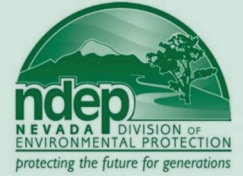




Carson River Mercury Superfund Site



U.S. Environmental Protection Agency • Region 9 • San Francisco, CA • April 2011

Archaeological Studies of Historic Mill Sites

The State of Nevada's Division of Environmental Protection (NDEP), supported by the United States Environmental Protection Agency (EPA), has begun a new phase of the mercury contamination investigation associated with historic Comstock Lode gold and silver mining in the Carson River and Washoe Lake watersheds.

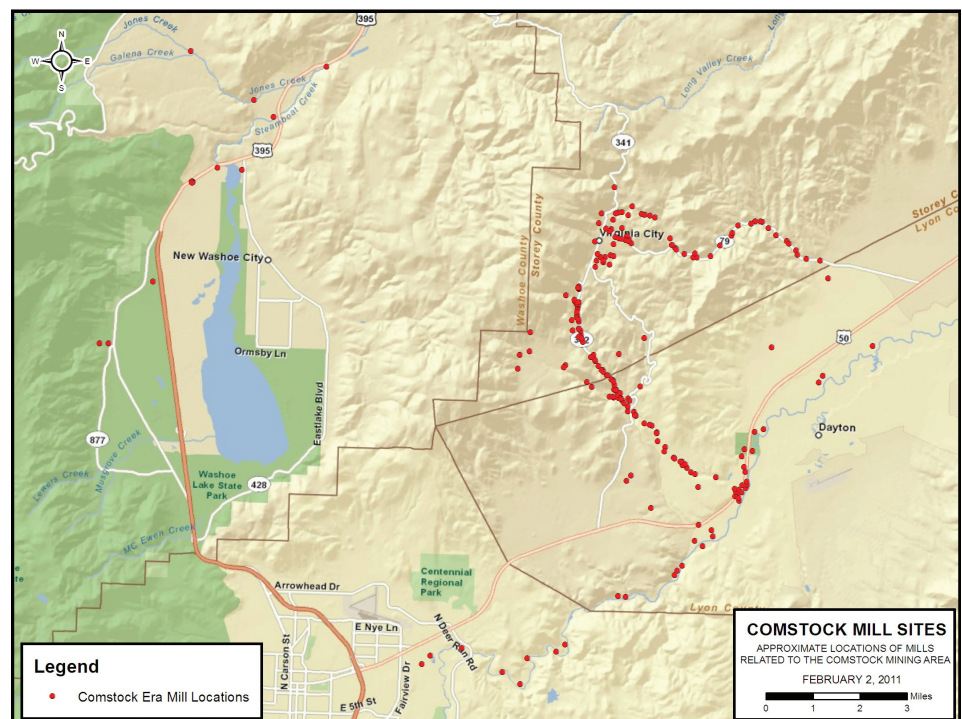
NDEP will employ archeologists to characterize gold and silver millsites that were active during the Comstock-era (1859-1900). The milling process concentrated naturally-occurring arsenic and lead, and also added mercury to the ore to separate gold and silver from the native rock.

In the intervening century since the mills were active, wind and water have eroded and redistributed these contaminants to soil and water courses, as well as stream, river, lake and floodplain sediments. Original mill site locations are still potential hotspots for mercury, arsenic and lead contamination; therefore, it is important to know exactly where each former mill site was located.

The original Carson River Mercury Superfund Site investigation in the 1990s identified over 130 mill sites and that list has now grown to almost 250.

Some of these mill site locations are well established, but the locations of many others are less certain. Since these mill sites are the source for the mercury, arsenic and lead contamination, it is important to know as much about the geographic location, nature, and history of each mill site as possible.

The first step in the process will be a comprehensive archaeological inventory of all Comstock-era mill sites. The inventory will include an accurate description of each mill, the mill's precise geographic location, physical remains, and processing history. The NDEP is releasing a Request for Proposal (RFP) to retain the services of archaeologists to review historic records, document mill site histories and ultimately conduct field work to identify the location and what remains of each mill site on the ground surface. Areas to be investigated are shown on the map below.



Would you like to talk to us about the Carson River Mercury Superfund Site? EPA is updating its Community Involvement Plan, which organizes our public participation efforts. We will be conducting a number of community interviews to learn of any issues and concerns about mill site investigations, and to confirm the best ways to keep the community involved in the investigation phase. Please contact David Cooper, EPA's Community Involvement Coordinator, 800-231-3075 or 415-972-3245



How You Can Help NDEP's Archaeological Study:

The Carson River Mercury Superfund Site is a complex regional site that requires additional study to clean up specific areas and manage them effectively. If you have knowledge of specific mill site locations, old maps or documents, or are a landowner of a former mill site, any assistance you can provide would be greatly appreciated (see NDEP contacts on Page 3).

NDEP or a contracted representative will be contacting landowners in order to visit former mill site locations to see what remains of these historic mills. By agreeing to allow archaeological personnel access to your property, a more complete and comprehensive record of our shared Comstock history can be documented and preserved for future generations. The State of Nevada, using funds provided by EPA, will pay for the investigation. There is no cost to the landowner.

Community Involvement Program

Community Involvement Plan Update

The purpose of EPA's Community Involvement program is to help the public become knowledgeable about and involved in the Superfund investigation and cleanup decision-making processes. Our work is organized by a Community Involvement Plan (CIP), which is currently being updated.

The CIP lists the community's issues and concerns about the site, and then identifies the tools and techniques that EPA will use to provide information about the site and access to the decision-making process. EPA learns about these issues and concerns by conducting community interviews with various members of the public (residents, government officials, activists, etc.). If you are interested in being interviewed to help update the CIP, please contact David Cooper, Community Involvement Coordinator (contact information on page 3).

Site History

In the late 1800s, hundreds of Comstock Lode gold and silver mills in the Carson River and Steamboat Creek (Washoe Lake) watersheds contaminated nearby soils and drainages. More than 14 million pounds of mercury, used to extract the precious metals from ore, were lost to the environment. The mercury moved from the mill sites, through drainages, to the Carson River. Arsenic and lead, which were naturally present in the ore, also became concentrated at the mill sites and moved through the environment.

Investigations have found that historic releases of mercury, arsenic and lead have impacted: (1) sediments and adjacent floodplains of the Carson River from New Empire downstream through Lahontan Reservoir and extending to the Stillwater National Wildlife Refuge; (2) soils

and sediments in Gold, Sixmile, Sevenmile and Daney Canyons; (3) soils and sediments associated with mill sites in and around Washoe and Little Washoe Lakes and Steamboat Creek, and (4) aquatic and semi-aquatic species living in or near the impacted water bodies.

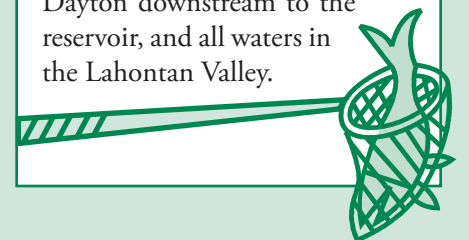
The EPA listed the Carson River Mercury Superfund Site on the Superfund National Priorities List in August 1990. Since that time, EPA has conducted cleanups of residential properties in the Dayton Area, and numerous scientific studies of the transport and fate of mercury in the Carson River and its floodplain, Lahontan Reservoir, and Stillwater Wildlife Refuge have been conducted.

This fact sheet concentrates on the source areas of the contamination, primarily the mill sites and the land areas which the mill sites have affected. EPA

calls this area Operable Unit 1 of the Carson River Mercury Superfund Site. Information on Operable Unit 2, which includes the Carson River from Empire to its terminus at the Stillwater Wildlife Refuge, and associated sediments and floodplain, will be presented in future fact sheets.

Fish Advisory

Due to elevated levels of methylmercury, the Nevada State Health Division has recommended *no consumption* of fish from Big and Little Washoe Lakes, Lahontan Reservoir, the Carson River from Dayton downstream to the reservoir, and all waters in the Lahontan Valley.



For More Information

EPA has a number of ways for the public to learn about the Site. We've placed Site documents in our Information Repositories listed on the back. Site documents are also available on EPA's web site and NDEP's web site (see back page). EPA and NDEP also have a number of staff that you can call with questions using their direct lines listed below or EPA's toll-free message line (800-231-3075).

NDEP Contacts

Jeff Collins

Nevada Division of
Environmental Protection
Bureau of Corrective Actions
901 S. Stewart St., Ste 4001
Carson City NV 89701
(775) 687-9381
jrcollins@ndep.nv.gov

Jack Yates

Nevada Division of
Environmental Protection
Bureau of Corrective Actions
901 S. Stewart St., Ste 4001
Carson City NV 89701
(775) 687-9547
jyates@ndep.nv.gov

David Friedman

Nevada Division of
Environmental Protection
Bureau of Corrective Actions
901 S. Stewart St., Ste 4001
Carson City NV 89701
(775) 687-9385
dfriedman@ndep.nv.gov

EPA Contacts

Source Area Contamination**Jere Johnson**

Project Manager
(415) 972-3094
johnson.jere@epa.gov

River and Reservoir Contamination**Carmen White**

Project Manager
(415) 972-3010
white.carmen@epa.gov

David Cooper

Community Involvement
Coordinator
(415) 972-3245
toll free (800) 231-3075
cooper.david@epa.gov



Mailing List Coupon

If you are not already on EPA's mailing list for the Carson River Mercury Superfund Site, please send an e-mail or return the coupon below to David Cooper (contact info above).

Name _____

Mailing Address _____

City, State _____ Zip _____

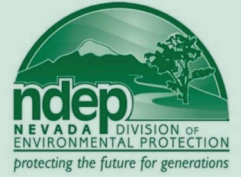
Telephone (optional) _____

E-mail (optional) _____

Affiliation (optional) _____



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Archaeological Studies of Historic Mill Sites

Information Repositories

For site documents, please visit the Information Repositories at:

Dayton Valley Library
650 Highway 50, Space 6
Dayton, NV 89403
(775) 246-6212

Nevada State Library and Archives
100 Stewart Street
Carson City, NV 89710
(775) 687-5160

Churchill County Library
553 South Maine Street
Fallon, NV 89406
(775) 423-7581

Please visit EPA's
Carson River Mercury Site website at:
www.epa.gov/region09/CarsonRiverMercury



Please visit NDEP's
Carson River Mercury Site website at:
http://ndep.nv.gov/bca/carsonriver/criver_1.htm

United States Environmental Protection Agency, Region 9
75 Hawthorne Street (SFD-6-3)
San Francisco, CA 94105
Attn: David Cooper (CRMS 4/11)

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