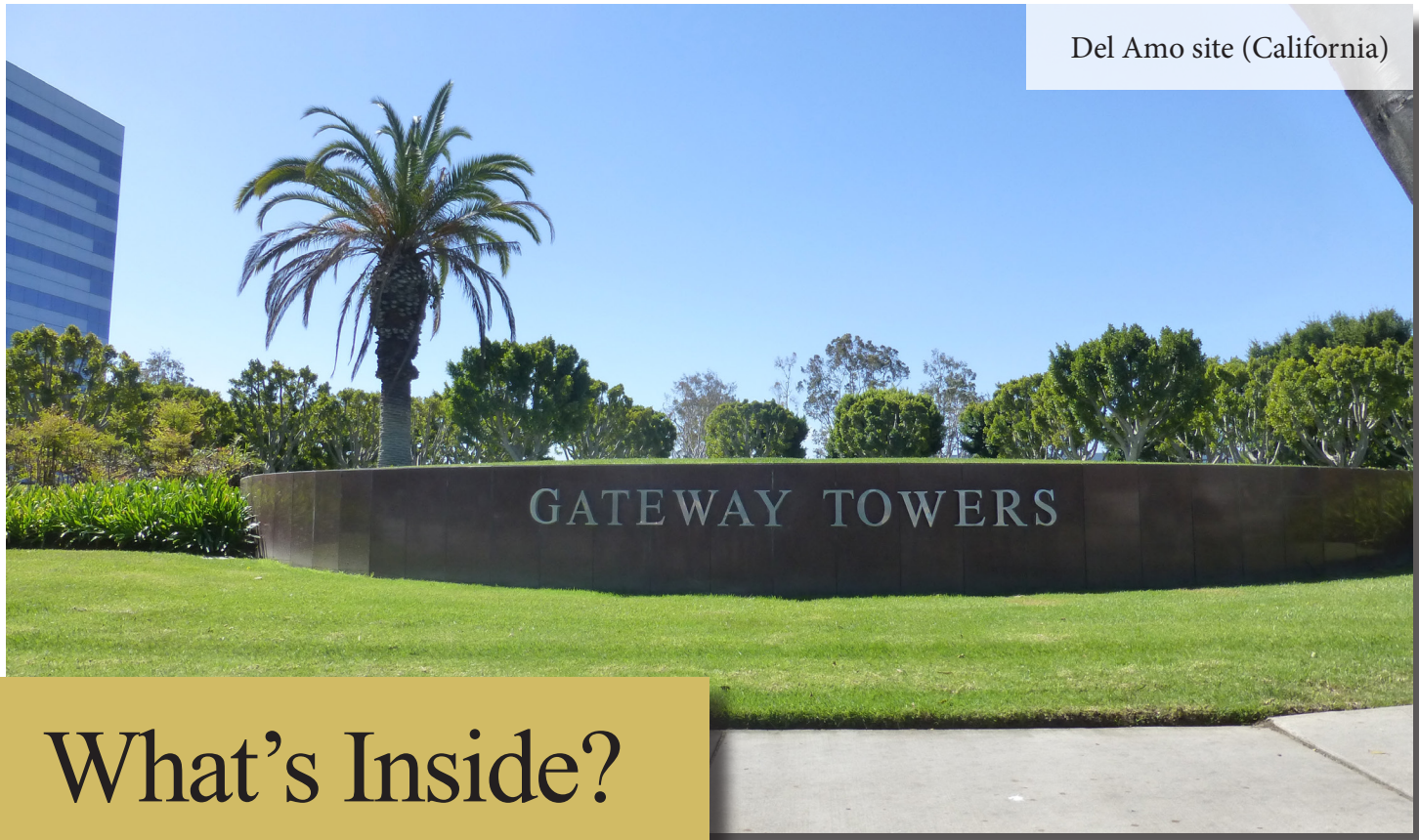
EPA

August 2014

Superfund Sites Work for Communities:

A Look at the Beneficial Effects of Superfund Redevelopment in EPA Region 9



Del Amo site (California)

What's Inside?

Preface

Every day, EPA's Superfund program makes a visible difference in communities nationwide. The revitalization of communities affected by contaminated lands is a key part of Superfund's mission, delivering significant benefits one community at a time, all across the country. Through EPA's Superfund Redevelopment Initiative, the Agency contributes to the economic vitality of these communities by supporting the return of sites to productive use. These regional reports highlight these community-led efforts in action, as EPA launches a new era of partnerships and works toward a sustainable future.

Introduction

EPA Region 9 states and U.S. Pacific territories – Arizona, California, Hawaii, Nevada, American Samoa, Guam and the Northern Mariana Islands – are diverse. While the Pacific Southwest region is known for its scenic travel destinations and high-tech industry, manufacturing, agriculture and commercial trade also thrive across parts of these areas. Local governments, state agencies and many organizations in these Pacific Southwestern states work hard to help smaller communities remain vibrant while planning carefully to accommodate growth in major cities and suburbs. A key part of this work focuses on finding new uses for former industrial sites, including Superfund sites. The Superfund program in EPA Region 9 is proud to play a role in these efforts.

The cleanup and reuse of Superfund sites can often restore value to site properties and surrounding communities that have been negatively affected by contamination. Site reuse can revitalize a local economy with jobs, new businesses, tax revenues and local spending. Reuse of Superfund sites can yield other important social and environmental benefits for communities as well. Through programs like the Superfund Redevelopment Initiative (SRI), EPA Region 9 helps communities reclaim cleaned up Superfund sites. Factoring in future use of Superfund sites as part of the cleanup process helps pave the way for their safe reuse. In addition, EPA Region 9 works closely with state agencies and local officials to remove barriers that have kept many Superfund sites vacant and underused for decades. EPA Region 9 also works to ensure that businesses on properties cleaned up under the Superfund program can continue operating safely during site investigations and cleanup. This enables these businesses to remain as a source of jobs for communities.

The results are impressive. Superfund sites across the Pacific Southwest Region are now the location of industrial parks, shopping centers, office buildings and neighborhoods. Many sites continue to host industrial operations such as large-scale manufacturing facilities. Some sites continue to host active military facilities. Others are now parks and recreation facilities. On-site businesses and organizations at current and former Region 9 Superfund sites provide an estimated 26,000 jobs and contribute an estimated $2.4 billion in annual employment income for Region 9 residents. Restored site properties in Region 9 generate an estimated $11 million in annual property tax revenues for local governments.

This report looks at how reuse activities at Superfund sites make a difference in communities. In particular, the report reviews some of the beneficial effects of businesses located at current and former Superfund sites, as well as the land values and property taxes associated with Superfund sites returned to use following cleanup.

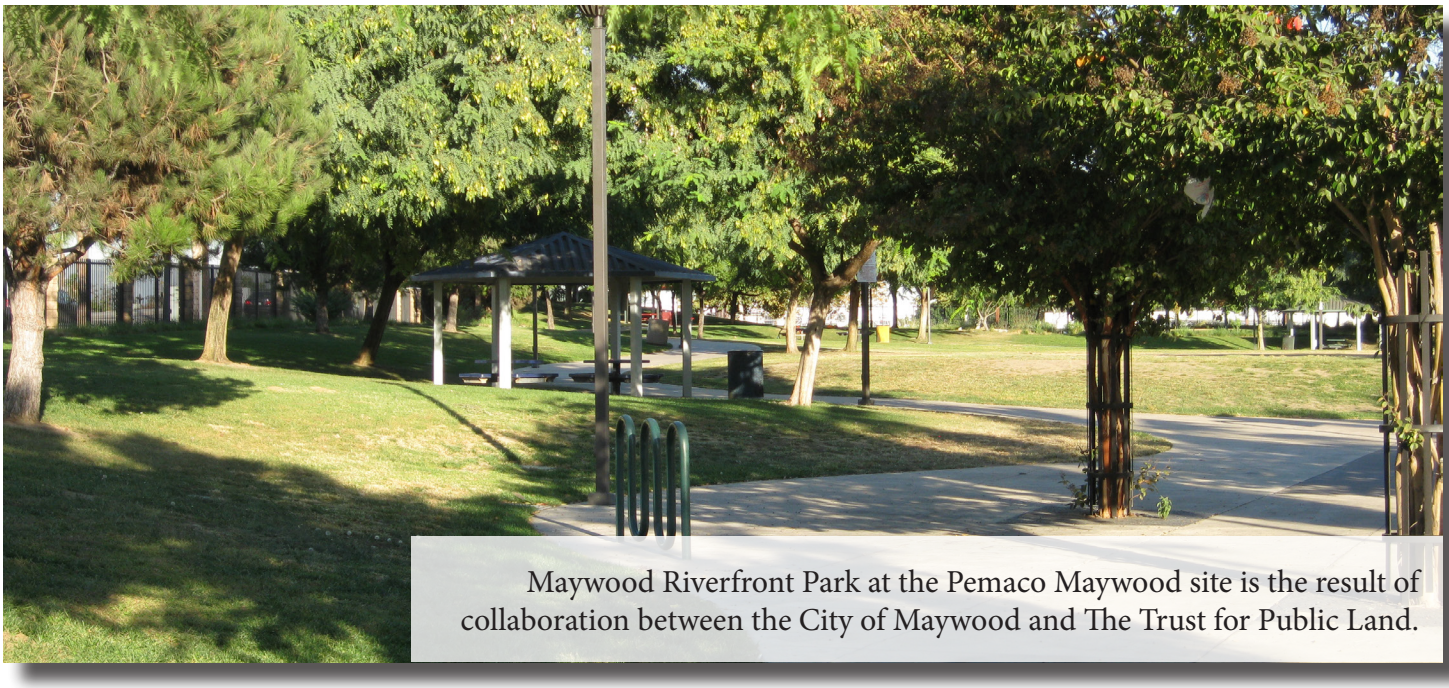
Support for Superfund Reuse

EPA Region 9 remains committed to making a difference in communities through the cleanup and reuse of Superfund sites. In addition to protecting human health and the environment through the Superfund program, EPA Region 9 partners with stakeholders to encourage reuse opportunities at Superfund sites. EPA Region 9 helps communities and cleanup managers consider reuse during cleanup planning, and evaluate remedies already in place to ensure appropriate reuse at cleaned-up sites. In addition, EPA participates in partnerships with communities and encourages opportunities to support Superfund redevelopment projects that emphasize environmental and economic sustainability.

Specific reuse support efforts in EPA Region 9 include:

- Identifying and evaluating local land use priorities to align these priorities with site cleanup plans through the reuse planning process.
- Facilitating cleanup and reuse discussions to help resolve key issues between parties interested in site redevelopment.
- Supporting targeted projects intended to help Region 9 communities and EPA find the right tools to move reuse forward at sites.
- Making efforts to help address communities' and developers' liability, safety and reuse concerns related to Superfund site reuse through development of educational materials, comfort letters, developer agreements and environmental status reports that provide information about the appropriate use of sites. These reports, which provide information about the appropriate use of sites, are known as Ready for Reuse Determinations.
- Supporting partnerships with groups committed to putting Superfund sites back into use, such as The Trust for Public Land.
- Developing reuse fact sheets, videos, websites, reuse case studies and Return to Use Demonstration Project summaries to share opportunities and lessons associated with Superfund redevelopment.

All of these efforts have helped build expertise across the Pacific Southwest Region, making it easier to consider future use of Superfund sites prior to cleanup and easier to identify opportunities for removing reuse barriers. These efforts also help other communities, state agencies, potentially responsible parties and developers better understand potential future uses for Superfund sites. This helps stakeholders engage early in the cleanup process, ensuring that Superfund sites are restored as productive assets for communities. Most importantly, these efforts lead to significant returns for communities, including jobs, annual income and tax revenues.



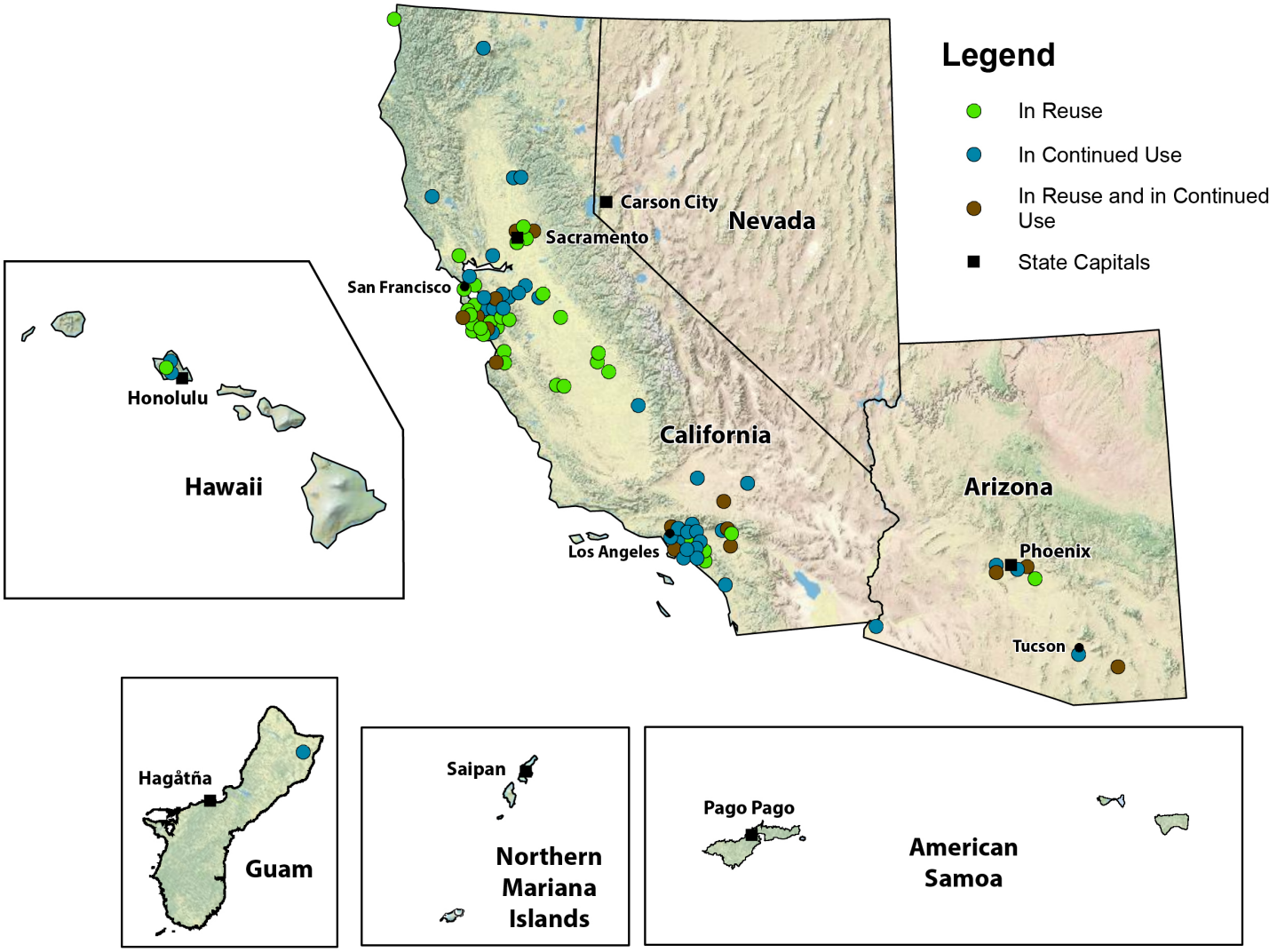
Maywood Riverfront Park at the Pemaco Maywood site is the result of collaboration between the City of Maywood and The Trust for Public Land.

Superfund Reuse: The Big Picture

EPA has placed over 130 sites in Region 9 on the National Priorities List (NPL) since the Superfund program began in 1980. The Agency oversees investigation and cleanup at additional Superfund alternative sites in the region, and performs or oversees short-term cleanup actions as well. Some of these sites are vast, posing challenges for both cleanup and redevelopment. Whenever possible, EPA seeks to integrate reuse priorities into site cleanup plans.

Fairchild Semiconductor Corp. (Mountain View Plant) site (California)

As of 2014, over 85 NPL sites have either new uses in place or uses that have remained in place since before cleanup in Arizona, California, Hawaii and Guam.[1] Many of these sites have been redeveloped for commercial, industrial and residential purposes. Others have been redeveloped for public services, recreational, ecological, agricultural or military uses. The following sections take a closer look at some of the beneficial effects of businesses located at current and former Superfund sites, as well as the land values and property taxes associated with Superfund sites returned to use following cleanup.



1 There are currently no sites in reuse or in continued use in Nevada, American Samoa or the Northern Mariana Islands.

Beneficial Effects of Superfund Site Reuse

Businesses and Jobs

EPA has collected economic data for over 650 businesses, government agencies and civic organizations at 41 sites in reuse and continued use in Region 9. See the State and U.S. Territory Reuse Profiles (pp. 11-14) for specific Region 9 state and territory reuse details. There are no reuse profiles for Nevada, American Samoa or the Northern Mariana Islands, because there are currently no sites in reuse there. Businesses and organizations located on these sites fall within several different sectors, including professional, scientific and technical services, transportation and warehousing, wholesale and retail trade, manufacturing, health care and social services, and finance and insurance.

Businesses, facilities and organizations at these sites include semiconductor manufacturers, aircraft manufacturers, discount department store K-Mart, a Coca-Cola bottling company, a Holiday Inn hotel, health care providers and a Staples office supply store.

In total, businesses and organizations on these sites employ an estimated 26,133 people, contributing an estimated $2.4 billion in annual employment income with about $27 billion in estimated annual sales. Employee income earned helps inject money into local economies. It also helps generate state revenue through personal state income taxes. In addition to helping local communities by providing employment opportunities, these businesses help local economies through direct purchases of local supplies and services. On-site businesses that produce retail sales and services also generate tax revenues through the collection of sales taxes, which support state and local governments. In addition, most businesses operating on sites in Region 9 generate tax revenues through payment of state corporate income or related taxes. Table 1 provides more detailed information.

Waste Disposal, Inc. site (California)

Region 9 Sites in Reuse and Continued Use: Business and Job Highlights

Businesses Identified
654

Estimated Annual Sales
$27 billion

Number of People Employed
26,133

Total Annual Employee Income
$2.4 billion

Table 1. Site and business information for Region 9 sites in reuse and continued use (2013)

	Number of Sites	Sites with Identified On-Site Businesses[a]	On-Site Businesses Identified[b,c]	Total Annual Sales	Total Employees	Total Annual Employee Income
In Reuse	33	18	141	$9 billion	4,818	$550 million
In Continued Use	39	14	124	$13 billion	6,047	$690 million
In Continued Use and In Reuse	15	9	389	$5 billion	15,268	$1.2 billion
Total	**87**	**41**	**654**	**$27 billion**	**26,133**	**$2.4 billion**

[a] Also includes other organizations such as government agencies, nonprofit organizations and civic institutions.
[b] Business information is not available for all businesses on all Superfund sites in reuse or continued use.
[c] For information on the collection of businesses, jobs and sales data, see the "Sources" section of this report.

Sites in Reuse and Continued Use: A Closer Look

In Reuse: There is a new land use or uses on all or part of a site; either the land use has changed (e.g., from industrial use to commercial use) or the site is now in use after being vacant.

In Continued Use: Historical uses at a site remain active; these uses were in place when the Superfund process started at the site.

In Reuse and Continued Use: Part of a site is in continued use and part of the site is in reuse.

Region 9 Site Examples

In Reuse: Fairchild Semiconductor Corp. (South San Jose Plant) (California) – a former electronics and semiconductor fabrication facility now supports a shopping center with retail shops, restaurants and parking.

In Continued Use: Advanced Micro Devices, Inc. (Building 915) (California) – active semiconductor fabrication facility since 1974.

In Reuse and Continued Use: Aerojet General Corp. (California) – rocket engine manufacturing operations are ongoing; following cleanup, new tenants are using other areas for office, commercial and light industrial activities.

Property Values and Property Tax Revenues

Properties cleaned up under the Superfund program and returned to use may increase in value. This increased value can boost property tax revenues, which help pay for local government operations, public schools, transit systems and other public services.

Identifying increases in property values and local property taxes following cleanup and reuse is challenging due to the availability of historical property values and the difference in timing of events at sites and frequency and timing of property value assessments by local agencies. Likewise, many factors affect property values, including external economic and neighborhood factors not related to a site's contamination or Superfund site status. It is also difficult to isolate the effects of Superfund cleanup and reuse using current property values. However, these values do provide insight into the current value of Superfund properties. They also highlight the potential loss in economic value if the properties were not cleaned up and made available for reuse or continued use.

EPA has collected property value tax data for six Superfund sites in reuse and continued use in Region 9.[2] These sites span 135 property parcels and 2,929 acres. They have a total property value of $810 million, a total land value of $400 million and a total improvement value of $410 million. Property tax information is available for five sites.[3] The properties generate a combined $11 million in local property taxes.[4]

Del Amo site (California)

Region 9 Sites in Reuse: Property Value and Tax Highlights

Total Property Value

$810 million

Total Annual Property Taxes

$11 million

2 A broader effort has not yet been made to collect property data in Region 9.

3 Property values consist of land value and the value of any improvements (buildings and infrastructure) on a property. When sites are reused, some or all of these improvements may be new or already be in place. In some cases, the land value and improvement value is not always available; instead, only the total property value may be available.

4 Property tax data were not available for one of the five Superfund sites with property value data.

Table 2. Property value and tax information for sites in reuse and continued use in Region 9[a]

Total Land Value (6 sites)[b]	Total Improvement Value (6 sites)	Total Property Value (6 sites)	Total Annual Property Taxes (5 sites)
$400 million	$410 million	$810 million	$11 million

[a] Results are based on an EPA SRI effort in 2013 that calculated on-site property values and property taxes for a subset of Superfund sites. A broader effort has not yet been made to collect property data in Region 9. The property value and tax amounts reflect the latest property value year and tax data year available in county assessor data sets, which varied from 2011 to 2013. For additional information, see the "Sources" section of this report.

[b] Detailed (land and improvement) property value data as well as tax data were not available for every site.

Beneficial Effects from Enhanced Recreational and Ecological Amenities

In addition to hosting office buildings, shopping centers and manufacturing facilities, many Region 9 sites in reuse provide recreational and ecological resources. At the Fresno Municipal Sanitary Landfill and Pemaco Maywood sites in California, for instance, redevelopment includes sports fields and other recreation facilities for nearby communities. Sites in ecological reuse include the South Bay Asbestos Area and Fort Ord sites in California, which both host wetland areas. These recreational and ecological reuses help attract visitors and residents and indirectly contribute to local economies.

Pemaco Maywood site (California

Why Are Wetlands Economically Important?

Wetlands provide a wide variety of benefits to surrounding areas, including flood control, water quality improvement, fish and wildlife habitat and recreational amenities. Replacing the water treatment services they provide with man-made facilities, for example, would be expensive. These benefits are difficult to quantify at the local level, but world-wide, wetlands are estimated to provide $14.9 trillion in ecosystem services. To learn more, see EPA's *Economic Benefits of Wetlands* fact sheet, available at:

http://water.epa.gov/type/wetlands/outreach/upload/EconomicBenefits.pdf

Reuse in Action

Municipal Airport, Agricultural and Ecological Uses, and Street Landscapes Demonstration Project

The Phoenix-Goodyear Airport (PGA) Area Superfund site is located in Maricopa County, Arizona, about 17 miles west of downtown Phoenix. The site includes two areas: PGA-North and PGA-South. In 1981, the state identified contaminated ground water and soil near the local municipal airport. The contamination resulted from years of industrial activities, including maintaining and operating military aircraft at the former Naval Airfield, and researching and making military detonators and explosives at the Unidynamics facility. In 1983, EPA added the site to the NPL. Site cleanup includes ground water treatment, soil vapor extraction, and removal and capping of the contaminated soil (PGA-South only). Today, while cleanup is ongoing, the site is able to support a range of different uses.

Agricultural test plots on PGA-North

Public service and industrial operations are located on PGA-South, including the Phoenix-Goodyear Airport, prefabricated home manufacturing, airline flight training and aircraft maintenance operations. These operations employ over 450 people and contribute an estimated $43 million in annual employment income. A PGA-North area next to ground water treatment operations supports agricultural test plots for different grass species potentially tolerant to desert conditions and irrigated with the treatment system's treated ground water. These tests identified a type of rye grass that tolerates desert conditions. The rye grass is harvested for feed and donated to an area rancher. Another PGA-North area is the focus of an innovative partnership between the City of Goodyear and Arizona State University. The partnership will allow the University to study different street landscapes along a major thoroughfare in Goodyear, considering issues such as drought-tolerant landscaping, dust control and aesthetics.

Finally, potentially responsible parties operating the site's ground water treatment systems have worked with the City of Goodyear for several years, returning treated ground water to use. Most recently, the City and Goodyear Tire and Rubber signed off on a project that will bring treated ground water from the PGA-South treatment system to nearby athletic fields for irrigation. For more information, see EPA SRI's "Where You Live" page.

Small-scale Farming and Small Businesses

The Del Monte Corp. (Oahu Plantation) site is located near Kunia Village in Honolulu County, Hawaii. A 6,000-acre pineapple plantation operated on site from about 1946 to 2006. The Del Monte Corporation used pesticides to control pests that attack pineapple roots. In 1977, 500 gallons of pesticide accidentally spilled next to the Kunia drinking water supply well. The spill led to the discovery of broader soil and ground water contamination resulting from years of improper pesticide storage and processing. EPA added the site to the NPL in 1994. Remedial actions included removal of contaminated soil, phytoremediation of contaminated ground water, installation of a vegetated soil cap, and installation of air stripper and

filtration systems to address contaminated drinking water. Soil and ground water treatment is ongoing.

Del Monte closed the plantation in 2006 and returned the leased property to the property owner, the James Campbell Company. In 2007, EPA issued an institutional controls consent decree to make sure new property owners and tenants would only develop in ways compatible with the site's remedies. EPA would provide oversight and guidance for site redevelopment, and EPA would have access to monitoring treatment equipment during ongoing cleanup. The consent decree helped stakeholders develop a plan for reuse. The James Campbell Company then began selling property lots. Kunia Loa Ridge Farmlands purchased more than half of the area to resell small plots to farmers and encourage them to farm sustainably. An Oils of Aloha facility operates on site, along with service organizations and other small businesses. In addition, the U.S. Army has expanded housing for Schofield Barracks on site. The properties on the site have an estimated total property value of $26 million. Annual property taxes total over $95,000. For more information, see EPA SRI's "Where You Live" page.

Commercial and Residential Developments

The Coalinga Asbestos Mine site is located in upper Pine Canyon in western Fresno County, California. The site includes 120 acres used for mining operations and 107 acres in Coalinga used for asbestos storage and transportation. Asbestos contamination was found in buildings and soil on railroad property. After sampling found asbestos from the site in an aqueduct near Los Angeles, EPA added the site to the NPL in 1984. Cleanup focused on limiting the release of asbestos into the air and nearby streams, and included access restrictions and deed restrictions. Remedy construction finished in 1995. EPA took the site off the NPL in 1998.

Residential development at the Coalinga Asbestos Mine site

After cleanup, parts of the site that did not require deed restrictions began attracting developers. K-Mart opened a store on site in 1992, which now provides an estimated 120 jobs and $2.3 million in estimated annual employee income. Other developments include a 43-unit apartment complex and a 47-lot neighborhood. The site is also home to a variety of small businesses. EPA conducted additional sampling in 2007 to determine whether there were any exposure issues of concern. Sampling results showed that the site's remedy remained protective of human health and the environment. For more information, see EPA SRI's "Where You Live" page.

Large-scale Commercial and Industrial Park

The 280-acre Del Amo site is located in the Harbor Gateway area in southern Los Angeles. A chemical manufacturing facility operated on site from the 1940s to 1972, when a developer bought the property and dismantled the facility. Facility operations released chemicals into the soil and ground water, and disposed of wastes in unlined pits and ponds on site. The California Department of Health Services began excavating some of the waste pits in 1982, and EPA began site inspections around that time. EPA placed the site on the NPL in 2002, following resolution of a legal dispute.

Recent construction activity at the Del Amo site

Today, the site hosts over 300 businesses that together employ over 6,600 people, contribute over $400 million in annual employment income and generate almost $3 billion in annual sales. The area's current total property value is an estimated $592 million; annual property taxes total almost $9 million. Most of the site had been developed into an industrial park in the 1970s. Commercial activities and construction projects have continued during cleanup. An innovative institutional control

program brought EPA, the state Department of Toxic Substances Control and potentially responsible parties together as part of the City of Los Angeles' building permit process. Institutional controls at the site help keep property owners, tenants and construction workers aware of the site's remedy while allowing businesses to continue operating. For more information, see EPA SRI's "Where You Live" page.

Recreational Waterfront Development

The 9-acre Jibboom Junkyard site in Sacramento, California, now hosts a waterfront park next to an existing bicycle trail. A metal salvaging facility operated on the site from 1950 until 1965, when the California Department of Transportation purchased the parcel to build an elevated interstate highway and right-of-way across 7 acres of the site. After discovering soil contamination from the salvaging operations, EPA placed the site on the NPL in 1983. To prevent exposure to contaminated soil and migration of contaminants into ground water, EPA and the U.S. Army Corps of Engineers excavated contaminated soil from the remaining undeveloped 2 acres and backfilled the area with clean soil.

Robert T. Matsui Waterfront at the Jibboom Junkyard site

In 2005, the Sacramento City Council approved the 2-acre area for redevelopment. Today, the Robert T. Matsui Waterfront Park includes pedestrian walkways, a fountain plaza, open space and interpretive signage. In addition to existing benches and landscaping, there are plans for additional park and picnic areas. Plans for redevelopment at the adjacent Pacific Gas and Electric (PG&E) state Superfund site could also enable more connectivity to the Sacramento River and more recreation opportunities for the community. For more information, see EPA SRI's "Where You Live."
see EPA SRI's "Where You Live" page.

State Reuse Profile: Arizona

EPA partners with the Arizona Department of Environmental Quality to oversee the investigation and cleanup of Superfund sites in Arizona. As of 2014, Arizona had eight Superfund sites with either new uses in place or uses remaining in place since before cleanup. EPA has collected economic data for 82 businesses and organizations operating on five sites in reuse and continued use in Arizona. The businesses and organizations employ nearly 8,700 people, contribute an estimated $688 million in annual employment income and have about $3.1 billion in estimated annual sales.

Table 3. Detailed site and business information for Superfund sites in reuse and continued use in Arizona (2013)

	Number of Sites[a]	On-Site Businesses Identified	Total Annual Sales	Total Employees	Total Annual Employee Income
In Reuse	1	-	-	-	-
In Continued Use	4	47	$2.3 billion	2,656	$184 million
In Continued Use and In Reuse	3	35	$0.8 billion	6,036	$504 million
Total	**8**	**82**	**$3.1 billion**	**8,692**	**$688 million**

[a] Three sites are federal facilities. Federal facility sites are not included in calculations of total businesses, jobs, income or annual sales.

Note: Business information is not available for all businesses on all Superfund sites in reuse or continued use.

Property Values and Property Tax Revenues

Property value and tax data were not available for sites in reuse or continued use in Arizona.

Did You Know?

The Tucson International Airport Area site in Tucson, Arizona, continues to host an airport as well as support industries and services. The Tucson Airport Authority employs 275 people and generates over $49 million in annual sales.

State Reuse Profile: California

EPA partners with the California Department of Toxic Substances Control to oversee the investigation and cleanup of Superfund sites in California. As of 2014, California had 75 Superfund sites with either new uses in place or uses remaining in place since before cleanup. EPA has collected economic data for 564 businesses and organizations operating on 35 sites in reuse and continued use in California. The businesses and organizations employ about 17,350 people, contribute an estimated $1.7 billion in annual employment income and have about $24 billion in estimated annual sales.

Table 4. Detailed site and business information for Superfund sites in reuse and continued use in California (2013)

	Number of Sites[a]	On-Site Businesses Identified	Total Annual Sales	Total Employees	Total Annual Employee Income
In Reuse	31	133	$9.0 billion	4,733	$544 million
In Continued Use	32	77	$10.6 billion	3,391	$506 million
In Continued Use and In Reuse	12	354	$4.4 billion	9,232	$695 million
Total	**75**	**564**	**$24 billion**	**17,356**	**$1.7 billion**

[a] Twenty-two sites are federal facilities. Federal facility sites are not included in calculations of total businesses, jobs, income or annual sales.

Note: Business information is not available for all businesses on all Superfund sites in reuse or continued use.

Property Values and Property Tax Revenues

EPA has collected property value data for five Superfund sites in reuse and continued use in California. These sites span 113 property parcels and 392 acres. They have a total property value of $784 million. All five sites have property value details. Together, the site properties have a total land value of $381 million and a total improvement value of $403 million. Property tax information is available for four sites. The properties generate a combined $11 million in local property taxes.

Table 5. Property value and tax information for sites in reuse and continued use in California

Total Land Value (5 sites)	Total Improvement Value (5 sites)	Total Property Value (5 sites)	Total Annual Property Taxes (4 sites)
$381 million	$403 million	$784 million	$11 million

Did You Know?

The South Bay Asbestos Area site in San Jose, California, includes the entire community of Alviso, home to 2,100 residents. The site is home to small markets, retail businesses and other services. The Santa Clara Unified School District operates on site and employs 50 people, contributing an estimated $2.6 million in estimated annual employment income.

State Reuse Profile: Hawaii

EPA partners with the Hawaii State Department of Health to oversee the investigation and cleanup of Superfund sites in Hawaii. As of 2014, Hawaii had three Superfund sites with either new uses in place or uses remaining in place since before cleanup. EPA has collected economic data for eight businesses and organizations operating on one site in reuse in Hawaii. The businesses and organizations employ about 85 people, contribute an estimated $6 million in annual employment income and have about $3.4 million in estimated annual sales.

Table 6. Detailed site and business information for Superfund sites in reuse and continued use in Hawaii (2013)

	Number of Sites[a]	On-Site Businesses Identified	Total Annual Sales[b]	Total Employees	Total Annual Employee Income
In Reuse	1	8	$3.4 million	85	$6 million
In Continued Use	2	-	-	-	-
In Continued Use and In Reuse	0	-	-	-	-
Total	**3**	**8**	**$3.4 million**	**85**	**$6 million**

[a] Two sites are federal facilities. Federal facility sites are not included in calculations of total businesses, jobs, income or annual sales.

[b] Annual sales figures are not available (or applicable) for every organization that makes jobs data available. As a result, in some instances, total annual sales are lower than total annual employment income.

Note: Business information is not available for all businesses on all Superfund sites in reuse or continued use.

Property Values and Property Tax Revenues

EPA has collected property value data for one Superfund site in reuse in Hawaii. The site spans 22 property parcels and 2,536 acres. They have a total property value of $26.1 million. Together, the site properties have a total land value of $18.7 million and a total improvement value of $7.4 million. The site properties generate a combined $96,000 in local property taxes.

Table 7. Property value and tax information for sites in reuse in Hawaii

Total Land Value (1 site)	Total Improvement Value (1 site)	Total Property Value (1 site)	Total Annual Property Taxes (1 site)
$18.7 million	$7.4 million	$26.1 million	$96,000

Did You Know?

The Pearl Harbor Naval Complex site in Pearl Harbor, Hawaii, encompasses 12,600 acres of land and water. The complex remains an active military facility.

(Source: US Navy)

U.S. Pacific Territory Reuse Profile: Guam

Region 9 includes three U.S. territories: American Samoa, Guam and the Northern Mariana Islands. Of these, only Guam has a Superfund site in reuse or in continued use. EPA partners with the Guam Environmental Protection Agency to oversee the investigation and cleanup of Superfund sites in Guam. As of 2014, Guam had one Superfund site with uses remaining in place since before cleanup. EPA has not collected economic data for that site, which is a federal facility in continued military use.

Property Values and Property Tax Revenues

Property value and tax data were not available for sites in continued use in Guam.

Did You Know?

The Andersen Air Force Base site in Yigo, Guam, covers 20,000 acres. The base opened in 1940 and remains an active military facility.

(Source: Lance Cpl. Brianna Turner)

Reuse on the Horizon

Planned Large-scale Shopping Center

The Operating Industries, Inc. Superfund site in Monterey Park, California, is located about 10 miles east of downtown Los Angeles. The site covers 190 acres; the Pomona Freeway separates the site into a North Parcel and a South Parcel. Monterey Park Disposal Company began operating a landfill at the site in 1948. Operating Industries, Inc. purchased the area in the 1950s and continued landfilling until 1984. The landfill received millions of gallons of commercial, residential and industrial wastes. These wastes contaminated the air, ground water and soil, and posed fire and health risks for nearby residents. In 1984, the State of California placed the landfill on the California Hazardous Waste Priority List, and the landfill closed later that year. EPA placed the site on the NPL in 1986.

Cleanup actions covered the landfill, controlled landfill gas and managed leachate. Monitoring and maintenance activities are ongoing. An innovative Landfill Gas Treatment System converts landfill gas into electricity, meeting more than half the cleanup's energy requirements.

There are plans to develop the North Parcel and surrounding land into a 51-acre Market Place shopping center. The 500,000-square-foot area will host retail and department stores, restaurants, a bank, a fitness center and parking. Home improvement retailer Home Depot and restaurant chain In-N-Out have already signed leases.

Conclusion

EPA works closely with its partners at Superfund sites across Region 9 to make sure that sites can be reused safely and protectively following cleanup. EPA also works with existing businesses and organizations at Superfund sites throughout the cleanup process to make sure they can remain open. The businesses and organizations operating on these sites provide jobs and income for communities. They help generate local and state taxes. Cleanup and redevelopment also helps stabilize and boost property values. As of 2014, Region 9 has over 85 NPL sites with new uses in place or uses that have remained in place since before cleanup. Future uses are planned for more Superfund sites in Region 9, across Arizona, California and Nevada. EPA remains committed to working with all stakeholders to support Superfund redevelopment opportunities in the Pacific Southwest Region.

The reuse of Superfund sites takes time and is often a learning process for project partners. Ongoing coordination among EPA, state agencies, local governments, potentially responsible parties, site owners, developers, and nearby residents and business owners is essential. EPA tools, including reuse assessments or plans, Ready for Reuse Determinations, comfort letters or partial deletions of sites from the NPL, often serve as the foundation for moving forward. At some sites, parties may need to take additional actions to ensure reuses are compatible with site remedies.

Results from across Region 9 indicate that these efforts are well worth it. Superfund sites are now home to large commercial and residential developments, mid-sized developments providing services to surrounding communities, and diverse small businesses. EPA is committed to working with all stakeholders, using both "tried-and-tested" tools as well as new and innovative approaches, to support the restoration and renewal of these sites as long-term assets for communities in the Pacific Southwest Region.

EPA Resources for Superfund Site Reuse

EPA Region 9 Superfund Redevelopment Initiative Coordinator
Gary Riley | 415-972-3003 | riley.gary@epa.gov

EPA Region 9 Superfund Sites in Reuse Website: list of Superfund sites in reuse for each state in Region 9.
http://www.epa.gov/superfund/programs/recycle/live/region9.html

SRI Website: tools, resources and more information about Superfund site reuse.
www.epa.gov/superfund/programs/recycle/index.html

Sources

Business, Job and Sales Information

The Hoovers/Dun & Bradstreet (D&B) database provided information on the number of employees and sales volume for on-site businesses. Hoovers/D&B provides information on businesses and corporations. It maintains a database of over 179 million companies using a variety of sources, including public records, trade references, telecommunication providers, newspapers and publications, and telephone interviews. In instances where employment and sales volume for on-site businesses could not be identified, information was sought from the Manta database.

The BLS Quarterly Census of Employment and Wages database provided average weekly wage data for each of the businesses. Average weekly wage data were identified by matching the North American Industry Classification System (NAICS) codes corresponding with each type of business with weekly wage data for corresponding businesses. If not available at the county level, wage data were sought by state or national level, respectively. In cases where wage data were not available for the six-digit NAICS code, higher level (less detailed) NAICS codes were used to obtain the wage data. To determine the annual wages (mean annual) earned from jobs generated by each of the businesses identified, the average weekly wage figure was multiplied by the number of weeks in a year (52) and by the number of jobs (employees) for each of the businesses.

Business and employment data were collected in 2013. Annual employment income is based on job data estimated in 2013 using BLS average weekly wage data for those jobs from 2012 (the latest available data). All figures presented have been rounded for the convenience of the reader. Federal facility sites are not included in calculations of total businesses, jobs, income or annual sales.

Property Value and Tax Information

Property value and property tax results are based on an EPA SRI effort in 2013 that calculated on-site property values and property taxes for a subset of Superfund sites by comparing available site boundary information with available parcel boundary information and gathering information for selected parcels from county assessor data sets. The property value and tax amounts reflect the latest property value year and tax data year available in county assessor data sets, which varied from 2011 to 2013. All figures presented have been rounded for the convenience of the reader.

Reuse in Action

Write-ups of sites in reuse or continued use included in this study are based on available EPA resources, including SRI reuse snapshots, SRI Return to Use Demonstration Project fact sheets and SRI case studies. Business and property value data included in these write-ups reflect the latest data available. Links to EPA's SRI reuse snapshots as well as the case studies are included below.

SRI Reuse Snapshots
http://www.epa.gov/superfund/programs/recycle/live/region9.html

SRI Return to Use Demonstration Project Fact Sheets
2010. Coalinga Asbestos Mine.
http://www.epa.gov/oerrpage/superfund/programs/recycle/pdf/rtu10coalinga.pdf

2010. Jibboom Junkyard.
http://www.epa.gov/oerrpage/superfund/programs/recycle/pdf/rtu10jibboom.pdf

2012. Del Monte Corp (Oahu Plantation).
http://www.epa.gov/oerrpage/superfund/programs/recycle/pdf/rtu12-delmonte.pdf

SRI Case Studies
Del Amo. 2013. Reuse and the Benefit to Community.
http://www.epa.gov/oerrpage/superfund/programs/recycle/pdf/delamo-success.pdf

SRI Celebrating Success Fact Sheets
Del Monte Corp. (Oahu Plantation). 2012.
http://www.epa.gov/oerrpage/superfund/programs/recycle/pdf/delmonte-success.pdf

Superfund Archived Success Story
In California, Many Hands Make Greener Work: OII Landfill.
http://www.epa.gov/superfund/accomp/success/pdf/oii.pdf

Other Sources
"In-N-Out may Open Shop in Monterey Park." Pasadena Star-News. October 9, 2013. Available at:
http://www.pasadenastarnews.com/business/20131009/in-n-out-may-open-shop-in-monterey-park

"Monterey Park City Approves Market Place Shopping Center." SGV West Valley Journal. 2012. Available at:
http://www.sgvjournal.com/monterey-park/1755-city-monterey-park-to-decide-market-place-shopping-center.html

"Monterey Park Mayor Talks About 3 New or Potential Development Projects." Pasadena Star-News. April 12, 2014. Available at:
http://www.pasadenastarnews.com/government-and-politics/20140412/monterey-park-mayor-talks-about-3-new-or-potential-development-projects

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