

Toxics Cleanup Program

July 2024

Yard cleanup progress

Ecology is using the majority of a \$94.6 million settlement from Asarco to clean up residential yards in Pierce and King counties. The goal is to reduce human health risk by cleaning up the most contaminated areas of the plume-Ruston, North & West Tacoma, and Southern Vashon-Maury Island.

We partner with Tacoma-Pierce County Health Department (Health Department) to sample yards in Tacoma. Since 2013, the Health Department has sampled 3,280 yards (see page 2). Overall, we have data on 6,002 yards in Tacoma, including results from the Environmental Protection Agency's prior Superfund work.

To date, we have replaced soil in 394 yards (with 359 of those yards in the Tacoma area) out of the 1,201 that qualify for soil replacement. Between 2023-2024, we replaced soil in 46 yards. We are currently planning cleanup for another 48 yards and anticipate our cleanup work to resume this fall and expand in 2025.

Protecting children where they play

The Soil Safety Program provides free soil sampling and cleanup for child play areas at schools, parks, and childcares. Created through legislation in 2005, the program sampled over 1,200 child play areas. We also addressed over 133 play areas, with 51 of those cleanups in Tacoma. This year we have cleaned up 3 childcares outside of Tacoma.

Funding local health department outreach

The Health Department received \$802,080, this biennium from Ecology to run the "Dirt Alert" program. This program raises awareness and promotes behaviors that reduce soil exposure, such as hand-washing, taking off shoes at the door, and covering bare patches of dirt in the yard. The Health Department initiatives include events, free soil testing, and new home owner outreach.

Encouraging voluntary cleanup

Property development and redevelopment presents a good opportunity to clean up contaminated soil. Developers sampled 261 acres in Tacoma, of which 146 acres required cleanup. They cleaned up 87 acres of contaminated land. The remaining 59 acres of contaminated land will be cleaned within the next few years. Ecology has seven active projects in Tacoma and Ruston.

To date, Ecology has evaluated cleanup of 91 properties within the entire Tacoma Smelter Plume. Developers sampled 3,359 acres of land with 2,146 acres requiring cleanup. They have cleaned up 1,337 acres of land.

About the Tacoma Smelter Plume

Asarco's former copper smelter in North Tacoma emitted arsenic, lead, and other heavy metals. These pollutants were carried by the wind and settled on surface soils, creating the Tacoma Smelter Plume (page 5).

The Asarco settlement: In 2009, the State of Washington received a settlement from Asarco for environmental damages. Ecology uses the \$94.6 million to manage risks from the Tacoma Smelter Plume through cleanup and outreach.

Federal, state, and local agencies working together

Since 1993, the U.S. Environmental Protection Agency (EPA) has overseen the Superfund cleanup of thousands of residential yards in Ruston and North Tacoma, and the smelter property itself.

In 2013, Ecology began cleaning up yards that did not qualify for EPA's cleanup. In addition, Ecology and the Health Department took over outreach work in the community. Through the Dirt Alert program we provide outreach and education and raise awareness.

Online map: Residents can go to our online map and public database to find out if their yard was part of the Superfund or Ecology soil sampling and soil replacement work.

<https://apps.ecology.wa.gov/dirtalert/>

Tacoma Smelter Plume website:

<http://ecology.wa.gov/Tacoma-smelter>

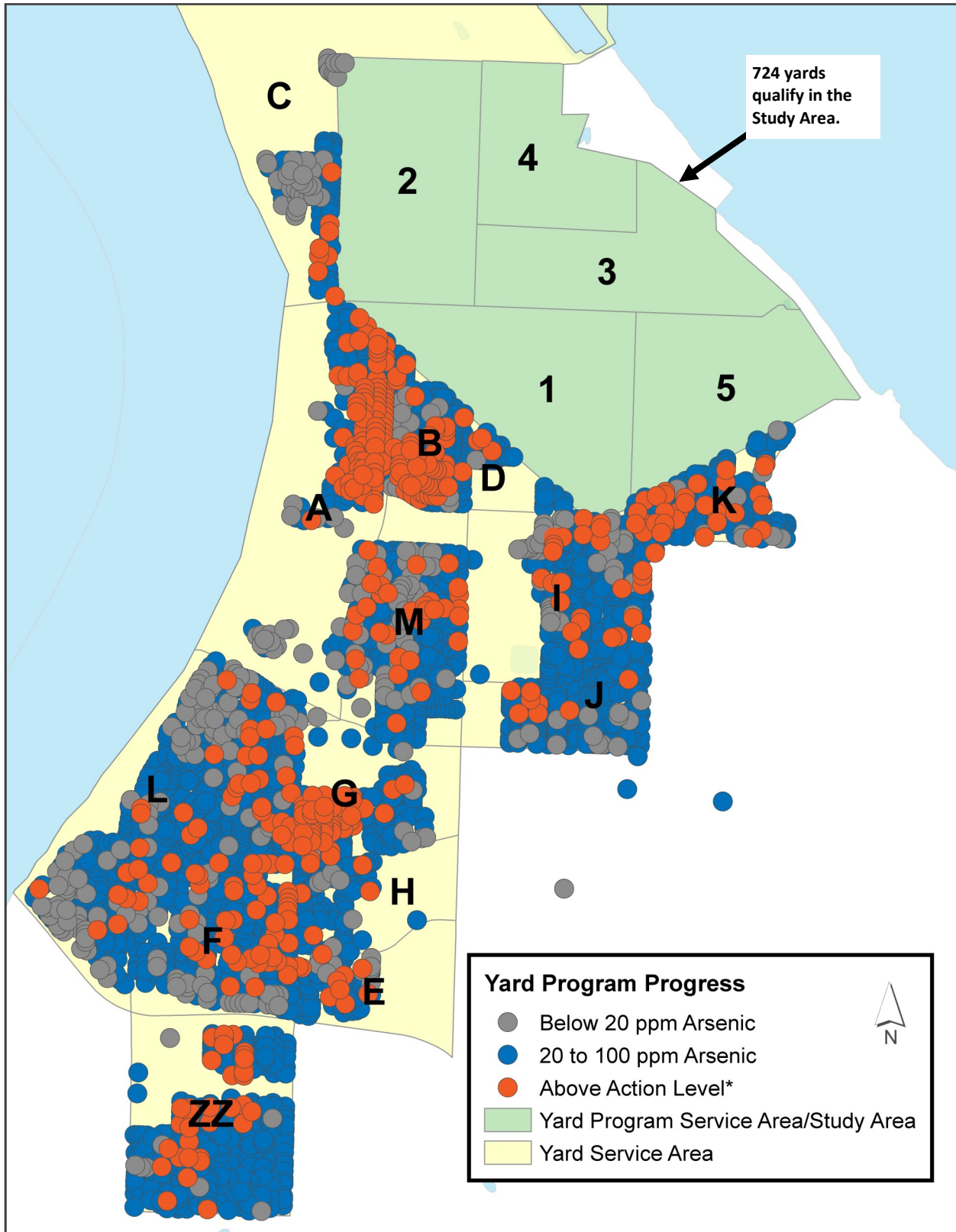
Dirt Alert videos:

<http://youtu.be/IV4YUdCHjE>

Contact: Marian Abbett
(360)-489-4569

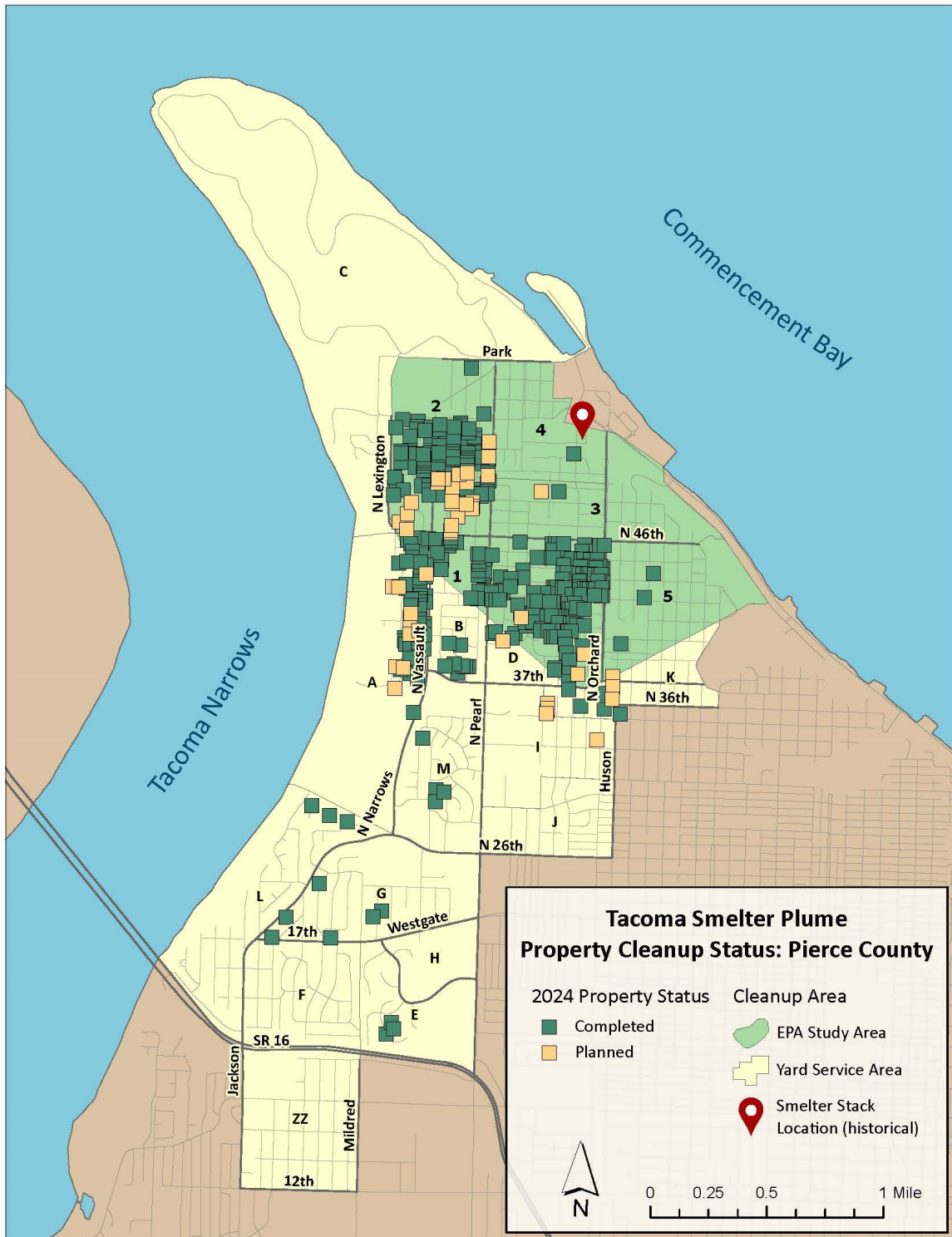
Marian.Abbett@ecy.wa.gov

Yard Program – completed soil sampling in Tacoma



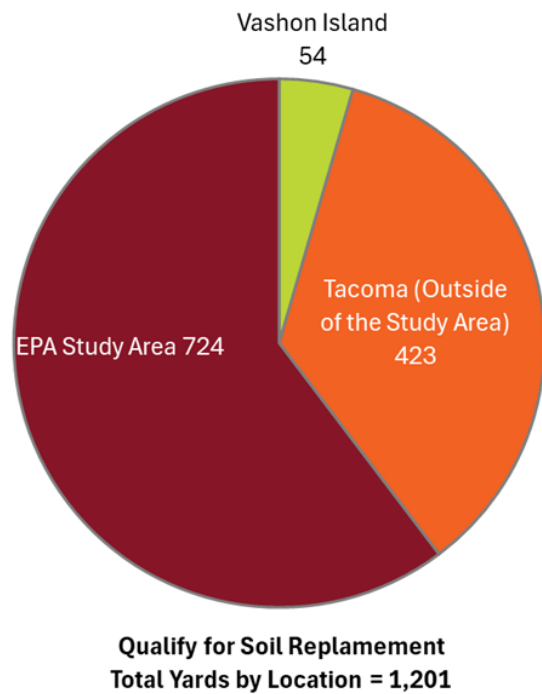
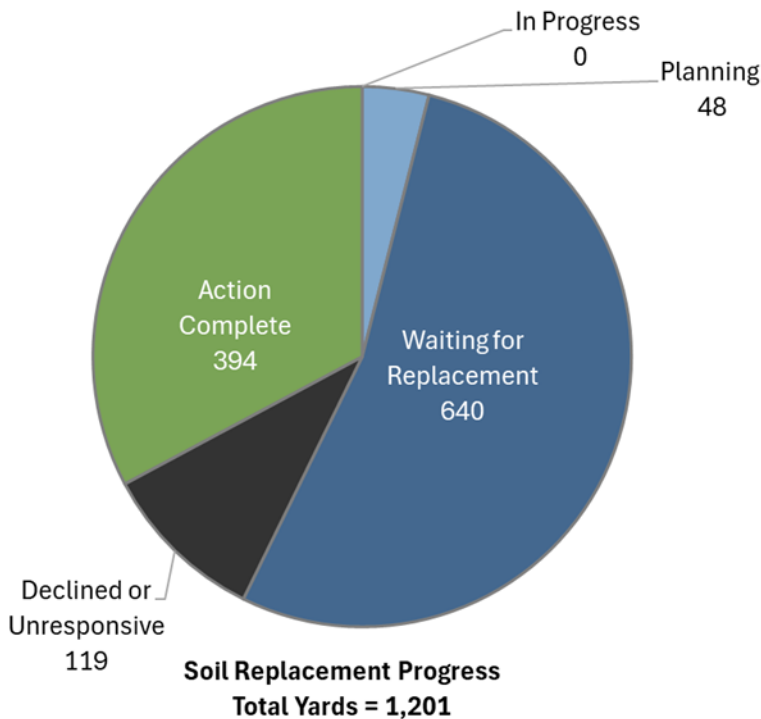
*Ecology’s action level for arsenic is 100 parts per million (ppm) or above; for lead, it is 500 ppm or above. Properties marked “Above Action Level” include those with average arsenic or lead above the action levels. The map displays data from Yard Program Sampling efforts, and does not include EPA sampling data. This map was updated in May 2023.

Yard Program – soil replacement progress in Tacoma through 2024



**The Study Area is where the Environmental Protection Agency oversaw the Superfund cleanup of thousands of residential yards in Ruston and north Tacoma (green area on map). Ecology is continuing the work that was started by the EPA over 20 years ago. This map was created in July 2024.

Yard Program – soil replacement progress



Tacoma-Pierce County outreach & education efforts

Get Covered! Toolkits

- For residents of the plume
- Provides two free bags of splinter-free cedar play chips and instructions.
- TPCHD staff deliver to residents
- Nearly 50 kits provided to residents through annual mailer and Peach Jar campaigns .



Annual Mailer

- Sent to over 12,000 postal customers in the Yard Program Service Area
- Shared information on Soil Safety Program, Yard Program, Dirt Alert, Healthy Actions and Get Covered! Toolkits
- Translations available on website in Spanish, Korean, Chinese and Vietnamese



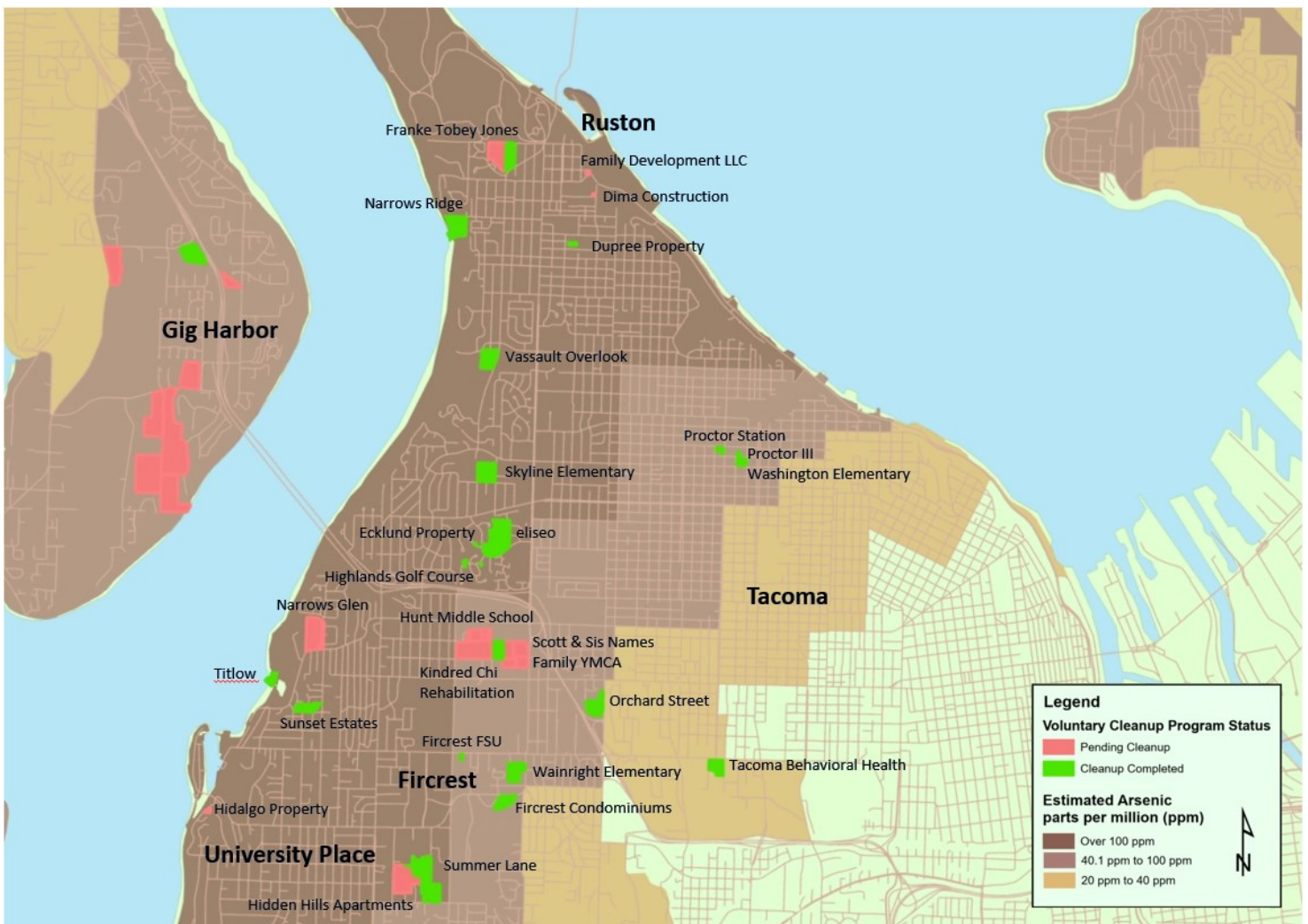
Sampling

- Staff provide free arsenic and lead sampling for residential yards
- Within Yard Program area, contaminant levels may qualify for soil replacement
- Outside Yard Program area, sampling is educational only

Community Gardens

- Partnership with Harvest Pierce County
- Provide educational signage to post at community gardens within the Tacoma Smelter Plume footprint
- 23 signs installed to date

Tacoma Smelter Plume – Estimated Arsenic Levels and Voluntary Cleanup Program Sites



With 90% certainty, at least 1 in 10 parcels will have arsenic in soil at or above levels shown. Predictions are based on distance and direction from the former Asarco smelter, and on sampling data from forested and other soils undisturbed by development. Actual arsenic levels may vary greatly from parcel to parcel. Arsenic levels are shown in parts per million (ppm).