



Department of Energy  
Office of Legacy Management

July 6, 2010

Susan C. Linner  
Colorado Field Supervisor  
c/o Alison Deans Michael  
USFWS/Colorado Field Office  
P.O. Box 25486, DFC (MS65412)  
Denver, Colorado 80225-0486

Subject: Off-Site Well Abandonment Project (Rocky Flats Site)

Dear Ms. Linner:

The U.S. Department of Energy, Office of Legacy Management, at the Rocky Flats Site (Site) requests approval of the enclosed project description for abandonment of four groundwater monitoring wells that are located on nearby off-Site properties. Please provide your concurrence and approval for the project at your earliest convenience.

If you have questions, please feel free to contact me or Jody Nelson (720) 377-9677. Thank you.

Sincerely,

A handwritten signature in blue ink, appearing to read "Scott R. Surovchak".

Scott R. Surovchak  
LM Site Manager

Enclosure

cc w/enclosure:  
S. Berendzen, USFWS  
J. Nelson, Stoller  
rc-rocky flats

cc w/o enclosure:  
L. Kaiser, Stoller  
R. DiSalvo, Stoller

## Off-Site Well Abandonment Project (Rocky Flats Site) 2010 U.S. Fish and Wildlife Service (USFWS) Notification

Four U.S. Department of Energy (DOE)-owned ground water monitoring wells are located offsite, to the east of the Rocky Flats Site. The wells are no longer of use and are scheduled to be abandoned. Three of the wells (11994, 11894, and 49192) are located on City of Broomfield property near the Great Western Reservoir, and the fourth well (49292) is located in the City of Westminster near Standley Lake (Figure 1).

A general description of the project activities follows. The equipment necessary to conduct the work is expected to be a rubber-tired backhoe, pickup truck with a trailer, and potentially one other pickup truck. Mobilization/demobilization of equipment to the well locations will be on existing roads (where present) and then will require driving off-road using the shortest and safest route to reach the wells. The routes have been discussed with and approved by the cities. Each well consists of a concrete pad (approximately 3 feet [ft] by 3 ft) and one or two steel protective casings enclosing the actual well, which is polyvinyl chloride casing. The steel protective casing(s) at these wells extends into the ground several feet.

First, the well casing will be filled in accordance with regulations set forth by the State of Colorado Office of the State Engineer. A hole will then be dug along each edge of the concrete well pad approximately 3 ft deep and the width of the backhoe bucket. The concrete pad will be broken off around the casing, and the soil will be removed from around the casing. The well casing will be cut off approximately 2 ft below the ground surface using a demolition or chop saw, and then the well casing and any remaining concrete pad will be removed. The well casing and concrete pad, including pieces that were broken off, will be placed on the trailer or in the back of a pickup truck for removal from the area. The excavated area where the well pad sat will be backfilled to blend with the surrounding grade contours and lightly compacted to reduce settling. In addition to the excavated soils that will be used to backfill each excavation, up to approximately 2 cubic yards of material may be needed to backfill each location to approximate existing grades. The excavated area is not expected to measure more than about 12 ft by 12 ft. The remainder of the area will simply have the vegetation trampled. The disturbed area will be seeded with a seed mix that matches the surrounding vegetation, which is described below. Abandonment of each well is expected to take approximately one day.

Well 11994 is located in a stand of smooth brome (*Bromus inermis*), yellow sweet clover (*Melilotus officinale*), and Canada thistle (*Cirsium arvense*) and is located about 50 ft north of Walnut Creek. Stands of coyote willow (*Salix exigua*) are present along the stream but not immediately adjacent to the well. Well 11894 is located in a stand of smooth brome and is about 65 ft north of Walnut Creek. Coyote willow is also present along Walnut Creek at this location, but again, not immediately adjacent to the well. Well 49192 is located in a stand of smooth brome at the base of the Great Western Reservoir dam. The City of Broomfield mows this area as part of its dam maintenance. Well 49192 is located approximately 390 ft from some large plains cottonwood trees (*Populus deltoides*) that are east of the well, where the stream drainage resumes downstream (east) of the dam. At well 49292, the vegetation is dominated by intermediate wheatgrass (*Agropyron intermedium*), smooth brome, and crested wheatgrass (*Agropyron cristatum*). This well is located on one of the benches along the eastern side of the Standley Lake dam and is approximately 700 ft from the stream.

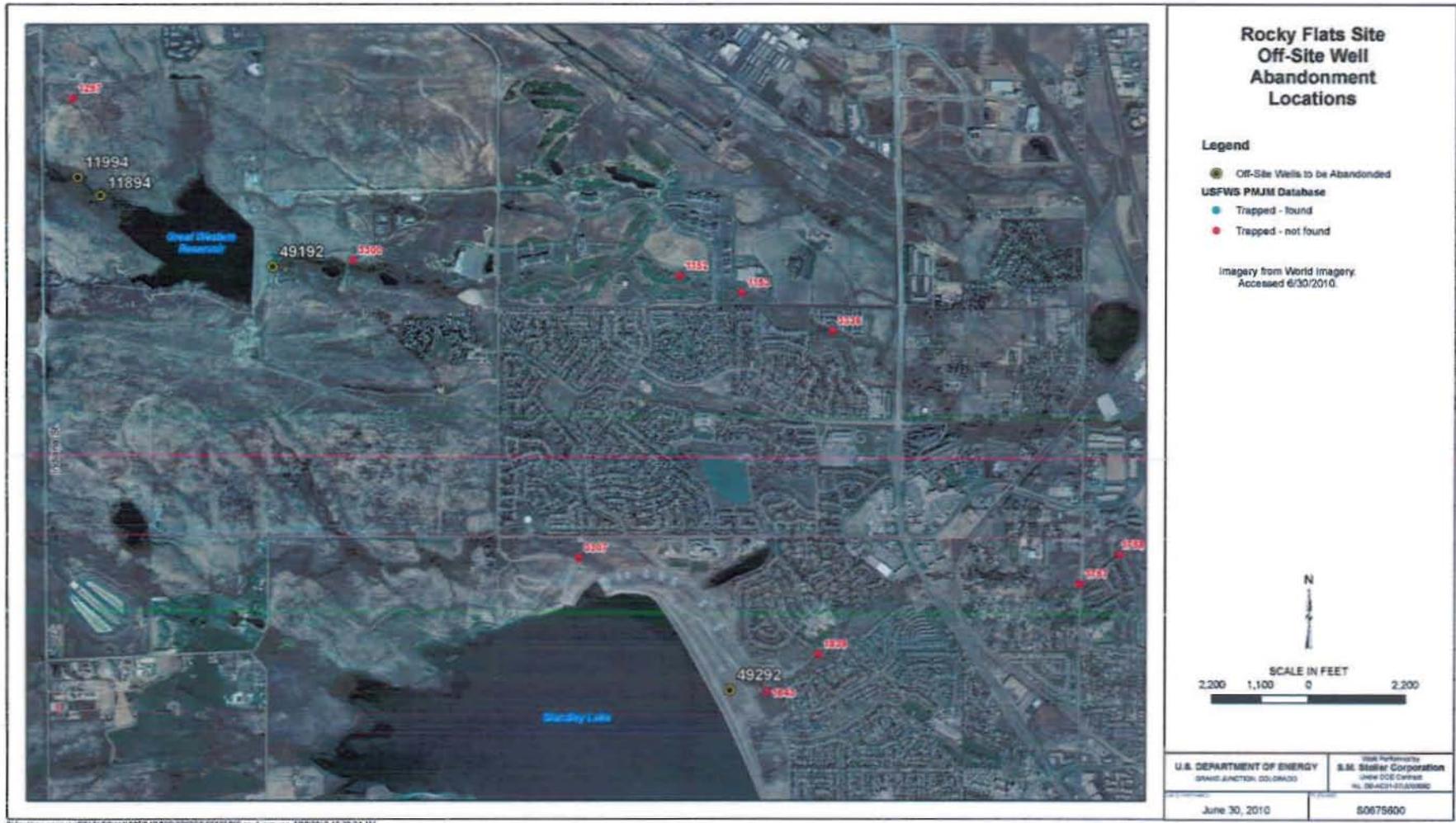


Figure 1. Off-site Well Locations and Preble's Mouse (PMJM) Trapping Locations from the USFWS PMJM Database

None of the four wells is located in areas designated as critical habitat or in the proposed ruling to change the critical habitat for the Preble's meadow jumping mouse (*Zapus hudsonius preblei*). Both wells 49292 and 49192 are located beyond the 361-ft buffer from the edge of the stream that provides habitat for the Preble's mouse. Additionally at well 49192, because Broomfield mows this area, it would provide little cover for the mouse. Therefore, neither of these wells should be considered to be in Preble's mouse habitat.

At wells 11994 and 11894, suitable habitat is present along Walnut Creek. A well-developed stand of coyote willow along much of the stream and an occasional plains cottonwood or peachleaf willow (*Salix amygdaloides*) are present. Although the surrounding grasslands (where the wells are located) is predominately smooth brome, yellow sweetclover, and some Canada thistle, the Preble's mouse is known to inhabit these lower quality habitat areas. For example, west of Indiana Street on the Rocky Flats National Wildlife Refuge and Central Operable Unit, the Preble's mouse has been trapped and tracked with telemetry in similar habitat. Therefore, there is a potential for the Prebles' mouse to be present in the area of these two wells. However, using the USFWS Preble's mouse trapping database, all of the trapping that has been conducted east of Indiana Street in the vicinity of these wells, as shown on Figure 1, has been negative for the Preble's mouse (trapping location ID numbers from USFWS database - 1297, 3300, 1643, and 1839). Therefore it is unlikely that the work being conducted to remove these wells would impact the Preble's mouse (if these latter two locations are considered to be in Preble's habitat).

Well abandonment activities were conducted in many areas of Preble's mouse habitat throughout the closure of the Rocky Flats Site. These activities were approved by the USFWS in the Programmatic Biological Assessment (PBA) Part I, Sections 4.2.6 (Well Abandonment and Replacement Program) and 4.2.7 (Removal of Concrete Pads from Abandoned Wells) and the resulting Biological Opinion (BO). Although these requested well abandonments are not on DOE property, the activities are the same as described within the PBA and BO. Therefore, DOE requests evaluation of these locations for a determination of whether they are in Preble's mouse habitat and approval from the USFWS that these wells may be abandoned as described. If you have any questions, please contact Scott Surovchak (720-377-9682) or Jody Nelson (720-377-9677).