

Superfund Sites Work for Communities:

How Superfund Redevelopment in EPA Region 9 Is Making a Difference in Communities



Figure 1. Del Amo site (California)

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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 profiles 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 are also thriving. Local governments, state agencies and many organizations in the 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 often restores 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.

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 into the cleanup process promotes the way for their beneficial reuse. In addition, EPA Region 9 works closely with state and local officials to remove barriers that have kept many Superfund sites underused. EPA Region 9 works to ensure that businesses on properties being cleaned up under Superfund can continue operating in a manner that protects both human health and the environment while site investigations and cleanup work continue. This continuity enables these businesses to remain as a source of jobs for communities.

Superfund sites across Region 9 are now home to 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 areas. On-site businesses and organizations at current and former Region 9 Superfund sites provide an estimated 31,000 jobs and contribute an estimated \$3.2 billion in annual employment income for Region 9 residents. Cleaned-up sites in use generate an estimated \$23 million in annual property tax revenues for local governments.¹

This profile looks at how reuse activities at Superfund sites make a difference in communities in Region 9. It updates the information presented in the 2014 profile. In particular, it describes some of the beneficial effects of reuse and continued use of current and former Superfund sites. The profile also describes the land values and property taxes associated with Superfund sites returned to use following cleanup and sites that have remained in use throughout the cleanup process. EPA updates these profiles every two years. The beneficial effects may increase or decrease from previous profiles due to changes in the number of sites in reuse or continued use, changes in the number of on-site businesses, changes in data availability, and changes in individual-level business or property value data. Figures presented represent only a subset of all Superfund sites in reuse or continued use in Region 9.

¹ Business and property value tax figures represent only a subset of the beneficial effects of sites in reuse or continued use in Region 9. There are 44 Superfund sites in reuse or continued use in Region 9 for which EPA does not have business data, including 28 federal facilities on the Superfund National Priorities List (NPL). Not all sites in reuse involve an on-site business or other land use that would employ people. Several sites without businesses have beneficial effects that are not easily quantified, such as properties providing ecological or recreational benefits (parks, wetlands, ecological habitat, open space, etc.). There are 71 sites in reuse or continue use in Region 9 for which EPA does not have property value or tax data, including 28 NPL federal facilities.

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

Businesses

984

Estimated Annual Sales

\$7.6 billion

Number of People Employed

31,269

Total Annual Employee Income

\$3.2 billion



Figure 2. Waste Disposal, Inc. site (California)

Support for Superfund Reuse

EPA Region 9 is committed to making a visible difference in communities through the cleanup and reuse of Superfund sites. In addition to protecting human health and the environment through the Superfund program, Region 9 partners with stakeholders to encourage reuse opportunities at Superfund sites. 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.

Reuse support efforts in EPA Region 9 include:

- Identifying and evaluating local land use priorities to align 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 site reuse forward.
- Making efforts to help address communities' and developers' liability, safety and reuse concerns through development of educational materials, comfort letters, developer agreements and environmental status reports that provide information about the appropriate use of sites.
- 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 and reuse case studies 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 (PRPs) and developers better understand potential future uses for Superfund sites. This understanding 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.



Figure 3. Pemaco Maywood site (California)

Superfund Reuse: The Big Picture

EPA takes immediate action at contaminated sites when warranted through short-term cleanup actions, also called removal actions. Then EPA refers sites warranting long-term cleanup to its remedial program or to state programs. The National Priorities List (NPL) is a list of the most serious sites that EPA focuses on for further investigation and possible remediation through the Superfund program. Once EPA places a site on the NPL, the Agency studies the contamination, identifies technologies that could address the material and evaluates the alternative cleanup approaches. EPA then proposes a cleanup plan, and, after collecting public input, issues a final cleanup plan. EPA then cleans up the site or oversees cleanup activities.² EPA has placed over 130 sites in Region 9 on the NPL. It oversees investigation and cleanup at an additional three Superfund Alternative Approach sites in the region, and performs or oversees short-term cleanup actions as well.

Whenever possible, EPA seeks to integrate reuse priorities into site cleanup plans. In Region 9, 87 NPL sites and two non-NPL Superfund sites are in use. These sites have either new uses in place or uses that remain in place from before cleanup. Many of these sites have been redeveloped for commercial, industrial and residential purposes. Others have been redeveloped for residential, recreational, ecological or agricultural purposes. Businesses and other organizations also use all or parts of other sites for vehicle parking and alternative energy projects.

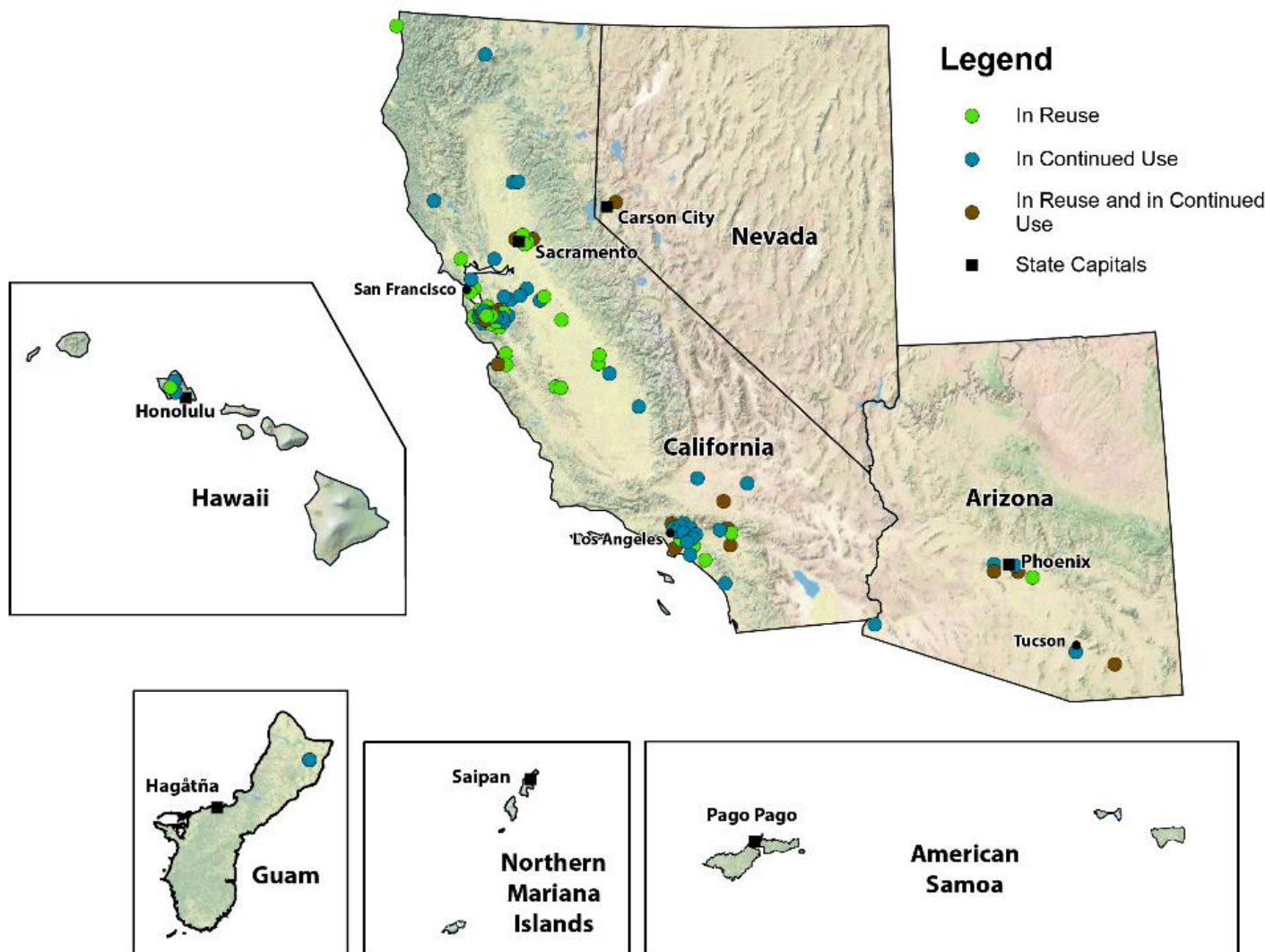


Figure 4. Sites in Reuse and Continued Use in Region 9

² Removal actions may be taken at sites on and not on the NPL.

Beneficial Effects of Superfund Site Reuse in Region 9

Businesses and Jobs

EPA has collected economic data for over 980 businesses, government agencies and civic organizations operating on 43 NPL sites and two non-NPL Superfund sites in reuse and continued use in Region 9.³ See the State and U.S. Territory Reuse Profiles (pages 14-18) for each Region 9 state's reuse details.⁴ 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 facility, a Holiday Inn hotel, health care providers and a Staples office supply store.

Businesses and organizations on these sites earn about \$7.6 billion in estimated annual sales, and employ an estimated 31,269 people, earning an estimated \$3.2 billion in annual employment income. This income injects money into local economies and generates revenue through personal state income taxes. These businesses also 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. More detailed information is presented in Table 1.⁵



Figure 5. Raytheon Corp. site (California)

Table 1. Site and business information for Region 9 sites in reuse and continued use (2015)

	Sites	Sites with Businesses ^a	Businesses ^b	Total Annual Sales ^c	Total Employees	Total Annual Employee Income
In Reuse	30	17	190	\$1.7 billion	4,521	\$380 million
In Continued Use	43	19	397	\$1.8 billion	8,661	\$1.1 billion
In Reuse and in Continued Use	16	9	397	\$4.1 billion	18,087	\$1.7 billion
Total	89	45^d	984	\$7.6 billion	31,269	\$3.2 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 profile.

^d See footnote 1, page 3.

³ See footnote 1, page 3.

⁴ There are no reuse profiles for American Samoa or the Northern Mariana Islands because there are no sites in reuse there.

⁵ For additional information on the collection of businesses, jobs and sales data, see the "Sources" section of this profile.

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. This is because 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.

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) – a former electronics and semiconductor fabrication facility is now a shopping center with stores, restaurants and parking.
- ***In Continued Use:*** Applied Materials – a former semiconductor wafer manufacturing plant that was converted to offices and educational facilities for Applied Materials.
- ***In Reuse and Continued Use:*** Aerojet General Corp. – rocket engine manufacturing is ongoing. Following cleanup, new tenants are using other areas for office, commercial and light industrial facilities.



Figure 6. Phoenix-Goodyear Airport Area site (Arizona)

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 property taxes following cleanup and reuse is challenging due to insufficient data on 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 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 and 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 18 Superfund sites in reuse and continued use in Region 9. These sites span 436 property parcels and 4,373 acres and have a total property value of \$1.7 billion. In total, 16 of the 18 sites have both land and improvement property value details; the properties at these sites have a total land value of \$770 million and a total improvement value of \$870 million. Seventeen of the 18 sites have property tax details.⁶ Properties at these sites generate a combined \$23 million in local property taxes annually.⁷

Region 9 Sites in Reuse: Property Value and Tax Highlights

Total Property Value

\$1.7 billion

Total Annual Property Taxes

\$23 million



Figure 7. Del Amo site (California)

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

Total Land Value (16 sites) ^b	Total Improvement Value (16 sites)	Total Property Value (18 sites)	Total Annual Property Taxes (17 sites)
\$770 million	\$870 million	\$1.7 billion	\$23 million

^a Results are based on an EPA SRI effort in 2015 that calculated on-site property values and property taxes for a subset of Superfund sites. The property value and tax amounts reflect the latest property value year and tax data year available in county assessor datasets, which varied from 2014 to 2015. For additional information, see the "Sources" section of this profile.

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

⁶ 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 breakdowns showing both the land value and improvement value is not always available; instead, only the total property value may be available.

⁷ Property tax data were not available for one of the 18 Superfund sites with property value data.

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 example, 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 host wetland areas. These recreational and ecological reuses help attract visitors and residents and indirectly contribute to local economies.



Figure 8. Fresno Municipal Sanitary Landfill site (California)

Why Are Wetlands Economically Important?

Wetlands provide a wide variety of benefits. The combination of shallow water, high levels of nutrients and primary productivity is ideal for the development of organisms that form the base of the food web and feed many species of fish, amphibians, shellfish and insects. Wetlands are extremely effective in removing pollutants from water and act as filters for future drinking water. They play a role in reducing the frequency and intensity of floods. They can store large amounts of carbon. They also provide recreational amenities.

These benefits also have economic value. Replacing wetlands' water treatment services with manmade facilities, for example, would be expensive. Worldwide, wetlands provide an estimated \$14.9 trillion in ecosystem services. To learn more, see EPA's [Economic Benefits of Wetlands](#) fact sheet.

See also [EPA's web page on the importance of wetlands](#).

See also the National Oceanic and Atmospheric Administration's website feature on [Carbon Sequestration](#).

Reuse in Action

South Bay Asbestos Area – Commercial Development and Recreational Opportunities

The 550-acre South Bay Asbestos Area Superfund site is located in San Jose, California, and includes the Alviso neighborhood. Three landfills operated on site from 1953 to 1982; they may have received asbestos waste from a cement pipe manufacturing plant. Investigations also found asbestos in the Guadalupe River ring levee surrounding Alviso. EPA placed the site on the NPL in 1986. Cleanup included paving of asbestos-contaminated lots, removal of asbestos debris and soils, landfill covers, land use restrictions, removal of the Guadalupe River ring levee, and restoration of impacted wetlands. Site cleanup has finished.

Today, site uses include two thriving business parks as well as the Alviso neighborhood. The 70-acre America Center offers office space in LEED-certified green buildings; it is located on the former Marshland Landfill area. The America Center hosts six businesses, including Flextronics International USA, Inc. and Polycom, Inc. Together, these businesses provide 1,200 jobs and \$114 million in annual employee income, while generating \$348 million in annual sales. The second business park – Gold Street Tech Center – is located on part of the former Santos Landfill area. It provides commercial and office space for several businesses, including TiVo, Inc.'s headquarters. Together, businesses at the Center provide 938 jobs and \$111 million in annual employee income, with \$495 million in annual sales. The site also includes open space, trails, and volleyball and basketball courts.



Figure 9. South Bay Asbestos Area site (California)

Phoenix-Goodyear Airport Area – Municipal Airport, Agricultural and Ecological Uses

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 groundwater and soil near the municipal airport. The contamination was the result of years of industrial activities, including aircraft operations and maintenance at the former Naval Airfield and detonators and explosives research and manufacturing at the Unidynamics facility. In 1983, EPA added the site to the NPL. Cleanup includes groundwater treatment, soil vapor extraction, and removal and capping of contaminated soil (PGA-South only). Today, while cleanup is ongoing, the site is able to support a range of different uses.

Public service and industrial operations located on PGA-South include the Phoenix-Goodyear Airport, prefabricated home manufacturing, airline flight training and aircraft maintenance operations. These operations employ over 1,000 people and contribute an estimated \$40 million in annual employment income. A PGA-North area next to groundwater treatment operations supports agricultural test plots for different grass species. The grasses are irrigated with treated groundwater. 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. In 2012, the site's PRP's formed a partnership with a local nearby school that resulted in beneficial results for both parties. In exchange for allowing the PRPs to install a new groundwater pipeline on the school's property, PGA provides the school with treated groundwater to be used to cool new school buildings. Finally, PRPs operating the site's groundwater treatment systems have worked with the City of Goodyear for several years to return treated groundwater to use. Most recently, the City and Goodyear Tire and Rubber implemented

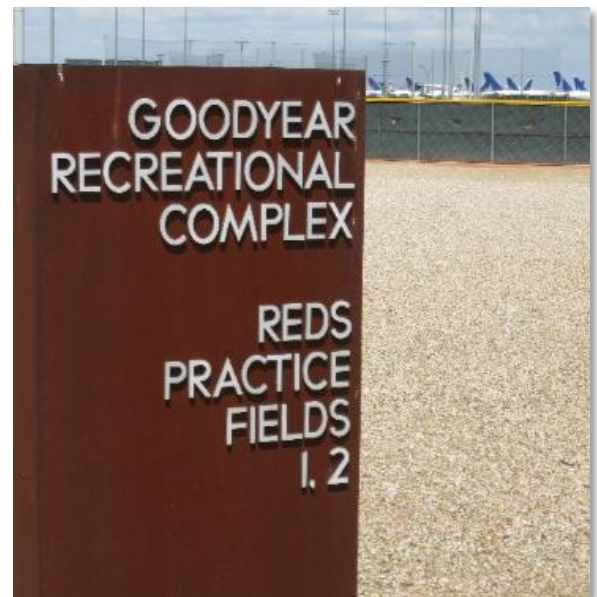


Figure 10. Athletic fields irrigated by treated groundwater from the Phoenix-Goodyear Airport Area site (Arizona)

a project to bring treated groundwater from the PGA-South treatment system to nearby athletic fields for irrigation. The City estimates it will save \$200,000 a year by using the treated groundwater. Treated groundwater has also been used for irrigation at a local golf club.

Del Monte Corp. (Oahu Plantation) – 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 groundwater contamination resulting from years of improper pesticide storage and processing. EPA added the site to the NPL in 1994. The remedy included removal of contaminated soil, phytoremediation of contaminated groundwater, a vegetated soil cap, and air stripper and filtration systems to address contaminated drinking water. Soil and groundwater 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 a Consent Decree focused on institutional controls to make sure any new development would be compatible with the site's remedy. EPA agreed to provide oversight and guidance for redevelopment activities; EPA also has access to monitoring equipment during cleanup. The Consent Decree helped inform stakeholders' reuse plans. 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 for sustainable agriculture operations. 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.



Figure 11. Pineapple farm

Del Amo – 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 groundwater, 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.

Today, the site hosts nearly 260 businesses that together employ over 6,000 people, contribute almost \$386 million in annual employment income and generate over \$1.5 billion in annual sales. The area's current total property value is an estimated \$678 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 PRPs together as part of the City of Los Angeles' building permit process. Institutional controls at the site help make sure that property owners, tenants and construction workers are aware of remedy requirements over the long term.



Figure 12. Del Amo site (California)

Benefits of Groundwater Reuse in Region 9

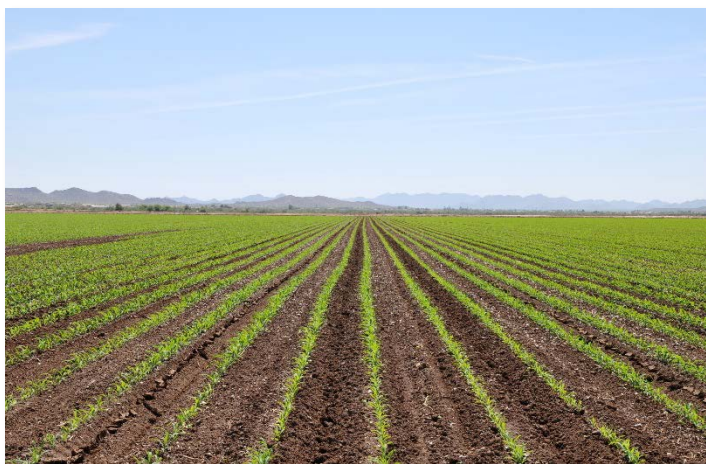
In recent years, EPA has made it a priority to reuse and recycle treated wastewater or groundwater for beneficial purposes on Superfund and other contaminated sites. These uses include agricultural and landscape irrigation, industrial processes, household utilities, and drinking water. Reusing treated water for drinking water is especially important in Region 9, where states are facing some of the worst droughts in U.S. history and populations continue to grow rapidly. From 1990 to 2010, for example, Arizona's population increased 74 percent, California's population increased 25 percent and Nevada's population increased nearly 125 percent. These states are also some of the driest in the United States, ranked 47th, 40th and 50th nationally, respectively, in terms of average annual precipitation. Thus, treated wastewater and groundwater at Superfund sites provide localities with access to additional water resources and also helps reduce the need to divert water from sensitive ecosystems. Finally, having these water supplies available locally means that water does not need to be transported over long distances, reducing energy costs as well as carbon emissions.

The Newmark Ground Water Contamination Superfund site is located in San Bernardino, California. The site includes two major groundwater plumes. Treatment systems made groundwater available for public consumption in 1998. The systems can treat up to 29 million gallons of water a day.

Treated groundwater from the South El Monte part of the San Gabriel Valley (Area 1) Superfund site was available for public consumption as of 2008. The system includes four separate groundwater pump-and-treat systems operated by three different water purveyors. The systems can treat up to 18 million gallons of water a day.

The North Indian Bend Wash Superfund site is located in Scottsdale, Arizona. Industrial facilities contaminated groundwater with volatile organic compounds. The site's central groundwater treatment facility began operation in 1994, with treated groundwater available for public consumption the same year. The facility uses air stripping technology and can treat up to 11.3 million gallons of water a day.

Table 3 shows the estimated daily treated water value by site. In total, over \$250,000 worth of contaminated groundwater is treated on a daily basis. Treated groundwater at each site is made available for public consumption by the local water providers listed below.



Figures 13 and 14. Restored groundwater has many benefits for Region 9

Table 3. Estimated Daily Treated Water Value by Site

Site Name	Daily Water Treatment Capacity (MGD) ¹	Local Water Provider	Estimated Daily Treated Water Value ²
San Gabriel Valley (Baldwin Park)	43	La Puente Valley County Water District	\$21,269
Newmark Ground Water Contamination	29	San Bernardino Water Authority	\$44,582

Site Name	Daily Water Treatment Capacity (MGD) ¹	Local Water Provider	Estimated Daily Treated Water Value ²
San Gabriel Valley (South El Monte)	18	San Gabriel Valley Water Company	\$62,151
San Gabriel Valley (Whittier Narrows)	16	San Gabriel Valley Water Company	\$55,245
North Indian Bend Wash	11.3	City of Scottsdale Water Department	\$18,645
San Fernando Valley (Burbank)	8.6	City of Burbank Water and Power	\$14,451
San Fernando Valley (Glendale)	7.2	Glendale Water and Power	\$23,581
Tucson International Airport Area	6.25	Tucson Water Department	\$12,950
San Fernando Valley (North Hollywood)	1	City of Burbank Water and Power	\$1,680
Total:	140.35		\$254,554

¹ MGD refers to millions of gallons per day.
² Based on the local water provider's residential water use rate multiplied by the daily water treatment capacity at each site.



Figure 15. An irrigation pond used by a golf course is filled with treated groundwater from the Phoenix-Goodyear Airport Area site (Arizona)

State Reuse Profile: Arizona

EPA partners with the Arizona Department of Environmental Quality to oversee the investigation and cleanup of Superfund sites in Arizona. Arizona has eight Superfund sites with either new uses in place or uses that have remained in place since before cleanup. EPA has collected economic data for 157 businesses and organizations operating on five sites in reuse and continued use in Arizona. The businesses and organizations employ nearly 8,200 people and contribute an estimated \$732 million in annual employment income.

Table 4. Detailed site and business information for Superfund sites in reuse and continued use in Arizona (2015)

	Sites ^a	Sites with Businesses	Businesses ^b	Total Annual Sales	Total Employees	Total Annual Employee Income
In Reuse	1	0	0	\$0	0	\$0
In Continued Use	4	2	52	\$367 million	2,629	\$237 million
In Reuse and in Continued Use	3	3	105	\$674 million	5,538	\$495 million
Total	8	5	157	\$1 billion	8,167	\$732 million

^a Three sites are federal facilities. Data for federal facilities are not included in calculations of total sites with businesses, businesses, sales, employees or income.

^b 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 and continued use in Arizona. The site spans 11 property parcels and 934 acres. They have a total property value of \$44 million. Property value details were not available. Properties at the site generate a combined \$165,000 in local property taxes.

Table 5. Property value and tax information for sites in reuse and continued use in Arizona^a

Total Land Value (0 sites)	Total Improvement Value (0 sites)	Total Property Value (1 site)	Total Annual Property Taxes (1 site)
0	0	\$44 million	\$165,000

^a The property value and tax amounts reflect the latest property value year and tax data year available in county assessor datasets, which varied from 2014 to 2015.

Did You Know?

Companies at the Motorola, Inc. (52nd Street Plant) Superfund site in Phoenix Arizona, remain open for business during cleanup. These businesses provide jobs for about 1,540 people and generate an estimated \$164 million in annual income.



Figure 16. Motorola, Inc. (52nd Street Plant) site (Arizona)

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. California has 76 Superfund sites with either new uses in place or uses that have remained in place since before cleanup. EPA has collected economic data for 817 businesses and organizations operating on 39 sites in reuse and continued use in California. The businesses and organizations employ nearly 23,000 people and contribute an estimated \$2.5 billion in annual employment income.

Table 6. Detailed site and business information for Superfund sites in reuse and continued use in California (2015)

	Sites ^a	Sites with Businesses	Businesses ^b	Total Annual Sales	Total Employees	Total Annual Employee Income
In Reuse	28	16	180	\$1.7 billion	4,406	\$367 million
In Continued Use	36	17	345	\$1.4 billion	6,032	\$900 million
In Reuse and in Continued Use	12	6	292	\$3.4 billion	12,549	\$1.2 billion
Total	76	39	817	\$6.5 billion	22,987	\$2.5 billion

^a Twenty-two sites are federal facilities. Data for federal facilities are not included in calculations of total sites with businesses, businesses, sales, employees or income.

^b 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 16 Superfund sites in reuse and continued use in California. These sites span 372 property parcels and 591 acres. They have a total property value of \$1.7 billion. Fifteen of the 16 sites have property value details. Together, the properties at these sites have a total land value of \$747 million and a total improvement value of \$868 million. Fifteen of the 16 sites have property tax details. Properties at these sites generate a combined \$22 million in local property taxes.

Table 7. Property value and tax information for sites in reuse and continued use in California^a

Total Land Value (15 sites)	Total Improvement Value (15 sites)	Total Property Value (16 sites)	Total Annual Property Taxes (15 sites)
\$747 million	\$868 million	\$1.7 billion	\$22 million

^a The property value and tax amounts reflect the latest property value year and tax data year available in county assessor datasets, which varied from 2014 to 2015.

Did You Know?

Firestone Business Park was built at the Firestone Tire & Rubber Co. (Salinas Plant) site in Salinas, California, after cleanup. The park hosts small and medium businesses. McCormick & Company Inc. produces spices on site, employing 200 people.



Figure 17. Spices

State Reuse Profile: Hawaii

EPA partners with the Hawaii State Department of Health to oversee the investigation and cleanup of Superfund sites in Hawaii. Hawaii has three Superfund sites with either new uses in place or uses that have remained in place since before cleanup. EPA has collected economic data for 10 businesses and organizations operating on one site in reuse in Hawaii. The businesses and organizations employ about 115 people and contribute an estimated \$8 million in annual employment income.

Table 8. Detailed site and business information for Superfund sites in reuse and continued use in Hawaii (2015)

	Sites ^a	Sites with Businesses ^b	Businesses	Total Annual Sales	Total Employees	Total Annual Employee Income
In Reuse	1	1	10	\$5.4 million	115	\$8 million ^c
In Continued Use	2	0	0	\$0	\$0	\$0
In Reuse and in Continued Use	0	0	0	\$0	\$0	\$0
Total	3	1	10	\$5.4 million	115	\$8 million^c

^a Two sites are federal facilities. Federal facility sites are not included in calculations of totals sites with businesses, businesses, jobs, income or annual sales.

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

^c While sales values typically exceed estimated totals of annual income, sales can sometimes be lower than estimated income. This could be attributed to a number of business conditions and/or data reporting. In addition, annual sales figures are not available (or applicable) for every organization that makes jobs data available.

Property Values and Property Tax Revenues

EPA has collected property value data for one Superfund site in reuse in Hawaii. The site spans 53 property parcels and 2,848 acres. The parcels have a total value of \$26.5 million. Together, the site properties have a total land value of \$25.3 million and a total improvement value of \$1.2 million. The site properties generate a combined \$160,000 in local property taxes.

Table 9. Property value and tax information for sites in reuse in Hawaii^a

Total Land Value (1 site)	Total Improvement Value (1 site)	Total Property Value (1 site)	Total Annual Property Taxes (1 site)
\$25.3 million	\$1.2 million	\$26.5 million	\$160,000

^a The property value and tax amounts reflect the latest property value year and tax data year available in county assessor datasets, which varied from 2014 to 2015.

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.



Figure 18. Pearl Harbor Naval Complex site (Hawaii)

State Reuse Profile: Nevada

EPA partners with the Nevada Division of Environmental Protection to oversee the investigation and cleanup of Superfund sites in Nevada. Nevada has one Superfund site, the Carson River Mercury Superfund site, with new uses in place and uses that have remained in place since before cleanup. Residential, industrial, commercial and agricultural uses continue to operate on site; gold and silver mining operations have recently started on site as well. The site spans 236 former mill sites and 80 miles of the Carson River in several counties in Nevada. EPA has not collected economic data for this site.

Property Values and Property Tax Revenues

Property value and tax data were not available for the site in reuse and continued use in Nevada.

Did You Know?

The Carson River Mercury Superfund site in western Nevada was mined for gold and silver during the late 1800s. Workers used mercury to extract precious metals until the end of the century, when they converted to cyanide processing. About 7,500 tons of mercury eventually contaminated the Carson River and the surrounding floodplain. Cleanup activities included removing contaminated soils and mine tailings from residential areas and other high exposure areas and enacting institutional controls. The cleanup plan allows the continued industrial, commercial and residential use of the site.



Figure 19. Gold and silver mining tools

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. Guam has one Superfund site, the Anderson Air Force base site, with uses that have remained in place since before cleanup. EPA has not collected economic data for that site; it 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. Currently, portions of the base are designated wildlife and marine preserves to protect about 23 endangered species living on or near the site. It remains an active military facility.



Figure 20. U.S. military jet

Reuse on the Horizon in Region 9

Planned Shopping Center

The Operating Industries, Inc., Landfill 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 area 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, groundwater 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. The landfill closed later that year. EPA listed 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 stores, restaurants, a bank, a fitness center and parking. Home improvement retailer Home Depot and restaurant chain In-N-Out have signed leases. Site preparation has started.

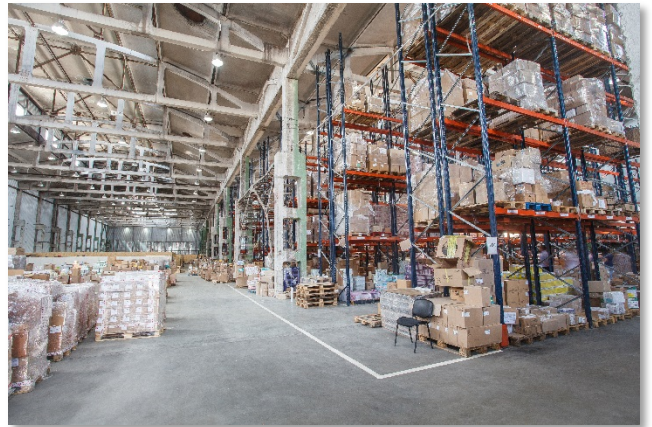


Figure 21. Home Depot will soon be operating out of the Market Place Shopping Center

Conclusion

EPA works closely with its partners at Superfund sites across Region 9 to make sure that sites can safely be reused or remain in continued use 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. There are 87 NPL sites and two non-NPL sites with new uses in place or uses that have remained in place since before cleanup. Future uses are planned for more Region 9 Superfund sites in Arizona, California and Nevada. EPA remains committed to working with all stakeholders to support Superfund redevelopment opportunities in the Pacific Southwest Region.



Figure 22. Tucson International Airport Area site (Arizona)

The reuse of Superfund sites takes time and is often a learning process for project partners. Ongoing coordination among EPA, state agencies, local governments, PRPs, site owners, developers, and nearby residents and business owners is essential. EPA tools, including reuse assessments or plans, 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.

Across the Pacific Southwest Region, Superfund sites are now home to large commercial and residential developments, mid-sized developments providing services to surrounding communities, and small businesses. EPA is committed to working with all stakeholders, to support the restoration and renewal of these sites as long-term assets.

EPA Superfund Site Reuse Resources

Superfund Sites in Reuse: find more information about Superfund sites in reuse
www.epa.gov/superfund-redevelopment-initiative/find-sites-reuse

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

SRI Website: tools, resources and more information about Superfund site reuse
www.epa.gov/superfund-redevelopment-initiative

EPA Office of Site Remediation Enforcement Website: tools that address landowner liability concerns
www.epa.gov/enforcement/landowner-liability-protections

Sources

Business, Job and Sales Information

Information on the number of employees and sales volume for on-site businesses comes from the Hoovers/Dun & Bradstreet ([D&B](#)) database. EPA also gathers information on businesses and corporations from D&B. D&B maintains a database of more than 225 million active and inactive businesses worldwide. Database data include public records, financials, private company insights, extensive global information, telephone numbers and physical addresses. When Hoovers/D&B database research cannot identify employment and sales volume for on-site businesses, EPA uses the [Manta](#) database. Both databases include data reported by businesses. Accordingly, some reported values might be underestimates or overestimates. In some instances, business and employment information also comes from local newspaper articles and discussions with local officials and business representatives. While sales values typically exceed estimated totals of annual income, sales can sometimes be lower than estimated income. This can be attributed to a number of business conditions and/or data reporting. Data included are obtained directly from the aforementioned sources, and reported as presented by those sources.

EPA obtains wage and income information from the U.S. Bureau of Labor Statistics (BLS). EPA uses the BLS Quarterly Census of Employment and Wages database to obtain average weekly wage data for the identified businesses. Average weekly wage data are 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 weekly wage data is not available at the county level, EPA uses wage data by state or national level, respectively. In cases where wage data is not available for the six-digit NAICS code, EPA uses higher-level (less-detailed) NAICS codes to obtain the wage data. To determine the annual wages (mean annual) earned from jobs generated by each of the identified businesses, EPA multiplies the average weekly wage figure by the number of weeks in a year (52) and by the number of jobs (employees) for each business.

Business and employment data used for this profile were collected in 2015. Annual employment income is based on job data estimated in 2015 using BLS average weekly wage data for those jobs from 2014 (the latest available wage data at the time of this profile). All income and sales figures presented have been rounded for the convenience of the reader. Federal facility sites are not included in calculations of total sites with businesses, businesses, jobs, income or annual sales.

Property Value and Tax Information

EPA collected on-site property values and property taxes included in this profile 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 datasets. The property value and tax amounts reflect the latest property value year and tax data year available in county assessor datasets, which varied from 2014 to 2015. 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 case studies. Links to EPA's SRI case studies are included below.

SRI Case Studies

Del Amo site. 2013. [Reuse and the Benefit to Community: Del Amo Superfund Site.](#)

Del Amo site. 2016. [Cleanup, Continued Use and Redevelopment in a Thriving Business Park.](#)

Phoenix-Goodyear Airport Area site. 2015. [Reuse and the Benefit to Community: Phoenix-Goodyear Airport Area Superfund Site.](#)

South Bay Asbestos Area site. 2015. [Reuse and the Benefit to Community: South Bay Asbestos Area.](#)

Other Sources

[City of Monterey Park website.](#)

Zen Vuong. “[In-N-Out May Open Shop in Monterey Park.](#)” *Pasadena Star-News*. October 9, 2013.

“[Monterey Park City Approves Market Place Shopping Center.](#)” *SGV West Valley Journal*. 2012.

Zen Vuong. “[Monterey Park Mayor Talks About 3 New or Potential Development Projects.](#)” *Pasadena Star-News*. April 12, 2014.



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