

# PUTTING SITES TO WORK

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

**2020 DATA**

## REGION 9 ECONOMIC PROFILE



*Cover page photos:*

*Carson River Mercury (Nevada), Indian Bend Wash Area (Arizona), Del Amo (California), Tucson International Airport Area (Arizona), South Bay Asbestos Area (California)*

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Figure 1. Airplanes at the Tucson International Airport Area site (Arizona).

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# PREFACE

EPA's Superfund program is a cornerstone of the work that the Agency performs for citizens and communities across the country. The revitalization of places affected by contaminated lands is a key part of Superfund's mission, meeting community needs for thriving economies and improved environmental and public health outcomes. Through EPA's Superfund Redevelopment Program, the Agency contributes to these communities' economic vitality by supporting the return of sites to productive use.

EPA has made historic investments to tackle the climate crisis and to ensure all communities have safe places to live and work. Working closely with communities, developers and property owners, EPA is leading the way to return these once-contaminated sites back to safe and beneficial use.

These regional profiles highlight community-led efforts as EPA expedites cleanup and remediation and engages with partners and stakeholders to support redevelopment and community revitalization.

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# 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 and manufacturing, agriculture and commercial trade are also thriving. Local governments, state agencies and organizations across the Region work hard to help smaller communities remain vibrant while carefully planning for new 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 amenities to surrounding communities that have been negatively affected by contamination. Site redevelopment can revitalize a local economy with jobs, new businesses, tax revenues and local spending.

Through programs such as the Superfund Redevelopment Program, EPA Region 9 helps communities reclaim cleaned-up Superfund sites. Factoring the anticipated future use of Superfund sites into the cleanup process promotes their safe redevelopment. In addition, EPA Region 9 works closely with state and local officials to remove barriers that have kept many Superfund sites vacant or underutilized. EPA Region 9 works to ensure that businesses on properties being cleaned up under Superfund can continue operating in a way that protects human health and the environment during site investigations and cleanup work. This continuity enables these businesses to remain open and serve as a source of jobs and income for local 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 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 46,336 jobs and contribute an estimated \$5.1 billion in annual employment income. Region 9 sites in reuse and continued use generate \$50.7 million in annual property tax revenues for local governments.<sup>1</sup>

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

<b>Businesses:</b>	1,335
<b>Total Annual Sales:</b>	\$15 billion
<b>Number of People Employed:</b>	46,336
<b>Total Annual Employee Income:</b>	\$5.1 billion



Figure 2. An office building at the Del Amo site (California).

<sup>1</sup> 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 46 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 (e.g., parks, wetlands, ecological habitat and open space). In addition, there are 73 sites in reuse or continued use in Region 9 for which EPA does not have property value or tax data, including 28 NPL federal facilities.



This profile looks at how redevelopment activities at Superfund sites make a difference in communities across Region 9. In particular, it describes some of the beneficial effects of redevelopment 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 and sites that have remained in use throughout the cleanup process. EPA periodically updates these profiles. The beneficial effects of site use may increase or decrease over time due to changes in:

- The number of sites in reuse or continued use.
- The number of on-site businesses.
- Data availability.
- Changes in business and property value data.

Figures presented represent only a subset of all Region 9 Superfund sites in reuse or continued use.



*Figure 3. Left: The storefront to a home improvement store at the San Fernando Valley Area 1 site (California). Right: The front entrance to a commercial building at the Del Amo site (California).*



# SUPPORT FOR SUPERFUND REDEVELOPMENT

EPA Region 9 is committed to improving the health and livelihood of Americans by cleaning up and returning land to beneficial use. In addition to protecting human health and the environment through the Superfund program, Region 9 partners work with stakeholders to encourage redevelopment opportunities at Superfund sites. Region 9 helps communities and site managers consider redevelopment during cleanup planning and evaluate remedies already in place to ensure appropriate redevelopment. In addition, EPA participates in partnerships with communities and encourages opportunities to support Superfund Redevelopment projects that emphasize environmental and economic sustainability.

Redevelopment support efforts in EPA Region 9 include:

- Identifying and evaluating local land use priorities to align with site cleanup plans through the redevelopment planning process.
- Facilitating cleanup and redevelopment 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 redevelopment 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 – known as Ready for Reuse Determinations – that provide information about the appropriate use of sites.
- Supporting partnerships with groups committed to putting Superfund sites back into use, such as the U.S. Fish and Wildlife Service.
- Developing reuse fact sheets, websites, webinars and reuse case studies to share opportunities and lessons associated with Superfund Redevelopment.



*Figure 4. Sculpture and common space on the Google Quad Campus at the Fairchild Semiconductor Corp. (Mountain View Plant) site (California).*

These efforts have helped build expertise across Region 9, making it easier to both consider future use of Superfund sites prior to cleanup and to identify opportunities for removing reuse barriers. These efforts also help tribes, state agencies, local governments, communities, potentially responsible parties, site owners, developers, and other partners and stakeholders to 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.

# SUPERFUND REDEVELOPMENT: THE BIG PICTURE

EPA can take and oversee immediate action at contaminated sites through short-term cleanup actions, also called removal actions.<sup>2</sup> EPA refers sites warranting long-term cleanup to its remedial program or to state programs. EPA's National Priorities List (NPL) is a list of sites the Agency is targeting 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 contaminants and evaluates alternative cleanup approaches. EPA then proposes a cleanup plan and, after collecting public input, issues a final cleanup decision. The Agency then cleans up the site or oversees cleanup activities. EPA has placed 135 sites in Region 9 on the NPL.

Whenever possible, EPA seeks to integrate redevelopment priorities into site cleanup. In Region 9, 97 NPL sites and three 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 recreational, ecological and agricultural uses. Businesses and other organizations also support culturally and historically significant uses on site areas. Many redeveloped sites support multiple uses and have the capacity to support additional uses and further redevelopment. The following sections take a closer look at the beneficial effects of businesses operating at current and former Superfund sites in Region 9.

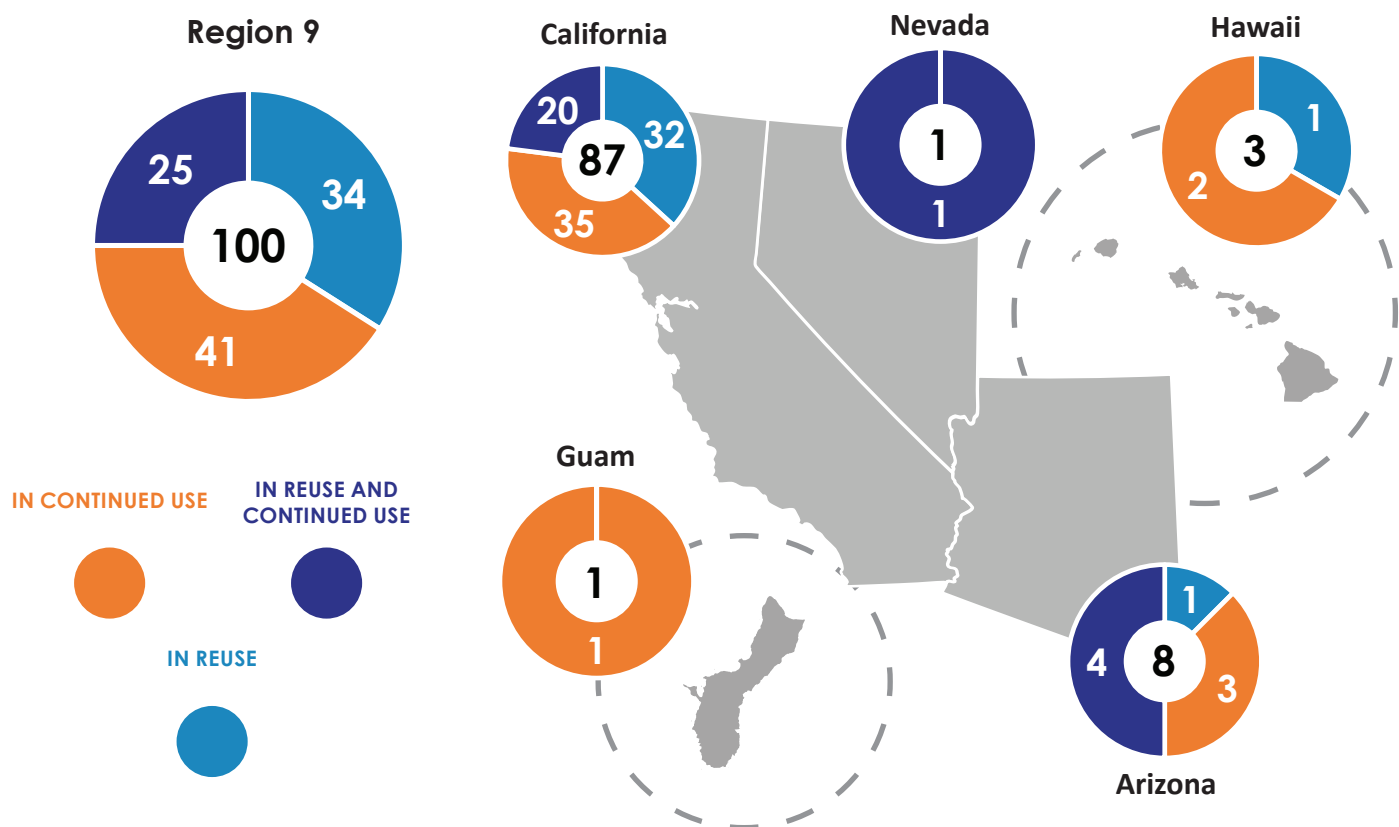


Figure 5. Sites in reuse and continued use in Region 9.

<sup>2</sup> Removal actions may be taken at sites on the NPL and sites not on the NPL.



Figure 6. Left: Continued use of airport and adjacent commercial and industrial services with new agricultural reuse at the Phoenix-Goodyear Airport Area site (Arizona). Right: View of the predominantly residential San Fernando Valley (Area 3) site (California).

## Sites in Reuse and Continued Use: A Closer Look

Reuse Type	Description	Region 9 Example
<b><i>In Reuse</i></b>	<i>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.</i>	<i>Fairchild Semiconductor Corp. (Mountain View Plant) (California) – part of this former semiconductor manufacturing facility now supports an office complex, including the Google Quad Campus.</i>
<b><i>In Continued Use</i></b>	<i>Historical uses at a site remain active; these uses were in place when the Superfund process started at the site.</i>	<i>San Fernando Valley (Area 3) (California) – homes in the valley have remained in continued use from before NPL listing through site deletion to the present.</i>
<b><i>In Reuse and Continued Use</i></b>	<i>Part of a site is in continued use and part of the site is in reuse.</i>	<i>Phoenix-Goodyear Airport Area (Arizona) – the Phoenix-Goodyear Airport (formerly Naval Air Facility Litchfield Park) has been in continuous operation since 1940. About 12 acres of the site have been in agricultural grass production use since 2009. The area uses treated groundwater for irrigation.</i>

# BENEFICIAL EFFECTS OF SUPERFUND SITE REDEVELOPMENT IN REGION 9

## Businesses and Jobs

EPA has collected economic data for 1,335 businesses, government agencies and civic organizations operating on 52 NPL sites and two non-NPL sites in reuse and continued use in Region 9.<sup>3</sup> The State Redevelopment Profiles provide more information on each state's reuse details. Businesses and organizations at these sites are part of several different sectors, including professional, scientific and technical services, transportation, 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, health care providers, a Lowe's home improvement store, a Coca-Cola bottling facility, a Holiday Inn hotel and a Staples office supply store.

The businesses and organizations at these sites earn about \$15 billion in estimated annual sales and employ about 46,336 people, earning an estimated \$5.1 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. Table 1 provides more detailed information.<sup>4</sup>

**Table 1. Site and Business Information for Region 9 Sites in Reuse and Continued Use (2020)**

	Sites <sup>a</sup>	Sites with Businesses <sup>b</sup>	Businesses <sup>c</sup>	Total Annual Sales <sup>d</sup>	Total Employees	Total Annual Employee Income
<i>In Reuse</i>	34	19	138	\$2.5 billion	5,095	\$634 million
<i>In Continued Use</i>	41	15	119	\$1.8 billion	3,777	\$506 million
<i>In Reuse and in Continued Use</i>	25	20	1,078	\$10.7 billion	37,464	\$4 billion
<b>Totals</b>	<b>100</b>	<b>54</b>	<b>1,335</b>	<b>\$15 billion</b>	<b>46,336</b>	<b>\$5.1 billion</b>

<sup>a</sup> A total of 28 sites are federal facilities. Federal facility sites are excluded from all other detailed site and business data presented above.

<sup>b</sup> Also includes other organizations such as government agencies, nonprofit organizations and civic institutions.

<sup>c</sup> Business information is not available for all businesses on all Superfund sites in reuse or continued use.

<sup>d</sup> For information on the collection of business, jobs and sales data, see the Sources section.

<sup>e</sup> See footnote 1, page 1.

<sup>f</sup> Throughout this report, sales and annual employee income may not sum exactly to the totals presented due to rounding.

<sup>3</sup> See footnote 1, page 1.

<sup>4</sup> For more information on the collection of business, jobs and sales data, see the Sources section.



Property Values and Property Tax Revenues

Properties cleaned up under the Superfund program and returned to use have the potential to increase in value significantly. This increased value can boost property tax revenues, which help pay for local government operations, schools, transit systems and other public services. Site properties at the South Bay Asbestos site in California, for example, are now valued at nearly \$563 million.

Identifying increases in property values and property taxes following cleanup and reuse is challenging. This is due to several factors, including limited data on past property values and the frequency and timing of local property value assessments. 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 redevelopment using current property values. However, these values 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 and tax data for 27 Superfund sites in reuse and continued use in Region 9.<sup>5</sup> These sites span 892 property parcels and 14,928 acres. They have a total property value of \$4.7 billion. The average total property value per acre is \$314,000.

Land and improvement property value information is available for 26 sites. These properties have a total land value of \$1.7 billion and a total improvement value of \$2.8 billion.<sup>6</sup>

Property tax information is available for 27 sites. The properties generate a combined \$50.7 million in local property taxes annually.

Region 9 Sites in Reuse and Continued Use: Property Value and Tax Highlights

Total Property Value: \$4.7 billion  
Total Annual Property Taxes: \$50.7 million



Figure 7. A pavilion at the South Bay Asbestos site (California).

Table 2. Property Value and Tax Information for Sites in Reuse and Continued Use in Region 9<sup>a</sup>

Total Land Value (26 sites) <sup>b</sup>	Total Improvement Value (26 sites) <sup>c</sup>	Total Property Value (27 sites)	Total Property Value per Acre (27 sites) <sup>d</sup>	Total Annual Property Taxes (27 sites)
\$1.7 billion	\$2.8 billion	\$4.7 billion	\$314,000	\$50.7 million

<sup>a</sup> Results are based on an EPA Superfund Redevelopment Program effort to collect 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 2020 to 2021. For more information, see the Sources section. Throughout this report, property and tax values may not sum exactly to the totals presented due to rounding.

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

<sup>c</sup> Land and improvement value for one site is listed as \$0.

<sup>d</sup> Based on total property value amount of \$4.7 billion divided by total acreage of 14,928.

5 There are 73 more sites in reuse or continued use in Region 9 for which EPA does not have property value or tax data, including 28 NPL federal facilities. See footnote 1, page 1.

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

## Beneficial Effects from Enhanced Recreational and Ecological Amenities

In addition to hosting commercial developments, retail centers and industrial facilities, many Region 9 sites in reuse and continued use provide recreational and ecological benefits. Green space and habitat reuses help attract visitors and residents and indirectly contribute to local economies.

Careful planning enables the integration of green spaces and habitat into site cleanup, resulting in the transformation of contaminated properties into valuable community and wildlife assets. Green spaces are integral components of sustainable communities – they help protect the environment and human health while providing other social and economic benefits. Parks, community gardens and other public green spaces create opportunities for people to gather, exercise and connect with nature. The creation of green spaces and habitat at once-contaminated properties serves to re-introduce ecosystems and biodiversity into urban and suburban landscapes by providing corridors for migrating species and preserving habitat. They can also mitigate stormwater runoff problems by slowly absorbing and naturally filtering stormwater, resulting in improved water quality due to decreased runoff and erosion.

Parks, natural areas and scenic landscapes also have great economic value – supporting regional economies through tourism, agriculture and other activities. Economic impacts of recreation activities can include outdoor recreation spending and reduced public costs related to healthcare and infrastructure. In 2017, outdoor recreation contributed \$887 billion to the U.S. economy, supporting 7.6 million jobs and generating \$63.5 billion in national tax revenue and \$59.2 billion in state and local tax revenue.<sup>7</sup> Protected green space can also increase the property values of nearby homes by providing amenities that draw people to live and work in the community. Many sites in Region 9 provide recreational and ecological benefits.

## Recreational and Ecological Uses at Superfund Sites: Enhancing Public Health, Revitalizing Habitat

Many Superfund sites are located in communities with limited recreation resources and 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. 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 well-being. 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. Thanks to the efforts of local governments, the state, federal agencies and communities, Superfund sites across the country support a wide array of recreational and ecological uses on site.

## Tuluwat: Ecological Restoration and Cultural Use

The 1.5-acre Tuluwat site is located on an island in Humboldt Bay, Eureka, California. The site is a significant Native American cultural heritage area that contains the remains of two ancient villages. It is listed on the National Register of Historic Places and as a threatened National Historic Landmark. Beginning in the 1850s, Euro-American settlers drove the Wiyot Tribe from the island. From the 1870s to 1990, a dry dock and ship repair facility operated on site and contaminated the area.



Figure 8. Protective measures for erosion control at the Tuluwat site (California).

<sup>7</sup> The Outdoor Recreation Economy. Outdoor Industry Association. Available at [https://outdoorindustry.org/wp-content/uploads/2017/04/OIA\\_RecEconomy\\_FINAL\\_Single.pdf](https://outdoorindustry.org/wp-content/uploads/2017/04/OIA_RecEconomy_FINAL_Single.pdf).

The Wiyot Tribe established a Wiyot Sacred Sites Fund to acquire parts of the island as they became available. The Wiyot Tribe now owns most of the site after purchasing 1.5 acres in 2000 and receiving 40 acres from the city of Eureka in 2004 and the remaining 202 acres in 2018. For more than a decade, the Wiyot Tribe worked to leverage over \$2.8 million in state and federal resources to clean up the site. EPA assistance included a \$200,000 Brownfields cleanup grant in 2004, a review of site cleanup plans and a \$508,000 time-critical removal action to excavate and cap contaminated soil. The Wiyot Tribe has restored ecological systems and cultural practices at Tuluwat. Ecological restoration prevents erosion and supports wildlife habitat. Land use restrictions prevent future development that would interfere with the Wiyot Tribe's cultural practices.

## Pemaco Maywood: Revitalizing for Recreation

The 4-acre Pemaco Maywood Superfund site is located along the Los Angeles River in Maywood, California. A chemical mixing facility operated on site from the 1940s to 1991. Facility operations contaminated soil and groundwater with hazardous chemicals. EPA added the site to the NPL in 1999. EPA treated the most contaminated soils in 2008. A treatment system for soil vapors and groundwater continues to operate. After cleanup, recreational reuse of the site was a top community priority. EPA considered that reuse goal throughout all phases of remedial design and implementation. The city of Maywood and The Trust for Public Land revitalized several former industrial lands along the Los Angeles Riverfront as part of the Los Angeles River Greenway Project. The site was one of the best-situated properties for inclusion in the project.

Today, the site is part of Maywood Riverfront Park, which provides much-needed athletic and recreation facilities in the most densely populated city west of the Mississippi. One of only two large parks available to area residents, Maywood Riverfront Park has greatly increased recreation amenities in an underserved community. Maywood Riverfront Park opened in 2006. It includes soccer fields, basketball courts, a play area, native plant landscaping and picnic areas. The park's design included green infrastructure elements to manage stormwater. These features naturally direct and clean stormwater, prevent erosion, and reduce the need for more expensive traditional infrastructure.

EPA, in conjunction with the city of Maywood, later redeveloped another part of the site for incorporation into the park. This area opened to the public in 2018 and features walkways, lighting, gazebos, benches and barbeques.



Figure 9. Left: A playground and restroom facilities at Maywood Riverfront Park (California). Right: A bicyclist enjoying bicycle lanes along the perimeter of Maywood Riverfront Park (California).



## Beneficial Effects from Alternative Energy Projects

Alternative energy projects provide a range of beneficial effects. They support construction and operations jobs, spur local investment for manufacturing and materials, create benefits for landowners in the form of land lease and right-of-way payments, lower energy costs, and reduce greenhouse gas emissions. They also help hedge against energy price and supply volatility, support local business competitiveness and technology supply chain development, provide outreach and public relations opportunities for site owners and communities, and contribute to broader economic development planning.

Several efforts in EPA Region 9 have encouraged opportunities for alternative energy projects at Superfund sites and other contaminated lands:

- Applied Materials has a 2-megawatt rooftop and parking lot-based solar installation at its property at the **National Semiconductor Corp.** site in Santa Clara, California. The installation includes a tracking system that increases solar panel efficiency by 30%. It provides enough electricity to power 1,500 homes.
- Solar panels at the **Frontier Fertilizer** site in Davis, California, fully power the groundwater treatment system. The solar-powered system eliminates about 50 metric tons of greenhouse gas emissions per year.
- As part of the cleanup of the **Apache Powder Co.** site in Cochise County, Arizona, Apache Nitrogen Products used a 1.4-kilowatt solar panel to generate electricity for a groundwater treatment pump. The company also put in solar awnings and a canopy on its administration building at the site. At times, the panels generate more electricity than the company can use, with surplus power shared on the grid.



Figure 10. Solar panel installation at the Apache Powder Co. site (Arizona).



Figure 11. Left: Solar panels power 100% of the groundwater remedy at the Frontier Fertilizer site (California). Right: Part of a 3.5-megawatt solar array at the Aerojet General Corp. site (California).



## Opportunity Zone Tax Incentives as a Superfund Redevelopment Tool

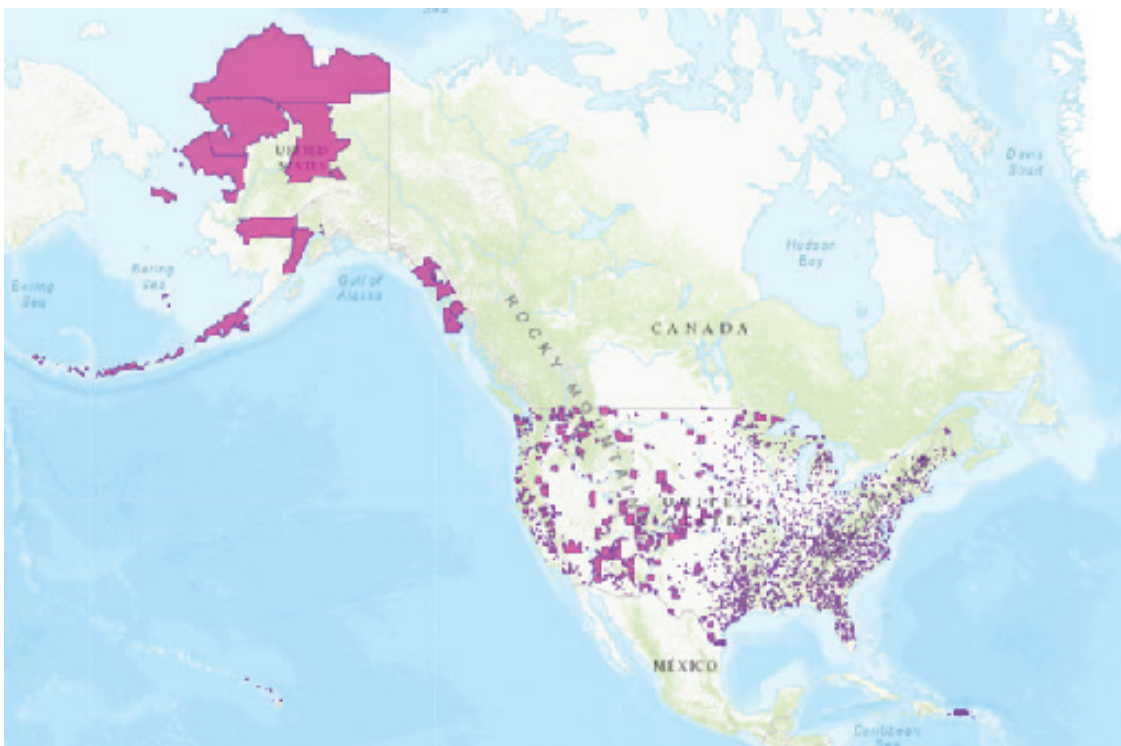
Opportunity Zones are a powerful tool to encourage economic revitalization in distressed communities by incentivizing long-term, sustainable investment in redevelopment and stimulating economic growth. State governors have designated 8,756 Opportunity Zones across the country in geographic areas where the poverty rate is twice as high as the national average. Socio-economic metrics show that Opportunity Zones are among the highest-need communities in the nation. The U.S. Department of the Treasury estimates that Opportunity Zones may attract up to \$100 billion in investments, which strengthens the financial viability of redevelopment projects at Superfund sites located in Opportunity Zones.

Redevelopment of current or former Superfund sites may qualify for Opportunity Zone tax benefits. Nationally, there are 343 NPL sites located entirely or partially in Opportunity Zones. Estimates indicate there are thousands of Superfund removal sites in Opportunity Zones across the nation. In Region 9, there are 34 NPL sites located entirely or partially in an Opportunity Zone. Redevelopment investments that meet appropriate qualifying criteria may be eligible for Opportunity Zone tax benefits. EPA and the U.S. Department of Housing and Urban Development (HUD) have tools and resources to help local leaders achieve equitable outcomes in Opportunity Zone development projects.

*Learn more about Superfund Redevelopment and Opportunity Zones:  
<https://www.epa.gov/superfund-redevelopment/superfund-redevelopment-using-opportunity-zone-tax-incentives>*

## Environmental Justice and Economic Revitalization

Communities with environmental justice concerns are disproportionately affected by environmental pollution and hazards, and typically include marginalized low-income groups and people of color, including tribal and indigenous people. Superfund cleanups and redevelopment are opportunities to evaluate how to reduce impacts on these communities and, through meaningful community involvement efforts, engage communities in productive dialogue to increase local benefits through reuse opportunities that meet community needs.



*Figure 12. Map of Opportunity Zones.  
(Source: U.S. Department of Housing and Urban Development, Map of Opportunity Zones)*

# REDEVELOPMENT IN ACTION

## OPERATING INDUSTRIES, INC., LANDFILL From Landfill to Thriving Commercial Development

The Operating Industries, Inc., Landfill Superfund site in Monterey Park, California, is about 10 miles east of downtown Los Angeles. The site covers 190 acres; the Pomona Freeway separates the area into a 45-acre North Parcel and a 145-acre South Parcel. Monterey Park Disposal Company began operating a landfill at the site in 1948. Operating Industries purchased the area in the 1950s and continued landfilling until 1984. The landfill received over 38 million gallons of liquid industrial hazardous waste over its lifetime. Disposal practices at the landfill contaminated the air, groundwater and soil, and posed 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 added the site to the NPL in 1986. EPA entered into enforcement agreements with thousands of responsible parties to recoup hundreds of millions of dollars to fund cleanup projects. Cleanup projects included the construction of a landfill cover, landfill gas control and flaring system, and leachate treatment plant. An innovative landfill gas treatment system, installed in 2002, converted landfill gas into electricity, meeting more than half the cleanup's energy requirements from installation to 2007. Over its five years of operation, the system generated more than 15,000 megawatt hours of electricity, equivalent to an energy cost-savings of about \$1.75 million. Monitoring, maintenance and treatment activities are ongoing. Today, site facilities treat 8.7 million gallons of leachate and 2.4 billion standard cubic feet of landfill gas each year.

Today, the first phase of development of Monterey Park Market Place Shopping Center, a 577,000-square-foot retail facility on the site's North Parcel, has been completed. The city of Monterey Park and the property developer celebrated the project with a groundbreaking ceremony in November 2016. In 2018, retail stores and restaurants started opening on site on a rolling basis. Today, some of the businesses operating at the shopping center include Costco, Home Depot, Guitar Center, Starbucks, Mod Pizza and, most recently, an Ono Hawaiian BBQ. In 2020, nine businesses on site employed 654 people, providing an estimated employment income of about \$19 million and generating over \$147 million in total sales. Further redevelopment opportunities at the site include additional commercial retailers and solar development potential on the site's South Parcel.

In July 2019, EPA Region 9 presented its Excellence in Site Reuse award to the Operating Industries, Inc., Landfill Site Custodial Trust, the city of Monterey Park and M&M Realty Partners. The award is given to developers, site owners, responsible parties or other stakeholders demonstrating excellence in working with EPA on redevelopment of a Superfund site. In Monterey Park, the award recognized how the site's redevelopment has stimulated the community's economy, returning an unused property to beneficial use and providing retail and dining amenities for area residents.



*Figure 13. Costco store and parking lot at the Operating Industries, Inc. Landfill (California).*

# SAN GABRIEL VALLEY AREA 4

## Revitalization of Source Area Properties and Community Job Training Opportunities

The San Gabriel Valley Superfund sites include four areas of contaminated groundwater in the 170-square-mile San Gabriel Valley in southern California (San Gabriel Valley Areas 1 through 4). In 1979, state-mandated testing of local drinking water supplies found several areas of contamination in the San Gabriel Valley's water supply. Decades of improper chemical handling and waste disposal practices at hundreds of industrial sites throughout the San Gabriel Valley resulted in widespread groundwater contamination. In 1984, EPA placed the four main areas of groundwater contamination on the NPL.

The San Gabriel Valley Area 4 site (also known as the Puente Valley Operable Unit) includes the Main San Gabriel Basin and the Puente Basin. The site is located mostly in the cities of Industry and La Puente and in some unincorporated parts of eastern Los Angeles County. EPA plans call for three groundwater pump-and-treat systems to protect the water supply in the "mouth of the valley" portion of the Puente Valley. The systems are also intended to prevent further contaminant movement. Initial construction of the systems began in 2006. Completion of the systems was delayed until EPA and the implementing parties could maximize the beneficial use of treated groundwater. With two systems under full construction and one system in the design phase, EPA anticipates that all three cleanup systems will be in place and operating in 2023. Water utilities in the area provide clean water that meets all state and federal drinking water standards. Groundwater treatment is ongoing. Properties that act as the primary sources of site contamination and are targeted for cleanup are in various stages of continued use and reuse. As of 2020, 24 businesses operated at the Area 4 source areas. Those businesses employ nearly 350 people, providing about \$18 million in estimated annual employment income and generating over \$309 million in annual sales revenue.

The Superfund Job Training Initiative (SuperJTI) is an EPA program that supports job readiness programs in communities affected by nearby Superfund sites and encourages the employment of trainees at local site cleanups. In 2019, the San Gabriel Valley SuperJTI provided career development opportunities for 20 trainees living near all four San Gabriel Valley Superfund sites. EPA partnered with the San Gabriel Basin Water Quality Authority, the city of La Puente, Hacienda La Puente Adult Education, and America's Job Center of California to create the program. It provided local job seekers with skills, certifications, and hands-on training for construction and cleanup. EPA's goal was to offer workforce development skills to communities so that people can take advantage of site-related employment opportunities. The 14-week program included Work Readiness Training, 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) Training, CPR/First Aid, and Preparation for Water and Distribution I and Treatment I. Nationwide, around 400 trainees have participated in the SuperJTI program. Job placement success for program graduates is about 75%.



Figure 14. Left: The Sealy Mattress facility at the former Ajax Hardware source area at the San Gabriel Valley Area 4 Superfund site (California). Right: New development at the former Utility Trailer source property at the site.



# TUCSON INTERNATIONAL AIRPORT

## Continued Uses and Green Improvements

The Tucson International Airport Area Superfund site is in Tucson, Arizona. Encompassing 10 square miles, the site includes Tucson International Airport, parts of the Tohono O’odham Indian Reservation, residential areas in Tucson and South Tucson, and the Air Force Plant #44 Raytheon Missile Systems Company (AFP44). The site has been in industrial use since 1942, when three large aircraft hangars were constructed to support the war effort. Since World War II, the site has supported the establishment and growth of Tucson’s civilian airport and aircraft- and electronics-related industries. In the early 1950s, the city of Tucson detected groundwater contamination in a municipal supply well near AFP44. Residents nearby complained of foul odors in private wells. The plume of groundwater contamination was found to be a half-mile wide and 5 miles long. Investigations found that former aircraft and electronics manufacturing activities, aircraft maintenance and improper waste disposal in unlined pits and landfills on site contributed to soil and groundwater contamination. By the early 1970s, improper waste disposal practices at the site had stopped. EPA added the site to the NPL in 1983.

Cleanup includes ongoing treatment of contaminated groundwater and removal of contaminated source area soil. Water is treated and returned to the municipal water supply for use as drinking water. Future potential beneficial uses of the treated water are being considered , including as part of the recycled water system for irrigation and other uses, or as groundwater recharge projects. As a result of cleanup efforts, municipal water meets drinking water standards. Throughout the cleanup process, Tucson International Airport and businesses have continued to operate. In many cases, cleanup activities have been planned to minimize disruptions to ongoing business operations.

Today, site uses serve as an economic engine for the Tucson area, supporting thousands of jobs and millions of dollars in economic benefits. Industrial and commercial activities at the site include airport operations-related businesses as well as aerospace- and defense-related design and manufacturing, educational services, and other businesses. In 2020, about 105 businesses operate on the site, generating over \$4.6 billion in annual sales. The businesses employ about 13,000 people, contributing nearly \$1.3 billion in estimated annual employment income to the local community.

The Federal Aviation Administration and the Arizona Department of Transportation funded a \$14.3-million solar panel installation project with a matching contribution by the Tucson Airport Authority (TAA). Completed in 2017, the solar canopy project provides shade for over 1,300 parking spaces at Tucson International Airport and produces 2.5 megawatts of power. The canopies’ production offsets more than two-thirds of the airport terminal’s energy usage, saving the TAA \$35,000 a month and reducing its consumption of fossil-based grid energy. The design also includes “green walls” vegetated with plants that provide cool climate conditions under the solar panel installation.



*Figure 15. Passenger terminal entrance at the Tucson International Airport Area Superfund site (Arizona).*



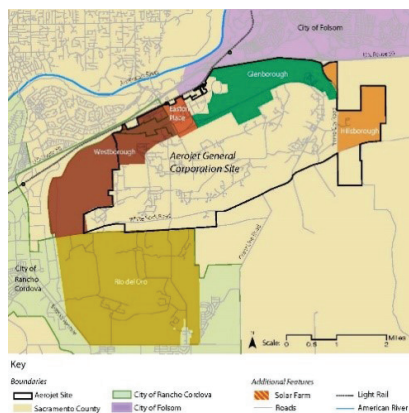
# REDEVELOPMENT ON THE HORIZON IN REGION 9

## AEROJET GENERAL CORP. Transforming Parts of a Former Rocket Propulsion Manufacturing Facility into a Mixed-use Community

The Aerojet General Corp. Superfund site, once covering over 8,500 acres, now covers about 5,900 acres near Rancho Cordova, about 10 miles east of Sacramento, California. Aerojet (now known as Aerojet Rocketdyne, Inc.) and its subsidiaries have researched, designed and manufactured rocket motors engines to support national defence, space exploration and communications since 1953. Prior to the 1980s, manufacturing, testing and waste disposal practices led to soil and groundwater contamination. EPA added the site to the NPL in 1983. Since 1983, Aerojet has been actively cleaning up the site and now operates several groundwater extraction and treatment systems to address and contain site-related groundwater contamination. Groundwater use restrictions are also in place. The company continues to explore methods to clean up soil and groundwater contamination. Aerojet built a solar facility on site in 2009 and 2010 to reduce the company's carbon footprint and improve energy usage as part of its Sustainability Initiative. The 22-array solar farm generates 6 megawatts of power, enough to meet 20% of the site's groundwater treatment system needs. Altus Power acquired the solar arrays in 2017.

In 2016, Aerojet relocated its corporate headquarters from the Rancho Cordova site to El Segundo, California. Today, some company business functions remain on site. In addition, Aerojet's tenants use the site for office, commercial and light industrial purposes. In 2020, site businesses employed about 872 people, providing nearly \$78 million in estimated annual employment income.

In 2018, EPA placed the site on EPA's national Redevelopment Focus List of sites with major redevelopment potential. Today, Easton Development Corporation LLC (Easton) is creating the Easton Master Plan for site redevelopment. The plan includes five interconnected communities: Easton Place, Glenborough, Westborough, Hillsborough and Rio del Oro. The development will span about 6,100 acres (including 3,000 acres of the Superfund site) and include more than 18,500 residential units, 1,900 acres of parks, open space and parkways, and 12.7 million square feet of commercial/retail space. Infrastructure improvements will include a new network of green corridors, parks, bicycle paths, greenbelts and walking trails. Preserved open spaces linked across the development will connect to the American River Parkway and nearby neighborhoods. Each borough will provide mixed uses, including neighborhood shopping centers, recreation amenities, employment and shopping venues, and a wide range of housing options. A light rail station in Easton Place connects to downtown Sacramento and historic Folsom. The first phase of construction of single-family homes in the Rio Del Oro community, next to the Superfund site, began in 2020.



*Figure 16. Map showing proposed development areas at the Aerojet General Corp. Superfund site (California).*

# CONCLUSIONS

EPA works closely with its partners at Superfund sites across Region 9 to make sure sites can be reused safely or remain in continued use during and following cleanup. EPA also works with businesses and organizations at Superfund sites throughout the cleanup process to make sure they can remain open.

The businesses and organizations at these sites provide jobs and income for communities and generate local and state taxes. Cleanup and redevelopment also helps stabilize and boost property values. There are 97 NPL sites and three non-NPL Superfund sites in Region 9 that have either new uses in place or uses that have remained in place since before cleanup. Future uses are planned for many more Superfund sites in Region 9. EPA remains committed to working with all stakeholders to support Superfund redevelopment opportunities in Region 9.



*Figure 17. Presentation of the Region 9 Excellence in Site Reuse Award at the Operating Industries Inc. Landfill site (California).*

The redevelopment of Superfund sites takes time and is often a learning process for project partners. Ongoing coordination among EPA, tribes, state agencies, local governments, communities, potentially responsible parties, site owners, developers, and nearby residents and business owners is essential. EPA tools, including reuse assessments and plans, comfort letters and 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 Region 9, Superfund sites are now home to major commercial and industrial facilities, mid-size developments and small businesses providing services to surrounding communities. EPA is committed to working with all stakeholders to support the restoration and renewal of these sites as long-term assets.

## EPA Superfund Redevelopment Resources

*EPA Region 9 Superfund Redevelopment Program Coordinator*  
Grace Ma | (415) 947-4212 | [ma.grace@epa.gov](mailto:ma.grace@epa.gov)

*Superfund Sites in Reuse:* find more information about Superfund sites in reuse.  
[www.epa.gov/superfund-redevelopment/find-superfund-sites-reuse](http://www.epa.gov/superfund-redevelopment/find-superfund-sites-reuse)

*Superfund Redevelopment Program Website:* tools, resources and more information about Superfund site reuse.  
[www.epa.gov/superfund-redevelopment](http://www.epa.gov/superfund-redevelopment)

*EPA Office of Site Remediation Enforcement Website:* tools that address landowner liability concerns.  
[www.epa.gov/enforcement/landowner-liability-protections](http://www.epa.gov/enforcement/landowner-liability-protections)

# STATE REDEVELOPMENT PROFILES





# ARIZONA REDEVELOPMENT PROFILE

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. The sections below present economic data, property values and tax data for sites in reuse or continued use in Arizona.

## Businesses and Jobs

EPA has collected economic data for 233 businesses and organizations operating at five sites in reuse or continued use in Arizona.

**Table 3. Detailed Site and Business Information for Sites in Reuse and Continued Use in Arizona (2020)**

	Sites	Sites with Businesses	Businesses <sup>a</sup>	Total Annual Sales <sup>b</sup>	Total Employees	Total Annual Employee Income
<i>In Reuse</i>	1	0				
<i>In Continued Use</i>	3	1	26	\$380 million	1,712	\$219 million
<i>In Reuse and in Continued Use</i>	4	4	207	\$5.2 billion	15,143	\$1.4 billion
<b>Totals</b>	<b>8</b>	<b>5</b>	<b>233</b>	<b>\$5.6 billion</b>	<b>16,855</b>	<b>\$1.6 billion</b>

<sup>a</sup> Business information is not available for all businesses on all Superfund sites in reuse or continued use. Three sites are federal facilities. Federal facility sites are excluded from all other detailed site and business data presented above.

<sup>b</sup> 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 three Superfund sites in reuse or continued use in Arizona. These sites span 198 property parcels and 4,756 acres.

**Table 4. Property Value and Tax Information for Sites in Reuse and Continued Use in Arizona<sup>a</sup>**

Total Land Value (2 sites)	Total Improvement Value (2 sites)	Total Property Value (3 sites)	Total Annual Property Taxes (3 sites)
\$148 million	\$198 million	\$564 million	\$2 million

<sup>a</sup> The property value and tax amounts reflect the latest property value year and tax data year available in county assessor datasets, which varied from 2020 to 2021.



Figure 18. Scottsdale Police Department District 1 at the Indian Bend Wash Area site.

## Did You Know?

The Indian Bend Wash Area Superfund site in Scottsdale and Tempe, Arizona, spans several square miles. Cleanup is ongoing. The site remains in continued use – residential, recreational, commercial and industrial areas are located on site. In total, businesses at the site employ close to 1,300 people. They provide over \$92 million in estimated annual income and generate over \$366 million in estimated annual sales.





# CALIFORNIA REDEVELOPMENT PROFILE

EPA partners with the California Department of Toxic Substances Control to oversee the investigation and cleanup of Superfund sites in California. California has 87 Superfund sites with either new uses in place or uses that have remained in place since before cleanup. The sections below present economic data, property values and tax data for sites in reuse or continued use in California.

## Businesses and Jobs

EPA has collected economic data for 1,021 businesses and organizations operating at 47 sites in reuse or continued use in California.

**Table 5. Detailed Site and Business Information for Sites in Reuse and Continued Use in California (2020)**

	Sites	Sites with Businesses	Businesses <sup>a</sup>	Total Annual Sales <sup>b</sup>	Total Employees	Total Annual Employee Income
<b>In Reuse</b>	32	18	117	\$2.5 billion	4,879	\$622 million
<b>In Continued Use</b>	35	14	93	\$1.5 billion	2,065	\$287 million
<b>In Reuse and in Continued Use</b>	20	15	811	\$5.4 billion	21,865	\$2.6 billion
<b>Totals</b>	<b>87</b>	<b>47</b>	<b>1,021</b>	<b>\$9.4 billion</b>	<b>28,809</b>	<b>\$3.5 billion</b>

<sup>a</sup> Business information is not available for all businesses on all Superfund sites in reuse or continued use. 22 sites are federal facilities. Federal facility sites are excluded from all other detailed site and business data presented above.

<sup>b</sup> 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 23 Superfund sites in reuse or continued use in California. These sites span 571 property parcels and 5,211 acres.

**Table 6. Property Value and Tax Information for Sites in Reuse and Continued Use in California<sup>a</sup>**

Total Land Value (23 sites)	Total Improvement Value (23 sites)	Total Property Value (23 sites)	Total Annual Property Taxes (23 sites)
\$1.5 billion	\$2.6 billion	\$4 billion	\$48 million

<sup>a</sup> The property value and tax amounts reflect the latest property value year and tax data year available in county assessor datasets, which varied from 2019 to 2021.



Figure 19. The entrance to the America Center complex at the South Bay Asbestos site.

## Did You Know?

Following cleanup of asbestos wastes in local landfills, the South Bay Asbestos Area Superfund site in the Alviso District of San Jose, California, has been returned to use. The site now houses three business complexes, primarily for support of technology-related industries. Today, these companies employ nearly 2,900 people and generate almost \$970 million in estimated annual sales.



# GUAM REDEVELOPMENT PROFILE

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 or property value data for this site; it is a federal facility in continued military use.



Figure 20. Japan Air Self Defense Force training exercises at Andersen Air Force Base.<sup>7</sup>

## Did You Know?

Since 1940, the Andersen Air Force Base Superfund site has served as a support facility for U.S. Strategic Air Command operations in Yigo, Guam. Improper disposal techniques resulted in the contamination of groundwater under the site. The site remains an active U.S. Air Force base. Parts of the base are designated wildlife and marine preserves that protect about 23 endangered species.

<sup>7</sup> Japan Air Self Defense Force training exercises at Andersen Air Force Base by Courtney Witt, U.S. Air Force, available at [https://commons.wikimedia.org/wiki/File:F-2A\\_\(526\)\\_of\\_6\\_Sqn\\_taxis\\_at\\_Andersen\\_Air\\_Force\\_Base,\\_-5\\_Feb.\\_2009\\_a.jpg](https://commons.wikimedia.org/wiki/File:F-2A_(526)_of_6_Sqn_taxis_at_Andersen_Air_Force_Base,_-5_Feb._2009_a.jpg) /CC BY-SA 3.0 available at [creativecommons.org/licenses/by-sa/3.0/](https://creativecommons.org/licenses/by-sa/3.0/).

# HAWAII REDEVELOPMENT PROFILE

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. The sections below present economic data, property values and tax data for sites in reuse or continued use in Hawaii.

## Businesses and Jobs

EPA has collected economic data for 21 businesses and organizations operating at one site in reuse in Hawaii.

**Table 7. Detailed Site and Business Information for Sites in Reuse and Continued Use in Hawaii (2020)**

	Sites	Sites with Businesses	Businesses <sup>a</sup>	Total Annual Sales <sup>b</sup>	Total Employees	Total Annual Employee Income
<i>In Reuse</i>	1	1	21	\$23 million	216	\$13 million
<i>In Continued Use</i>	2	0				
<i>In Reuse and in Continued Use</i>	0	0				
<b>Totals</b>	<b>3</b>	<b>1</b>	<b>21</b>	<b>\$23 million</b>	<b>216</b>	<b>\$13 million</b>

<sup>a</sup> Business information is not available for all businesses on all Superfund sites in reuse or continued use. Two sites are federal facilities. Federal facility sites are excluded from all other detailed site and business data presented above.

<sup>b</sup> 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 or continued use in Hawaii. This site spans 123 property parcels and 4,960 acres.

**Table 8. Property Value and Tax Information for Sites in Reuse and Continued Use in Hawaii<sup>a</sup>**

Total Land Value (1 site)	Total Improvement Value (1 site)	Total Property Value (1 site)	Total Annual Property Taxes (1 site)
\$79 million	\$14 million	\$93 million	\$220,000

<sup>a</sup> The property value and tax amounts reflect the latest property value year and tax data year available in county assessor datasets, which varied from 2020 to 2021.



Figure 21. Aerial view of the Del Monte Corp. (Oahu Plantation) site area. Imagery © 2019 Google.

## Did You Know?

From 1946 to 2006, Del Monte Corporation grew and processed pineapples at the Del Monte Corp. (Oahu Plantation) Superfund site in Kunia Village, Hawaii. Kunia Loa Ridge Farmlands now owns more than half of the site and resells small plots to farmers to grow tropical fruits and raise livestock. Seed corn production also takes place on part of the site. In 2011, a beauty products company moved its headquarters and manufacturing operations on site. Part of the U.S. Army's Schofield Barracks are also on site.



# NEVADA REDEVELOPMENT PROFILE

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 site, with new uses in place and uses that have remained in place since before cleanup. The sections below present economic data, property values and tax data for the one site in reuse and continued use in Nevada.

## Businesses and Jobs

EPA has collected economic data for 60 businesses and organizations operating at one site in reuse or continued use in Nevada.

**Table 9. Detailed Site and Business Information for Sites in Reuse and Continued Use in Nevada (2020)**

	Sites	Sites with Businesses	Businesses <sup>a</sup>	Total Annual Sales <sup>b</sup>	Total Employees	Total Annual Employee Income
<i>In Reuse</i>	0	0				
<i>In Continued Use</i>	0	0				
<i>In Reuse and in Continued Use</i>	1	1	60	\$21 million	456	\$28 million
<b>Totals</b>	<b>1</b>	<b>1</b>	<b>60</b>	<b>\$21 million</b>	<b>456</b>	<b>\$28 million</b>

<sup>a</sup> Business information is not available for all businesses on all Superfund sites in reuse or continued use.

<sup>b</sup> 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

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



Figure 22. The Carson River at the Carson River Mercury Site.

## Did You Know?

Gold and silver mining contaminated soils, sediments and surface water at the Carson River Mercury Superfund Site, which stretches across several counties. Site investigations and cleanup are ongoing. The site remains in continued industrial, commercial, agricultural and residential use. Site businesses employ more than 450 people and generate over \$20 million in estimated annual sales.



# REUSE INFORMATION SOURCES

Summaries of sites in reuse or continued use in this profile are based on available EPA resources, including Superfund Redevelopment Program case studies as well as other resources. Links to EPA's Superfund Redevelopment Program case studies and other resources are included below.

## EPA Resources

Aerojet General Corp. 2010. Green Remediation and Utility-Scale Solar Development The Aerojet General Corporation Superfund Site And Sacramento County, California. <https://semspub.epa.gov/src/document/09/2400046>.

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San Gabriel Valley. 2021. Administrator's Emphasis List 2017-2021. <https://www.epa.gov/sites/production/files/2021-01/documents/2020-ael-summary-report-compliant.pdf>.

San Gabriel Valley. 2021. Putting Sites to Work Region 9 Economic Profile. <https://semspub.epa.gov/src/document/HQ/100002640>.

Tucson International Airport Area. 2016. Reuse and the Benefit to Community Tucson International Airport Area Superfund Site. <https://semspub.epa.gov/src/document/09/1164550>.

## Other Resources

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Tucson Airport Authority Environmental Program. <https://www.flytucson.com/taa/environmental-programs>.

## Photos

Map of Opportunity Zones. <https://opportunityzones.hud.gov/resources/map>.

Wikimedia Commons. 2009. [https://commons.wikimedia.org/wiki/File:F-2A \(526\) of 6 Sqn taxis at Andersen Air Force Base, -5 Feb. 2009 a.jpg](https://commons.wikimedia.org/wiki/File:F-2A_(526)_of_6_Sqn_taxis_at_Andersen_Air_Force_Base,_-5_Feb._2009_a.jpg).

# BUSINESS, JOBS, SALES AND INCOME INFORMATION

Information on the number of employees and sales volume for on-site businesses comes from the Hoovers/Dun & Bradstreet (D&B) (<https://www.dnb.com>) database. EPA also gathers information on businesses and corporations from D&B. D&B maintains a database of over 330 million active and inactive businesses worldwide.

When Hoovers/D&B research was unable to identify employment and sales information for on-site businesses, EPA used the Reference Solutions database, formerly known as ReferenceUSA (<https://www.data-axle.com/what-we-do/reference-solutions/>). In cases where Reference Solutions did not include employment and sales information for on-site businesses, EPA used the Manta database (<https://www.manta.com>). The databases include data reported by businesses. Accordingly, some reported values might be underestimates or overestimates. In some instances, business and employment information came 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.

EPA obtained wage and income information from the U.S. Bureau of Labor Statistics (BLS). Part of the U.S. Department of Labor, the BLS is the principal federal agency responsible for measuring labor market activity, working conditions and price changes in the economy. All BLS data meet high standards of accuracy, statistical quality and impartiality.

EPA used the BLS Quarterly Census of Employment and Wages database to obtain average weekly wage data for site businesses. Average weekly wage data were identified by matching the North American Industry Classification System (NAICS) codes for each type of business with weekly wage data for corresponding businesses in site counties. If weekly wage data were not available at the county level, EPA sought wage data by state or national level, respectively. In cases where wage data were not available for the six-digit NAICS code, EPA used higher-level (less-detailed) NAICS codes to obtain the wage data.

To estimate the annual income earned from jobs at site businesses, EPA multiplied 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 2020. Estimated annual employment income was calculated using 2020 jobs data and BLS average weekly wage data for those jobs from 2019 (the latest available wage data at the time of this profile). Federal facility sites were included in calculations of total sites in reuse or continued use only. Federal facility sites were excluded from all other calculations (i.e., number of sites with businesses, number of businesses, total jobs, total income and total annual sales). All sales and income figures presented have been rounded for ease of reading. Throughout this report, sales and annual employee income may not sum exactly to the totals presented due to rounding.

# 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 typically varied from 2020 to 2021 where date information was provided. Throughout this report, property and tax values may not sum exactly to the totals presented due to rounding.

*Back cover photos: San Fernando Valley (Area 1) (California), Aerojet General Corp. (California), Operating Industries Inc., Landfill (California).*





## United States Environmental Protection Agency

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