



A Pilot Framework: Integrating Community Health and Wellness into the Superfund Reuse Assessment Process

Pilot Framework Overview

Purpose

Develop a pilot framework to evaluate potentially integrating health, prevention and wellness considerations into the Superfund site reuse assessment process.

Background

Communities in Need: Many communities located near Superfund sites are impacted by disinvestment, multiple environmental burdens, lack of services, and stark health disparities.

Federal Health, Prevention and Wellness Initiatives: Addressing environmental justice concerns for overburdened communities is a priority for EPA. In addition, several federal initiatives focus on health, prevention and wellness including:

- Federal Interagency Working Group on Environmental Justice
- HUD-DOT-EPA Partnership for Sustainable Communities
- National Prevention Strategy

The Superfund Reuse Assessment Process: A reuse assessment identifies potential future use at a site by evaluating site constraints, surrounding context, local plans and community goals. Integrating an analysis of a community's relative health and wellness needs into this process may assist the community in providing informed input for potential future land use assumptions. This data could also help the community advocate for resources, technical assistance or programs from local, state, tribal or federal partners that could help to support in additional planning and implementation of future land uses related to health and wellness, or to address community needs outside of the scope of the Superfund program authority.

Pilot Framework

Development: A literature review of community health assessment tools identified the Sustainable Communities Index as one adaptable model whose objectives and indicators:

- fit into a land use analysis,
- apply in rural and urban settings, and
- have readily available data sources.

Process: The diagram at right illustrates a process for integrating community health and wellness considerations into a reuse assessment.

Black text indicates typical steps in a reuse assessment.

Blue text indicates additional information or steps that may be included when addressing health and wellness considerations.



Pilot Case Study: Fairfax St. Wood Treaters (FSWT) Site (Jacksonville, FL)

Site Context

FSWT Site

- Woodtreating operations (1980-2010).
- Contamination of site soils, residential yards and public school property.
- In 2011, EPA initiated a reuse assessment during the Remedial Investigation/Feasibility Study phase of the Superfund process.



Surrounding Neighborhood

- Environmentally overburdened.
- 94% African-American.
- Median household income is 43% less than Duval County median household income (2010).



The Fairfax St. Wood Treaters Superfund site is located in northwest Jacksonville approximately 2 miles from the City's downtown. The neighborhood study area is defined by I-95 to the east and active rail lines to the north, south and west.

Pilot Scoping Considerations

Selecting a Candidate Site

- Criteria for site selection included a community that:
- Exhibits characteristics of an overburdened community (as defined by Plan EJ 2014).
 - Has raised environmental justice or disease disparity concerns.
 - Has raised health and wellness concerns or goals.

Selecting a Level of Effort

Recognizing that time and resources may vary, the following chart outlines a range of options in level of effort for the analysis. A lower level of effort does not imply that information being gathered is less valid. This pilot included Discussion Questions, Service Area Maps, Existing Health Risk and Disparity Studies, and Health Risks and Disparity Maps.

	LOE	Approach
Community Discussion	Low	Discussion Questions Use the discussion questions during stakeholder interviews or community meetings to identify community health and wellness needs.
Asset and Gap Analysis Approaches	Med.	Proximity Maps Map the location of features related to health and wellness in the community relative to the site.
	High	Service Area Maps Map the gaps in service area for features related to health and wellness.
Health Conditions Approaches	Low	Existing Health Risk and Disparity Studies Identify existing resources on health risks and disparities.
	High	Health Risks and Disparity Maps Map health disparities and potential neighborhood health risks.

1 Community Goals

Community Engagement Process

- Site visit with Superfund Remedial Project Manager, including interviews with residents, community-based organizations, and city and county agencies.
- Follow-up community planning workshop with 45 stakeholders.

Community Reuse Goals

- Mixed-use space to support small businesses
- Grocery store
- Health clinic/pharmacy
- Banking services
- Senior housing center
- Police stop station



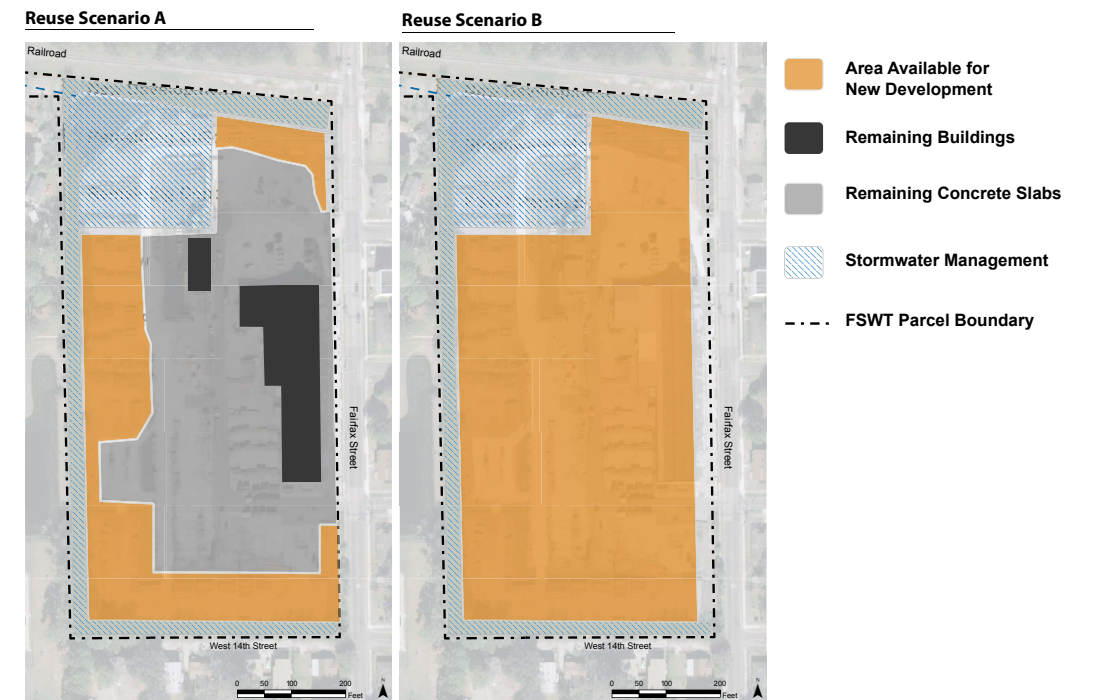
2 Site Suitability

Large site size offers opportunity to provide services that require a large footprint.

Site is not on a major corridor, so retail or other services would need to be scaled to a neighborhood market or consider improving access and transit options to increase service area.

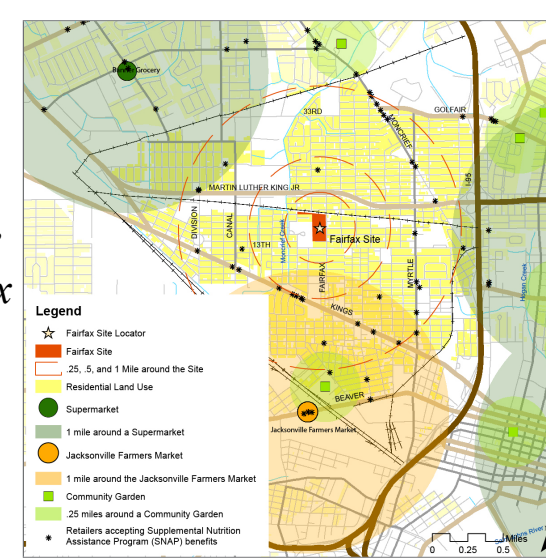
Site has proximity to two schools, so land uses should be carefully considered.

Reuse Scenarios: The two suitability maps (below) for the FSWT Site show how slabs, buildings or other site and remedial features may determine the future area available for development.



3 Service Analysis

The health and wellness service analysis supplements the typical reuse assessment land use analysis. It could include evaluation of assets as well as gaps in amenities and services that support health and wellness. Data may be gathered from local, state and federal sources.



Results: The FSWT Site service analysis, based on the Sustainable Communities Index model, is summarized in the chart below. The map (right) shows an example of gaps in access to healthy, affordable food.

Feature	Assets	Gaps within the Study Area
Transportation options	Sidewalks on Fairfax Street frontage	Limited street trees on Fairfax frontage Rail line blocks access to the site for residential areas north of the site
Community facilities	Multiple community centers Public library	No arts or cultural facilities
Health facilities	Two primary care offices that accept Medicaid Dental van stops	No FDHC in the study area No dental facility that accepts Medicaid Vision and mental health facilities unknown
Open space	Multiple public parks	Limited bike/greenway access
Neighborhood retail services	Gas stations are prevalent Bank	Limited neighborhood retail
Healthy, affordable food		No grocery store Retailers with limited health foods are prevalent
Quality affordable housing		Low homeownership rates High vacancy rates Community indicates a desire to increase affordable housing

4 Health and Wellness Needs

The purpose of the health and wellness needs analysis is to document the relative need to support health and wellness in the neighborhood around the site related to:

- Community health outcomes and
- Potential environmental risks.

Health outcomes can be documented through community interviews and health outcome data maps.

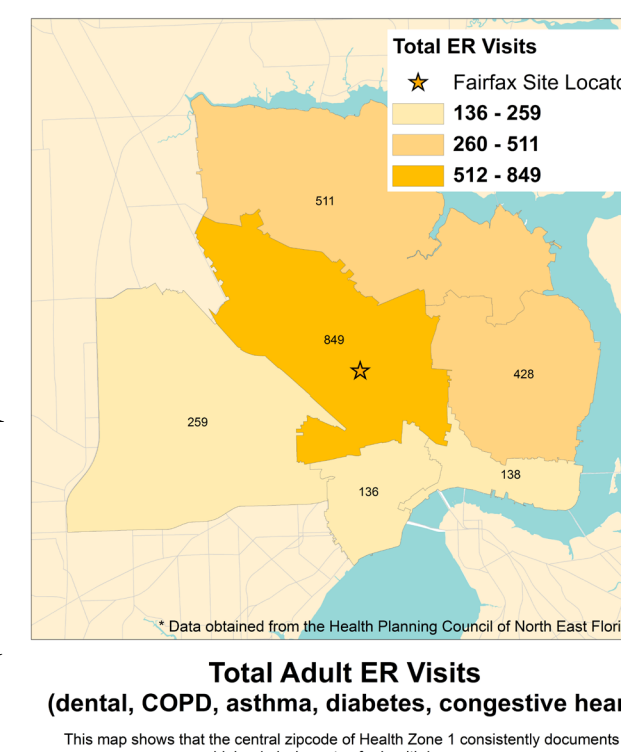
Health Outcomes

The FSWT Site is located in Duval County's Health Zone 1, which has the highest rates in Duval County of:

- Infant mortality.
- Heart disease mortality.
- Asthma-related ER visits.
- ER visits related to uncontrolled diabetes.

The site is also located in the zip code of Health Zone 1 with the highest rates within Health Zone 1 of:

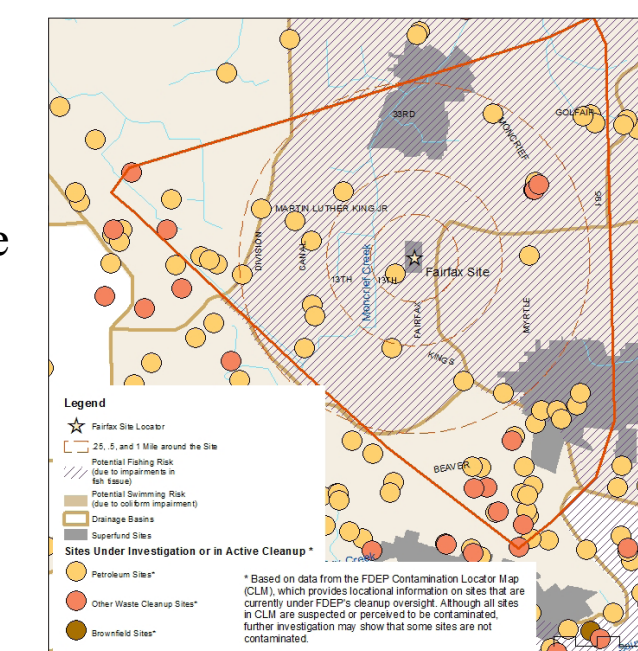
- Teen births.
- Dental-related ER visits.
- Ambulatory care sensitive conditions-related ER visits.



Environmental Risks

Risks include:

- Proximity to streams with fish consumption risks and swimming risks due to poor water quality.
- Four Superfund sites in close proximity (note that proximity does not directly correlate to exposure or health effects).
- A multitude of sites under investigation or cleanup through the State Brownfields program.



Contaminated or Potentially Contaminated Sites and Streams with Fish Consumption or Swimming Risks

5 Recommendations

Residents in this zip code suffer from the highest health disparities within the county based on birth, mortality and emergency room data. The neighborhood is also burdened with environmental risks and experiences an absence of many land uses associated with better quality of life and better health outcomes.

The neighborhood could benefit from the following health and wellness features:

- A dental, mental health and/or vision facility.
- Extension or expansion of an existing Federally Qualified Health Center.
- A grocery store and neighborhood retail services.
- Affordable housing.
- Arts and cultural facilities.

The site may be suitable for any of these uses, however:

- Retail size may need to be suited for a neighborhood scale.
- Both access and transit options may need to be improved to increase the service area.
- Access may need to be improved for a large volume of users.

This pilot project was funded by EPA's Superfund Redevelopment Initiative to provide a framework for integrating health, prevention and wellness considerations into the Superfund reuse assessment process. Through the Superfund program, EPA is working to further the cleanup of contaminated sites and the protection of human health and the environment. Additional support was provided by EPA's Office of Environmental Justice and the EPA Region 4 Superfund program.

For additional information on SRI, please visit: <http://www.epa.gov/superfund/programs/recycle>. For additional information on the pilot project, please contact Melissa Dreyfus (Dreyfus.Melissa@epa.gov, 703.603.8792).