Brownfield Redevelopment Success Stories

Duke University Superfund Research Center Community Engagement Core March 15, 2018 Catherine Kastleman & Emily Jewell (UNC)

Presentation Overview

- What is a Brownfield?
- Case Studies: Successful Brownfield redevelopment with grants from the US Environmental Protection Agency (US EPA)
- Redevelopment options at the former Planters Oil Mill Site

What is a Brownfield?

"A brownfield is a property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. It is estimated that there are more than 450,000 brownfields in the U.S.

Cleaning up and reinvesting in these properties increases local tax bases, facilitates job growth, utilizes existing infrastructure, takes development pressures off of undeveloped, open land, and both improves and protects the environment."

Source: US Environmental Protection Agency (EPA): https://www.epa.gov/brownfields/overview-brownfields-program

Case Study #1: Taunton, Massachusetts "Robertson on the River"



Before: Robertson Textile Mill

- Built 1890, closed 1990, purchased 2003
- Yarn and other textile production
- Vacant, safety concern for community due to soil contamination and vandalism

Taunton, Massachusetts "Robertson on the River"

After: Robertson on the River

- Successfully removed soil contaminated with PAHs, lead, asbestos, and underground storage tanks
- Now an affordable housing and commercial space
- \$15 million in redevelopment funding from local, state, and public entities



https://archive.epa.gov/region1/brownfields/web/jpg/4-6.jpg

Miles City, Montana: The Cornerstone



http://farm6.staticflickr.co m/5133/5573853407_199 da74f7c_o.jpg

Before: Holy Rosary Hospital

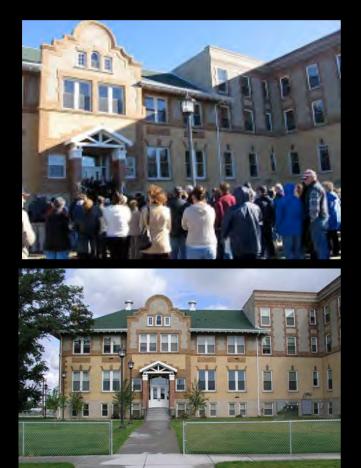
Three structures built in 1910, 1930, 1950

Sold and stripped in 1990
 Abandoned and vandalized
 MT DEQ assessed in 2004-2005
 Cleanup through 2007



http://deq.mt.gov/portals/112 /Land/Brownfields/images/Old HolyRosaryHospital.JPG

Miles City, Montana: The Cornerstone



https://upload.wikimedia.org/wikipedia/commons/thumb/b/be/Corner stone_Apartments%2C_Miles_City_%283939322565%29.jpg/1200px-Cornerstone_Apartments%2C_Miles_City_%283939322565%29.jpg

After:

- Removed asbestos, vermiculite, oil, and detergent
- Opened in 2007 for low to moderate income families
- Over \$5 million from nine different funding sources for cleanup/redevelopment (\$2.2 million in low income housing tax credits)
- ≫31,000 sq. ft. of space with green space, parking, playground

Case Study #3: Hickory, North Carolina Moretz & Hollar Mills

Before



After

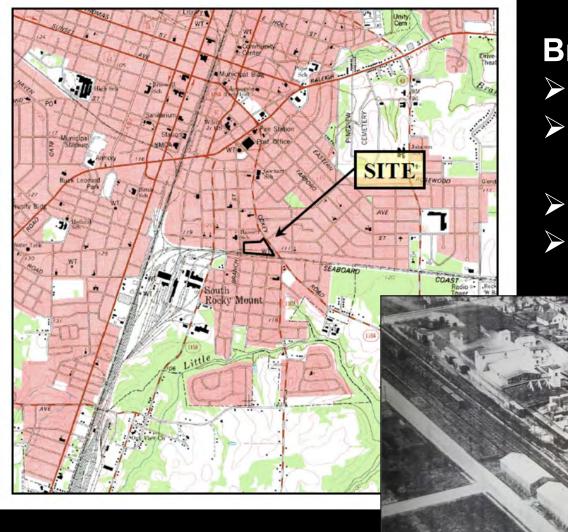


 Moretz Mill built 1929, bought 1992
 Asbestos, lead paint, soil contamination were removed/covered with pavement
 Opened in 2014: houses, fitness center, event space, retail and office space

- US EPA awarded \$400,000 in Brownfield Assessment Grants to Hickory in 2007 and 2012 to redevelop both sites
- Improved aesthetics, economy, job market. Bringing markets to Hickory to invest, expand and generating tax revenue for the city and county (Hollar = \$16,000, Moretz = \$30,000)

http://ih.constantcontact.com/fs132/1107842220607/img/1228.jpg?a=1117273934525 https://i2.wp.com/d3m7xw68ay40x8.cloudfront.net/assets/2016/06/08112650/hollarmill.jpg?resize=922%2C759&ssl=1 http://cbsa-architects.com/wp-content/uploads/2016/04/Screen-Shot-2016-04-14-at-2.03.49-PM.png

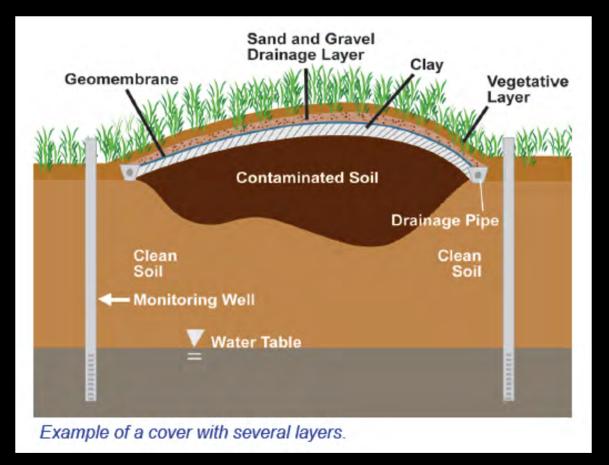
Planters Oil Mill: Rocky Mount



Brief History:

- ➤ 1907- 1983 Mill in operation
- 2007: Site donated to City in 2007, mill demolished
- EPA Site Assessments I & II completed
 2011: cleanup starts, ~ 2/3 of site capped

Remediation at Planters Oil Mill Site



Approved uses for capped side of site:

- Multi-unit residential and associated parking lots
- Recreational and community gardens
- Light industrial purposes
- Other commercial purposes with DEQ approval

Current Land Use Restrictions

- No use of groundwater at site without additional sampling
- No enclosed buildings can be built until:
 - DEQ determines no significant risk to public health and environment
 - Vapor barrier approved by professional engineer

Thank you!

Catherine Kastleman

Program Coordinator for Community Engagement & Research Translation Duke University Superfund Research Center Nicholas School of the Environment, Duke University Catherine.Kastleman@duke.edu 919-613-8207