 8% | 166 |
| 9th - 12th Grade, No Diploma | 558 | 8% | 70 |
| High School Graduate | 2,235 | 32% | 158 |
| Some College, No Degree | 2,688 | 38% | 173 |
| Associate Degree | 1,044 | 15% | 133 |
| Bachelor's Degree or more | 1,019 | 14% | 98 |
| **Population Age 5+ Years by Ability to Speak English** | | | |
| Total | 10,230 | 100% | 549 |
| Speak only English | 7,079 | 69% | 368 |
| Non-English at Home[1+2+3+4] | 3,151 | 31% | 402 |
| [1]Speak English "very well" | 1,844 | 18% | 298 |
| [2]Speak English "well" | 570 | 6% | 92 |
| [3]Speak English "not well" | 554 | 5% | 162 |
| [4]Speak English "not at all" | 183 | 2% | 71 |
| [3+4]Speak English "less than well" | 737 | 7% | 177 |
| [2+3+4]Speak English "less than very well" | 1,307 | 13% | 185 |
| **Linguistically Isolated Households*** | | | |
| Total | 246 | 100% | 64 |
| Speak Spanish | 133 | 54% | 61 |
| Speak Other Indo-European Languages | 45 | 18% | 28 |
| Speak Asian-Pacific Island Languages | 68 | 28% | 25 |
| Speak Other Languages | 0 | 0% | 12 |
| **Households by Household Income** | | | |
| Household Income Base | 4,095 | 100% | 144 |
| < $15,000 | 462 | 11% | 114 |
| $15,000 - $25,000 | 334 | 8% | 62 |
| $25,000 - $50,000 | 939 | 23% | 105 |
| $50,000 - $75,000 | 946 | 23% | 115 |
| $75,000 + | 1,413 | 35% | 110 |
| **Occupied Housing Units by Tenure** | | | |
| Total | 4,095 | 100% | 144 |
| Owner Occupied | 2,736 | 67% | 116 |
| Renter Occupied | 1,359 | 33% | 116 |
| **Employed Population Age 16+ Years** | | | |
| Total | 8,412 | 100% | 345 |
| In Labor Force | 5,622 | 67% | 290 |
| Civilian Unemployed in Labor Force | 485 | 6% | 79 |
| Not In Labor Force | 2,791 | 33% | 176 |

**Data Note:** Detail may not sum to totals due to rounding. Hispanic population can be of any race. N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2011 - 2015.

*Households in which no one 14 and over speaks English "very well" or speaks English only.

# EJSCREEN ACS Summary Report

Location: User-specified polygonal location
Ring (buffer): 0-mile radius
Description:

| | 2011 - 2015 ACS Estimates | Percent | MOE (±) |
|---|---|---|---|
| **Population by Language Spoken at Home*** | | | |
| Total (persons age 5 and above) | 10,230 | 100% | 549 |
| English | N/A | N/A | N/A |
| Spanish | N/A | N/A | N/A |
| French | N/A | N/A | N/A |
| French Creole | N/A | N/A | N/A |
| Italian | N/A | N/A | N/A |
| Portuguese | N/A | N/A | N/A |
| German | N/A | N/A | N/A |
| Yiddish | N/A | N/A | N/A |
| Other West Germanic | N/A | N/A | N/A |
| Scandinavian | N/A | N/A | N/A |
| Greek | N/A | N/A | N/A |
| Russian | N/A | N/A | N/A |
| Polish | N/A | N/A | N/A |
| Serbo-Croatian | N/A | N/A | N/A |
| Other Slavic | N/A | N/A | N/A |
| Armenian | N/A | N/A | N/A |
| Persian | N/A | N/A | N/A |
| Gujarathi | N/A | N/A | N/A |
| Hindi | N/A | N/A | N/A |
| Urdu | N/A | N/A | N/A |
| Other Indic | N/A | N/A | N/A |
| Other Indo-European | N/A | N/A | N/A |
| Chinese | N/A | N/A | N/A |
| Japanese | N/A | N/A | N/A |
| Korean | N/A | N/A | N/A |
| Mon-Khmer, Cambodian | N/A | N/A | N/A |
| Hmong | N/A | N/A | N/A |
| Thai | N/A | N/A | N/A |
| Laotian | N/A | N/A | N/A |
| Vietnamese | N/A | N/A | N/A |
| Other Asian | N/A | N/A | N/A |
| Tagalog | N/A | N/A | N/A |
| Other Pacific Island | N/A | N/A | N/A |
| Navajo | N/A | N/A | N/A |
| Other Native American | N/A | N/A | N/A |
| Hungarian | N/A | N/A | N/A |
| Arabic | N/A | N/A | N/A |
| Hebrew | N/A | N/A | N/A |
| African | N/A | N/A | N/A |
| Other and non-specified | N/A | N/A | N/A |
| Total Non-English | N/A | N/A | N/A |

**Data Note:** Detail may not sum to totals due to rounding. Hispanic population can be of any race. N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2011 - 2015.
*Population by Language Spoken at Home is available at the census tract summary level and up.