Fostering community gardens in an area with historic soil contamination

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The soil in industrial cities is often an overlooked resource. Years of manufacturing or other industrial processes can leave contaminants in the soils and scare residents away from using the land. As the local food movement grows, though, planners and gardeners must reconcile the desire to grow food in cities with the fear that the soils are contaminated.

On Tuesday, Nov. 5 at 10:35 am, Kristen McIvor of the Pierce Conservation District will discuss the challenges and benefits of urban gardening. Her talk, Fostering Community Gardens in an Area with Historic Soil Contamination, is part of is part of the American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America Annual Meetings, Nov. 3-6 in Tampa, Florida. The theme of this year's conference is "Water, Food, Energy, & Innovation for a Sustainable World."

In Tacoma, Washington, a copper smelter operated for nearly 100 years contaminating the soil in some areas of the city. While remediation has improved soils, residents have become hyper-aware of the threat of soil contamination. But often, that fear is misplaced.

In her effort to establish community gardens, McIvor has worked with soil throughout the city. "We test all of the soils before we start building a garden," she explains. "None of the tests have shown any results to be concerned about. Even though there is the perception of soils being very toxic here, our experience is that that is not true."

While testing has shown that there is little to fear in the soils of Tacoma, residents are still hesitant to dig in and start growing food. And without dedicated growers and organizers, urban agriculture can't flourish. So McIvor and her colleagues work hard to educate growers and help them manage their gardens in ways that eliminate any contamination fears.

Raised beds are often built on top of existing land and filled with new soil or compost. And the city of Tacoma does its part to help. TAGRO, a biosolid-based soil product that contains nutrients that plants need, is provided to growers free of charge. Raised beds and TAGRO help growers feel comfortable with the soil and build productive gardens. And residents are taking notice.

"With TAGRO, you can turn a beginning gardener into someone who has a garden plot full of food," says McIvor. "When people see the amazing yields, it's not a hard sell."

The number of urban gardens in Tacoma has increased from 14 to 34 in just three years. Other cities can follow that lead and find ways to educate people about soils and contamination while encouraging growers. These efforts will give people access to fresh, local food regardless of the history of their soil.

Provided by American Society of Agronomy