



Underground Storage Tank Revolving Loan and Grant Program

Washington State Pollution Liability Insurance Agency

**Report to the Legislature
2017–2019 Biennium**

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Washington State Pollution Liability Insurance Agency
Underground Storage Tank Revolving Loan and Grant Program
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Underground Storage Tank Loan and Grant Program

The Washington State Legislature established the Underground Storage Tank Revolving Loan and Grant Program (Loan and Grant Program) to address Washington's aging underground storage tank (UST) infrastructure, the existing barriers to cleaning up historical contamination from leaking UST sites, and the evolving transportation fuel market. The Loan and Grant Program provides UST owners and operators access to capital to:

- Replace or upgrade aging fuel systems to prevent leaks and dispense modern fuels.
- Clean up historical or ongoing contamination caused by UST releases.
- Transform old stations into the gas stations of the future, adapted to the changing transportation fuel market, including the installation of alternative fueling infrastructure such as electric vehicle (EV) charging stations.

The Pollution Liability Insurance Agency (PLIA) partners with the Washington State Department of Health (DOH) for administration of the financial lending portion of the program. The DOH has existing underwriting capabilities and experience administering loan and grant programs, while PLIA has the technical expertise and project management experience to efficiently and effectively guide cleanups and infrastructure upgrades to prevent future contamination.

By September 1 of each even-numbered year, the agency must provide the Office of Financial Management and the appropriate legislative committees a report on the agency's activities supported by expenditures from the Pollution Liability Insurance Agency Underground Storage Tank Revolving Account ([RCW 70A.345.090](#)). The report must at a minimum include:

- (1) The amount of money the Legislature appropriated from the Pollution Liability Insurance Agency Underground Storage Tank Revolving Account under [RCW 70A.345.080](#) during the last biennium;
- (2) For the previous biennium, the total number of loans and grants, the amounts loaned or granted, sites cleaned up, petroleum underground storage tank systems upgraded, replaced, or permanently closed, and jobs preserved;
- (3) For each loan and grant awarded during the previous biennium, the name of the recipient, the location of the underground storage tank facility, a description of the project and its status, the amount loaned, and the amount repaid;
- (4) For each underground storage tank facility where PLIA conducted remedial actions under [RCW 70A.345.060](#) during the previous biennium, the name and location of the site, the amount of money used to conduct the remedial actions, the status of remedial actions, whether liens were filed against the underground storage tank facility under [RCW 70A.345.070](#), and the amount of money recovered; and



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(5) The operating costs of PLIA and DOH to carry out the purposes of this chapter during the last biennium.

This report focuses primarily on program activities during the 2017–2019 Biennium. This includes the Capital Financial Assistance Grant Pilot Program (Pilot Program) authorized by the 2015 Legislature and the initial phases of the UST Loan and Grant Program, which was authorized by the 2016 Legislature and took effect on July 1, 2016.

Appendix A includes background information on the current state and impacts of Washington’s aging storage tank infrastructure and historical petroleum contamination across the state.

Appendix B provides information on the Pilot Program projects.

Appendix C presents summaries of each of the projects accepted into the UST Loan and Grant Program for award years 2017 through 2019.

Appendix D lists the agency’s staff.

Appropriation

The 2015 Legislature appropriated \$1,800,000 for the Pilot Program, directing PLIA to conduct a pilot demonstration at three study sites with aging tanks, contamination to soil and/or groundwater, and serious financial hardship.

Based on the success of the Pilot Program, the 2016 Legislature appropriated \$10,000,000 for the establishment and operation of the UST Loan and Grant Program in Fiscal Year 2017.

- At the time of the initial fund transfer on July 1, 2016, \$2,500,840 was unobligated and available for transfer to the Pollution Liability Insurance Agency Underground Storage Tank Revolving Account ([RCW 70A.345.020](#)) for the startup activities of the program.
- For the 2015-2017 Biennium, PLIA transferred \$10,000,000. PLIA spent \$378,470 on startup costs of which 80%, or \$203,708, paid for staff salaries and benefits.
- During the 2017-2019 Biennium, PLIA transferred \$19,385,602. PLIA spent \$1,196,941 in operating costs and \$4,623,195 in capital costs.



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Program Timeline and Accomplishments

UST Grant Pilot Program Timeline

July 2015	PLIA received Pilot Program appropriation and issued request for applications
August 2015	Grants awarded to three pilot projects
Fall 2015	Project work began
December 2016	Cleanup and infrastructure work completed on first project (performance monitoring ongoing)
June 2017	Cleanup and infrastructure work completed on second project (performance monitoring ongoing)
July 2018	Investigation of residential vapor intrusion completed on third project (vapor extraction ongoing)

UST Loan & Grant Program Timeline

April 2016	Enabling legislation signed by Governor
July 2016	Legislation took effect
October 2016	Program launch, open applications for 2016-2017 Award Cycle
March 2017	43 applications received
July 2017	40 Preliminary Planning Assessments completed with project requests totaling \$40,165,264
October 2017	Open applications for 2017-2018 Award Cycle
May 2018	12 applications received and accepted
October 2018	Open applications for 2018-2019 Award Cycle
May 2019	23 applications received and accepted
October 2019	Open applications for 2019-2020 Award Cycle



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At the direction of the 2015 Legislature, PLIA developed and launched the Pilot Program in July 2015. In August 2015, PLIA awarded three \$575,000 grants to project sites with aging tanks, contamination to soil and/or groundwater, and serious financial hardship. Project work began in the fall of 2015. To date, two sites have completed cleanup and infrastructure upgrades. One site, Acme Fuel, received a site No Further Action (NFA) letter, and the other site, Genesee, received a site NFA with an Environmental Covenant. On the third project, investigation of residential vapor intrusion has been completed and the site characterization is near completion.

The businesses at Acme Fuel and Genesee Energy have successfully completed cleanup and infrastructure upgrades and are able to continue operating with the assistance provided through PLIA's Pilot Program. This assistance led directly to the preservation of at least 47 jobs between the two businesses, and had positive impacts on many more jobs in associated businesses. (See Appendix B for full Pilot Program project descriptions.)

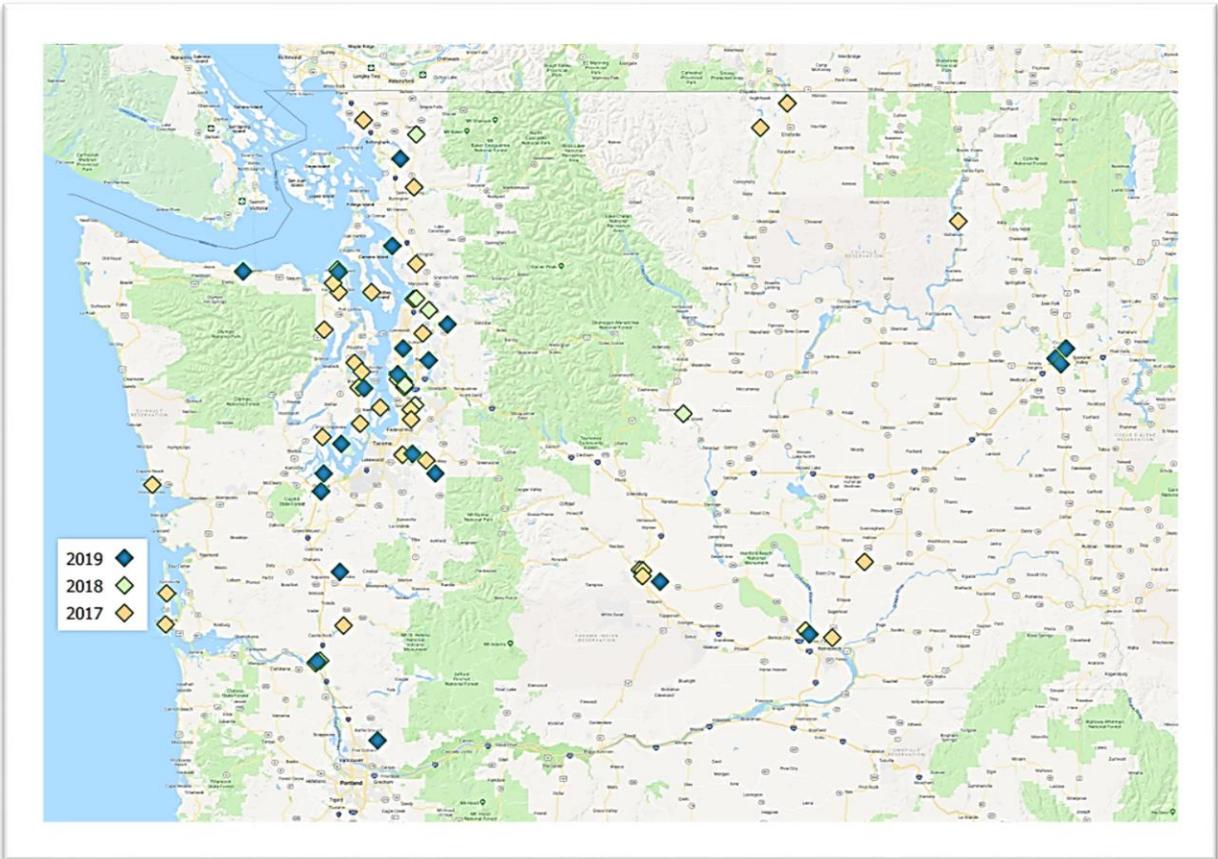
Building off of the successful implementation of the Pilot Program, and at the direction of the 2016 Legislature, PLIA developed and launched the UST Loan and Grant Program statewide.

Owners and operators of USTs were invited to submit applications from October 4, 2016, to March 1, 2017. In this initial Award Cycle, PLIA received and reviewed 43 applications, entering 41 applicants into the program (the other two applicants withdrew voluntarily). PLIA notified applicants regarding acceptance in May 2017.

For the following biennium, applications were accepted between October and March, with program acceptance notification given in May. In 2018, the program received 12 applications, and for 2019, there were 23 applications. The following map shows the geographical distribution of applicant projects.



UST Loan and Grant Application Statewide



The first phase of the program after acceptance is the Preliminary Planning Assessment (PPA) process. During the spring and summer of 2017, PLIA conducted intake meetings with participants and awarded grants of up to \$150,000 for PPAs at each of the 41 sites. The PPAs were completed in less than six months, providing site owners and the state of Washington with critical data about the conditions at the project sites. Projected cleanup and infrastructure costs for all sites with completed PPAs total \$45,426,570. (See next section for more information about the PPA process. See Appendix C for a table of individual project costs and full descriptions of UST Loan and Grant Program projects.)

After the PPAs were completed, PLIA ranked each site according to the program criteria, and PLIA and DOH began reviewing each participant's financial resources to determine eligibility for financing. As financial reviews are completed, PLIA, DOH, and the participant



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meet to discuss financing options. Once the participant agrees to and is approved for financing, work proceeds under PLIA oversight. (See “Loan and Grant Process” section on page 6 for more information on project financing, planning, and implementation.)

The Loan and Grant Program’s award process is governed by interpretive guidance while the program rules are under development. PLIA submitted a CR-101 on August 1, 2017, and has developed a stakeholder outreach plan to support formal rulemaking. A Small Business Economic Impact Statement will also need to be conducted prior to finalizing program rules.

Preliminary Planning Assessments

For projects accepted into the Loan and Grant Program, PLIA conducts a Preliminary Planning Assessment (PPA) to review existing data and reports, identify and fill existing data gaps, and develop a robust cleanup and construction plan.

PLIA has used a competitive solicitation process to establish a pool of consultants who contract with PLIA to complete the PPAs, which may include:

- Soil and groundwater borings.
- Laboratory analysis of soil and groundwater samples.
- Development of a conceptual site model.
- Development of a cleanup scope of work.
- Design specifications for alternative fuel infrastructure.

Collection and assessment of data is critical, given that the issues the program addresses are typically invisible from the surface, such as the condition of USTs and piping, and the extent and impacts of contamination to soil and groundwater. Data and reporting from each PPA provide the crucial groundwork for a successful project. Completing a thorough PPA at the outset of any project ensures accountability and efficiency and reduces the time it takes to successfully complete site cleanup.

The PPAs provide PLIA with the necessary information to critically evaluate and rank each site using the program criteria, which take into account environmental and financial aspects of each site. The PPA also provides participants with a better understanding of the site conditions and the costs of cleaning up and/or upgrading the site. In some cases, data collection during the PPA alerts a participant to previously undiscovered contamination, for which they may be able to access pollution liability insurance funds to help offset project costs. In other cases, data from the PPA reveals that contamination at the site has already been remediated adequately to bring the site to closure with no further action required.

While PLIA provides funding for PPAs, the cost is subtracted from the financing limit for each participant. This approach and business model ensures reliable, high-quality data collection and reduces uncertainty in environmental projects over the long-term. PPAs also



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provide information needed to right-size financing to fit participant needs and successfully bring projects to closure. UST owners and operators who receive a PPA from PLIA are not guaranteed financing through the Loan and Grant Program.

Loan and Grant Process

Using the data submitted by applicants and collected during the PPAs, PLIA prioritizes project sites according to the criteria listed in the program guidance document which is found on PLIA's website (<https://plia.wa.gov/ust-loan-and-grant-program/>).

Once projects are ranked, PLIA assesses participants' financial resources using established underwriting methods to inform financing options. UST owners and operators may receive financing to cover the estimated costs of cleaning up their site and/or upgrading fuel systems infrastructure. Interest-rate discounts may be awarded as an incentive to encourage recipients to opt for alternative fuel strategies, such as installing EV charging stations, in support of the Governor's [Pollution Reduction and Clean Energy Executive Order 14-04](#).

PLIA works with recipients to identify all existing funding sources—such as current insurance policies or other financial responsibility mechanisms—to ensure the use of these private funding sources before expending loan and grant funds.

Recipients select an environmental consultant to complete the cleanup work outlined in the PPA. PLIA, the recipient, and the consultant hold a project kickoff meeting to develop shared project expectations, timelines, and milestones. After the meeting, the consultant submits a final cleanup and construction plan for review and approval. Once approved by the recipient, the plan is submitted to PLIA for review to ensure it meets program requirements and state cleanup regulations.

Upon approval from PLIA, the consultant begins work on the project, including submittal of permit applications. PLIA will schedule meetings and site visits as necessary throughout the project to ensure oversight of cleanup activities, regulatory compliance, and continued transparency for interested parties.

Upon completion of cleanup activities, the consultant will submit a plan to PLIA for a Model Toxics Control Act (MTCA) compliance review through PLIA's Petroleum Technical Assistance Program.

Project Timelines

Projects begin with a project kickoff meeting and must follow an agreed-upon timeline established at that meeting. Any changes require written concurrence by PLIA and the recipient. Contracts may be terminated if projects are not progressing as scheduled.



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Loan Repayments

Loan repayment begins after the first project invoice is submitted for payment. The DOH will administer loan repayment schedules and processing.

Operating Costs

During Fiscal Year 2016, operating costs for the Pilot Program were \$66,119. During Fiscal Year 2017, startup operating costs for the UST Loan and Grant Program were \$2,500,840. Included in the startup operating costs was \$57,000 for program administration activities carried out by the DOH. For Fiscal Year 2018, PLIA had operating costs of \$361,419. For Fiscal Year 2019, operating costs were \$1,196,940.



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Program Status through July 2019

2016 Pilot Program	
Acme Fuel Company Olympia	Cleanup and infrastructure upgrades complete. Site No Further Action (NFA) letter received.
Genesee Energy Seattle	Cleanup and infrastructure upgrades complete. Site NFA with Environmental Covenant received.
Sharp's Automotive Moxee	Full site characterization near completion.
2017 Award Year	
Applications received	43
Intake meetings held	43
Preliminary Planning Assessments	10 (completed within 6 months) Estimated total project costs of \$45,426,570
Grant offers made	2
Loan offers made	7 (4 accepted)
2018 Award Year	
Applications received	12
Intake meetings held	10
Preliminary Planning Assessments	10 (Estimated total project costs – to be determined)
Grant offers made	0
Loan offers made	0
2019 Award Year	
Applications received	23
Intake meetings held	20
Preliminary Planning Assessments	21



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Conclusion

PLIA's Capital Financial Assistance Grant Pilot Program and Underground Storage Tank Revolving Loan and Grant Program were created to assist UST owners and operators who wish to:

- Replace or upgrade aging fuel systems to prevent leaks and dispense today's fuels.
- Clean up historical or ongoing contamination caused by UST releases.
- Transform old stations into the gas stations of the future, adapted to the changing transportation fuel market, including the installation alternative fueling infrastructure such as EV charging stations.

In the 2015–2017 Biennium, PLIA developed and launched the successful \$1,800,000 Pilot Program. This program has enabled the removal of two outdated UST systems; cleanup of environmental contamination at two UST sites; installation of two modernized UST systems; investigation of residential vapor intrusion and installation of a vapor extraction system at one UST site; and direct preservation of at least 47 jobs.

In the 2017 Award Cycle, PLIA has conducted the Preliminary Planning Assessment (PPA) on 40 project sites, characterizing environmental contamination and developing well-informed plans for site cleanup and infrastructure removal, replacement, and upgrades. The project cost requests total \$40,165,264 in financial need to achieve site cleanup and infrastructure upgrades in order to ensure safe operation and insurability of these UST sites in the years ahead.

For the 2017 Award Cycle, PLIA has nine (9) projects in the PPA phase. The estimated project costs requests is still to be determined. In the 2018 Award Cycle, 23 applications were received with 21 projects undergoing the PPA, and in the 2019 Award Cycle, PLIA received 11 applications with each applicant project starting the PPA. Highlights of some of these project sites are presented in Appendix C.

Recommendation

PLIA recommends continuation of the program and its spending authority. Continued program operation will allow the agency to continue working with UST owners and operators to achieve their environmental cleanup and infrastructure management goals so they can effectively, and responsibly serve their communities. Program updates and information for prospective program participants is posted to PLIA's website at www.plia.wa.gov.

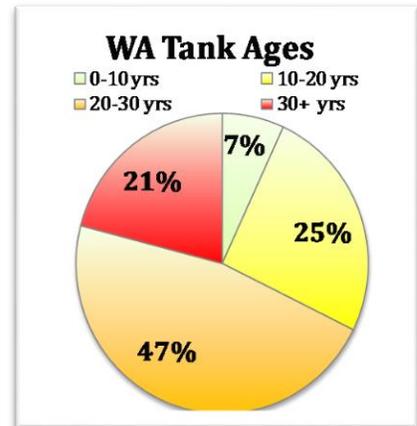


Appendix A: Underground Storage Tank Revolving Loan and Grant Program Background 2015-2016

Washington’s existing underground storage tank (UST) infrastructure is aging. In the 1990s, television news coverage of leaking fuel tanks and their impact on community drinking water sources led to national initiatives for large-scale replacement or lining of UST infrastructure. Now, more than 20 years later, the infrastructure once again needs replacing or upgrading, but the national and state programs of the 1990s no longer exist to provide incentives and support.

Aging Infrastructure

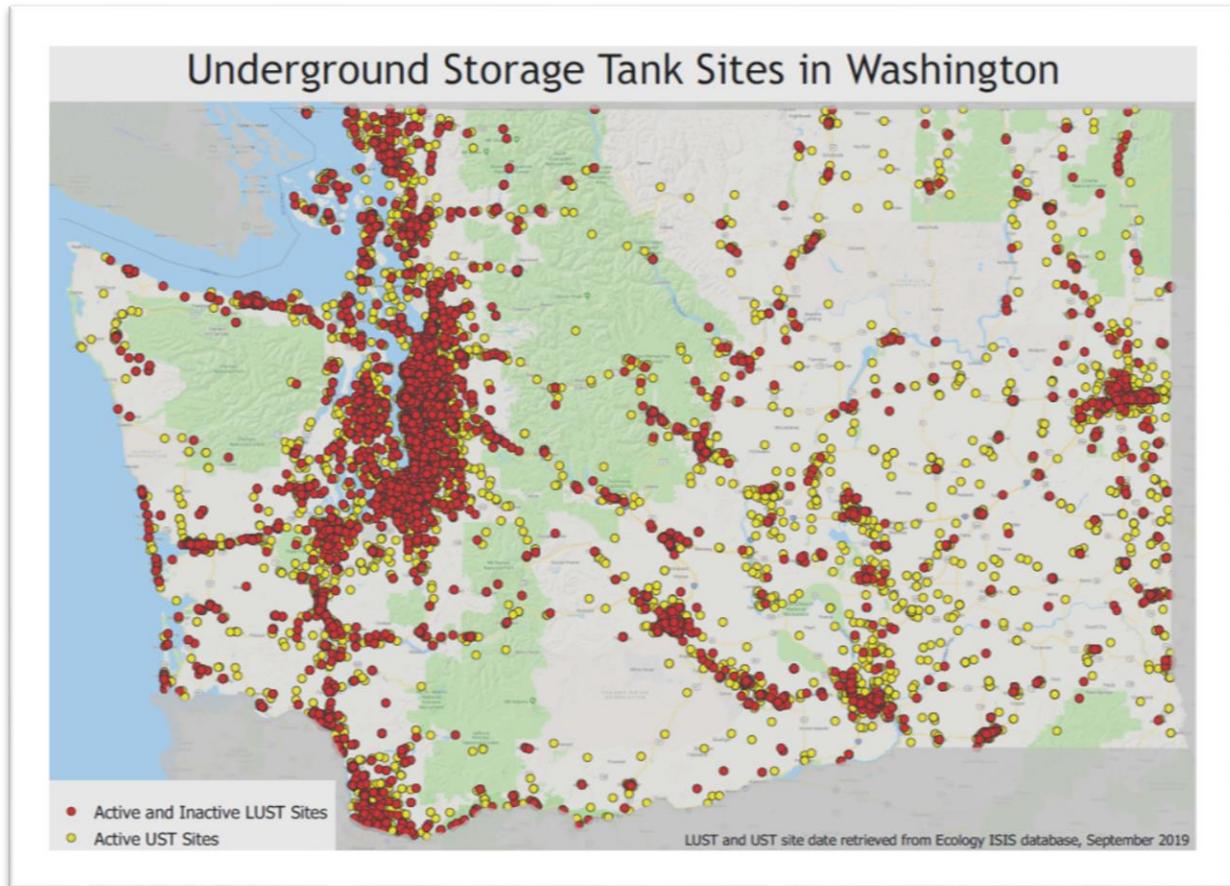
The average age of Washington’s UST infrastructure is over 20 years. These older UST systems are more difficult and costlier to insure since the likelihood of leaks from the tanks or the associated piping and fittings increases over time (ASTSWMO, 2015). UST manufacturers generally warranty UST systems for 30 years. Close to 70% of Washington’s UST infrastructure will be 30 years or older by 2021.



Historical Contamination

Washington has more than 2,900 leaking UST sites still awaiting remediation, several of which include historical contamination. In 1989, PLIA was established to ensure the continued availability of affordable UST insurance in Washington from that point forward.

PLIA’s Commercial UST Reinsurance Program reinsures approximately 80% of Washington’s current UST infrastructure. At the time PLIA’s program was established, it was assumed that pre-existing contamination would be resolved through other means, such as property redevelopment. Two factors affect the overall ability to resolve historical contamination in Washington: 1) the high groundwater tables in many parts of the state, and 2) Washington’s stringent environmental cleanup laws. When a gasoline leak reaches the groundwater table, cleanup costs rise sharply. In Washington’s major metropolitan areas, redevelopment has led to a large number of cleanups. In many of the state’s rural areas, however, property values are disproportionate to cleanup costs, so redevelopment has not been as successful a driver of cleanup.



Reported leaking UST sites (red) and active UST sites (yellow) across Washington.

Financial Barriers

Many owners and operators of USTs are currently unable to access the financial resources necessary to upgrade their UST systems and clean up residual contamination. Traditional lenders are hesitant, and sometimes unable, to provide financing for UST infrastructure, especially if the property already has documented contamination. In addition, many of the UST owners in Washington are small business owners who cannot raise the capital needed from other sources, despite their desire to clean up existing contamination and protect the environment from future releases of contaminants.

Community Impacts

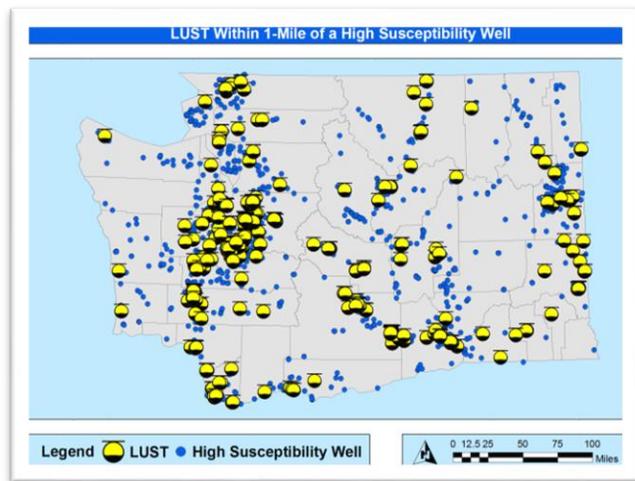
The problem of failing USTs combined with a lack of financial resources negatively impacts Washington's communities (Integrative Economics, LLC & Sound Resource Economics, 2016).

Drinking water: More than 2,500 operational USTs are located within one mile of a well designated as highly susceptible to contamination. When one of those USTs begins to leak,



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local drinking water sources are jeopardized, requiring either costly treatment or well abandonment and loss of a resource.



<https://fortress.wa.gov/ecy/publications/publications/0909048.pdf>

Economy: Surrounding property values can decrease due to historical and current contamination. A recent national study estimates that housing prices decrease by 3–6% when a contaminant release from a nearby UST is discovered (Guignet, et al., 2016). The study also found that prices return to pre-contamination levels once the contamination has been cleaned up. Lower property values impact not only individual property owners, but also the amount of property tax collected by local municipalities to support community services.

Environment: Aging tanks and their infrastructure release fuel into soil and groundwater, causing contamination that can take years to clean up. Harmful vapors from the contamination can travel through the soil and impact air quality in nearby houses and commercial buildings. When contaminated groundwater reaches surface water, it can harm fish and other organisms.

Small businesses: When owners of small and midsize gas stations cannot obtain the capital needed to meet regulations and adapt to alternative fuel strategies, they may not be able to continue operating. This leads to the loss of local businesses, some of which have been handed down over several generations and are a central component in their communities.

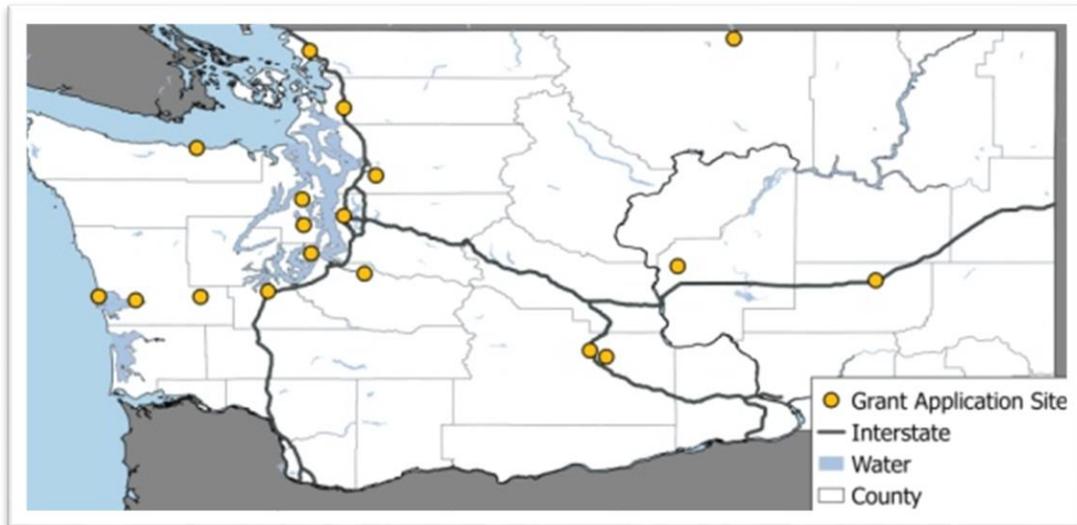
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http://plia.wa.gov/PLIA_Economic_Impacts_Report.pdf



Appendix B: 2015–2016 Capital Financial Assistance Grant Pilot Program

Chapter 3, Laws of 2015, 64th Legislature, 3rd Special Session, Section 3085 directed PLIA to conduct a pilot demonstration at three study sites with aging tanks, contamination to soil and/or groundwater, and serious financial hardship. PLIA received 21 applications for the Pilot Program grants.



PLIA Proviso Grant Applications Received

PLIA reviewed and ranked each applicant based on the selection criteria established for the program to select the three sites eligible for Pilot Program grants. On August 17, 2015, PLIA awarded three \$600,000 grants to the following recipients: Acme Fuel Company of Olympia; Genesee Fuel and Heating Company, Inc. of Seattle; and Sharp’s Automotive of Moxee.

After selecting the three pilot demonstration sites, PLIA met with each of the grantees and their environmental consultants to review existing information for their sites and develop cleanup and infrastructure upgrade plans. PLIA’s successful Pilot Program provides the foundation for expansion to the full Loan and Grant Program in 2017.

The following pages provide profiles of each of the pilot demonstration grant sites.



Acme Fuel Company, Olympia

Acme Fuel Company, founded in 1925, is a third generation family-owned business located in downtown Olympia. Acme Fuel Company provides fuel services to homes and businesses throughout Thurston and Mason Counties. They deliver propane and heating oil to homes, repair and install heating and cooling equipment, and operate two card lock gas stations that provide fuel to businesses and individuals.



In 2011, Acme Fuel Company's fuel supplier delivered fuel to a discontinued tank, resulting in a catastrophic release and an emergency cleanup. During the cleanup investigation they discovered historical contamination from the underground fuel piping and fittings which had been leaking over several years. Upon discovering the contamination, Acme Fuel Company's owner, Christophe Allen, worked with an environmental consultant to develop a plan to clean up the contamination. Mr. Allen was surprised to learn that while his insurance policy covered the cleanup work, none of the station rebuilding costs would be covered. He approached his banker to set up financing and was told that the bank would not be able to help, because his property was already contaminated, and the costs were too large compared to the size of his small family business.



The pilot program grant allowed Acme Fuel Company to move ahead with the teardown of the station and cleanup of the contamination using insurance funds, with the reassurance that they would have the resources to put their station back together once the contamination was removed. With the grant funds, Acme Fuel Company has installed new tanks and lines that are less likely to leak in the future.

Current Project Status: Cleanup and tank system upgrade complete. No Further Action received.



Genesee Fuel & Heating Company, Inc., Seattle

Genesee Fuel & Heating Company is a third generation family-owned business located in South Seattle. The company, started in 1929, is one of only three companies that provide heating oil services to the Seattle area. Genesee Fuel & Heating Company is also the largest dealer of bioheat, which is a form of biodiesel used for home heating. The company provides biodiesel blends of up to 99% biodiesel for their environmentally conscious customers.



In January 2015, the owner of the company, Steve Clark, received a notice of nonrenewal from his insurance company, stating that his coverage would be discontinued within three months due to the age of his company’s USTs. The tanks were installed in 1949 and 1955. Without an insurance policy, Mr. Clark could not meet the state and federal operating requirements. Although his company was financially sound, Mr. Clark’s banker was unable to assist him with financing for tank replacement. Mr. Clark’s banker explained that trucks and buildings are simple to finance, as they are easy to collateralize, but financing for a UST would be an uncollateralized loan—something his bank could not provide. Without the Pilot Program grant award, Mr. Clark would not have been able to remove the outdated tank system and clean up the associated contamination in order to install an upgraded tank system. Without the upgraded system, Mr. Clark would not have been able to continue to operate his business.

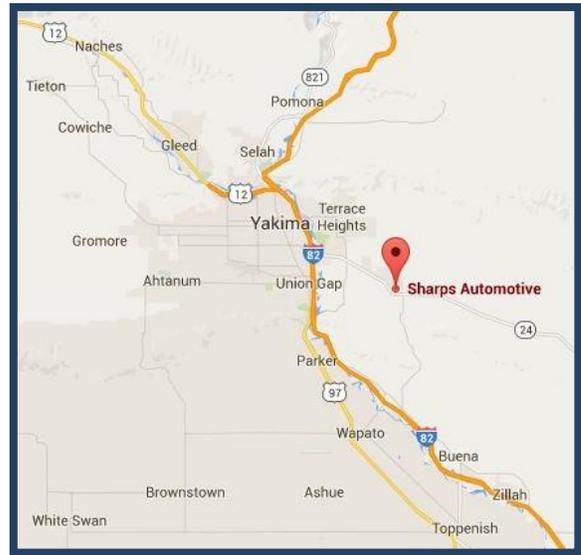
Current Project Status: Cleanup and tank system upgrade complete. No Further Action with Environmental Covenant received.



Sharp's Automotive, Moxee

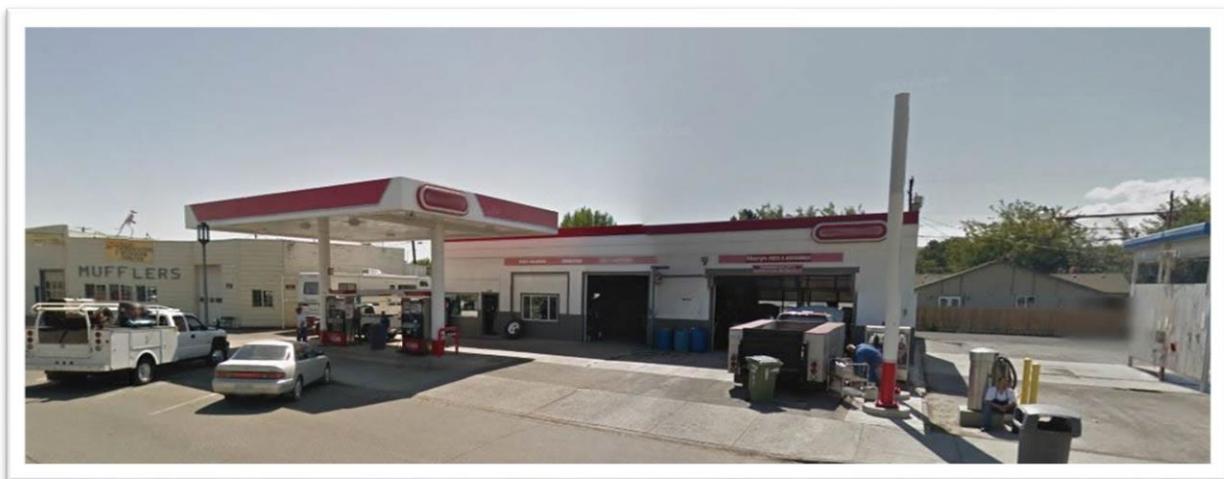
Sharp's Automotive is a small family-owned fuel and service station located in the town of Moxee near Yakima. The Sharp family purchased the business in 1987. The service station is a central part of the community and provides essential services to the surrounding area, especially area farmers.

In 1994, during the nationally led UST upgrade efforts, the station's USTs were removed and replaced. Soil contamination was discovered on the site and interim cleanup actions were completed, but a full cleanup of the site did not occur due to the limited availability of funds.



In 2016, the Department of Ecology issued a letter to Mr. and Mrs. Sharp and the previous property owner, noting potential vapor intrusion concerns. The Sharp's were denied financing from their local credit union and were unable to fund the investigation and cleanup work necessary at their site. PLIA grant funds are being used to complete the site investigation, secure access agreements, and conduct vapor monitoring to set MTCA cleanup levels for the site.

Current Project Status: Preliminary Planning Assessment near completion.





Appendix C: 2017-2019 Award Year Project Summaries

When completing the Preliminary Planning Assessments, PLIA’s environmental consultants developed project cost estimates for each project. The table below shows the estimated cost for each project. (Projects **shaded in green** indicate that a financial offer has been made and accepted.)

2017					
Rank	Project/Site	Location (City/County)	Cleanup Cost	Infrastructure Cost	Total Cost
3	Quick Stop #4	Longview/Cowlitz	\$805,469	\$500,393	\$1,305,862
5	Smitty's Conoco #190	Yakima/Yakima	\$1,580,000	\$921,780	\$2,501,780
6	Ocean Mart & Gas	Hoquiam/Grays Harbor	\$218,400	\$739,200	\$957,600
7	You & I Market	Pacific Beach/Grays Harbor	\$720,000	\$482,000	\$1,202,000
8	Bill's Garage	Chimacum/Jefferson	\$550,000	\$0	\$550,000
9	PetroCard, Inc. (South Kent)	Kent/King	\$2,284,680	\$1,494,000	\$3,778,680
10	Seaview Mobil	Seaview/Pacific	\$409,000	\$569,651	\$978,651
11	Jack's Country Store	Ocean Park/Pacific	\$140,000	\$1,914,900	\$2,054,900
12	PK Sandhu LLC	Oroville/Okanogan	\$1,474,000	\$348,000	\$1,822,000
13	PetroCard Inc. (North Kent)	Kent/King	\$579,000	\$725,400	\$1,304,400
14	Daisy Station	Rice/Stevens	\$0	\$487,359	\$487,359
15	PetroCard, Inc. (Seattle 4th)	Seattle/King	\$1,050,600	\$1,274,640	\$2,325,240
16	Port of Illahee	Bremerton/Kitsap	\$539,500	\$0	\$539,500
17	Woohoo Enterprises, LLC	Bremerton/Kitsap	\$560,000	\$68,500	\$628,500
18	Central Valley Store	Poulsbo/Kitsap	\$410,000	\$1,949,350	\$2,359,350
19	Portal Way Station	Ferndale/Whatcom	\$230,100	\$1,409,200	\$1,639,300
20	Apple Barrel	Yakima/Yakima	\$0	\$1,270,000	\$1,270,000
21	Connell Oil (900 S Columbia)	Connell/Franklin	\$5,000	\$625,509	\$630,509
22	Nordic Properties, Inc.	Port Orchard/Kitsap	\$789,000	\$1,310,000	\$2,099,000



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2017					
Rank	Project/Site	Location (City/County)	Cleanup Cost	Infrastructure Cost	Total Cost
23	Smitty's Minimart #60	Yakima/Yakima	\$130,000	\$771,700	\$901,700
24	Repaul, LLC	Puyallup/Pierce	\$565,000	\$0	\$565,000
25	Sandy's Chevron	Quilcene/Jefferson	\$0	\$105,000	\$105,000
26	Smokey Point Chevron	Marysville/Snohomish	\$180,000	\$100,000	\$280,000
27	Connell Oil - 1980 Terminal	Richland/Benton	\$0	\$628,964	\$628,964
28	Connell Oil - 3802 Swallow	Pasco/Franklin	\$0	\$628,964	\$628,964
29	Drew's Grocery & Service, Inc.	Toutle/Cowlitz	\$143,000	\$1,537,000	\$1,680,000
30	Gold Creek Community Church	Woodinville/King	\$339,300	\$0	\$339,300
31	Hi-Way Grocery	Buckley/Pierce	\$96,000	\$571,505	\$667,505
32	Port of Port Townsend	Port Townsend/Jefferson	\$5,000	\$1,268,800	\$1,273,800
33	Port of Skagit	Sedro Woolley/Skagit	\$224,400	\$0	\$224,400
34	Loomis Kwik Stop	Loomis/Okanogan	\$0	\$860,000	\$860,000
35	Jarrell's Cove Marina	Shelton/Mason	\$5,000	\$630,000	\$635,000
Completed under PPA or withdrawn after PPA					
	Conan Fuel	Gig Harbor/Pierce	\$910,000	\$928,000	\$105,000
	Connell Oil - 817 W A St	Pasco/Franklin	\$0	\$105,000	\$59,000
	Genesee Fuel & Heating Co, Inc.	Seattle/King	\$0	\$59,000	\$1,313,247
	P&J Deli Mart	Tacoma/Pierce	\$370,000	\$126,793	\$1,838,000
	US Petro Food Mart	Spokane/Spokane	\$5,000	\$402,578	\$496,793
	Villa Grove Market & Gas	Olympia/Thurston	\$0	\$1,313,247	\$994,000
Withdrawn before PPA was completed					
	76 Food Mart	Everett/Snohomish			
	Honu Crossing	Seattle/King			
	Jim's Market & Gas	Seattle/King			



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2018			
Rank	Project/Site	Location (City/County)	Site Needs
	CI Sunny's Deli	Renton/King	Cleanup, tank replacement, install leak detection and electrical vehicle charging station, and replace fuel dispensers.
	Everybody's Store	Deming/Whatcom	Install electrical vehicle charging station, remove tank, and install canopy.
	Former San Juan Grocery	Port Townsend/Jefferson	Cleanup.
	Hewitt Ave Property	Everett/Snohomish	Cleanup.
	Jim's Market/Sea-Ko, Inc.	Seattle/King	Replace tanks, piping, and leak detection, and install electrical vehicle charging station.
	Pangborn Memorial Airport	East Wenatchee/Douglas	Remove tanks.
	Quick Stop Market	Kelso/Cowlitz	Replace tank, canopy, piping, and dispenser island, install leak detection and electrical vehicle charging station.
	Rainier 76	Seattle/King	Cleanup, replace tanks, canopy, and dispenser island.
	Step In Style Hair Design	Snohomish/Snohomish	Cleanup.
Withdrawn before PPA was completed			
	Miller's One Stop	Elk/Spokane	
	R & R Food Mart	Spokane/Spokane	
Completed under PPA or withdrawn after PPA			
	Towner's Conoco	Spokane/Spokane	



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2019			
Rank	Project/Site	Location (City/County)	Site Needs
	Butler Garage	Seattle/King	Cleanup.
	Car Smart Auto Service, LLC	Sumner/Pierce	Cleanup, remove tanks, and install electrical vehicle charging station.
	Chuck's Service, Inc.	Wilkeson/Pierce	Cleanup, replace tanks, piping, and dispenser island, install pumping system, leak detection, and electric vehicle charging station.
	CI Camp Union Grocery	Seabeck/Kitsap	Cleanup, replace tanks and piping, install leak detection, pumping system, and electric vehicle charging station.
	Divine Corporation (2 nd Ave)	Spokane/Spokane	Cleanup, install tanks, piping, leak detection, and electric vehicle charging station.
	Divine Corporation (Market St)	Spokane/Spokane	Cleanup, install tanks, piping, leak detection, and electric vehicle charging station.
	Estate of Ruby McDonald	Port Angeles/Clallam	Cleanup.
	Gull Harbor Mercantile	Olympia/Thurston	Cleanup.
	H.D. Watkins Estate	Richland/Benton	Cleanup.
	Hockinson Market	Brush Prairie/Clark	Cleanup, remove tanks, and install electric vehicle charging station.
	Lakebay Marina and Resort	Lakebay/Pierce	Replace tanks and piping, install leak detection, dispenser island, canopy, and electric vehicle charging station.
	Old City Hall	Tumwater/Thurston	Cleanup and install electric vehicle charging station.
	Orchard Mart	Port Orchard/Kitsap	Cleanup and remove building.
	R & R Food Mart	Spokane/Spokane	Replace tanks.
	Red Barn	Monroe/Snohomish	Cleanup.
	Seidel Group, LLC	Lake Forest Park/Kitsap	Cleanup and install electric vehicle charging station.
	Sharp's Automotive Service	Moxee/Yakima	Cleanup, replace leak detection, piping, dispenser island, and tanks, install pumping station and electric vehicle charging station.
	Twin City Shell	Stanwood/Snohomish	Cleanup, remove tanks, piping, canopy, and dispenser island.



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	Whatcom County Fire Dist #18	Sedro-Woolley/Skagit	Cleanup remove tanks, piping, leak detection, dispenser island, canopy, and driveway.
	William Stephenson Property	Puyallup/Pierce	Cleanup.
Withdrawn before PPA was completed			
	Associated Petroleum Products	Redmond/King	
	Candace's Corner LLC	Port Townsend/Jefferson	
	Handy Mart	Longview/Cowlitz	

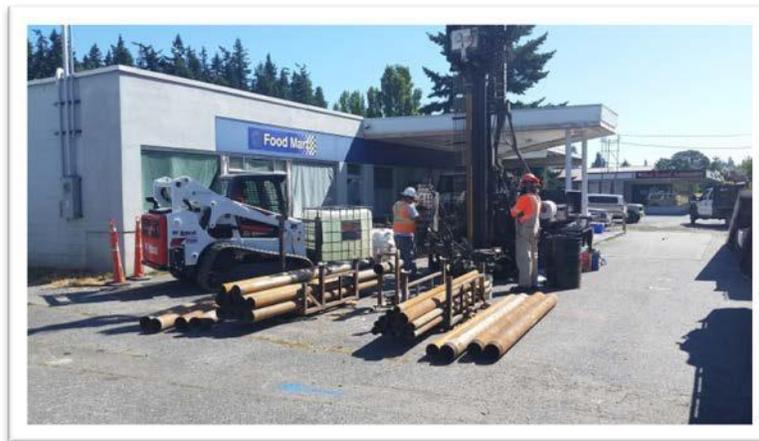


Appendix D: 2018-2019 Project Site Highlights

Former Whidbey Marine & Auto Supply, Freeland

The Former Whidbey Marine & Auto Supply, located in Freeland, Washington, formerly operated as a service station and auto repair shop between 1967 and 2008. In 2005, a release of petroleum hydrocarbons was identified related to the underground gasoline storage tanks installed at the property. In the same year, a subsurface investigation was conducted to determine the extent of contamination in soil and groundwater at the property. The 2005 investigation identified gasoline impacts in soil and groundwater beneath the property associated with the gasoline tanks installed at the property. The impacted groundwater was approximately 60 feet below the ground surface, above the level of the regional drinking water aquifer.

In 2006, a remediation system was installed and started operation at the property, utilizing soil vapor extraction technology to remove gasoline as a vapor. Whidbey Marine & Auto Supply continued operating as a gasoline service station until 2008. The remediation system continued operation until 2010, removing approximately 1,800 gallons of gasoline as vapor. In 2011, the fuel tanks, fuel dispensers, and piping were decommissioned and removed from the Property, and chemical injections were conducted to help with remediation efforts.



In 2012, additional investigations determined that gasoline impacts had reached the underlying sea-level aquifer. Freeland Water and Sewer District drinking water wells are installed in the sea-level aquifer approximately 0.5 mile downgradient of the property and



Former Whidbey Marine & Auto Supply, Freeland cont'd

are used as Whidbey Island's primary drinking water source. In response to the findings, groundwater monitoring wells were installed downgradient of the property to determine the extent of contamination in groundwater in the sea-level aquifer and evaluate if contamination was a risk to the drinking water wells. Groundwater sampling of downgradient monitoring wells has confirmed that contamination remained localized, and was not an immediate threat to the Whidbey drinking water supply.

In 2017, the Washington Pollution Liability Insurance Agency funded a Preliminary Planning Assessment to determine the current conditions of contamination in soil and groundwater, and to develop a plan to clean up the remaining contamination. As part of this assessment, SoundEarth sampled existing groundwater wells and advanced 4 soil borings across the property, 2 of which were completed as new groundwater monitoring wells. Results of groundwater sampling confirmed that contamination is still present but remains localized, and the extent of the groundwater plume downgradient has been defined. To address the remaining soil and groundwater contamination identified at the property, SoundEarth recommended installation of a remediation system utilizing deep soil vapor extraction and air sparge wells to treat remaining groundwater contamination from both the upper perched aquifer and lower sea-level aquifer.

Current Project Status: Awaiting Funding Status for Cleanup



Illahee Foods, Bremerton

This property is located on Illahee Road NE, located north of Bremerton, Washington. The property historically was occupied by two generations of gasoline stations and a convenience market. The former station and store were constructed on the property prior to World War II, which served the local community until 2002. Since this time, the property has remained vacant. Three underground fuel-storage tanks, empty and unused, remain on the



In December of 2016, the Port of Illahee applied for financial assistance from the Pollution Liability Insurance Agency (PLIA) Revolving Loan and Grant Program. This assistance was



requested to provide funding for site characterization, removal of the underground tanks, and cleanup of possible petroleum contamination. With this completed effort, and approval of a PLIA grant, the Port would be able to purchase the Property and remodel the current building as a community- meeting space.

PLIA selected the Property to undergo a Preliminary Planning Assessment (PPA), in order for PLIA to gather additional information to determine if a loan or grant could be provided.

The initial site-characterization work has been completed, as summarized in the completed PPA report. Soil and groundwater contamination have been identified on the property. This contamination also has migrated to the east beneath the adjacent roadway. A preferred remedial-action alternative to address this contamination has been identified. The PPA report also includes an appraisal of the current property value, as well as a projected value should the cleanup work occur.

Current Project Status: Awaiting Funding Status for Cleanup.



Former Northern State Hospital, Sedro-Woolley

The Former Northern State Hospital property, located in Sedro- Woolley, Washington, is a 225-acre property that was initially developed in 1909. The property historically operated as a treatment and residence facility and hospital for people with mental illness until 1973. The property is currently comprised of approximately 80 buildings, some of which are leased by tenants, including the U.S. Department of Labor for Cascade Job Corps program and the Washington Military Department National Guard. The property was recently purchased by the Port of Skagit, who will be working in partnership with the City of Sedro-Woolley, Skagit County, and the Washington State Department of Enterprise Services to redevelop the property into a center for innovation and technology.



Previous environmental investigations conducted at the property between 1993 and 2014 identified several areas of concern throughout the property, which included chlorinated solvent contamination near a former laundry building, heavy oil contamination near the Power House building, and lead, arsenic, and other metal contamination throughout the property. In 2017, the Washington Pollution Liability Insurance Agency funded a Preliminary Planning Assessment focusing on areas of concern associated with impacts from petroleum hydrocarbons. During this assessment, SoundEarth advanced soil borings and installed groundwater monitoring wells near former gasoline underground storage tanks associated with a former fueling station, as well as behind the Power House building at the property to evaluate the presence and extent of petroleum hydrocarbon contamination in soil and groundwater.



SoundEarth’s investigation identified gasoline and benzene contamination in soil and groundwater near the former fueling station. Heavy oil contamination in soil behind the Power House building was identified, which was determined to be the result of fill material throughout that area. The vertical and lateral extents of contamination are defined in both areas, and soil and groundwater impacts were determined to be limited.



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Former Northern State Hospital, Sedro-Woolley cont'd

To address the soil and groundwater contamination in the identified areas of the property, SoundEarth recommended a remedial excavation to remove all contaminated soil and groundwater from the former fueling station area. The contaminated cleanup will be completed in conjunction with property-wide redevelopment activities.

Current Project Status: Awaiting Funding Status for Cleanup



Quick Stop #4, Longview

Quick Stop #4 is a family owned and operated service station and convenience store in Longview, Washington. Owned by Family Supermarkets, Inc., Quick Stop #4 was constructed in 1962. The community that Quick Stop #4 serves includes vehicles from the Department of Social and Health Services (including Child Protective Services) and Columbia Wellness, a private non-profit agency providing mental health services to adults, children, and families.

In 2013, the pollution liability insurance premiums for the Quick Stop#4 underground storage tanks (USTs) tripled due to their age. Additionally, Family Supermarkets faced the risk of these aged USTs becoming uninsurable. Family Supermarkets applied to the PLIA Revolving Loan and Grant Program to obtain financing for removal and replacement of the aging fuel system to minimize the potential for leaks and maintain insurability.

The first step in this process was to complete a Preliminary Planning Assessment (PPA). For Quick Stop #4, the PPA included: 1) performing an environmental investigation to determine the extent of contamination, 2) preparing a conceptual remedial design and cost estimate to clean up site contamination and replace the fuel system, and 3) completing a property value appraisal to enable PLIA to assess the value of the property after cleaning up contamination and replacing the fuel system.



VERTEX, an environmental consultant working under contract with PLIA, performed the environmental investigation, which identified soil and groundwater contamination caused by fuel system leaks. Contaminated groundwater flows from the Quick Stop#4 property toward Lake Sacagawea, part of a Longview public park.

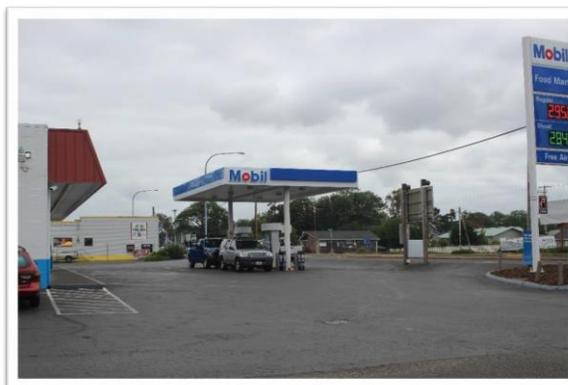
The combination of insurance and PLIA Loan and Grant Program funding will allow Family Supermarkets to clean up soil and groundwater contamination in conjunction with: 1) removing the existing aged USTs and fuel lines, 2) installing new USTs and fuel lines that will be insurable and less prone to leakage, and 3) installing an electric car charging station to allow Quick Stop #4 to serve the next generation of vehicles.

Current Project Status: PLIA is now ranking the applications for the 2017 award to determine which Applicant projects will be accepted into the Loan and Grant Program.



Seaview Mobil, Seaview

The Seaview Mobil site has been operated as a commercial gasoline fueling station since 1980. Three underground storage tanks (USTs) are present at the site, including two USTs used for storage of gasoline fuel and one UST used for storage of diesel fuel. Fuel dispensers, fueling piping, and a canopy are located above the three USTs. A convenience store is also located at the site. The site is currently owned by Baby Island Inc., and was purchased from the previous owner in 2007. The property owners plan to continue operating the site as a commercial gasoline fueling station.



In 2017, PLIA awarded Seaview Mobil a grant to conduct a Preliminary Planning Assessment (PPA) at the property. The PPA included funding for an assessment of potential impacts to soil and groundwater from fueling activities, and development of cost estimates to replace the existing USTs and related infrastructure. During the PPA investigation, petroleum impacted soil was not identified at the site; all soil samples met Ecology’s soil cleanup levels. Petroleum-impacted groundwater was encountered at the property at concentrations above regulatory limits.

Through funding from PLIA’s Revolving Loan and Grant Program, the property owners were able to characterize their site and obtain a cost estimate for future work, including remediation and fueling system upgrades. The Seaview Mobil site is now working with PLIA to obtain funding for system upgrades and to address groundwater impacts at the site.

The Seaview Mobil is a busy gas station in Seaview, Washington, a popular beachside tourist destination. The store is located near a public beach access point. The Seaview Mobil store also provides services to motorists along Highway 101 and 103, which are considered scenic byways.

Current Project Status: Awaiting Funding Status for Cleanup and Infrastructure Upgrades.



Smitty's Conoco #190, Yakima

Since 1986, numerous petroleum releases from the infrastructure at the Smitty's Conoco #190 facility have resulted in soil and groundwater contamination throughout most of the property. This contamination includes measureable liquid petroleum on the groundwater table. The owner, R.H. Smith



Distributing Co., Inc., previously worked with an environmental consultant to characterize the contamination and conduct interim remedial actions. However, in 2017, tank tightness tests were conducted and all but one of the four 10,000-gallon underground storage tanks (USTs) at the property failed. Three tanks were emptied of product and have not been used since.

While at least some portion of the cleanup and assessment work to date has been covered by the facility's insurance policy, upgrades to the aging infrastructure and tanks is not covered under those policies, and can be prohibitively expensive. Further, the extent of contamination at the site may cost more to clean up than remains in the insurance policy.

The Preliminary Planning Assessment grant has allowed the facility's owners to characterize previously undefined data gaps and the potential risks to human health and the environment, and understand, with a greater level of certainty, the cost of cleaning up the contamination and upgrading the infrastructure at the site (which would help to reduce the chance of future releases).

The Smitty's Conoco #190 facility has operated as a service station for approximately 35 years and provides fueling and a convenient store services for clients located in downtown Yakima. R.H. Smith Distributing Company was formed as a petroleum company in Grandview Washington, in 1947 by Robert H. Smith. Mr. Smith's three sons took over management of the company in the mid-1980s after learning the business from the ground up.

The company currently owns multiple retail fuel stations and Card Lock facilities, and currently delivers close to 45 million gallons of fuel each year to various farm and commercial accounts.

Current Project Status: Remediation pilot testing for system design underway.



Vashon Athletic Club, Vashon Island



In 1999, site investigation activities at the Vashon Athletic Club/Mom's Grocery site revealed gasoline contamination present in soil and groundwater in the vicinity of the facility's underground storage tanks (USTs) and in an area of a historic pump island, which was removed prior to the current owners' acquiring the property.

Subsequent cleanup activities occurred in 2000, when approximately 370 tons of contaminated soil was excavated and treated offsite. During these activities a leaking UST was identified by a failed tightness test during the site remedial actions. The UST was emptied and has not been used since.

The initial site remediation activities in 2000 failed to remove all the contaminated soil in the immediate vicinity of the UST basin and product lines, and several areas of the site remained uncharacterized.

The owners of the property, Mark and Diana Leonard, are only able to use insurance funding for a portion of site remedial activities, and would not be able to use it to upgrade the site's aging infrastructure.

The Preliminary Planning Assessment enabled the site characterization to be largely completed, and provided valuable information on potential risks to human health and the environment and anticipated costs associated with upgrading the infrastructure at the site and cleaning up the remaining contamination.

The Leonard's have owned the property since 1991, which houses both the Mom's Grocery service station and the Vashon Athletic Club. Mom's Grocery provides one of the few fuel and grocery services to the residents of Vashon Island (largely accessible by ferry only). The Vashon Athletic Club provides exercise and swimming pool facilities for all ages to enjoy.

Current Project Status: On hold pending site ranking and funding.



You & I Market, Pacific Beach

The You & I Market property, located in Pacific Beach, Washington, was identified as a contaminated site in 1995. The You & I Market property provides fuel services to individuals in Grays Harbor County, as well as operation of a convenience store and teriyaki restaurant. In 1995, 3 underground storage tanks (USTs) were removed from the property. At the time of the removal, 2 new USTs were installed, consisting of one 10,000-gallon unleaded gasoline UST and one 6,000/4,000-gallon split UST containing premium gasoline and diesel, respectively. Those USTs are currently in operation at the property.



Previous investigations conducted on the property between 1997 and 2011 indicated the presence of weathered gasoline and diesel contamination exceeding the applicable cleanup levels beneath and around the pump island and extending over 100 feet southeast beneath 2nd Street.

In 2017, the Washington Pollution Liability Insurance Agency funded a Preliminary Planning Assessment to delineate the extent of contamination at the property, and determine the appropriate cleanup action and estimated costs for the cleanup. As part of that investigation, SoundEarth advanced 10 soil borings across the property. Out of the 10 borings, 4 were completed as monitoring wells. SoundEarth collected soil samples from the borings and low-flow groundwater samples from the network of monitoring wells on the property.

Results of soil and groundwater sampling confirmed contaminated soil and groundwater are present on the property between 5 and 10 feet below ground surface. The full lateral and vertical extent of the contamination has been defined. Based on the results and the age of the UST system, SoundEarth recommended replacing the existing pump islands, USTs, and associated piping. Any contaminated soil encountered during the excavation activities would be excavated. To address contamination in the subsurface, SoundEarth recommended an air sparge/soil vapor extraction system to remediate the property.

Current Project Status: Awaiting Funding Status for Cleanup and Infrastructure Upgrades



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Appendix E: Agency Staff List

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