

Cowlitz County
Millennium Bulk Terminals – Longview Health Impact Assessment
Summary of 29 November 2018 Open House

PURPOSE

This open house provided interested community members the opportunity to learn about the health impact assessment (HIA) and served as a final event marking the closeout of the HIA process. Attendees were able to ask questions and interact with members of the HIA Steering Committee and the HIA team, including staff from the Cowlitz County Department of Building and Planning, Cowlitz County Health and Human Services Department, and the Washington State Department of Health.

PROJECT TEAM ATTENDANCE

- Nick Fazio, Associate Long Range Planner, Cowlitz County
- Elaine Placido, Director, Building & Planning Department, Cowlitz County
- Ron Melin, Deputy Director, Building & Planning Department, Cowlitz County
- Nicole McDermott, Facilitator/Public Involvement, BergerABAM
- Emma Johnson, Event Planner/Public Involvement, BergerABAM
- Earl Christian, Logistics Manager/Public Involvement, BergerABAM

PROJECT BACKGROUND

Millennium Bulk Terminals—Longview, LLC is proposing to construct and operate a coal export terminal on a 190-acre site in Cowlitz County, Washington, along the Columbia River. An HIA was prepared in conjunction with the proposed project. An HIA is a process that helps support the required review and analysis of potential health effects of a plan, project, or policy before it is built or implemented. The HIA prepared for the Millennium Bulk Terminals—Longview proposed export terminal focused on neighborhoods near the proposed terminal, as well as community facilities along the BNSF rail line in Cowlitz County.

EVENT OVERVIEW

The community open house, marking the end of the HIA process, was held in the Cowlitz County General Meeting Room on Thursday, 29 November 2018 from 5:00 to 7:00 p.m. An open house announcement was posted on the County's website as well as reported by a local newspaper (The Daily News). Approximately 35 community members attended, including members of the HIA Steering Committee. Attendees could view displays and ask questions about the project. Five stations with multiple display boards provided an overview of the Millennium Bulk Terminals Longview project, outlined the HIA process and goals, introduced committee members, identified key HIA findings and recommendations, and culminated in a comment station for attendees to submit written comments (see Figures 1 through 18).

COMMENTS

The comment station was set up to allow for community input in the open house, as well as to assist the County in evaluating the HIA process. Comment forms sought feedback from the community using the following four written prompts.

- *Do you feel an HIA was a good way to address your concerns? Would you recommend an HIA be used in the future for other projects/programs?* The majority of the respondents felt the HIA was a good tool and could be useful for future projects, but some concerns were expressed over the time/cost to produce the document, the viability of the recommendations, and how the HIA Steering Committee was facilitated. (Five comments received.)
- *Please provide comments on the HIA process and if you think it was successful in assessing potential health impacts. Was the Steering Committee effective? How could the process be improved in the future?* Respondents had mixed reviews of the HIA process, with some saying the process was well thought out and others expressing concerns that the scope of the HIA was limited in its analysis. Recommendations for improving the process included expanding analysis to issues outside the scope of the State Environmental Policy Act (SEPA) Final Environmental Impact Statement (FEIS) and producing recommendations that have more tangible solutions. (Seven comments received.)
- *Please provide comments on how the final HIA meets the goals established for the proposed project (see the HIA goals board for reference).* Respondents were happy with the HIA Steering Committee, but expressed some concerns that the proposed recommendations were not implementable. (Four comments received.)
- *The County would like your feedback on the HIA process to guide future projects. Please provide comments on the public comment opportunities during the HIA process. Were there sufficient opportunities to provide comments? Did you feel your comments were adequately addressed throughout the process?* In general, respondents felt that there were sufficient opportunities for public comment throughout the HIA process, but expressed various concerns over other aspects of the process. (Five comments received.)

One additional comment, not submitted on a comment card, was received by the County at the open house. Each comment card contained a space for the commenter to note whether they would like to receive follow up to their comments and indicate which agency they would like to hear from (County Department of Building and Planning, County Health and Human Services, Washington State Department of Health). No agency responses were requested on the comment cards.

The following written comments were received from the public during the open house, with one additional set of comments submitted to the County after the event.

Do you feel the HIA was a good way to address your concerns? Would you recommend an HIA be used in the future for other projects/programs?		
Comment No.	Comment	Response Requested (Agency)
1	I hope this terminal never gets built 16 mile & a quarter trains is going to bottleneck our industrial area. Then they are going to clean up the Radauick Dump at our expense & take to Silverlake Dump – just what we need – All for a turnaround for their trains. This belongs somewhere where there is no towns to tube lock with 16 trains, not Longview.	(no agency listed for response)
2	<p>This HIA is a community-led effort that evaluates effects the proposed terminal would have on human health and quality of life in adjacent communities. The SEPA EIS and HIA act as complementary documents; both look at similar impacts, but through different lenses.</p> <p>From my personal observations there were some very strong personalities on the committee that showed strong opposition to or minimized any information or findings that were not supportive of the coal project. As the process developed it became obvious that the HIA would not and did not provide expected solutions supporting the project so strong action was exercised to minimize or eliminate negatives toward the project.</p> <p>This attitude/approach was overly obvious in the comments and language expressed in the Minority Conclusion comments (pages 21, 22). It attacks and belittles the committee members that did not agree with them (the Minority) and this after they all agreed, at the start, that conclusions/decisions would be made by a majority vote! In my opinion these comments are totally unacceptable and disrespectful toward the Majority thinking committee members who expressed themselves like adults.</p> <p>After reading the solutions I am very disappointed. All I see are recommendations for actions that solve nothing but look marginal at best (more testing, keep informed, support efforts to etc.). Every action suggested is just that, a suggestion. I never see the words will do, is responsible for, must do, is liable for, is directed to. I realize the HIA has no legal power but with the wording used the complete report can be easily ignored as meaningless is solutions.</p> <p>Based on the amount of effort in the complete HIA process (based on sound data) I feel the HIA report should be considered in any future evaluations or decisions of the Millennium Project and should be used in considering and evaluating any future industrial projects proposed for the areas along the industrial way corridor between I-5 and Ocean Beach.</p>	(no agency listed for response)
3	Yes, the citizens committees have wonderful potential, but elected officials seem to feel they are not responsible to the people paying their “salaries.” They should be ashamed of themselves.	(no agency listed for response)
4	<ol style="list-style-type: none"> 1. Obviously this HIA document is a wonderful tool to address a project and its health impacts. 2. The issue is, for me, that very few projects would be able to financially support the enormous expense to the applicant and the county. 3. The applicant shouldn't be involved in the process other than to provide facts for the steering committee. This should eliminate the pressure to make a favorable recommendation. 	(no agency listed for response)
5	I would recommend HIAs for any future project that is a BIG impact on the community, more trains, more trucks, etc.	(no agency listed for response)

The County would like your feedback on the HIA process to guide future projects. Please provide comments on the public comment opportunities during the HIA process. Were there sufficient opportunities to provide comments? Did you feel your comments were adequately addressed throughout the process?		
Comment No.	Comment	Response Requested (Agency)
1	<p>Summary of Primary Health Impact Areas & Recommendations , p. 12 line 1</p> <p>The language approved by the HIA SC (at October meeting) read: "This project would cause changes in air quality and probably increased cancer risk."</p> <p>This was changed without discussion to read: "This project would cause changes in air quality and potentially increase cancer risk."</p> <p>This changes the meaning of the sentence and is a disservice to the spirit of transparency and to the audience for the HIA.</p>	(no agency listed for response)
2	<p>In general the process was good. The delays in proceeding should not have happened. As the County exhibited biased self-interest by inserting itself into litigation involving the project, it should not have held a leadership role in the HIA process. There was too much heavy-handed direction from county facilitators. If the county cannot be truly objective in future project assessments, they should allow the process to be facilitated by an objective third party with no interest in the outcome. One of the drafts was apparently written by MBT which was totally inappropriate.</p>	(no agency listed for response)
3	<p>The county wants my feedback? I'd love to give it. I simply don't think elected officials care. I could also like to include hired staff. I seriously question the planning department. And include them in my comments about truly listening to and following the best interest of the citizens of Cowlitz County.</p>	(no agency listed for response)
4	<p>The county steering committee provided ample time/dates to make comments. At least the comments were reviewed and the information may or may not be included in the HIA.</p> <p>I believe that the majority/minority conclusion was a great idea that was included within the guidelines. The addition of personal comments adds to the understanding of the public as to the steering committee's perspective on the HIA document. The conclusion statements should be limited to just why should or should not the coal terminal be built. Unfortunately, the minority opinion goes way too far in restating the proposal, attacks on other steering committee members being biased, etc. should not have been allowed. The minority conclusions should have been as short and concise as the majority conclusion.</p> <p>Frankly, the reasons for allowing a coal terminal in Longview has been lost in this way too long statement. This document will be used by other researchers for other cities/counties. Cowlitz County should not be placing statements that show "infighting" within the steering committee. Let those prejudice statements be included in the personal comments in appendix A.</p>	(no agency listed for response)
5	<p>Yes on public comments. I believe the complete HIA report should be considered as a leading guideline by present and future local administrators and politicians when considering any future development of lands in Cowlitz County and the towns of Castle Rock, Toutle, Longview, Kelso, Kalama, and Woodland.</p> <p>We need to focus on diversity of development and development that will enhance or sustain the areas they move into in terms of health and quality of place.</p>	(no agency listed for response)

Please provide comments on how the final HIA meets the goals established for the proposed project (see the HIA goals board for reference).		
Comment No.	Comment	Response Requested (Agency)
1	This project is a good move. We need the jobs. A lot of work went into this project. This project will not be built for another ten/15 yrs. With a lot of groups/people are against this project. This is a mill town and that's what R.A. Long wanted. I have no specific comments against this project. Thanks for the hard work on this project. <i>(The commenter indicated this is a general comment and not specific to the prompt on the comment card).</i>	(no agency listed for response)
2	The committee did a brilliant job. Unfortunately, all has fallen on deaf ears. Citizen's committees are not valued. Our tax money is calculated and there is no accountability how it is spent. Personally, I am outraged.	(no agency listed for response)
3	I'm glad that this project has concluded. It may not be perfect but it is good. I appreciate those on staff who worked very hard to put this together. I hope that it will be a useful tool and example for future projects.	(no agency listed for response)
4	The goals were set early on and I believe those goals were attained in understanding and acknowledgment only. Solutions were not "solutions" to any health or welfare issues.	(no agency listed for response)
Please provide comments on the HIA process and if you think it was successful in assessing potential health impacts. Was the Steering Committee effective? How could the process be improved in the future?		
Comment No.	Comment	Response Requested (Agency)
1	It appears that the steering committee was well represented by industry, religious and civic minded citizens as well as health professionals. This gives me confidence in the report. It also appears that the consensus of the steering committee that the health impact to the community would be detrimental which outweighs any benefits in my opinion. Thank you for the open house and opportunity to voice my opinion. No coal terminal and definitely no coal trains please.	(no agency listed for response)
2	I think it was successful in bringing as much information as possible to the HIA. I do not believe that the referenced that were used should be limited to those that could or could not be survive a legal challenge. It's up to the committee members to decide if a document or portions of a document is credible. As an example "The Oakland Coal Study." Those members should have their point of view respected as much as I would like to see our HIA respected. I personally have used the "Oakland Coal Study" in many comments for various projects.	(no agency listed for response)
3	Thank you for the opportunity to comment. The HIA process was successful and produced very good information that I hope will be used to inform the residents of Cowlitz County and Southwest Washington of the necessary factors needed to make decisions that benefit our communities and the wider global community. Bottom line – the health impacts of this proposed project are mostly negative and are not environmentally or economically mitigatable. This is not what good neighbors do for each other. Climate change is the issue.	(no agency listed for response)

Comments on the HIA process (continued)		
Comment No.	Comment	Response Requested (Agency)
4	The steering committee was not allowed to be effective. There were very smart people on the HIA committee. One person summed it up “this is saying the county doesn’t care about its citizens.” How sad that is. Wake up, commissioners – wake up planning department. You are supposed to see rules are followed, not advance your own agenda.	(no agency listed for response)
5	This HIA report only is concerned about revenue (which is important) but it literally unprofessionally demeans the majority of the steering committee. The studies done related to the health and other aspects of MBTL that are negative to the global and local environment are not seriously considered the clear and present dangers. Money will not win over natural caused disease, fires, earthquakes, and flooding that are already occurring now – coal is the worst polluter.	(no agency listed for response)
6	The process was limited by not allowing analysis of issues beyond what was provided in the FEIS. The issue of coal dust was not explored to the extent requested. Economic impacts were glossed over – there was no analysis of loss of property values, just an assumption there would be an increase in tax valuation. There was no economic evaluation of impacts to existing industries and businesses whose property accesses would have been impacted by sixteen unit trains a day. If you’re going to make an issue of economic value – then look at all the impacts. There was no evaluation of additional ship traffic to current shipping and fishing uses of the river. The HIA makes the wrong statements about relative proximity of schools to exposures to coal dust and DPM. Woodland Schos, Carrolls Elementary, Kalama Schs, and St Helens Elementary are all in close enough proximity to be affected by coal dust and DPM. When looking at DPM exposure the numbers of people working or attending schools in impacted areas needs to be considered, not just residences. <i>(This comment included five attachments. See Attachment A.)</i>	(no agency listed for response)
7	I believe the process was well thought out and all parties cooperated to allow the committee to progress. Ever so slowly. I question the process used to pick committee members. There was a fair representation of tax paying citizens, but some had prior very strong opinions prior to the choosing! Maybe somebody smarter than me knows a better way? Assessing potential health impacts – yes. Steering committee effective – in what? Solutions – No. All were suggestions of should do’s, support, consider, think about, with no will do, must, liable for etc. Even the solutions are bandaids and do not resolve a single health or welfare issue!	(no agency listed for response)

Additional comment not submitted on comment card		
Comment No.	Comment	Response Requested (Agency)
1	<p>I am John Steppert, living in Longview. I want to thank the steering committee and staff for drafting and crafting an excellent Health Impact Assessment final report. Kudos to you all!</p> <p>-Why is the applicant not required to have a retrenchment plan? Without one, this potentially puts a big liability on the community.</p> <p>-Aspiration goal (p.16): “Cowlitz County aspires to establish a low carbon economy and footprint to minimize our contribution to climate change.” (What agency/dept. is going to take the lead to insure this happens?)</p> <p>I am deeply troubled by the accusatory, blaming, disrespectful tone and tenor that is reflected in the minority report of this document. The minority report is very critical and condemning of the majority report members. It makes unfair assumptions about their intentions and goals, and questions their commitment to an objective, scientific, fair, and just approach to facts and process.</p> <p>This minority report does not capture and convey a spirit of good will and partnership that have been the basic core values of this steering committee. Furthermore, the accusatory, blaming, shaming approach is certainly not in keeping with a public document of this scope and magnitude. I wish the minority members would have held themselves to a higher, more respectful position in documenting their disappointments and disagreements. I would have been more in keeping with the collaboration and cooperation that has gone into crafting and drafting this excellent report. Thanks!</p>	(no agency listed for response)



Timeline of Significant Dates

Applicant: Millennium Bulk Terminals—Longview, LLC
CWA: Clean Water Act
Ecology: Washington State Department of Ecology
EIS: Environmental Impact Statement
JARPA: Joint Aquatic Resources Permit Application
NEPA: National Environmental Policy Act
SEPA: State Environmental Policy Act
USACE: U.S. Army Corps of Engineers

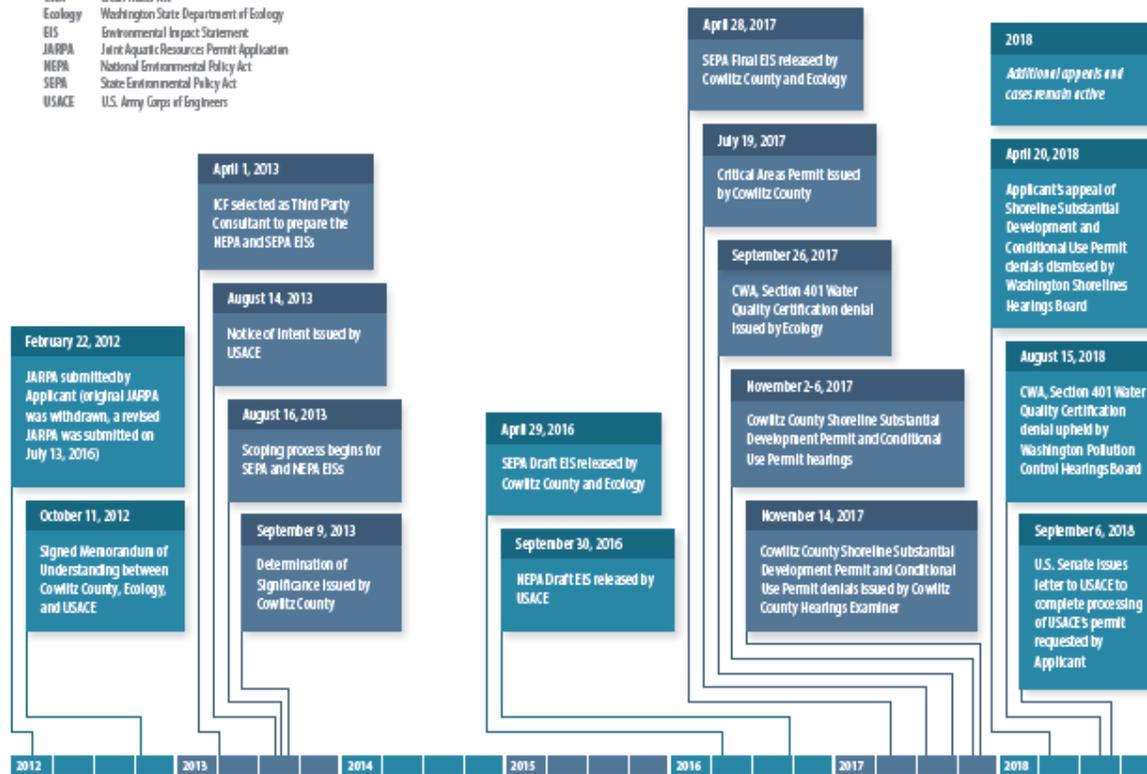


Figure 1. Poster Board – Timeline of Significant Dates

Project Description

What does Millennium Bulk Terminals—Longview, LLC (Applicant) propose?

The Applicant proposes to construct and operate an export shipping terminal for receiving, stockpiling, and transferring coal to cargo ships.

- Project will cover approximately 190 acres of a 540-acre site
- Final build-out capacity is 44 million metric tons of coal export per year
- Includes coal handling and storage area, 2 new docks, rail loop
- New rail traffic of 16 coal trains per day (8 loaded and 8 empty)
- New vessel traffic of 840 vessels per year (1,680 one-way vessel transits per year)

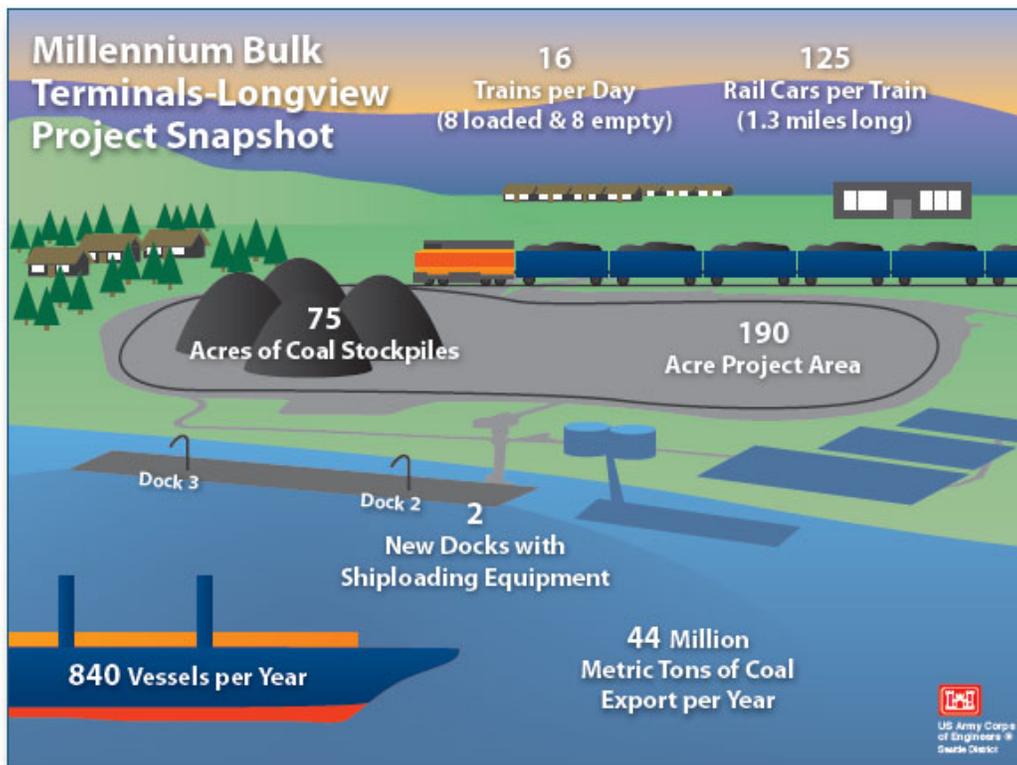


Figure 2. Poster Board – Project Description

Layout of the Proposed Terminal

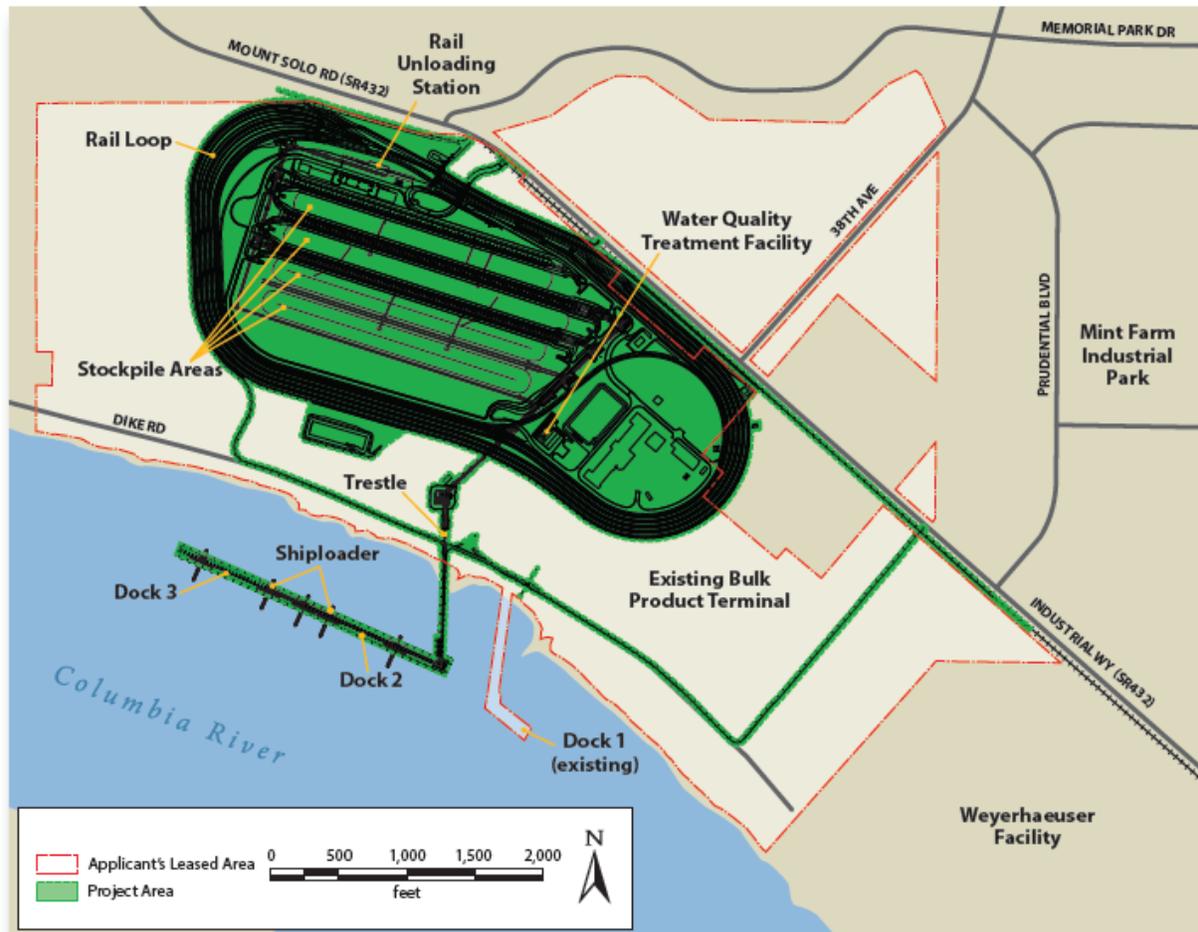


Figure 3. Poster Board – Layout of the Proposed Terminal

Health Impact Assessment Process

How does the Health Impact Assessment process work?

The HIA process consists of six steps that are used to look at the potential and sometimes unintended effects of the proposed terminal on the health of the immediate community.



Figure 4. Poster Board – Health Impact Assessment Process

Health Impact Assessment Goals

What are the goals for the Health Impact Assessment?

Goals of the HIA were established by the HIA Team and the Steering Committee. The HIA Team includes representatives from:

- Cowlitz County Department of Building and Planning
- Cowlitz County Health and Human Services Department
- Washington State Department of Health

Goals of the HIA include:

1. Providing information to decision makers about the relative health and health equity impacts of the proposed terminal.
2. Providing information about the relative health and health equity impacts on the residents of Cowlitz County.
3. Increasing understanding about the connections between major development projects and health and health equity.
4. Conducting an HIA that conforms to the “Minimum Elements and Practice Standards for Health Impact Assessment.”



Figure 5. Poster Board – Health Impact Assessment Goals

Steering Committee

Who is the Health Impact Assessment Steering Committee?

The following organizations were represented by the HIA Steering Committee:

- Local residents
- City of Longview
- Cowlitz 2 Fire & Rescue
- Cowlitz Economic Development Council
- Cowlitz Indian Tribe
- Faith Community
- Family Health Center
- Highlands Neighborhood
- International Longshore and Warehouse Union, Local 21
- Longview Commercial Fishing
- Lower Columbia College
- The Health Care Foundation
- Washington State University Extension Longview



Figure 6. Poster Board – Steering Committee

Fifteen Steering Committee Questions

The 15 primary questions developed by the Steering Committee to help guide the health impact analysis are as follows:

1. What effects will coal dust, diesel exhaust from trains, ship pollutants, and emissions from vehicles due to increased congestion have on the health of Longview residents and sensitive populations (such as asthmatics, the elderly, those who are pregnant, smokers, those with respiratory conditions, and youth)?
2. What are the short- and long-term effects of diesel exhaust and coal dust exposure?
3. What neighborhoods and communities will be at the greatest risk of exposure to air pollution based on proximity, prevailing winds, and other environmental factors?
4. How will the project affect the number and types of jobs in Longview in the long term and how does that affect the health of those employed and the community as a whole? How does that compare to alternative site uses for the project site?
5. How will the other aspects of the local economy be affected? Will the impact on tourism, the service economy, and the river economy increase prosperity?
6. How will this affect local taxes and will that affect health?
7. What economic, social, or environmental accountability does the Applicant have to the community if they close or leave the community? Does that accountability remain if there is a bankruptcy?

Figure 7. Poster Board – Steering Committee Questions (1 of 2)

Fifteen Steering Committee Questions (cont'd)

8. What are the potential effects of climate change on Cowlitz County residents, their health, and the linkage to increased carbon dioxide (CO₂) from this project?
9. What will be the health effects on the community in regards to emergency response times, commute times, and traffic congestion?
10. What will be the effect on recreational and active transportation activities in Cowlitz County, such as walking, biking, and taking the bus?
11. What will be the health effects of noise and vibration?
12. Will fish in the Columbia River be contaminated, and, if so, what will be the health impacts on people who eat those fish?
13. What are the health impacts of topper agents on workers or residents?
14. Will there be health effects related to changes in water quality?
15. Will there be any health effects on residents from consuming food grown on local farmland or in residential gardens?



Figure 8. Poster Board – Steering Committee Questions (2 of 2)

Air Quality

Key Findings and Recommendations



Proposed project-related trains would be a source of air pollutant emissions.

Key Findings:

- Air quality would be worse around the proposed terminal and along the rail lines leading to the terminal. There would likely be an increase in some types of diseases related to diesel emissions.
- People most likely to experience negative health effects are infants, children, pregnant women, stroke survivors, and those who already have health conditions.

Recommendations:

- The County and local industries should partner with BNSF to support Cowlitz County as a site for locomotive diesel emission reduction strategies.
- The County should independently confirm the Applicant is mitigating fugitive dust from coal stockpiles as much as possible.
- The Southwest Clean Air Agency should increase the number, type, and locations of air quality monitoring stations, and should review air quality data and provide access to results for the life of the project.

Figure 9. Poster Board – Key Findings and Recommendations: Air Quality

Economic Health and Prosperity

Key Findings and Recommendations



Key Findings:

- The proposed terminal would create approximately 1,350 temporary construction jobs and 135 permanent jobs.
- Assessing the effect on other industries or on the overall prosperity of Cowlitz County's economy would require a more detailed economic analysis.

Recommendations:

- Permitting agencies should encourage community development agreements between applicants and affected parties that include investment in infrastructure, workforce development, and community education.
- Local governments and service providers should review and coordinate land-use policies related to housing, infrastructure, and school development in relation to industrial development zones.
- Local governments and economic development authorities should recruit and support employers that use environmentally friendly technology, energy-efficient practices, and sustainable use of resources.

Figure 10. Poster Board – Key Findings and Recommendations: Economic Health and Prosperity

Taxes and Municipal Budgets

Key Findings and Recommendations



Key Findings:

- The Applicant projects that construction of the proposed terminal would generate \$5.9 million in Cowlitz County tax revenue and terminal operations are expected to increase County tax revenue by \$1.65 million per year.

Recommendations:

- Local governments should prioritize health funding and program support and development.
- The State of Washington should consider legislation and economic policy tools that shift the economic burden of development onto developers and industry, while allowing revenue to stay under local control, where community health programs provide the highest and most direct benefit.
- Health indicators should be analyzed and reported annually and the County Health Officer may recommend strategies for improving the health of Cowlitz County residents based off this analysis.
- Local governments should hold new local industry accountable for the true cost to the community of development.

Figure 11. Poster Board – Key Findings and Recommendations: Taxes and Municipal Budgets

Contingency Planning for Closures and Economic Resiliency

Key Findings and Recommendations



The proposed terminal would be located along the Columbia River near Longview, Washington.

Key Findings:

- The long-term outlook for the coal market is difficult to predict, but data shows that it is subject to ups and downs. A Retrenchment Plan is a strategy for adjusting the size or scope of a company (e.g., downsizing) in order to stay in business. The Applicant is not required to have a Retrenchment Plan in place.
- The community can protect itself from the impacts of a closure through strategies such as investing in different types of industry and working with industries to create closure plans ahead of time.

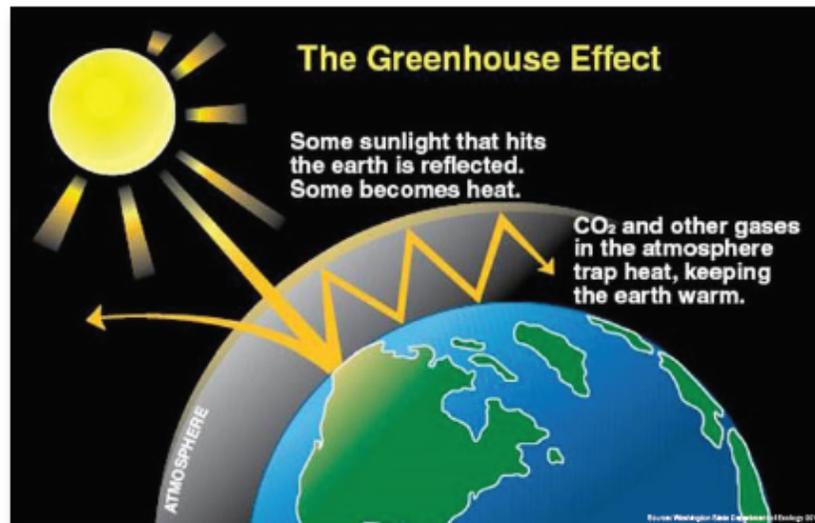
Recommendation:

- Local governments should work with major commercial and industrial projects to establish plans related to retrenchment, post-closure site management, business retention, and cleanup planning in the event a major industrial project vacates.

Figure 12. Poster Board – Key Findings and Recommendations: Contingency Planning for Closures and Economic Resiliency

Climate Change and Community Health

Key Findings and Recommendations



Key Findings:

- Rising levels of greenhouse gases are driving changes in the climate system. Higher temperatures, declines in snowpack, increasing flood risk, sea level rise, more acres burned from wildfires, and other effects of climate change will affect Washington residents, endangering health and wellbeing.
- Harms to health from the effects of climate change will grow in the coming decades, but collective global actions to rapidly and dramatically reduce greenhouse gases, along with other prevention and adaptation measures, can prevent many of these impacts.

Recommendations:

- Local governments should work with the Washington State Department of Health to conduct Climate Change Vulnerability Assessments and develop subsequent Climate Change Resilience and Adaptation Plans.
- Local governments should promote development that uses best available science, health-protective standards, protections for workers and residents, environmentally friendly technology, energy-efficient practices, and sustainable use of resources.

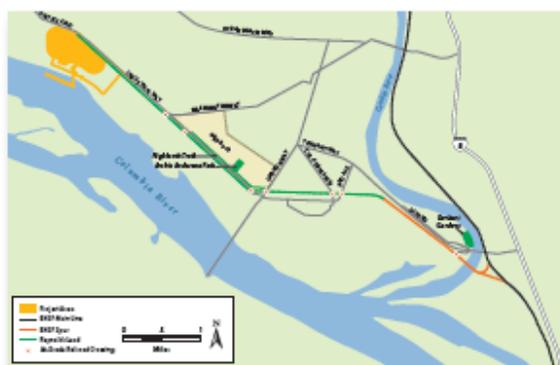
Figure 13. Poster Board – Key Findings and Recommendations: Climate Change and Community Health

Traffic Delays and Noise and Vibration

Key Findings and Recommendations

Key Findings:

- A train operating for the proposed terminal would take between 8 and 10 minutes to pass at local crossings along the Reynolds Lead with current track infrastructure, and between 4 and 6 minutes with planned track infrastructure improvements.
- At full operation, an average of 8 loaded coal trains and 8 empty coal trains per day would travel to and from the proposed terminal.
- Neighborhoods that would be most affected by the proposed terminal are already experiencing higher than average rates of noise and vibration.



Grade crossings that could experience vehicle delay impacts.

Recommendations:

- Employers and local governments should review proposals for adding emergency services on the industrial waterfront side of the railroad tracks. Local planning efforts should account for the “Daytime Population” or “Working Population” of the industrial area when siting new services and assessing needs.
- Project operators should complete acoustical studies to identify noise impacts and mitigation at sensitive receptors within 1 mile of the proposed terminal site, and within 1 mile of the Reynolds lead and the BNSF spur.
- The Applicant and local governments should support establishing quiet zones at Cowlitz County crossings that are affected by project-related train traffic.
- If the Federal Railroad Administration does not approve the quiet zones, the Applicant should establish a plan and funding source to reduce the impact of project-related noise on sensitive receptors.
- Local governments responding to future development proposals should include requirements that minimize additional effects of noise on people living near the industrial zones.

Figure 14. Poster Board – Key Findings and Recommendations: Traffic Delays and Noise and Vibration

Recreation and Fisheries

Key Findings and Recommendations



The Columbia River is home to endangered species and species of concern, such as salmon.

Key Findings:

- The proposed terminal and its operations are not likely to significantly increase polyaromatic hydrocarbon (PAH) levels in fish in the Columbia River to levels of public health concern as fish partially metabolize and process these contaminants over time.
- The HIA did not identify a hazard to bystanders from chemical agents, “toppers,” or surfactants applied to the top of full coal trains to reduce coal dust during the loading and transport of coal; however, the full ingredient lists of the toppers are not available from manufacturers.

Recommendations:

- Local governments should have a written plan to work with partner agencies and stakeholders to expand and sustain an aquatic health monitoring effort.
- Local governments should consider effects of future projects on fishery resources and Endangered Species Act-listed stocks.

Figure 15. Poster Board – Key Findings and Recommendations: Recreation and Fisheries

Drinking Water Quality

Key Findings and Recommendations

Key Findings:

- Potential threats to drinking water quality can be avoided, minimized, and/or mitigated by complying with water quality requirements.
- The denial of the Clean Water Act, Section 401 Water Quality Certification indicates the information in the permit application was not sufficient to decide whether the proposed terminal meets permitting standards and requirements.
- Damage to project area wells from an earthquake is unlikely, and any damage that does occur can be handled by evaluating, repairing, and/or decommissioning well casings as needed.



The Mint Farm Regional Water Treatment Plant draws water from an aquifer in the area.

Recommendations:

- Local governments should have a written plan to work with partner agencies and stakeholders to expand and sustain an aquatic health monitoring effort.
- Industrial applicants should be expected to maintain compliance with the Longview City Council's Water Supply Protection Ordinance, passed in 2012.
- The Applicant should maintain wells in the project area by keeping potential sources of contamination at least 100 feet from well openings and by maintaining the structure of wells to prevent the wells from being a source of contamination of the deep aquifer. The Applicant should have wells inspected by a licensed well driller on an annual basis and report the results to the public.
- All industrial users should be expected to decommission any well that is unusable, abandoned, damaged, the use of which has been permanently discontinued, or which is in such repair that its continued use is impractical or is an environmental, safety, or public health hazard per Washington Administrative Code 173-160.
- Local governments should work with the Office of Drinking Water Southwest Regional Office to evaluate their current monitoring protocol and modify it as needed.

Figure 16. Poster Board – Key Findings and Recommendations: Drinking Water Quality

Local Food Crops

Key Findings and Recommendations



Key Findings:

- The amount of coal dust that lands on a surface is called coal dust deposition. For the proposed terminal, there is concern of coal dust landing on the soil and plants in backyard vegetable gardens.
- All residential and school properties along the portion of BNSF main line that would transport coal are located far enough from the rail line that they would not experience a noticeable level of coal dust deposited outside.
- Any coal dust that is deposited onto soil on residential and school properties along the rail line would be at levels that are lower than those known to harm human health.

Recommendation:

- The Applicant should implement a program, similar to one in Surrey, British Columbia, to investigate and resolve community complaints about nuisance coal dust.

Figure 17. Poster Board – Key Findings and Recommendations: Local Food Crops

Baseline Health and Health Equity

Key Findings and Recommendations



Key Findings:

- The neighborhoods that would be most affected have characteristics that put them at a disadvantage with respect to health, including lower educational attainment, more disability, more single-parent households, and more people living below the poverty line.
- These characteristics contribute to greater rates of disease, hospitalizations, and death from many conditions including conditions that are associated with changes to air quality, noise, and possibly other community characteristics that would be influenced by the proposed terminal.

Recommendations:

- Cowlitz County should update the 2014 Community Health Assessment and 2015 Community Health Improvement Plan in collaboration with stakeholders.
- Cowlitz County should implement a comprehensive monitoring and evaluation plan, conforming to the final step of Health Impact Assessment Standards.
- Local governments should adopt land-use controls to avoid siting new facilities that require transport, refinement, and/or storage of large quantities of substances that pose a risk to human health near residential areas.
- Local governments should incentivize expansion of health programs that address community-wide needs and help meet local and state requirements.

Figure 18. Poster Board – Key Findings and Recommendations: Baseline Health and Health Equity

Cowlitz County
Millennium Bulk Terminals – Longview Health Impact Assessment
29 November 2018 Open House

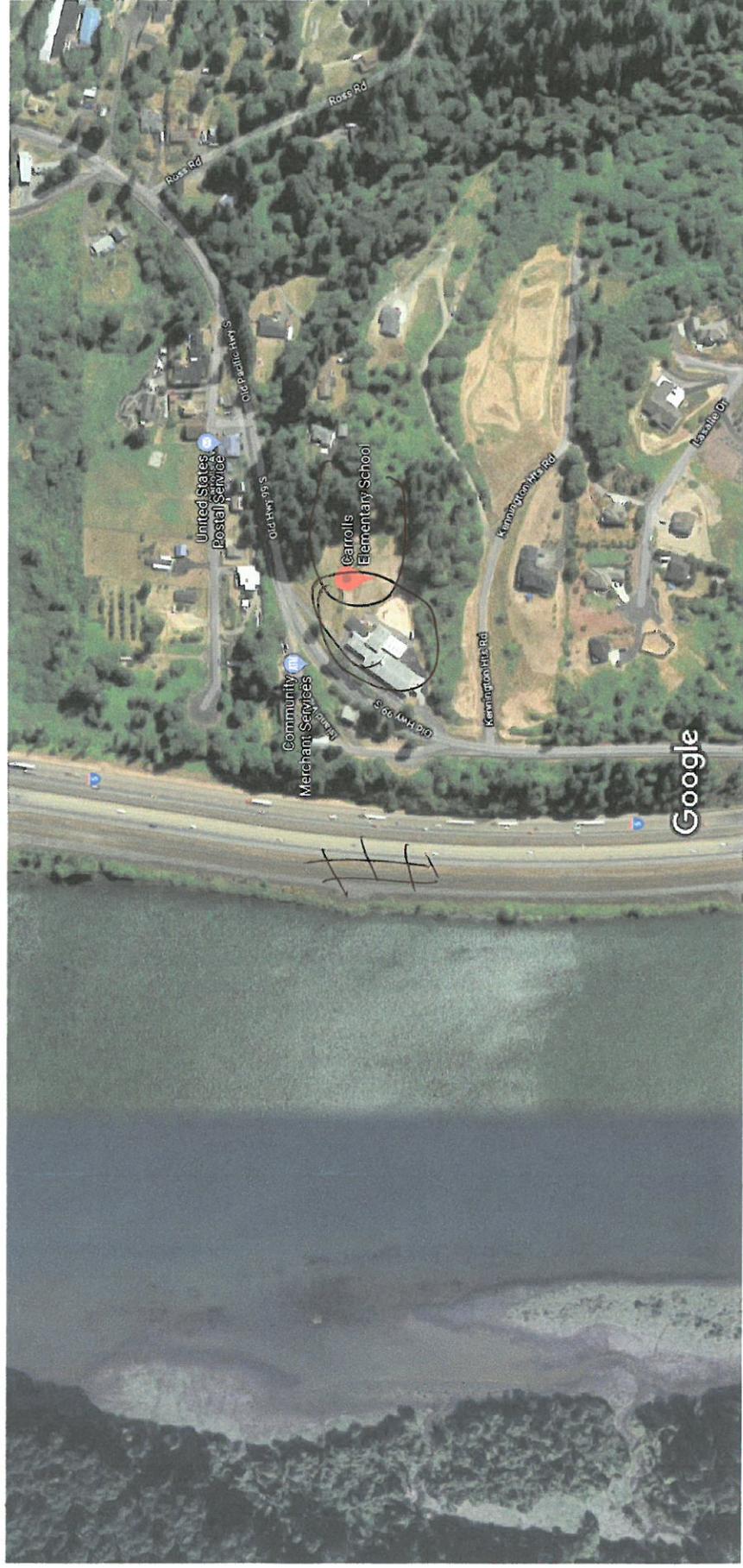
Attachment A
Maps Provided with Comment



Map data ©2018 Google 200 ft

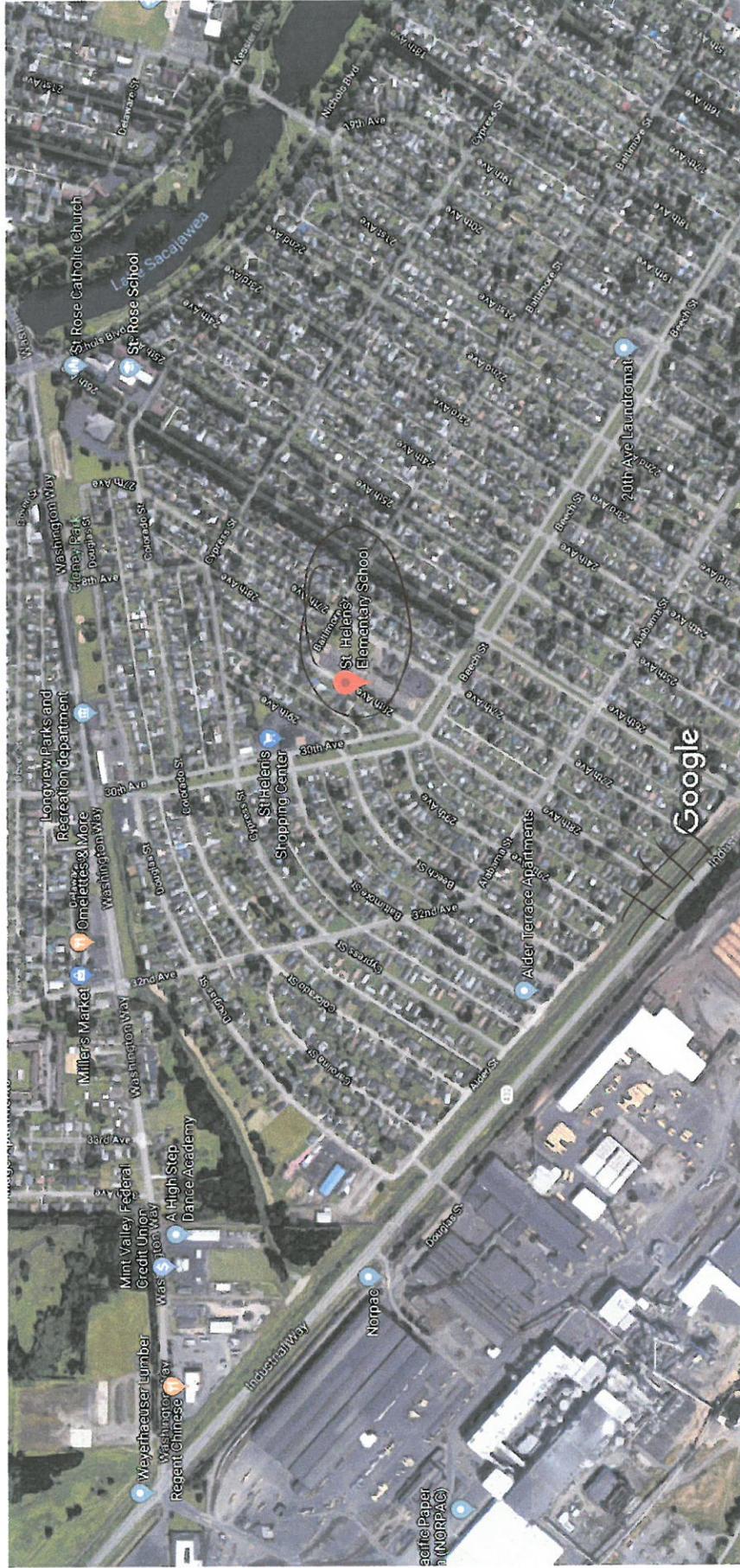
Woodland Elementary

Google Maps Carrolls Elementary School



Carrolls Elementary

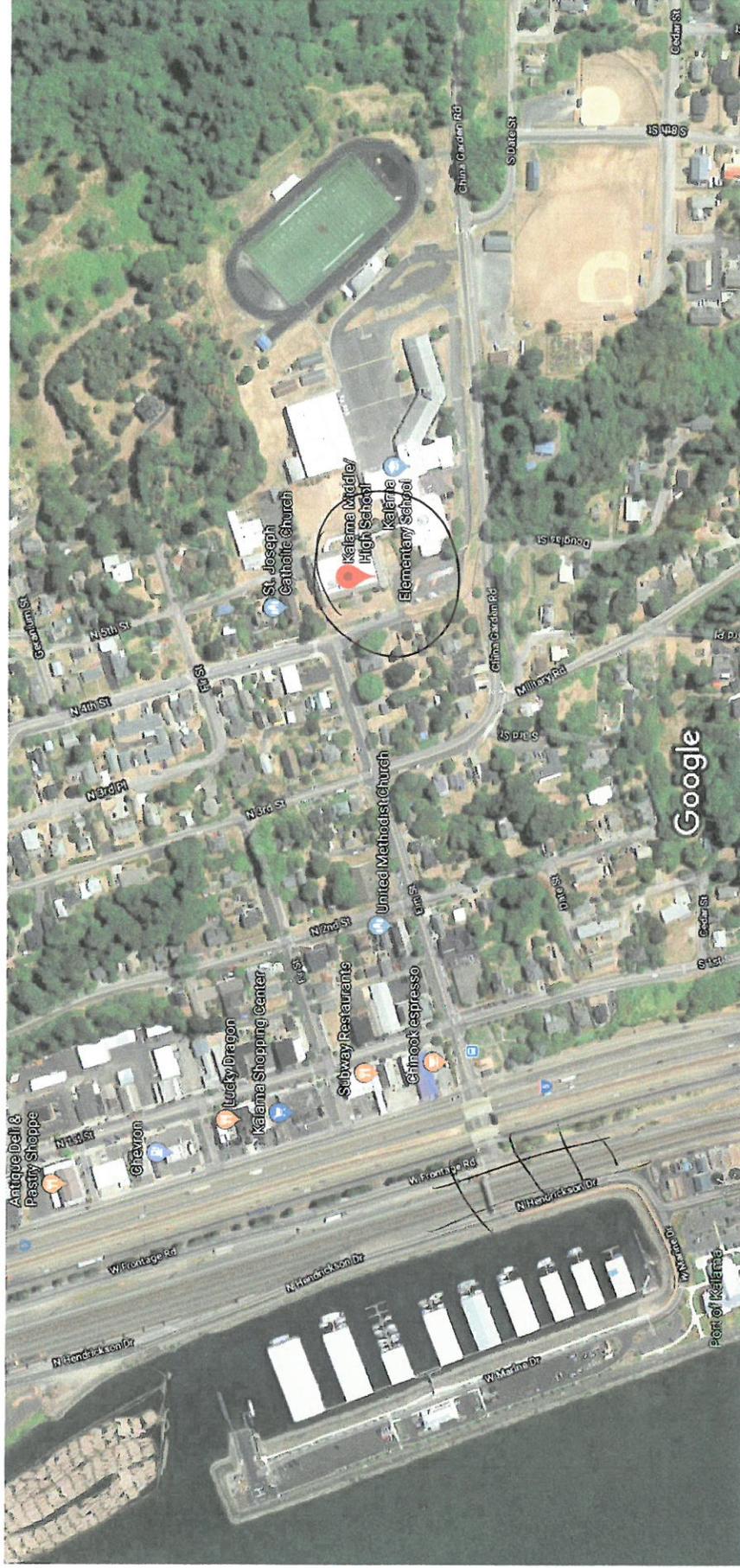
Google Maps St. Helens Elementary School



Imagery ©2018 Google, Map data ©2018 Google 500 ft

St. Helens Elementary

Google Maps Kalama Middle/High School



Imagery ©2018 Google, Map data ©2018 Google 200 ft

Kalama Sehs

Figure C-2. Estimated Population within Cancer Contours from Diesel Particulate Matter Emissions in Cowlitz County^[1, 5]

