



Superfund
Redevelopment
Initiative

SITE REDEVELOPMENT PROFILE

North Ridge Estates, Operable Unit 1 Superfund Site
Klamath Falls, Oregon



Vacant home of relocated former resident. (Source: EPA)

Site Location: Old Fort Road and North Ridge Drive, Klamath Falls, Oregon 97601

Size: 125 acres

Existing Site Infrastructure: All major types of infrastructure are located on site.

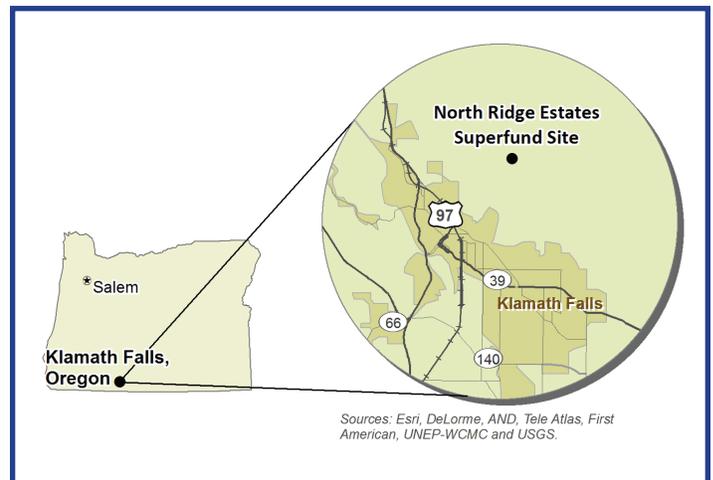
Current Site Uses: Residential areas; most homes are vacant following relocation of residents as part of site cleanup. Some residents continue to live on site. As properties are cleaned up, residents are returning to their homes while other homes are being listed for sale on the real estate market.

Use Restrictions: Institutional controls prevent disturbance of residual contamination and consolidated material in on-site repositories.

Surrounding Population: within 0.5 mile, 115 people; within 2.5 miles, 4,304 people; within 4 miles, 25,458 people.

EPA and Oregon Department of Environmental Quality (ODEQ) are working together to clean up World War II-era contamination at the North Ridge Estates, Operable Unit 1 Superfund site and support the site's return to productive use as a residential neighborhood in the Klamath Falls community.

The 125-acre site is a residential subdivision located about three miles north of Klamath Falls. The U.S. Department of Defense operated a base on site from 1944 to 1946. Base operations included treatment of Marines suffering from tropical diseases contracted during World War II. The Marine Recuperation Barracks comprised 82 buildings. In 1947, the state of Oregon acquired the property and started the Oregon Technology Institute (OTI), a vocational college, on site. During its nearly two decades on site, OTI demolished six structures as part of its operations. OTI moved from the site in 1964 and property ownership transferred to the federal General Services Administration. From 1965 to 1977, a partnership of private individuals owned the property. During this time, at least 22 additional



Sources: Esri, DeLorme, AND, Tele Atlas, First American, UNEP-WCMC and USGS.

Location of the site near Klamath Falls, Oregon.

buildings were demolished. Demolition of military barracks buildings contaminated the soil with asbestos and asbestos-containing materials.

SITE HISTORY AND REDEVELOPMENT TIMELINE

1944 - 1946	The U.S. Department of Defense operated a base on site.
1947	The state of Oregon acquired the property for development of the OTI.
December 1977	MBK purchased the site property.
1990s	MBK developed the 144-acre North Ridge Estates residential subdivision on the site.
2003	EPA responded to the site at the request of ODEQ.
2003 - 2009	EPA conducted emergency removals of all visible asbestos to address immediate threats to human health.
2006	Stakeholders agreed to a federal Consent Decree to permanently relocate site residents.
September 2011	EPA placed the site on the Superfund program's National Priorities List and selected the site's remedy in a Record of Decision.
2013	EPA's Superfund Redevelopment Initiative provided reuse planning assistance for the site.
2015	EPA finalized a cleanup design to remove between 2 and 4 feet of contaminated soil from privately owned properties and replace the material with clean soil.
2016	First season of cleanup took place from July to November 2016. EPA published the results of the reuse planning efforts.
2017	Second cleanup season took place from May to October 2017.
2018	Third cleanup season is expected to be completed by October 2018.

The Melvin Bercot Kenneth Partnership (MBK), a real estate development group, purchased the site property in 1977. Most of the buildings on the site were demolished by 1979. In 1993, Klamath County approved subdivision plans developed by MBK. Later that year, MBK began constructing homes on the 144-acre North Ridge Estates residential subdivision, which includes the entire footprint of Operable Unit 1. MBK sold properties in the subdivision to individuals from 1994 to 2002. EPA first responded to the site in 2003 at the request of ODEQ. Investigations found that asbestos contamination at the site resulted from improper demolition of the former military barracks buildings.

EPA conducted a series of emergency removal actions between 2003 and 2009. In January 2006, MBK, homeowners, the U.S. Department of Justice and EPA negotiated a federal Consent Decree to permanently relocate most subdivision residents. Some residents declined voluntary relocation. The settlement compensated homeowners to allow them to relocate to new permanent residences. The Consent Decree also provided for a receiver to manage and hold title to the properties as a potential resource for funding cleanup activities.

After initial efforts to remove contamination were not effective for long-term protection of human health, EPA added the site to the Superfund program's National Priorities List in 2011. The same year, EPA selected the site's long-term remedy in the site's Record of Decision. The selected remedy includes excavation and consolidation of asbestos-contaminated materials in on-site repositories, placement of a marker layer to prevent future digging below the deepest extent of excavation, and placement of caps and clean fill over excavated areas.

Starting in 2013, EPA's Superfund Redevelopment Initiative (SRI) supported reuse planning for the site. SRI supported the development of a document with renderings to illustrate how site properties are anticipated to look before and following cleanup. The renderings show how the neighborhood will look after removal of over 900 ponderosa pines. The renderings helped local stakeholders visualize the cleanup process and changes to the landscape during the cleanup process. The document also shared proposed planting plans and facilitated future use discussions with local stakeholders.

EPA finalized the cleanup design in 2015, planning to remove between 2 and 4 feet of contaminated soils from properties and provide clean soil as fill for excavated areas. EPA cleaned up nine land parcels in 2016 and 20 parcels in 2017. The contaminated soil and debris were placed in on-site repositories. In 2016, EPA seeded all excavated private properties and planted trees and shrubs. In 2017,



A rendering illustrating how the vacant home might look five to ten years after remedial action and replanting. (Source: EPA)

EPA seeded all excavated properties, including receiver managed properties, as well as planting trees and shrubs. EPA planted trees and shrubs on properties using the landscaping rendered in the SRI reuse planning document, planting one tree for every tree removed. In 2018, the final cleanup construction season, EPA plans to continue landscaping efforts. EPA installed drip irrigation systems to lower tree mortality rates. In addition, EPA is replacing two neighborhood roads, installing new driveways and will relocate a historic marker detailing the site's World War II history.

SRI provided support to capture resident input on plant species and placement to inform remedial design. This enabled owners to decide the types of trees and shrubs that would replace the ones removed during remedial action. SRI also designed conceptual planting plans for 11 privately-owned properties and 20 receiver managed vacant properties. In addition to the planting plans, a site-wide rendering and six property illustrations depicting structures, planned plantings and landscape growth projected five to ten years following remedial action were developed.

The multi-year project has provided significant local economic benefits. Local contractors have provided 80 percent of the project's labor services. Most materials used in the cleanup are also supplied locally, including about 80 percent of all gravel, fabric, soil and protective gear.

The project has also provided broader community benefits. In 2016 and 2017, a total of 32 Klamath Falls area residents successfully completed EPA's Superfund Job Training Initiative (SuperJTI) program, which is a job-readiness program that provides training and employment opportunities for people living in communities affected by Superfund sites. Each graduate earned certificates in flagging, forklift, 10-hour Occupational Safety and Health Administration training, cardiopulmonary resuscitation and first aid, 40-hour hazardous waste operations and emergency response, and asbestos operations and maintenance training. After graduation, participants of the program were placed into jobs with remedial contractors on site to assist with the cleanup.

FOR MORE INFORMATION

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North Ridge Estates, Phase II Planting Plans and Illustrations - <https://semspub.epa.gov/work/10/100034585.pdf>



In May 2017, EPA established a task force to restore the Superfund program to its rightful place at the center of the Agency's core mission to protect health and the environment.

epa.gov/superfund/superfund-task-force