



# MEYERS LANDFILL

U.S. FOREST SERVICE LAKE TAHOE BASIN MANAGEMENT UNIT

MAY 2013

## MEYERS LANDFILL FACT SHEET UPDATE ON REMEDIAL ACTIVITIES AND SUPPLEMENTAL GROUNDWATER INVESTIGATION MAY 2013

This fact sheet provides an update on the remedial activities and supplemental groundwater investigation the U.S. Forest Service is conducting at the Meyers Landfill Site (Site) pursuant to its authorities under the Comprehensive Environmental Response, Compensation, and Liabilities Act (CERCLA). The Site location is shown on Figure 1.

### **Background**

Meyers Landfill was a municipal landfill operated by private parties from 1946 to 1955 and El Dorado County (County) from approximately 1955 to 1971 under Forest Service Special Use Permits. Water leaching through the decomposing landfill waste has impacted groundwater beneath the site, resulting in a plume of contaminated groundwater extending approximately 2,000 feet down-gradient in a north-northeast direction away from the Site. The primary contaminants of concern are vinyl chloride and related volatile organic compounds (VOCs).

The United States brought a cost recovery action under CERCLA against the County and the City of South Lake Tahoe, both potentially responsible parties at the Site. The United States has reached a settlement with these and other potentially responsible parties.

### **Landfill (OU-1) Remedy Construction**

In June 2010, the United States entered into a partial consent decree (PCD) with the County which resolved certain federal claims against the County and counter-claims made by the County against the United States for cleanup of the Site. Under the PCD, the County is responsible for constructing and maintaining the selected remedy (with Forest Service oversight) for Operable Unit 1 (OU-1), the landfill waste mass and contaminant source area.

The selected remedy for OU-1 consists of the installation of an impermeable landfill cover

system, which includes consolidating waste, capturing and diverting shallow groundwater coming from off-site, directing and controlling surface water drainage, venting landfill gases emitted from waste decomposition, and revegetating the surface. Properly covering the landfill will minimize further migration of contaminants into groundwater beneath the Site. A schematic of the cover is shown on Figure 2 and the final cover design and drainage features are shown on Figure 3.

The Remedy was constructed during the 2010 through 2012 construction seasons. The final Remedy component is applying seeds, fertilizer, and mulch (hydroseeding) to the landfill surface and surrounding areas of the Site with native plant species to encourage vegetative cover. The pre-remedy landfill surface is shown on Figure 4 and the post-construction surface of the landfill is shown on Figure 5.

### **Forest Closure Order**

The Site has been under a Forest Closure Order since 1999 to protect the public from the hazards of the Site and to protect Site surface features from potential damage. In 2010, the Order was extended and expanded to include the landfill cover construction area. Once the landfill and surrounding areas have been hydroseeded and winterization has been completed, Garbage Dump Road will be removed from the Order. The landfill and surrounding area will remain closed until vegetation has become well established. Figure 6 shows the modified closure area. The Forest Service asks that the public comply with the Closure Order, which will be actively enforced.

Once the Closure Order is terminated, the Site will remain closed to motorized vehicle use, including off-highway vehicles, dirt bikes, and snowmobiles, to protect the public and the integrity of the remedy.

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THE FOREST SERVICE COMPLETED THE SUPPLEMENTAL RI/FS AND REVISED PROPOSED PLAN, FOR OU-1, THE LANDFILL AREA, IN MAY 2007.

THE FOREST SERVICE COMPLETED THE ROD FOR OU-1 IN NOVEMBER 2007.

THE FOREST SERVICE COMPLETED THE REMEDIAL DESIGN FOR OU-1 IN JANUARY 2009.

### **Groundwater (OU-2) Remedial Investigation**

The plume of VOC impacted groundwater at the Site has been designated as Operable Unit 2 (OU-2). The Forest Service and the County have been conducting groundwater investigations and monitoring at the Site since the 1990s. The initial Remedial Investigation and Feasibility Study Reports (RI/FS) did not fully describe groundwater conditions at the Site. In 2005, the Forest Service began the CERCLA Supplemental Remedial Investigation for OU-2 to fully define the nature and extent of the contamination. This is a key step in identifying a groundwater remedy for the Site. The selection of a final groundwater remedy for the Site will be greatly affected by how successful the OU-1 remedy is in mitigating the release of contaminants to groundwater. As a result, the Forest Service anticipates that the OU-2 investigation efforts will continue for several years after construction of the OU-1 remedy to determine the effectiveness of the remedy.

Current Site groundwater conditions are described in the Interim Groundwater Characterization Report which is available in the Site File at the Lake Tahoe Basin Management Unit offices in South Lake Tahoe and on their website at:

<http://www.fs.usda.gov/goto/ltbmu/MeyersLandfill>

The investigation to date shows that groundwater is present in two interconnected zones, the Upper Groundwater Zone (UGZ) and Middle Groundwater Zone (MGZ), and in a separate deeper zone, the Lower Groundwater Zone (LGZ). The UGZ and MGZ are impacted by vinyl chloride and other VOCs. Figure 7 shows the known extent and migration direction of vinyl chloride in the UGZ and MGZ as of September 2012.

Vinyl chloride concentrations in the UGZ and MGZ have historically ranged from less than 0.5 parts-per-billion (ppb) to 100 ppb. A ppb is about one drop in 13,750 gallons of water. Sampling has not detected VOCs in the LGZ. Figure 8 shows a cross section of the VOC contaminant plume.

Current groundwater investigation efforts indicate that contaminated groundwater in the UGZ appears to be moving northeastward parallel to Saxon Creek and that groundwater in the MGZ is moving in a more northerly direction toward Pioneer Trail. The OU-2 investigation has adequately defined the extent of VOCs in ground-

Although groundwater underlying private land is contaminated with VOCs, the groundwater contamination at the Site does not present a current risk to residents or drinking water supplies because the South Tahoe Public Utility District supplies drinking water from wells that are distant from the impacted area, and private residents are connected to the public water supply. Additionally, vinyl chloride and other VOC concentrations are very low and impacted water is far underground (about 160 feet below ground surface), where no one will come in contact with the contaminated groundwater.

### **What is Being Done?**

The impermeable cover over the landfill waste has been installed and will prevent further leachate generation from rainfall and snowmelt percolation through the waste. The Forest Service has installed additional groundwater monitoring wells which have defined the nature and extent of the groundwater contamination in the vicinity of the Site. Groundwater monitoring will continue for two to three more years to evaluate the effects of the OU-1 remedy on groundwater flow directions and VOC concentrations. Once the effectiveness of the OU-1 remedy is known, the Forest Service will prepare a supplemental RI/FS, proposed plan, and ROD for OU-2 (OU-2 ROD) and select a final remedy for the Site. The OU-2 ROD will address the contaminated groundwater plume and any response action that may be required if contaminants continue to emanate from the landfill waste.

### **How to find more information**

For more information, please refer to the contact individuals shown on page 4. Information on Meyers Landfill Remediation, including a Site history and relevant documents are available on the web at:

<http://www.fs.usda.gov/goto/ltbmu/MeyersLandfill>

The Administrative History of the Meyers Landfill Remediation is available for inspection upon request at the Forest Supervisor's Office, 35 College Drive, South Lake Tahoe, CA 96150.

**Switchboard:** (530) 543-2600

**Information:** (530) 543-2694

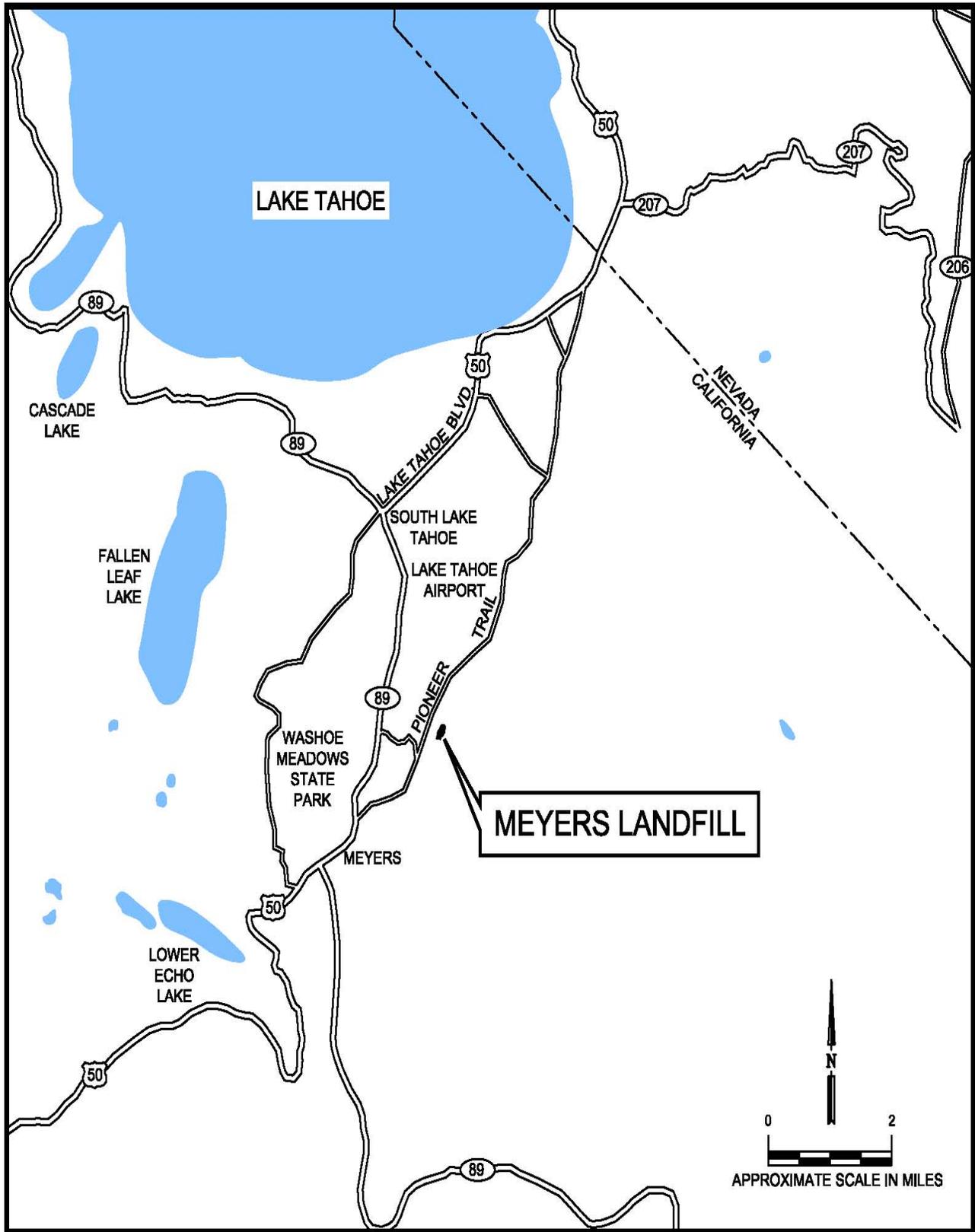


Figure 1: Landfill site location

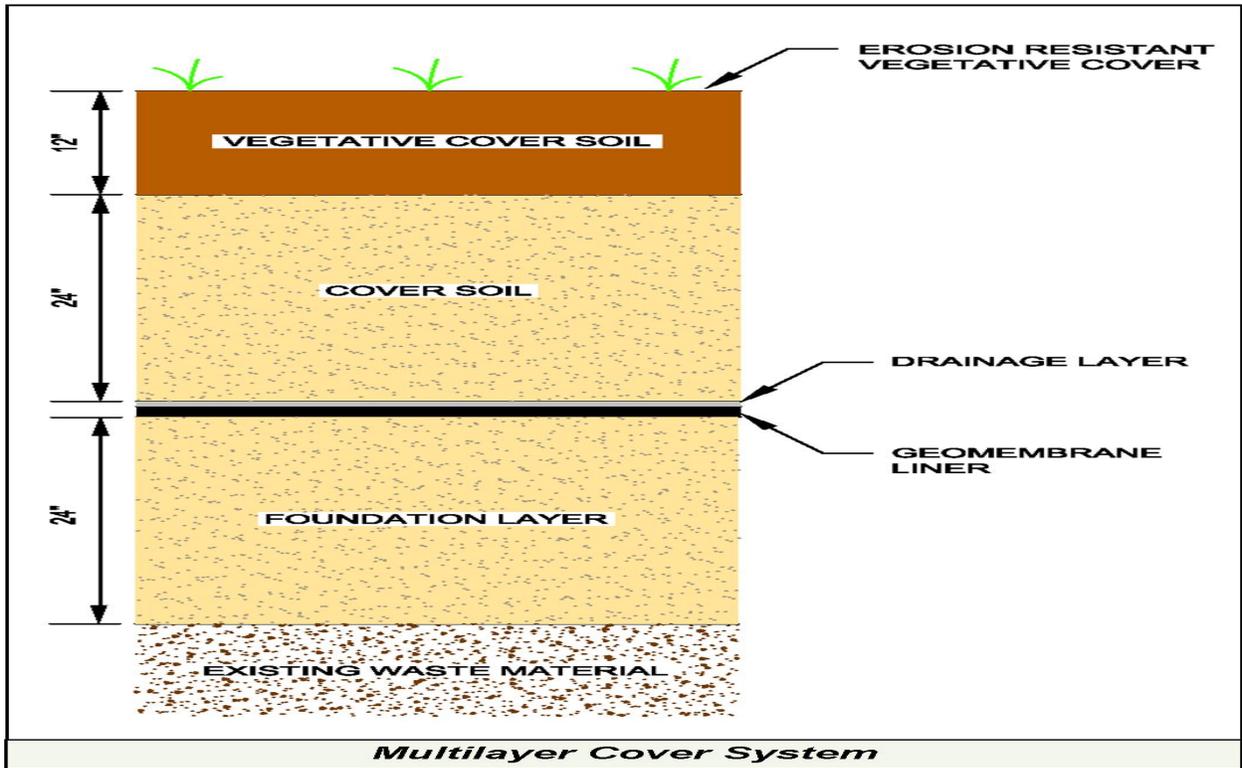


Figure 2: Landfill schematic layers

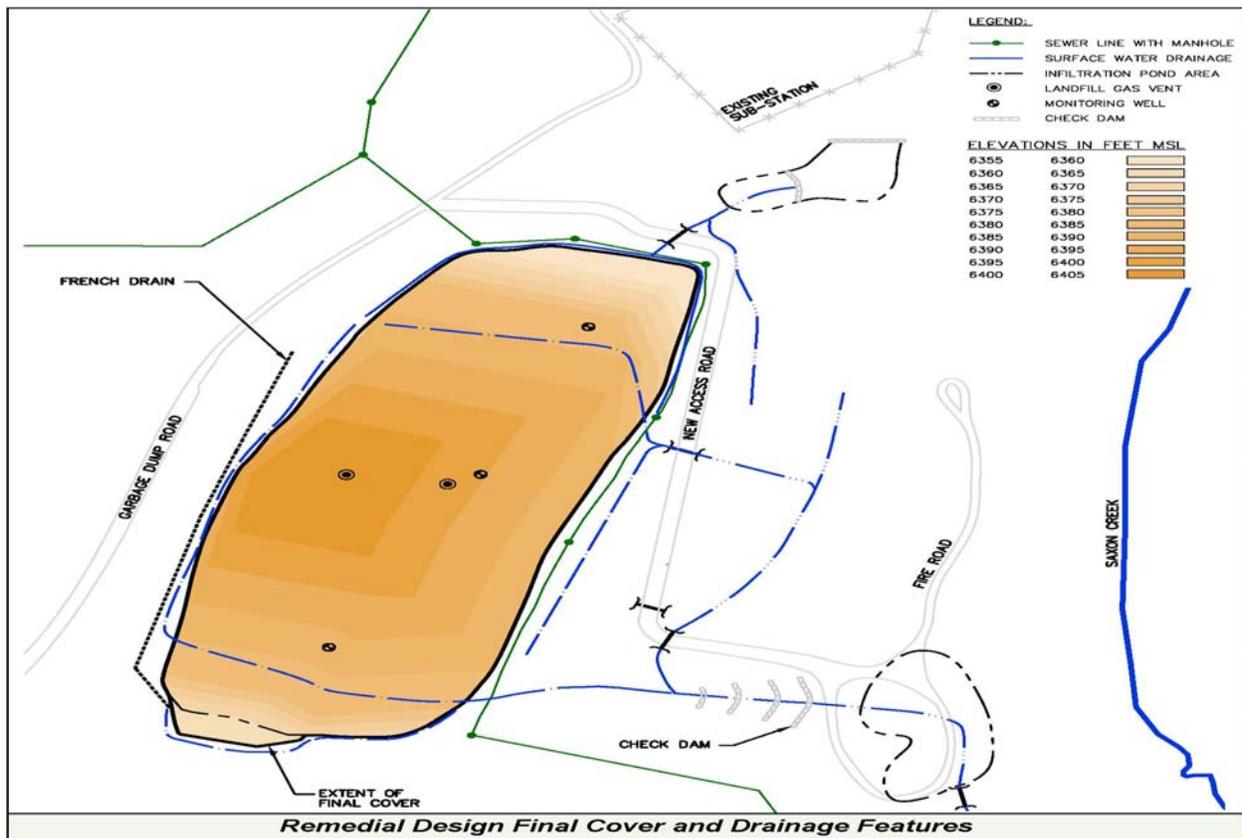


Figure 3: Landfill cap overview



Figure 4: Landfill surface prior to remedy installation.



**Figure 5: Post-construction photo**



Forest  
Service

Lake Tahoe Basin  
Management Unit

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South Lake Tahoe, CA 96150  
(530) 543-2600  
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**File Code:** 2520

**Date:** April 23, 2013

**Subject:** Meyers Landfill Area and Road Closures

**To:** Note to File

**From:** Nancy Gibson, Forest Supervisor *ng*

I intend to issue two Forest Orders to continue the closure of the Meyers Landfill Area and Forest Road No. 1204 to the public.

The purpose of this action is to ensure public health and safety while providing time for cleanup in a response action pursuant to the Comprehensive Environmental Response Compensation, and Liability Act ("CERCLA"), 42 U.S.C § 9604, Federal Executive Order 12580 as amended, and 7 C.F.R. § 2.60 (a)(40), for the property known as Meyers Landfill. The area and road affected is shown on the attached map. Order No. 19-13-01, which closes the Meyers Landfill Area and Forest Road No. 1204 (also known as Garbage Dump Road), will be in effect from May 1, 2013, through October 15, 2013 and May 1, 2014 through October 15, 2014. Order No. 19-13-02, which closes only the Meyers Landfill Area during the winterized period, will be in effect from October 16, 2013 through April 30, 2014 and October 16, 2014 through April 30, 2015. These closures are based on the Time Critical Action Memorandum and the additional analysis and documentation in the project record.

While the construction of the landfill cap and associated surface water controls (Remedial Action for Operable Unit 1) was almost completed in October of 2012, additional construction and revegetation efforts are planned for summer 2013 to repair erosive damage within the Meyers Landfill Area. The construction activities will cause significant hazards to public safety both within the Meyers Landfill Area and along Forest Road No. 1204. During the interim winterized period, hazards to public safety will remain within the Meyers Landfill Area including steep irregular slopes and slumping soils, and partially buried fencing, metal standpipes, concrete bollards, wiring and cabling. These hazards have high potential to cause injuries or fatalities to people not trained and engaged in the procedures necessary to mitigate these risks.

I have concluded that this decision may be categorically excluded from documentation in an Environmental Impact Statement (EIS) or Environmental Assessment (EA) under the National Environmental Policy Act. This action falls within the category identified in 36 CFR 220.6(d)(1) – prohibitions to provide short-term resource protection or to protect public health and safety – and does not require documentation in a decision memo, decision notice, or record of decision. Pursuant to 36 C.F.R. § 215.12(f), this decision is not subject to administrative appeal. I have determined that there are no extraordinary circumstances associated with this temporary closure and the procedures for legal notice and opportunity to comment (36 CFR 215.4) do not apply to this project. Implementation of the decision may begin immediately.



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Figure 6: Closure Order



ORDER NO. 19-13-01  
 USDA FOREST SERVICE  
 LAKE TAHOE BASIN MANAGEMENT UNIT  
 MEYERS LANDFILL AREA and ROAD CLOSURE



Pursuant to 16 USC 551 and 36 CFR 261.50(a) and (b), and to provide for public safety, the following acts are prohibited within the Lake Tahoe Basin Management Unit. This Order is effective from May 1, 2013 through October 15, 2013 and May 1, 2014 through October 15, 2014.

1. Going into or being upon the Meyers Landfill Closure Area. The Meyers Landfill Closure Area boundary begins at the intersection of Forest Road No. 1204 and Pioneer Trail, then continues due east for approximately 3000 feet to Saxon Creek, then continues northward along Saxon Creek to Forest Road No. 12N08, then continues westward along Forest Road No. 12N08 to Forest Road No. 1204, then continues southward along Forest Road No. 1204 back to the starting point, as shown on Exhibit A. 36 CFR 261.53(e).
2. Being on Forest Road No. 1204 (Garbage Dump Rd.). 36 CFR 261.54(e).

Pursuant to 36 CFR 261.50(e), the following persons are exempt from this Order:

1. Persons with a permit from the Forest Service specifically authorizing the otherwise prohibited act or omission.
2. Any Federal, State or local officer or member of an organized rescue or firefighting force in the performance of an official duty.
3. El Dorado County employees, and contractors and subcontractors of El Dorado County, engaged in operations authorized by the Forest Service within the Meyers Landfill Closure Area.

These prohibitions are in addition to the general prohibitions in 36 CFR Part 261, Subpart A.

A violation of these prohibitions is punishable by a fine of not more than \$5,000 for an individual or \$10,000 for an organization, or imprisonment for not more than six months, or both. 16 USC 551 and 18 USC 3559, 3571 and 3581.

Done at South Lake Tahoe, California, this 23 day of April, 2013.

  
 NANCY J. GIBSON  
 Forest Supervisor,  
 Lake Tahoe Basin Management Unit



ORDER NO. 19-13-02  
USDA FOREST SERVICE  
LAKE TAHOE BASIN MANAGEMENT UNIT  
MEYERS LANDFILL AREA and ROAD CLOSURE



Pursuant to 16 USC 55 1 and 36 CFR 261.50(a) and (b), and to provide for public safety, the following acts are prohibited within the the Lake Tahoe Basin Management Unit. This Order is effective from October 16, 2013 through April 30, 2014 and October 16, 2014 through April 30, 2015.

Going into or being upon the Meyers Landfill Closure Area. The Meyers Landfill Closure Area boundary begins at the intersection of Forest Road No. 1204 and Pioneer Trail, then continues due east for approximately 3000 feet to Saxon Creek, then continues northward along Saxon Creek to Forest Road No. 12N08, then continues westward along Forest Road No. 12N08 to Forest Road No. 1204, then continues southward along Forest Road No. 1204 back to the starting point, as shown on Exhibit A. 36 CFR 261.53(e).

Pursuant to 36 CFR 26 1.50(e), the following persons are exempt from this Order:

1. Persons with a permit from the Forest Service specifically authorizing the otherwise prohibited act or omission.
2. Any Federal, State or local officer or member of an organized rescue or firefighting force in the performance of an official duty.
3. EI Dorado County employees, and contractors and subcontractors of EI Dorado County, engaged in operations authorized by the Forest Service within the Meyers Landfill Closure Area.

This prohibition is in addition to the general prohibitions in 36 CFR Part 261, Subpart A.

A violation of this prohibition is punishable by a fine of not more than \$5,000 for an individual or \$10,000 for an organization, or imprisonment for not more than six months, or both. 16 USC 551 and 18 USC 3559, 3571 and 3581.

Done at South Lake Tahoe, California, this 23 day of April, 2013.

  
NANCY J. GIBSON  
Forest Supervisor,  
Lake Tahoe Basin Management Unit

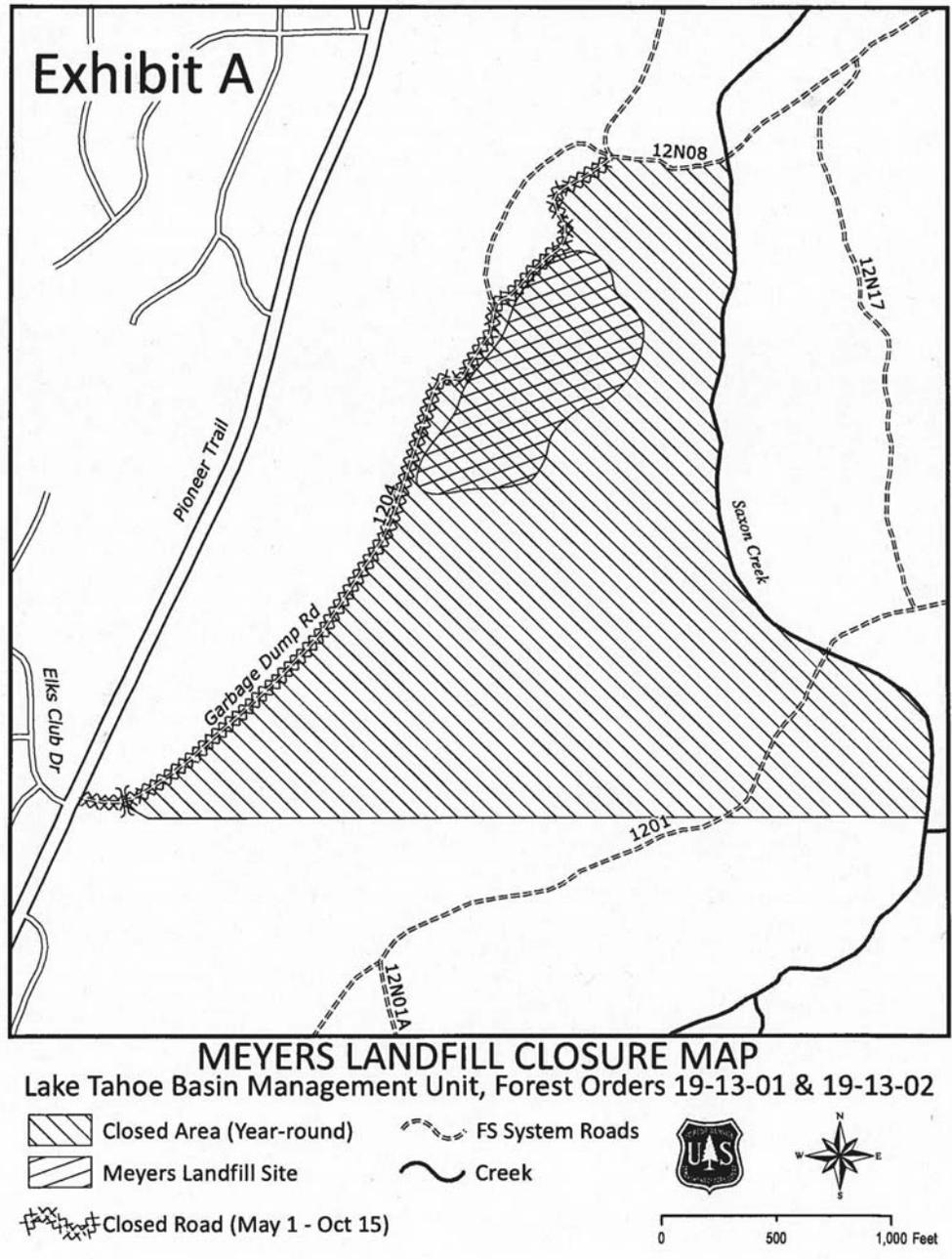


Figure 6: Closure Order

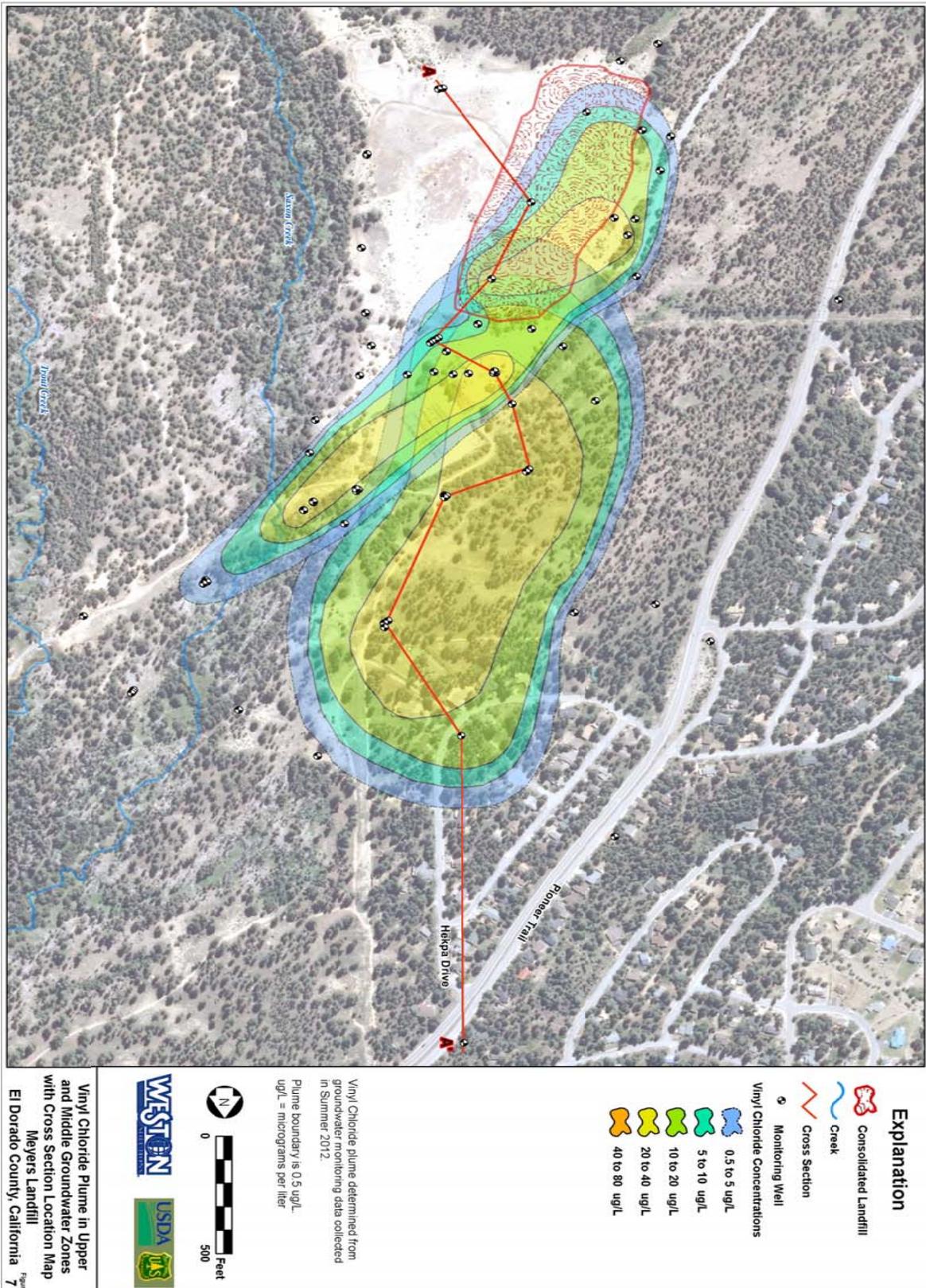


Figure 7: Vinyl chloride migration

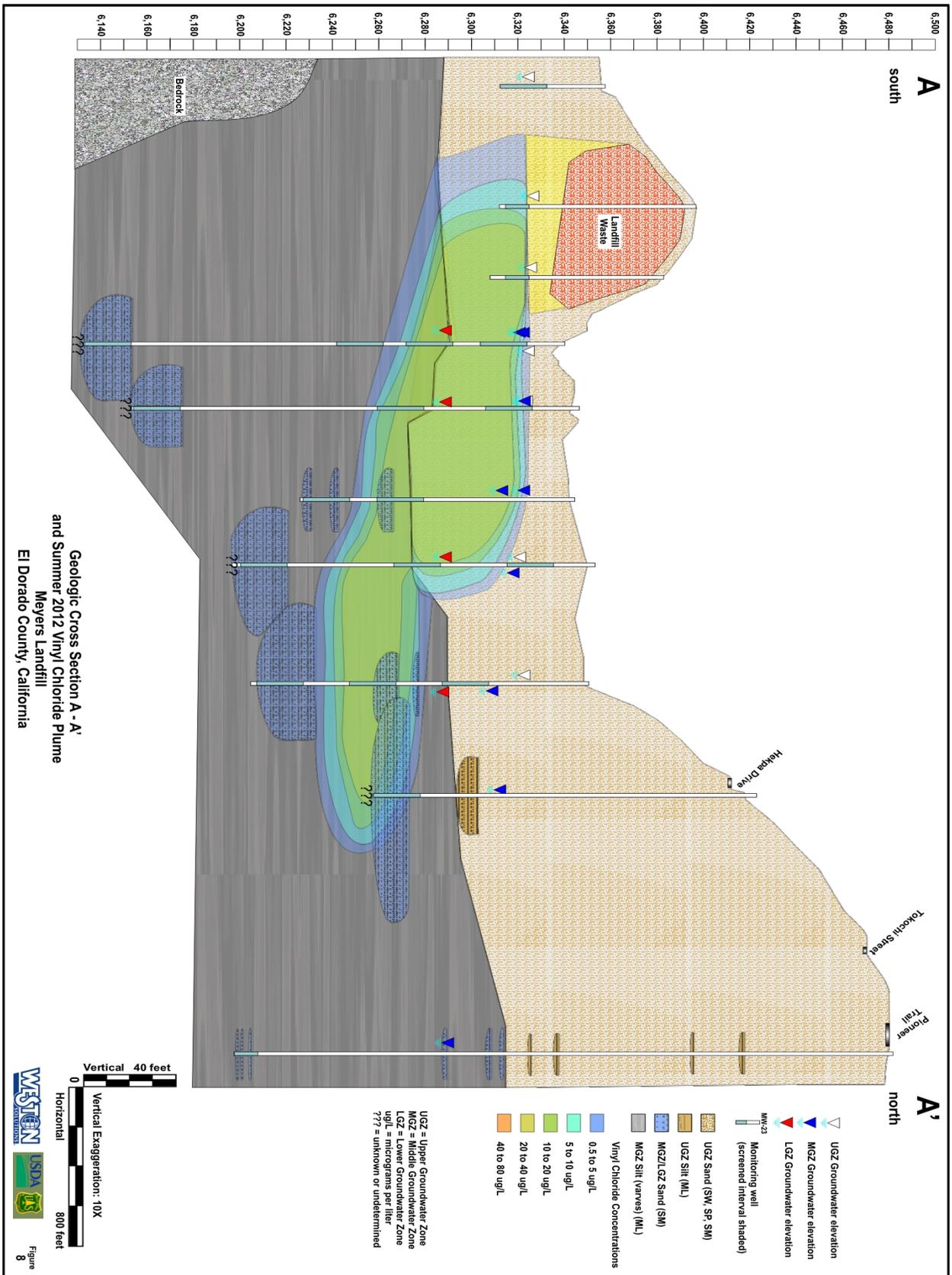


Figure 8: VOC contaminant plume



**Lake Tahoe Basin Management Unit**  
**35 College Drive**  
**South Lake Tahoe, CA 96150-4500**

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## U.S. FOREST SERVICE FACT SHEET UPDATE ON REMEDIAL ACTIVITIES

### U.S. Forest Service Contacts

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**U.S. Forest Service**  
**Lake Tahoe Basin Management Unit**  
35 College Drive  
South Lake Tahoe, CA 96150  
(530) 543-2694

**The Administrative Record for the site is also available for public review at the above referenced office location. Advance appointments are recommended.**

### **Want to be added to our Mailing List?**

Interested individuals are invited to be added to the Meyers Landfill Mailing List by sending their name, mailing address, and email address to the address shown below, or via email to: [pa\\_ltbtmu@fs.fed.us](mailto:pa_ltbtmu@fs.fed.us). Please include "Meyers Landfill Mailing List" in the subject line, and provide complete contact information, including a mailing address.