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Introduction

The Plainwell Paper Mill was a vital part of Michigan's economy, history and heritage for more than a century. In the early 1900s, the area along the Kalamazoo River had the largest concentration of paper mills in the world. Following the Plainwell Paper Mill's listing on EPA's Superfund National Priorities List (NPL) and its closure in 2000, city officials struggled with how best to engage with the 36-acre area's cleanup and help revitalize Plainwell's downtown.

Through a public-private partnership and the local government's work with EPA, the Michigan Department of Environmental Quality (MDEQ) and Weyerhaeuser, the site's responsible party, cleanup and redevelopment have both been able to move forward. A protective remedy and land revitalization are overarching project goals. In 2004, EPA aided the city's efforts by funding a community-based reuse planning process. The resulting plan and later updates identified opportunities to restore historic mill buildings, establish new commercial areas and neighborhoods, and create trails along the nearby Kalamazoo River.

For more than a decade, the City of Plainwell has been the champion for the cleanup and redevelopment of the Plainwell Paper Mill, recognizing the community-wide benefits and potential opportunities offered by the property's location, size and history. By turning it into a productive asset once again, the City of Plainwell hopes to create new interest in the city's downtown, support local jobs and economic development, and increase area property values and tax revenues.

In 2013 and 2014, following years of making property improvements, marketing the area and leveraging more than \$7.7 million in state and federal funding, the community's hard work has paid off.

- City development partner Conestoga-Rovers & Associates (CRA), an environmental consulting and development company, moved 50 staff into renovated space in the mill.
- Plainwell's new city hall facilities are under development in the mill.



Plainwell, Michigan, is a small town (pop. 3,804) in southwest Michigan. The city is about 40 miles south of Grand Rapids.

• The area is now part of a Historic District on the National Register of Historic Places.

Today, as environmental cleanup work continues, the City of Plainwell and CRA are focused on moving city hall's offices into the mill and bringing trails and new residential and commercial ventures to the site. The project is one of the first Superfund sites in the country where a local government and its development partner will both have offices located on property owned by the parties.

This case study explores the tools and partnerships that have led to the successful reuse and ongoing cleanup of the Plainwell Paper Mill. The following pages trace the evolution of cleanup and reuse efforts, highlighting the city's partnership with CRA and Weyerhaeuser, coordination with regulatory agencies, and ongoing cleanup planning and reuse activities through early 2014. The case study provides information and lessons learned to parties interested in historic preservation, adaptive reuse and mixed-use redevelopment at Superfund sites.



The Plainwell Paper Mill is a leading national example of historic preservation, adaptive reuse and mixed-use redevelopment.

Site History, Contamination and Remediation

The Plainwell Paper Mill is part of the regional Allied Paper Inc. / Portage Creek / Kalamazoo River Superfund site. Also known as the Kalamazoo River Superfund Project, the site includes five disposal areas, four other paper mill properties, an 80-mile segment of the Kalamazoo River from Morrow Dam to Lake Michigan, and a three-mile stretch of Portage Creek. Cities next to the site (following the course of the Kalamazoo River) include Kalamazoo, Plainwell, Otsego, Allegan and Saugatuck.

Wastewater from former paper mill operations, including operations at the Plainwell Paper Mill property, and the later dismantling of dams on the Kalamazoo River resulted in the contamination of area soils and river sediments with polychlorinated biphenyls (PCBs), which can pose a threat to human health and the environment. The presence of PCBs in historic



The Kalamazoo River Superfund Project is one of the largest regional cleanups in the United States.

paper mill wastes comes from the use of PCBs in carbonless copy paper between 1957 and 1971. After initial investigations, EPA listed the site on the National Priorities List, the Agency's list of top-priority Superfund sites, in August 1990.

Cleanup activities near the Plainwell Paper Mill to date have included:

- Removal and off-site disposal of PCB-contaminated sediment from the Kalamazoo River and its riverbanks.
- Long-term monitoring of the Kalamazoo River and ecosystems along the river.

Following EPA approval of the Remedial Investigation Report for the mill property in February 2013, responsible party Weyerhaeuser is now working on cleanup options for remaining contamination. Potential cleanup areas include a former wastewater sludge dewatering lagoon, the north-central portion of the property, and areas around several mill buildings. Weyerhaeuser will be responsible for any cleanup required.

Throughout all Superfund activities, EPA staff members continue to meet regularly with community stakeholders to share site information and updates and to incorporate community feedback into the Superfund process. River cleanup activities

near the mill property began in March 2007 and finished in June 2009, with additional ground water and soil sampling at the mill property in summer 2012. According to EPA project manager Sheila Desai, cleanup will take place once a Record of Decision (ROD) is signed. The ROD will likely be in place in 2014.

Weyerhaeuser is designing the remedy to enable the reuse of the rest of the mill property for mixed commercial, residential, recreational and public land uses. "Where feasible, Weyerhaeuser has altered its investigative schedule to accommodate the city's reuse plans," said Richard Gay, the company's Remediation Program Manager. "In terms of costs, Weyerhaeuser has spent money earlier than anticipated to help move the development forward."



Mill workers, 1911.

Project History

2000 - 2004

Getting Started

From the day the Plainwell Paper Mill closed in November 2000, the City of Plainwell focused on the future. "Something had to be done – the mill is a huge part of our downtown," said City Manager Erik Wilson. "We wanted to make sure the community had a voice in that process. We wanted to control our own destiny." However, with the property part of a larger Superfund site, owned by a bankruptcy trustee and environmental conditions there not yet characterized, any redevelopment effort faced significant challenges. "If we weren't going to take the lead, no one else would," said Plainwell Mayor Richard Brooks. "The community needed to be its own champion."

City staff and elected officials reached out to EPA Region 5 and MDEQ to learn more about the status of the mill property. "The community was informed and motivated," recalled Tom Bloom, EPA Region 5's Superfund Redevelopment Coordinator. "While the regional cleanup was going to be a long-term effort, there was also an opportunity to link cleanup and reuse in Plainwell." EPA staff encouraged the city to apply for project funding from EPA Region 5 and the Superfund Redevelopment Initiative (SRI) to conduct a community-based reuse planning process.

The funding, awarded in early 2004, enabled the locality to move forward. The City of Plainwell established and worked with a community-based Mill Committee and a consultant team to develop a conceptual reuse plan for the mill property. Over nine months, the 32-member Mill Committee researched the property's history, assessed local land use trends and market conditions, and developed reuse guidelines and a reuse strategy for the paper mill property.

The reuse planning process built relationships among the City of Plainwell, EPA Region 5 and MDEQ. The project also raised the community's awareness of the significance and status of the paper mill property, enabling the City of Plainwell to build community support for the property's cleanup and redevelopment. Finally, the process established a working relationship between the City of Plainwell and Weyerhaeuser, the site's responsible party.

The resulting reuse plan outlined opportunities to locate innovative commercial, residential, civic, and recreational land uses at the site. The plan recognized the property's central location in Plainwell, the importance of linking the property with surrounding neighborhoods, the city's downtown district and the Kalamazoo River, and the paper mill's role as an important part of the community's history and heritage.



Aerial view of the mill in 2004.

"By the end of the process, we had built some important relationships and had a clear community vision for the future," Erik Wilson recalled. "To make that vision happen, the city needed to be able to control the mill property. Before that could happen, we needed a better understanding of the environmental conditions. Then, we needed to find the resources and the best way to acquire the mill."

Reuse Planning in Plainwell

Plainwell City Council formed a 32-member Mill Committee to represent community perspectives and guide the reuse planning project. The Committee also provided a forum for the community to learn about the site.

The reuse planning process included diverse local interests. Committee members included community residents, elected officials, business owners, city staff, site owner representatives, and representatives from community organizations such as the Plainwell Rotary Club. EPA and MDEQ site staff participated as resource members. A Weyerhaeuser representative participated as an observer.

In addition to committee meetings, the project also included site tours and public meetings.



Mill Committee meeting in March 2005.

The 2005 Reuse Plan for the Plainwell Paper Mill: *Envisioning the Future (conceptual plans)*

Recreation



Adaptive Reuse





Committee Reuse Goals

- Ensure the health and safety of community residents.
- Promote community gathering.
- Provide a mix of residential, commercial, recreational and civic uses.
- Promote commerce and attract visitors to Plainwell.
- Provide access to the Kalamazoo River and protect the natural environment.
- Recognize and celebrate the mill as an important part of the community's history and heritage.

Residential, Commercial and Public Spaces and Parking



2005 - 2006

Proceeding with Due Care...

Considering the acquisition of potentially contaminated property was new ground for the community. In August 2005, a key event made it possible. EPA signed a Consent Decree with responsible party Weyerhaeuser, a former owner of the mill. The agreement established the company's responsibility for future investigations and cleanup at the mill property.

The city's next step was to obtain assurances it would not be liable for site contamination caused by prior operators. After consideration of landowner liability protections provided under federal law, Plainwell City Council concluded that bona fide prospective purchaser (BFPP) status permitted under the 2002 CERCLA amendments would provide the greatest protections for the city as a new property owner.

In support of its efforts to obtain BFPP status, the city completed phase I and II environmental assessments to confirm preexisting contamination. The assessments indicated a low likelihood of contamination across large areas of the property. The city also prepared a Due Care Plan to make certain that any future city activities at the mill would not create unacceptable risks or new problems related to site contamination. Finally, city staff met with EPA's site team and received assurances that the locality was taking all necessary steps to address liability concerns.

... Funding the Acquisition

At the same time, city officials worked with several key parties – the city's Brownfield Redevelopment Authority, the mill property's bankruptcy trustee and Allegan County – on a property acquisition strategy. After more than a year of negotiations, the broad outlines of the approach were clear.

- The city would spend \$418,000 to pay off back taxes owed on the property.
- Allegan County would waive \$273,000 in bankruptcy penalties and fees, lowering the city's acquisition costs by 40 percent.
- The city's Brownfield Redevelopment Authority would qualify as a BFPP and take title to the mill property.

"Instead of wringing their hands, as have other communities when a major industrial plant shuts its doors and puts people out of work, Plainwell's leaders are doing something about it."

> Kalamazoo Gazette editorial, September 2006

The Bigger Picture: EPA and Reuse

Efforts to address future land use considerations at the Plainwell Paper Mill fit in well with emerging nationwide interest in the revitalization of contaminated areas, including Superfund sites. With the creation of EPA's Superfund Redevelopment Initiative in 1999 and its Land Revitalization Agenda in 2003, EPA's Office of Solid Waste and Emergency Response launched a new EPA initiative focusing on promoting land reuse and revitalization at contaminated sites.

In 2002, the Small Business Liability and Brownfields Revitalization Act also became law. The Act was designed to make the acquisition and redevelopment of contaminated properties such as Superfund sites easier by addressing the liability concerns associated with these sites. EPA's Office of Site Remediation Enforcement has a team devoted to facilitating and implementing these liability protections. See the Resources section for more information.

CERCLA

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) is the law passed by Congress on December 11, 1980, that is commonly known as Superfund.

Once the strategy was authorized by a bankruptcy court judge and agreed to by Plainwell's City Council, the city's Brownfield Redevelopment Authority moved forward. It voluntarily acquired the mill property in August 2006.

"Moving from planning to acquiring the mill was a huge step," said Plainwell Mayor Richard Brooks. "It began to dawn on us that this was really happening." City Manager Erik Wilson agreed. "When the city acquired the mill, we felt like there was some certainty for the first time," he said. "The future of the Plainwell Paper Mill was secure."

By late 2006, the first part of the community's reuse journey was coming to a close. Now, it was time for the City of Plainwell to take on a set of new challenges. Managing, maintaining and preparing the mill property for redevelopment. Exploring market conditions. Updating and refining reuse plans. Pursuing development partnerships.

The city preferred to think of the challenges as opportunities, Erik Wilson noted. "We knew that working on each of these areas was what would make the project possible."

2007 - 2010

Putting the Pieces in Place

Preparing the Property for Redevelopment

Following the mill's acquisition, the city and its contractors undertook property improvements and infrastructure maintenance as well as asbestos and historic resource studies to maintain the mill property. Including acquisition costs, the city has invested \$865,000 in the Plainwell Paper Mill property. To help fund these efforts, the city partly relied on its tax increment financing district, which allocates resources from local property taxes for mill improvements and maintenance.

Exploring Market Conditions

City staff also started attending regional and national meetings and conferences to raise the property's profile and attract interest in the mill. Next, the city brought in several developers to tour the property and asked for their thoughts on reuse possibilities. "The city was looking for a particular fit," said Brownfield Redevelopment Authority Chairman Nick Larabel – "privatesector development partners with experience in mixed-use development, historic preservation and site cleanup."



The 2007 Developers Forum.

"Attending conferences and hosting the Forum helped us see the project from the private sector's point of view," Nick Larabel recalled. "While development interest wasn't going to happen overnight, it was there. We were confident that with a strong message, the project would stand out."

Feedback from the 2007 Developers Forum

- Focus on the eastern part of the property as a commercial gateway, the midsection for residential areas, and the western portion for downtown office and retail space, with city hall as a development anchor in the former mill building.
- Link new residential development to surrounding neighborhoods and the Kalamazoo River.
- Phase development in stages, so that the market can absorb the project over time.
- Emphasize historic preservation, adaptive reuse and the property's connection to Kalamazoo River as the project's distinguishing features.
- Use a Request for Qualifications (RFQ) process to attract developers so that the city can select the strongest candidate.
- Be patient the economic downturn nationally was compounded in Michigan with challenges such as the decline of the automotive industry.
- Work with state agencies to find redevelopment and historic preservation resources.

Updating and Refining Reuse Plans

Following the Developers Forum, the city hosted the first of three public workshops in late 2007. Community feedback included:

- Make sure any development is a good fit with existing businesses downtown.
- Preserve and restore the mill's historic features.
- Extend parks and a riverwalk throughout.
- Include arts and cultural space as part of the mill's restoration.
- Emphasize quality construction in any new development.

Based on the feedback from the Forum and public workshop, two design firms then updated the mill's 2005 reuse plan.

The second public workshop in March 2008 focused on refining plans for the proposed first phase of the redevelopment project – the renovation and adaptive reuse of mill buildings. "We created detailed plans so that developers would have a clear idea of what we were looking for," said City Manager Erik Wilson. "The effort also meant that we [the city] had a clear understanding of the project's infrastructure and access requirements."



The city's updated reuse plan for the Plainwell Paper Mill property, highlighting highway commercial (left), riverfront residential (left and center), and downtown mixed uses with adaptive reuse of historic mill buildings (right).

Pursuing Development Partnerships

By this time, the city was also working on an RFQ to share with prospective developers. "We put together a document laying out the mill project's goals and priorities," said Downtown/ Economic Development Manager Emilie Schada. "It requested that developers provide their qualifications for partnering with the city on the project. It also laid out our process for evaluating and selecting a developer."

City officials put together an interview committee with representatives from City Council, the Brownfield Redevelopment Authority, the Downtown Development Authority, the Planning Commission and city staff. In November 2008, the city issued the RFQ nationally, with a submission deadline of February 2009. Following interviews in spring 2009, Conestoga-Rovers Associates, or CRA, an international environmental consulting and development company, emerged as the leading candidate. "For communities struggling with contaminated industrial properties like old paper mills, one key is working with a developer who understands those situations, and has the expertise to deal with them," said Nick Larabel. "CRA brought that expertise to the table."

RFQ Evaluation Criteria for Developers

- Capabilities and experience to complete the project.
- Successful implementation of similar projects.
- Financial capacity to carry out the project.
- Stated commitment to the partnership.
- Quality of the submittal.
- Responsiveness to interview questions.



The city's 2008 Historic Building Feasibility Study identified 39 mill structures with more than 250,000 square feet of space (left). The city's Public Safety Building Committee prioritized preserving and restoring at least 13 buildings for civic and commercial uses (center), as well as enhancing pedestrian access between the mill complex and downtown Plainwell with bridges and a new parking area (right).



Partners involved in the Plainwell Paper Mill project.

"CRA is a specialized developer – we're Superfund engineers and contractors. We work on contaminated sites every day, so the mill project didn't scare us at all," said CRA Vice-President Wayne Bauman. "And the city had set up everything so well, with the state and EPA's help. This was an attractive opportunity for us. If the city hadn't done all of the preliminary work, we might not have been interested. We could read through their environmental and building assessments and be able to say, 'this really could work.' We were willing to locate our staff and operate our office here, even without an approved remedy in place."

CRA also brought a budding relationship with Weyerhaeuser, the site's responsible party, to the table. "It was just the start of that relationship," said Bauman. "Our relationship strengthened and helped the project once we knew Weyerhaeuser supported our redevelopment efforts." As one of the cleanup contractors, "CRA would be able to assist Weyerhaeuser with cleanup efforts and the city with redevelopment," noted Nick Larabel.

In April 2009, the city announced that it had selected CRA as its development partner. A year later, city officials signed a twophase agreement with CRA to help the city redevelop the site. The agreement defined timetables for environmental cleanup, demolition of unwanted buildings and site redevelopment plans. It also established occupancy plans, terms for economic development incentives, guidelines to keep part of the property open to the public and terms for financial responsibility.

In the project's first phase, the city would be responsible for building demolition, construction of a new parking area and a pedestrian bridge connecting the mill with downtown, renovating one or two buildings for a new city hall, and turning a former dewatering facility into a new public safety building. It would also convey ownership of a 2-acre parcel to CRA for \$1. For its part, CRA committed to a \$1 million renovation of the mill buildings on its property and to relocate its regional office from Kalamazoo to Plainwell.

Both parties also stated their intent to continue with a second phase of the project in the future, in which the development of the rest of the mill property would move forward. Phase two would be consistent with the community's reuse plans, including "publicly owned river walks, open space, recreational, parking and similar amenities reasonably acceptable to the city."



Parking lot and pedestrian bridge put in at nearby Fannie Pell Park to support the mill's reuse.

1884 – 1956	Lyon Paper Mill and Michigan Paper Company of Plainwell operate paper mill	
1956 – 2000	Six other companies operate facility	
Aug. 1990	EPA lists mill on NPL as part of larger Allied Paper Inc./Portage Creek/Kalamazoo River Superfunc site	
2000	Plainwell Paper Mill closes down; Plainwell Paper Company files for bankruptcy	
2004 – 2005	City of Plainwell requests reuse planning assistance from EPA Region 5 and SRI; community-based reuse planning process underway	
Mar. 2005	City of Plainwell finalizes first site reuse plan	
Aug. 2005	EPA signs Consent Decree with Weyerhaeuser establishing company's responsibility for mill property investigations and cleanup	
Aug. 2006	City of Plainwell acquires paper mill	
Jan. 2007	City hosts Developers Forum	
Mar. 2007 – Jun. 2009	PCB-contaminated sediment removed from property's riverbanks by Weyerhaeuser	
Nov. 2007	City hosts public workshop #1	
2008 – 2013	Remedial investigation of Plainwell Paper Mill by Weyerhaeuser	
Mar. 2008	City hosts public workshop #2	
Nov. 2008	City issues RFQ for development of the mill property	
Apr. 2009	City selects CRA as project's development partner	
Jun. 2009	City hosts public workshop #3	
2010	\$2.9 million in redevelopment funding received; project's development agreement signed	
2011	Public workshop #4; mill listed on National Register of Historic Places	
Jun. 2011	Plainwell awarded state award for community's historic preservation efforts; mill workers reunion	
Jul. 2011	CRA acquires 2.1-acre mill property, with development rights to the remaining property	
2012	Demolition of several mill buildings; infrastructure improvements; CRA relocates operations to property	
Summer – Fall 2012	Additional ground water and soil sampling	
Nov. 2012	Revised Remedial Investigation Report for Plainwell Paper Mill submitted to EPA	
Dec. 2012	City's new public safety building opens	
Feb. 2013	Revised Remedial Investigation Report approved by EPA	
Late 2013 – Early 2014	Wastewater treatment plant removed; new city hall facilities under development	

Next steps were now contingent on funding. With the publicprivate partnership and ongoing coordination with MDEQ and EPA in place, the city and CRA set out to find the resources and incentives needed to make the project possible.



Renovation and adaptive reuse of the former dewatering facility took less than a year. The city's new public safety building opened in December 2012.

2010 - 2014

Leveraging Resources

With the development agreement in place, doors began to open for the mill project. "The city was in a good competitive position to win grants and low-interest loans with a development partner on board," City Manager Erik Wilson said. "It helped us stand out." Another key, according to CRA's Wayne Bauman, was the city's longstanding efforts to raise awareness of the mill project in the region. "When we applied, state agencies were already familiar with the project," he said. "It was also a highpriority project for them. It addressed several state priorities – it would keep jobs in Michigan, it would add new jobs in the state, and support economic development in Plainwell."

The city also had identified specific projects with estimated budgets and timeframes for immediate action. A grant from the Michigan Economic Development Corporation (MEDC) enabled parking lot and pedestrian bridge construction to enhance access to the mill from downtown. A total of \$2.3 million in grants from MEDC and the Michigan Department of Natural Resources (MDNR) funded the first phase of building demolition. In turn, the city was able to recycle scrap metal worth \$400,000 from the buildings to fund additional work. "We are constantly asking, 'What can be salvaged?' What can be reused? What can be sold for scrap metal?'" said City Manager Erik Wilson.

These projects helped fulfill the city's development agreement obligations, making it possible for CRA to move forward with its plans. On July 18, 2011, CRA became the owner of the 2.1-acre portion of the mill property planned for its reuse. Renovation work began shortly afterward, with workers installing an elevator, updating a building entrance and preparing the interior for use as office space.

Detailed renovation work included restoring original wood floors, cleaning up tongue-and-groove ceiling boards, installing new windows, and updating heating, cooling and electrical systems. "We're trying to use efficient, green and local projects and to employ local contractors," CRA project manager Nicolas White said in a December 2011 *Kalamazoo Gazette* article. The project has qualified for LEED Silver certification. The U.S. Green Building Council awards the certification to buildings that meet standards for sustainability.

Adaptive reuse and historic preservation were also broader priorities for both the city and CRA. For example, the partnership proposed listing the mill on the National Register of Historic Places as one of the nation's most treasured cultural resources, which would qualify the project for state and federal tax credits (*see next page*). The city also obtained a \$2.3 million low-interest loan from the U.S. Department of Agriculture to help transform a former dewatering facility into the community's new public safety center. With longstanding efforts to combine local police and fire operations and the Plainwell fire station declared functionally obsolete, the renovation of the 14,100-square-foot building saved Plainwell money, increased operational efficiencies and helped preserve another mill structure.

Resources	Focus	Source	
\$720,700	Blight elimination – water treatment plant demolition	Michigan Department of Human Services	
\$2.3 million	New public safety building	U.S. Department of Agriculture	
\$2.3 million	Building demolition	MEDC (\$1 million) and MDNRE (\$1.3 million)	
\$1.3 million	Mill building renovation	CRA	
\$400,000	City hall renovations	Scrap metal recycling from building demolition	
\$710,000	New parking lot and bridge	MEDC (\$639,000) and city (\$71,000 match)	

Resources Leveraged to Date: \$7.73 million

Adaptive Reuse: A Closer Look



Michigan Paper Company of Plainwell office, 1911.

At the Plainwell Paper Mill, the buildings and infrastructure remaining on site represent an important part of the community's heritage. The city and CRA worked with a Michigan-based firm specializing in historic preservation in 2010 and 2011 to gather information that led Michigan's State Historic Preservation Office to recommend that the National Park Service list the mill on the National Register of Historic Places as one of the nation's most treasured cultural resources.

"Preserving parts of the Plainwell paper mill complex is critical to telling the story of the paper industry in the Kalamazoo Valley," noted historic preservation architect Gene Hopkins in a June 2011 *Kalamazoo Gazette* article. "It was not the first paper mill built in the region, but it is the only remaining one that remains relatively intact."

Communities across the country have been working to protect and restore historic industrial buildings and landscapes, recognizing the importance of preserving these local landmarks that reflect a community's history and heritage. Often, these facilities, once bustling with industrial activity, have been closed down and abandoned, creating significant challenges for their restoration.

In recent years, adaptive reuse has become an effective tool for communities interested in restoring former industrial facilities to active use. Adaptive reuse refers to the conversion of an old building or landscape into a new use, while preserving all or key portions of the building's historic features and infrastructure. Conversion can include the modification of a building's interior and exterior, or the construction of new building additions. Common forms of adaptive reuse include the transformation of former warehouse or factory buildings into office space or apartments. Adaptive reuse provides a powerful tool for communities to preserve and celebrate local history and memories, while also providing opportunities for new facilities and economic development.

Recognizing Excellence

In June 2011, the Michigan Historical Commission recognized the historic preservation leadership of Plainwell City Manager Erik Wilson with the Governor John B. Swainson Award.

"Federal and state agencies consider the city's plan for redevelopment a template for all mill projects," said Commission President Edward Surovell. "Our historic resources are among Michigan's greatest treasures, and the Swainson Award helps us pay tribute to those who serve as stewards of our state's rich heritage."

The city's application was successful. In October 2011, Michigan's State Historic Preservation Office announced that the Michigan Paper Company Mill Historic District in Plainwell had been added to the National Register. "Collaboration between the City of Plainwell and the developer, Conestoga-Rovers & Associates, will result in new life for this unique and important site," said State Historic Preservation Officer Brian Conway. "This designation will provide an opportunity for the developer to use historic preservation tax credits to rehabilitate the complex." These additional incentives include the 20 percent federal investment tax credit, a 5 percent state rehabilitation tax credit and a 25 percent state rehabilitation tax credit.



Adaptive reuse of the historic Plainwell Paper Mill.

Throughout this time, the city and CRA also continued to provide the community with regular updates and ask for feedback. Public meetings provided forums for discussion, while a reunion in June 2011 brought back together several hundred former mill workers who had last been on site when the paper mill abruptly shut down in 2000.

"The employees of this mill have seen a lot of successes here through the years," City Manager Erik Wilson said at the event. "We want to recognize the contributions they have made and

CRA Due Diligence

Building on the city's environmental assessments, CRA addressed its liability concerns via the Baseline Environmental Assessment provision of Michigan Act 451, Part 201, and the BFPP provisions of the 2002 CERCLA amendments. CRA prepared a Baseline Environmental Assessment (BEA) Report and submitted it to MDEQ in August 2011 to qualify for the exemption from liability per Section 20126(1)c of Michigan's Natural Resources and Environmental Protection Act (1994 PA 451 as amended). The BEA includes documentation of "all appropriate inquiries" under CERCLA through performance of a phase I environmental assessment per the ASTM 1527-05 standard, and additional remedial investigation data.

To maintain exemption from liability under state and federal law, CRA has performed and documented various site stewardship obligations: "due care" requirements per Section 20107a of Act 451 and "continuing obligations" pursuant to the 2002 CERCLA amendments. These actions were undertaken concurrently, and are recorded in an Act 451, Part 201 "Due Care" and CERCLA "Continuing Obligations" Evaluation and Plan Report. Issued in February 2012, the report is reviewed annually and modified if necessary. show them that new history will happen here." Listening to the presentation was 76-year-old Richard Gruber, who worked at the mill for 46 years. "I am glad the city is doing something with the property instead of just letting it crumble," he said in a *Kalamazoo Gazette* article.

Community outreach efforts have been so important," said Planning Commissioner and former Plainwell Mayor Jim Higgs. "Every step of the way, people have had opportunities to give decision-makers the feedback they need. The highest priority for a lot of people has been our ability to hold onto some of those historic buildings, to keep our history alive. I'm really proud of what the city and CRA have been able to accomplish."

Moving from Plans to Reality...

In March 2012, years of planning and renovation work led to a remarkable milestone – 50 CRA employees from the company's national construction division moved into an 8,000-square-foot office space at the mill. The property also gives CRA space to expand its offices if the construction division, including a petroleum pipeline construction and maintenance team, continues to grow.

"Everything is up and running and the transition has gone smoothly for us," said CRA's Wayne Bauman. "Coming to work each day at the mill is a pleasure and a privilege."

"Combining and complementing each of [the city and CRA's] specific areas of expertise that we all bring to the table has grown the health of the public-private partnership," said Downtown/Economic Development Manager Emilie Schada. "Our expertise in engaging the community, master planning, leveraging state and federal resources, and really sounding the bugle horn to generate support from multiple stakeholders – combined with CRA's expertise in construction engineering and Superfund redevelopment – make a perfect partnership. Building on our mutual goals is what feeds the public-private



Mill building demolition in 2012, during and after.

partnership. Both the city and CRA want to be associated with a high-class project."

In late 2013, the city began renovating space on the third floor of the brick building for administrative offices and a section of the first floor for city council chambers. The work is being funded with proceeds from selling scrap metal as unwanted mill structures are demolished. Plainwell's new city hall facilities are scheduled to open in June 2014.

"Everyone in the community can see the progress now," said Plainwell Mayor Richard Brooks. "People are working in the mill again. We know there is more to do, but we also can see how far we've come."

... Adapting to New Challenges

The parties involved at the Plainwell Paper Mill recognize that the project remains a work in progress. For redevelopment of the property's remaining 30 acres to move forward, cleanup plans need to be finished and put in place. Additional mill buildings require demolition. New infrastructure – water and sewer lines and utilities – is required.

To make this happen, the city and CRA are committed to working with responsible party Weyerhaeuser and EPA and MDEQ to make sure the cleanup plan reflects the community's reuse plans. "Weyerhaeuser continues to remain engaged with the City of Plainwell to facilitate the redevelopment of the property in a manner that is as expeditious as possible under the constraints of the federal regulatory process in place," said Weyerhaeuser's Remediation Program Manager Richard Gay. "The company would like to see the project completed as soon as possible."

"We are looking forward to working with all parties to make sure the cleanup put in place is protective of human health and the environment," said EPA project manager Sheila Desai. "The working relationships and community interest in Plainwell are remarkable." With the site's Record of Decision anticipated in 2014, the city, CRA, EPA and MDEQ are optimistic that site cleanup will be finished by late 2015.

"At that point, we will be able to market the property to other users," said CRA's Wayne Bauman. "They'll be able to work with a bank to finance their project, and we'll come up with creative solutions to address any concerns they might have." One option, Bauman mentions, could be long-term land leases for businesses, with CRA retaining its liability responsibilities.

The city and CRA also continue to pursue additional grant and loan funding opportunities. "Additional building demolition is a top priority," said City Manager Erik Wilson. "It's complicated and expensive work. The state has been such a fantastic partner, and we're hopeful that more of our grant and loan proposals will be accepted." In February 2013, the city was notified of a \$720,000 grant award from the Michigan Department of Human Services. The city used the grant to demolish a former wastewater treatment plant on site in late 2013.

The city has also managed to coordinate highway and downtown road upgrades with the mill project. An \$11 million Michigan Department of Transportation project is currently underway to rebuild a two-mile stretch of the M-89 highway, replace a bridge over the mill race and upgrade a bridge over U.S. Route 131. A \$420,000 enhancement grant from the Department is funding new streetlights, benches, trees and sidewalks throughout downtown Plainwell.

Today, Plainwell is able to both celebrate its rich history and look forward to a promising future. In 2012, for example, the Plainwell Arts Council and the City of Plainwell commissioned an artwork to commemorate the many changes underway in the community. The Renaissance Race sculpture, designed by a local artist, brings together salvaged mill components with a spiraling roll of paper that reaches to the sky. "We celebrate each milestone because each step brings us that much closer to [the redevelopment] truly shining," said Downtown Economic Development Coordinator Emilie Schada, "and be something tomorrow's generations will thank today's generations for believing in." The sculpture was dedicated on November 30, 2012.



The Renaissance Race sculpture in place on the mill property.

Lessons Learned

A combination of significant factors have contributed to the cleanup and reuse of the Plainwell Paper Mill.

- The paper mill property's size, contiguous acreage, historic buildings, downtown location and highway access meant it was an attractive site for redevelopment.
- The City of Plainwell energetically pursued the property's cleanup and redevelopment early on and over the long term, putting in place the requisite resources, partnerships and expertise.
- Responsible party Weyerhaeuser and CRA are engaged partners working with the city and site agencies to develop a cleanup plan that protects human health and the environment and enables reuse.
- EPA and MDEQ are engaged partners who understand the community's redevelopment priorities in the context of the mill property's cleanup.
- Coordination of cleanup and redevelopment plans means that both should be able to move forward as part of a linked, phased approach.
- All parties involved continue to be patient and flexible, recognizing that cleanup and redevelopment are complex processes reliant on available resources, multiple partners, cleanup requirements, market conditions and other factors.

The Bigger Picture

While these conditions created an ideal climate for the successful reuse of the Plainwell Paper Mill, there are also a range of broader lessons learned that can help guide similar projects at contaminated lands across the country.

Redevelop contaminated lands one step at a time.

Communities unfamiliar with contaminated lands are often unsure of how to approach redevelopment projects for these properties. In Plainwell, the local government built its expertise over time, reaching out to work with site agencies, then conducting site assessments and acquiring the mill property, then maintaining the area and pursuing redevelopment resources, and then reaching out to potential development partners. The city also reached out to regional organizations, state agencies and the state legislature, area businesses and consultants, and EPA and MDEQ to identify resources, create a partnership network and build its capacities.

EPA and Reuse: Lessons Learned

Since the inception of the Superfund program, EPA has been building on its expertise in conducting site characterization and remediation to ensure that contamination is not a barrier to the reuse of property. Today, consideration of future use is an integral part of EPA's cleanup programs from initial site investigations and remedy selection through to the design, implementation, and operation and maintenance of a site's remedy.

"At older sites, EPA did not focus on taking reuse considerations into account early in the cleanup process," reflected EPA Region 5's Matthew Mankowski, a former project manager at Superfund sites. "Today, that has changed. Superfund cleanups can be very creative and flexible in allowing for future site uses, but that information needs to be plugged in early to be as effective as possible."

At the Plainwell Paper Mill, the City of Plainwell was able to provide EPA and MDEQ with regular status updates on its interest in redeveloping the mill property. The city's and CRA's environmental assessments provided the agencies with enough information for the partners to be able to move forward, with Weyerhaeuser responsible for remaining site investigations and any required cleanup. Any future cleanup will take into account current and planned future uses at the mill property.

Thanks to lessons learned at Superfund sites across the country, EPA has developed additional tools to ensure an integrated approach to the cleanup and redevelopment of contaminated lands. For example, EPA has developed a partial deletions guidance. Partial deletions allow EPA to remove the cleaned and uncontaminated portions of a Superfund site from the NPL, expediting the reuse of those properties.

Second, EPA works with site stakeholders to consider how future land use considerations can inform the implementation and long-term stewardship of site remedies as well as cleanup planning. At some sites, for example, reuse considerations can inform the future location of ground water monitoring wells and other operation and maintenance equipment that might inadvertently hinder redevelopment efforts. At other sites, detailed site reuse plans have provided additional benefits that save time and reduce redevelopment costs. For example, future infrastructure corridors or building footers can be installed in coordination with site cleanup activities.

"We might not be responsible for the mill's past, but we are responsible for its future." - Emilie Schada, Plainwell Downtown/Economic Development Manager

Recognize the leadership role of local governments.

As the organizations responsible for their communities' general welfare, local governments are particularly well positioned to host redevelopment projects, bring together diverse stakeholders to discuss site reuse opportunities, and use planning tools and incentives to foster positive site outcomes. In Plainwell, redevelopment challenges included limited resources, a need for significant infrastructure upgrades and building demolition on site, and uncertain future ownership. The city acquired the property to help address these challenges and enable redevelopment to move forward.

Collaborate and build community relationships and partnerships.

Community-based reuse planning processes can be most effective when they engage diverse stakeholders, including site owners and responsible parties, are based on detailed site and community information, and lead to implementable strategies and next steps. The City of New Plainwell's community-based reuse planning process and regular public meetings helped build community-wide support for the mill's redevelopment. The city's consistent outreach to responsible party Weyerhaeuser also helped ensure its engagement. "We didn't want them to feel like an absentee partner working from out of state," said Downtown/Economic Development Manager Emilie Schada. "We've tried to help them see the mill like we do, every day."

Identify partnership roles and responsibilities, engage diverse expertise and establish reasonable redevelopment expectations for the process.

The city recognized its strengths, such as community planning and resource leveraging, and relied on CRA for legal, technical and engineering expertise to make the mill project happen. The community's resulting redevelopment plans are grounded in cleanup and market considerations, reasonably anticipating the types of land uses that could be located at the property in the future. "Even a small town community like Plainwell can tackle a large Superfund site," said Brownfield Redevelopment Authority Chairman Nick Larabel. "The key is to educate yourself and team with experienced partners. It takes time, but it's time well spent."

Think long term.

It can take many years to remediate contamination that has accumulated over decades of site activities. However, this lengthy process also provides a time window for site stakeholders to build partnerships and identify resources, coordinate with EPA and state agencies, and develop a strategy for returning a site to use while protecting future users. The City of Plainwell worked for almost a decade to put in place the pieces needed to redevelop the Plainwell Paper Mill.

Look to the future, recognize the past.

For most of its history, Plainwell was an agricultural and industrial community; the Plainwell Paper Mill operated for more than a century. Approaching the redevelopment process, the community recognized that times had changed. Plainwell needed new businesses, office space, retail services, housing and public recreation areas to sustain the local economy and enhance the community's quality of life. By adaptively reusing mill buildings and using art to celebrate the mill's history, Plainwell has built a strong foundation for the future.

Access site-related information and recognize opportunities provided by the Superfund program.

Superfund sites are among the most comprehensively documented and evaluated areas of land in the United States. At most sites, a completed remedial investigation/feasibility study, draft proposed plan, or Ready for Reuse Determination will provide prospective purchasers with extensive site information.

Build on past experience.

The City of Plainwell was charting new territory in addressing stigma, liability and other site issues. Today, thanks to the BFPP provisions of the 2002 Brownfields Revitalization Act, environmental insurance and EPA tools such as RfR Determinations, established resources are available. Prospective purchasers can contact EPA site teams to learn more, or see the Sources and Resources section for additional information.

Conclusion

The redevelopment of the Plainwell Paper Mill illustrates how community leadership, collaborative partnerships with EPA and state agencies, and detailed, flexible long-term planning can result in two successful outcomes: the protection of human health and the environment and community revitalization. Today, the Plainwell Paper Mill project has achieved several major milestones. CRA moved 50 staff into renovated office space in the mill in 2012, with city offices moving in in 2014. Following a \$2.3 million renovation, a former dewatering facility is the location of the city's new public safety building. The area is now part of a Historic District on the National Register of Historic Places.

In Plainwell, Michigan, the local government has led a complex redevelopment project that has brought the community together with diverse organizations and partners. In turn, the city's initiative has led to new economic opportunities and community-wide benefits, providing one of the leading examples of historic preservation, adaptive use and mixed-use Superfund redevelopment in the nation.

Historic Preservation and Mixed-Use Superfund Redevelopment

THE PLAINWELL PAPER MILL IN PLAINWELL, MICHIGAN

Sources and Resources

Sources

Images and maps for this case study are from EPA Region 5, the City of Plainwell, CRA and site visits.

Resources

City of Plainwell: www.plainwell.org

EPA CERCLIS site profile, including site decision documents: cumulis.epa.gov/supercpad/cursites/csitinfo. cfm?id=0502325

EPA Superfund Redevelopment Initiative: www.epa.gov/superfund/programs/recycle

EPA Region 5 Superfund Redevelopment: www.epa.gov/R5Super/redevelop

Michigan Department of Environmental Quality: www.michigan.gov/deq/0,4561,7-135-3304-84646--,00. html Michigan Department of Natural Resources: www.michigan.gov/dnr

Michigan Economic Development Corporation: www.michiganadvantage.org

CERCLA Liability and Local Government Acquisitions: www.epa.gov/oecaerth/resources/publications/cleanup/ brownfields/local-gov-liab-acq-fs-rev.pdf

2002 Brownfields Revitalization Act and BFPP information: www.epa.gov/brownfields/aai/aaicerclafs.pdf

Environmental insurance information: www.epa.gov/brownfields/insurance



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