

**WASHINGTON COUNTY PUBLIC HEALTH DIVISION**  
**FRONTIER LEATHER TANNERY ATSDR MODEL REPORT**  
**DECEMBER 2016**

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**BACKGROUND**

Health is shaped by the environment where people live, learn, work, and play. A healthy community is one that meets people's basic needs, provides opportunities for economic and social development, promotes healthy and sustainable living, and places high value on positive social relationships.

When not addressed, brownfield sites can often have negative impacts on a community's health. Exposure to hazardous substances in water and soil, safety concerns, and physical hazards impact health outcomes. The cleanup and redevelopment of the former Frontier Leather Tannery brownfield site presents an opportunity to integrate health considerations in planning efforts and to improve health outcomes in the City of Sherwood.

**PROCESS**

Washington County Public Health Division (WCPH), in partnership with the City of Sherwood, utilized the Agency for Toxic Substances and Disease Registry (ATSDR) Action Model to solicit community input on clean-up of the former Frontier Leather Tannery site, relocation of the City's public works yard, and redevelopment in Old Town.

Community health is an important part of land revitalization. Utilizing effective community engagement practices is a formative part of connecting community health and redevelopment efforts. To conduct the community engagement for this project, WCPH staff participated in two public meetings facilitated by the City. The questions from the Centers for Disease Control and Prevention ATSDR Action Model were used to guide the discussion at these meetings. In the first public meeting, Sherwood Planning Commissioners lead community members through the first two questions of the Action Model. Each planning commissioner lead a small group discussion which allowed community members an opportunity to voice concerns and ideas in a more informal setting. The remaining steps of the model were the focus of the second public meeting. At this meeting, preliminary results from the phase II assessment were shared along with data and research about the corresponding health impacts.

**ATSDR ACTION MODEL**

The ATSDR Action Model is a grass-roots, community-level model designed to foster dialogue, communication, and vision among the diverse members of the community through a series of four questions including: what are the community issues, how can

redevelopment address the issues, what are the community health benefits and what data are needed to measure change. The model creates a framework to assess the impacts of redevelopment on public health and provides a forum for community input. Through the use of the Action Model community members are encouraged to think about broad public health topics such as physical and mental health, community factors such as safety and economy, environmental impacts, and infrastructure.<sup>1</sup>

### ***What are the community issues?***

Sherwood community members shared numerous concerns regarding the contamination and clean-up of the Tannery site as well as possible redevelopment of the land. Primary concerns were focused on negative environmental outcomes and potential threats to human health. These included impact on water and soil quality, and fish and wildlife that live in the wetlands that border the site. People were concerned about community well & ground water contamination, extent of the contamination beyond the Tannery site, and the potential of further contamination when soil is dug up. Additionally, safety was raised as a concern since the land currently sits vacant and was the site of a large fire in 2015.

In regard to the redevelopment of the site and relocation of the public works yard, people were most concerned with the potential impact on traffic and parking along Oregon Street and in Old Town. Additional questions arose regarding the logistics of the process including acquiring the land from Washington County, the cost of clean-up, and connection to the Ken Foster Farms (KFF) site. Figure 1 provides a visualization of the issues that community members shared during the two public meetings. The size of the words corresponds to the frequency that these issues were brought up.

Figure 1: Word Visualization of Community Issues



<sup>1</sup> ATSDR Brownfield/Land Reuse Health Program. (2015). *ATSDR action model*. <https://www.atsdr.cdc.gov>.

### ***How can redevelopment address the issues?***

Redevelopment presents an opportunity to clarify information about contamination, assuage community concerns about toxins and dedicate resources to any necessary cleanup of the tannery site. This will have significant impact on community concerns regarding the contamination of the site and threats to human and environmental health. Redevelopment of the land would result in it no longer being a vacant lot. This would change perceptions about the land being blighted. Taking these concerns and perceptions into consideration with redeveloping the land would improve people's feeling of safety and reduce concern about fire danger. Other redevelopment considerations should include traffic congestion and parking in the area. Throughout the community engagement process it was clear that community members were supportive of moving the public works yard from Old Town to the Tannery site. They felt that this move would create new opportunities for economic growth through new businesses. Economic prosperity and job creation, in addition to safety and perceptions of safety, are all important drivers of health and impact a community's ability to thrive.

Community members were also enthusiastic about the possibility that the Tannery site could include recreation opportunities such as trails. The community felt that redevelopment presents new opportunities to improve sidewalk connectedness and bike lanes along Oregon Street in order to enhance access to Old Town and other areas of Sherwood. This is particularly important to consider for residents who are less likely to own a car including low-income households, older adults, people with disabilities and children. Studies show that good pedestrian amenities, bicycle infrastructure, and access to trails are associated with higher levels of physical activity and social cohesion among residents.<sup>2</sup>

### ***What are the community health benefits?***

The built environment has a significant impact on health outcomes. Through this public involvement process, it was clear that toxin exposure is the most imminent human health concern for the community related to the Tannery site. Fortunately, the phase II assessment conducted by Amec Foster Wheeler found that the potential for human exposure to harmful toxins is low. However, the benefits of brownfield remediation and redevelopment extend beyond removal of contaminants. Redevelopment is an opportunity to make infrastructure improvements that support health through: increased opportunity for physical activity, economic prosperity, improved feelings of safety and connectedness, and reduced stress.

Washington County's 2016 Community Health Assessment revealed that the leading causes of death and disease in Washington County are chronic diseases, including heart disease, cancer, asthma, diabetes, and obesity. Mental health issues such as depression

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<sup>2</sup> Urban Land Institute. (2015). *Building healthy places toolkit: strategies for enhancing health in the built environment*. <http://uli.org/wp-content/uploads/ULI-Documents/Building-Healthy-Places-Toolkit.pdf>.

are also prevalent.<sup>3</sup> One way in which these outcomes can be addressed is through the built environment and connected communities.

Infrastructure that supports increased opportunities for physical activity such as sidewalks, trails and bike lanes is essential to good health. Regular exercise helps maintain healthy weight and reduces the risk of high blood pressure, type 2 diabetes, heart attack, stroke, and several forms of cancer. It also reduces the likelihood of arthritis pain and disability, osteoporosis, depression and anxiety. A built environment that supports active transportation and physical activity opportunities can result in positive health outcomes. Research shows that there is a 47% increased likelihood that people who live in neighborhoods with sidewalks will get at least 30 minutes of exercise a day. People who live near trails are 50% more likely to meet physical activity guidelines.<sup>4</sup>

Community connectedness is also an important factor in creating safe, happy, and healthy places. Vacant brownfield properties take away from livability and are often tied to crime putting a strain on community resources. Creating spaces that bring community members together such as trails and natural environments improve mental and physical health. Health benefits from social interaction and improved safety include reduced risks for health issues such as depression, high blood pressure, and cardiovascular problems.<sup>2</sup> Built environment that fosters social interaction can also improve a people's perception of safety as well as their sense of community

A healthy economy is one of the fundamental drivers of a healthy community and positive health outcomes of residents. A thriving economy is critical in a community's ability to maintain health and independence. Stronger economies can translate into better access to nutritious food, safe neighborhoods, recreational opportunities, and other elements of healthy lifestyles. Built environment that supports healthy choices tend to have a positive relationship with property values and neighborhood desirability. An EPA study found that residential property values increased by 5.1–12.8 percent once a nearby brownfield was assessed or cleaned up.<sup>5</sup>

### ***What data are needed to measure change?***

In order to assess the impact on health of clean up and redevelopment of the Tannery site, it is important that the City examine data from a health perspective, with a particular focus on the social determinants of health. Social determinants of health are the economic and social conditions that influence a person's opportunity to be healthy. These include demographic, education, crime, housing, and built environment data such

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<sup>3</sup> Washington County Public Health. (2016). *2016 Washington County community health assessment summary of findings*. <http://www.co.washington.or.us/HHS/News/reports-and-publications.cfm>.

<sup>4</sup> Urban Land Institute. (2013). *Intersections: health and built environment*.

<sup>5</sup> United States Environmental Protection Agency. (2015). *The EPA brownfields program produces widespread environmental and economic benefits*. <https://www.epa.gov/sites/production/files/2015-09/documents/brownfields-benefits-postcard.pdf>.

as sidewalk density. In consideration of the limitations of city level health outcome data, assessing these indicators is an effective way to measure change in the impacts on health as a result of redevelopment.

## **CONCLUSION**

There are numerous opportunities to address community concerns and impact health through the redevelopment of the former Frontier Leather Tannery site. The public involvement process associated with this assessment provided an important first step in incorporating health considerations in the City of Sherwood's planning efforts.

Increasing targeted outreach and education to the community related to the phase II assessment results and environmental impacts is an effective strategy to assuage many of the health concerns the community expressed. One way to achieve this is to partner with environmental groups to develop informational materials, in plain language, about the assessment findings.

Further community engagement is important if the City chooses to acquire this land and pursue clean up funds. The relocation of the public works yard could present new opportunities in Old Town for economic opportunity, active transportation and community connectedness. It is important to consider equity in this process, especially when considering the potential impacts of redevelopment on older adults, children, people with disabilities and those living in poverty. An effective strategy to improve participation of the Sherwood community, particularly among priority populations, is to hold events within existing groups. By going to meetings where trust and a sense of community are already established, more robust and honest conversations can be had.

## **APPENDIX: FRONTIER LEATHER TANNERY COMMUNITY ENGAGEMENT NOTES**

### **CONCERNS**

#### **Safety**

- Community well water contamination
- Shallow ground water contamination
- Contamination extent; how deep does it go? Does it extend off-site? What are the health impacts? What is the cost to clean up?
- Need to know what is on-site before any action is taken
- Safety – dry fire hazard, no fence allows people to access the property (rebuild fence?)
- Concern about accurate information from DEQ and potential that standards will change requiring different levels of clean up
- Concern that digging up ground for redevelopment may cause more contamination problems
- Health in general

#### **Built Environment**

- Appearance of lots, both on this site and the adjacent privately owned sites
- Structures without parking
- Don't want to see new housing subdivisions built on the site
- Increased traffic on Oregon Street with redevelopment
- How would City vehicles access the public works yard if it moves to the Tannery site?

#### **Logistics**

- Concern that if Sherwood does all this work, will the County actually transfer the property to the
- City or could they change their minds?
- What other grant money is possible and/or likely if City moves forward? Are there other funding
- opportunities if grants don't cover the costs?
- What is done with the contaminated waste that is removed from the site?

#### **Ecosystem**

- Concern about disturbing wetlands during clean up
- Validity of surface water sampling due to seasonal impacts on water flow – did sampling occur one time or multiple times?
- Discrepancy between DEQ results and U.S. Fish and Wildlife analysis
- Prioritization of upland area for cleanup because of the incentive for economic development; not having enough funds for the cleanup of the wetland area
- Need for testing of amphibians rather than just birds to measure the ecological impact of the contamination. Amphibians are best indicator of wetland health

**KFF**

- Increase money (revenue) from Tannery site to help clean up KFF site
- Remediation should consider both this site and KFF
- City going through this just to park City trucks; should focus on KFF

**BENEFITS & CONSIDERATIONS**

- Opportunity to lease additional property not occupied by new public works yard
- Opportunity for entry from Langer Farms Parkway or Baler to cut down on traffic from Oregon Street
- Employment
- Moving public works out of Old Town will spur additional redevelopment there
- Attractive face (if done well) along Oregon Street
- Trails along wetlands for dogs and bikes
- Need for sidewalks along Oregon St.
- New quarry in Clackamas County could bring many more trucks turning on Tonquin. Important to consider this when planning redevelopment.
- Coordinate with railroad regarding potential trestle replacement and impact on site