

Recreational and Ecological Uses at Superfund Sites

Enhancing Public Health, Revitalizing Habitat

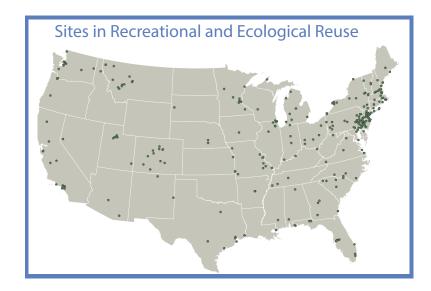
Thanks to the efforts of local governments and communities, Superfund sites across the country support a wide array of recreational and ecological uses. These uses range from parks with playgrounds and sports fields to Academy of Model Aeronautics (AMA) flying fields and rails-to-trails projects. With green space at a premium in many communities, reusing cleaned-up Superfund sites can provide valuable opportunities for new recreation facilities. Reusing these sites reclaims properties that would otherwise be left vacant while also supporting public health and community wellbeing. EPA's Superfund Redevelopment Initiative (SRI) helps communities reclaim and reuse once-contaminated lands for a wide range of purposes. SRI provides effective tools and supports dynamic partnerships and innovative activities to assist local communities as they pursue new opportunities to grow and prosper.

Overview of Recreational and Ecological Uses at Superfund Sites

As of 2019, SRI tracks nearly 300 Superfund sites that support recreational and ecological uses. Planning is underway to return over 70 additional sites to reuse as recreational and ecological areas. These areas provide much-needed open space and playgrounds for communities, support healthy habitat for wildlife, provide green infrastructure to help communities manage stormwater, and provide resources that encourage healthy and active lifestyles.

Recreational and ecological reuses at Superfund sites include:

- Parks
- Playgrounds
- Trails (walking, hiking, biking and horse trails)
- · Picnic areas
- Sports fields (baseball, soccer, softball and football fields)
- Fishing ponds
- · AMA flying fields
- · Golf courses
- · Open spaces
- Ecological areas, e.g. wildlife sanctuaries, nature preserves and wetlands



Planning for Recreational Reuse at Superfund Sites

Many Superfund sites are located in communities with limited recreation resources and limited space for new facilities. A Superfund site, or part of a site, can become a pocket park, a playground, wildlife habitat with trails, or acres of open space. By considering the reasonably anticipated future land use, remedy selection can identify appropriate cleanup actions to support various future uses. Reuse plans can further clarify cleanup requirements for future development, aligning cleanup goals with recreational development plans. Returning sites to recreational use also discourages unwanted activities such as trespassing and illegal dumping, with people on site regularly making sure facilities are well maintained. EPA staff work closely with communities to ensure the long-term protectiveness of remedies and their compatibility with plans for recreational uses.



Restored freshwater marsh, currently used by wildlife and area birdwatchers, at the Atlas Tack Corp. Superfund site in Fairhaven, Massachusetts.

Parks: New Recreation Facilities and Restored Ecological Habitat

Milltown State Park

A 2002 SRI pilot grant supported the formation and work of the Milltown Superfund Redevelopment Working Group for the Milltown Reservoir Sediments Superfund site in Milltown, Montana. Composed of local citizens and site stakeholders, the Working Group developed a plan that prioritized over 500 acres of land around the reservoir for use as a new state park and recommended preserving and restoring historic structures and areas. In 2008, the Working Group collaborated with the Montana Department of Fish, Wildlife and Parks on conceptual designs for the park.

The design included trails, river access, wildlife habitat and interpretive areas celebrating the region's history and heritage. In 2010, the state of Montana acquired portions of the site for the new Milltown State Park and allocated funding for the park's development. The state of Montana funded almost \$18 million in restoration and redevelopment activities at the site. In 2013, a stretch of the river flowing through the site opened to water traffic for the first time in over a century. Milltown State Park officially opened in June 2018. The park features more than 500 acres of terrain, ranging from restored river bottoms to a pine-forested bluff overlooking the Clark Fork River. The park provides a place for visitors to hike, bike, fish, float and watch birds and wildlife.



A northern pygmy owl visits the site.



View of the restoration channel and shaping grade control dam.

Land and Water: Community Space and Waterway Access

Heritage Park and Slidell Municipal Marina

Federal, state and municipal partnerships led to the recreational reuse of the 54-acre Bayou Bonfouca Superfund site in Slidell, Louisiana. In 1997, the site owners donated the prime waterfront property to the city for redevelopment. Today, the city uses those buildings as offices and support structures for its public works department. The boat launch is available for public use, providing access to Bayou Bonfouca. The local government also coordinated with EPA and the Louisiana Department of Environmental Quality (LDEQ) to develop community green space and a city park, known as Heritage Park. The park includes playgrounds, picnic areas, walking paths, restrooms and a gazebo for performances and community gatherings.

The city hosts annual Fourth of July festivities at Heritage Park, with firework spectators viewing the show from the park and the bayou. In 2012, the city of Slidell received a \$1.5 million Boat Infrastructure Grant to promote boating access along Bayou Bonfouca near the site. Coordination among the city, LDEQ and EPA paved the way for the Slidell Municipal Marina. The marina opened in 2018. It includes floating docks, piers, pedestrian pathways and other amenities to encourage recreational boating on Bayou Bonfouca. The marina provides boaters with access to Heritage Park and downtown Slidell from Lake Pontchartrain. EPA Region 6 recognized the city's dedication to beneficial reuse with a 2018 Excellence in Site Reuse Award.



Slidell community playground at Heritage Park.



Landing docks, walking paths and picnic areas welcome boaters at Heritage Park.

Room to Grow: Expanding Existing Resources

Meeting in the Middle to Support Community Needs

A reuse study found significant community interest in recreational reuse opportunities at the Liberty Industrial Finishing Superfund site in Oyster Bay, New York. Located next to the Ellsworth Allen Park, the site provided a convenient location for park expansion. Due to the site's industrial zoning and location, EPA had selected industrial cleanup standards for the site and additional cleanup would be required to support recreational uses. In 2002, EPA entered into a Prospective Purchaser Agreement (PPA) with the town of Oyster Bay to ensure the protectiveness of the site's remedy and enable reuse to move forward. In return for EPA waiving the local government's potential Superfund liability and releasing Superfund liens on the site property, the town made a substantial payment to EPA to help fund cleanup activities and compensate for the cost difference in cleanup standards.

In 2003, the town acquired the site's western parcel using its eminent domain authority. Construction of the site's remedy finished in 2012 and the town held community planning meetings to plan the Ellsworth Allen Park expansion. Plans for the park include a community center, ballfields, a multi-use sports field and green space. The town of Oyster Bay then passed a resolution to rezone the site area from industrial uses to recreational uses. Park construction began in 2017; the town anticipates that the park will open in the summer of 2019. Nassau County has committed \$150,000 in community revitalization funding for the project.



Ducks enjoy splashing in a pond on the Massapequa Preserve.



Ellsworth W. Allen Town Park welcomes visitors.

Protecting Public Health and Recreational Reuse

EPA works closely with communities – before, during and after cleanup – to understand community plans and interests in the use of site properties. EPA determines whether sites are safe for specific reuses by comparing site contamination with health-protective regional screening levels. After reviewing site conditions, EPA may select state remedial levels or pursue site-specific health-based cleanup goals while considering recreational land use scenarios at sites.

At sites where final cleanup does not permit unlimited use and unrestricted exposure, EPA uses several tools to monitor remedy performance and protect site users:

- 1. Institutional controls are legal tools, such as municipal ordinances and deed restrictions, used to prevent exposure to contamination.
- 2. Five-Year Reviews evaluate changes in land use, toxicity and the status of remedies, and determine if a remedy remains protective.
 - Sites with remedies that are not protective over the long term indicate that EPA still has work to do such as continued groundwater cleanup or implementation of institutional controls to prevent groundwater use during cleanup.
 - Sites with remedies that are protective in the short term can be safely used for activities compatible with the remedy such as surface use for an athletic field over capped and covered waste.
- 3. EPA performs annual site reviews to ensure the human exposure under control performance measure is maintained. If a site poses a risk to people, EPA will take steps to address it.

EPA does not dictate how a site should be used or advocate for specific site uses. EPA can provide communities, developers and other interested parties with timely and clear information about site uses that are compatible with site remedies and protective of current and future site users.

Other Examples of Recreational and Ecological Reuse

- Region 1 <u>Industri-Plex</u> (Woburn, Massachusetts): The Aberjona Nature Trail is on site and a fish ladder at Center Falls Dam supports local recreational fisheries.
- Region 2 <u>Roebling Park</u> (Florence, New Jersey): The 34-acre Roebling Park expanded on site, providing additional riverfront green space.
- Region 3 <u>York County Solid Waste and Refuse Authority Landfill</u> (Stewartstown, Pennsylvania): The 200-acre Hopewell Recreation Complex includes playgrounds, walking trails, athletic fields, a picnic pavilion, a parking lot and two wildlife viewing platforms.
- Region 4 <u>Davis Timber Company</u> (Hattiesburg, Mississippi): The Fields of Barktopia dog park, trails connecting to the adjacent Longleaf Recreation Trail and restored pollinator habitat are all on site.
- Region 5 <u>Torch Lake</u> (Houghton County, Michigan): The Quincy Smelter area of the site is part of the Keweenaw National Historical Park.
- Region 6 <u>Fruit Avenue Plume</u> (Albuquerque, New Mexico): A rails-to-trails development is planned as part of the Glorieta Station redevelopment project at the site.
- Region 7 <u>John Deere (Dubuque Works)</u> (Dubuque, Iowa): The company added walking trails for employees and new pollinator habitat as part of voluntary vegetative cover improvement work.
- Region 8 <u>Libby Asbestos</u> (Libby, Montana): Riverfront Park offers river access, pavilions, a memorial, and picnic and recreational fishing areas.
- Region 9 <u>Pemaco Maywood</u> (Maywood, California): Maywood Riverfront Park offers soccer fields, basketball courts, a play area, native plant landscaping and picnic areas. Originally opened in 2006, a park expansion was added in 2018 to meet local demand for recreational space.
- Region 10 <u>Oeser Company</u> (Bellingham, Washington): Cleanup restored Little Squalicum Creek and associated wetlands, re-establishing walking paths in Little Squalicum Park, a pocket park that connects to the larger Bay-to-Baker trail network.

Redevelopment Partners Support Recreational and Ecological Uses

SRI's redevelopment partners work with communities and other site stakeholders to explore reuse opportunities and resources at nearby Superfund sites. To learn more, visit https://www.epa.gov/superfund-redevelopment-initiative/superfund-redevelopment-partnerships.











For More Information on Superfund Redevelopment

Please contact Frank Avvisato, Superfund Redevelopment Project Manager, at avvisato.frank@epa.gov or visit SRI's website at https://www.epa.gov/superfund-redevelopment-initiative.