Floodplain Assessment of the continued response to the Las Conchas fire,

Los Alamos National Laboratory

June 26, 2011

LA-UR-11-03907

Introduction

As part of the emergency response to the Las Conchas fire in June of 2011, the Los Alamos National Laboratory (LANL) installed several fire breaks and suppressed fire in Los Alamos, Pajarito, and Upper Ancho Canyons (Figure 2). The breaks consisted of an area where all of the vegetation was removed to base mineral soil in the dimensions of 100 feet wide and up to ¼ mile in length. The breaks provide an area with no burnable fuels that can protect sensitive resources and help limit the spread of fire. The installation of the fire breaks was quickly reviewed to avoid areas of concern (cultural and biological resources). Fires will be fought as they occur and any suppression in sensitive habitat will have storm water protection and restored as soon as emergency conditions will allow.

Project Description

A small fire of approximately one acre was reported in upper Ancho Canyon in Technical Area (TA) 49 on June 25th and it was quickly suppressed. In anticipation of other possible fires entering LANL property, fire breaks (Figure 1) were installed in Pajarito and Los Alamos canyons to limit the spread of fire from entering the lab. Pajarito and Los Alamos Canyons were chosen due to their proximity to the leading edge of the active fire area. In addition, areas around TA-54 (Area G) breaks were installed in the canyons surrounding this facility to limit the possibility of the encroachment of fire.

Floodplain Impacts

The installation of these cleared areas in the floodplains in Pajarito and Los Almos Canyons will temporarily increase run off and erosion. However, with proper erosion control and rehabilitation measures the sites will quickly recover. The area of fire suppression at TA-49 was not in a floodplain or wetland area. There has not been any fire suppression activities within the floodplain or wetlands at LANL at this time.

Alternatives

No Action

If the fire control structures are not implemented, there will be no disturbance impacts to the floodplain. However, the potential for the spread of fire to the remainder of these canyons including areas of human occupation, buildings and sensitive habitat of federally protected species in these same canyons is possible.

No other alternatives were considered.

Figure 1. Example of new fire breaks in LANL Canyons.

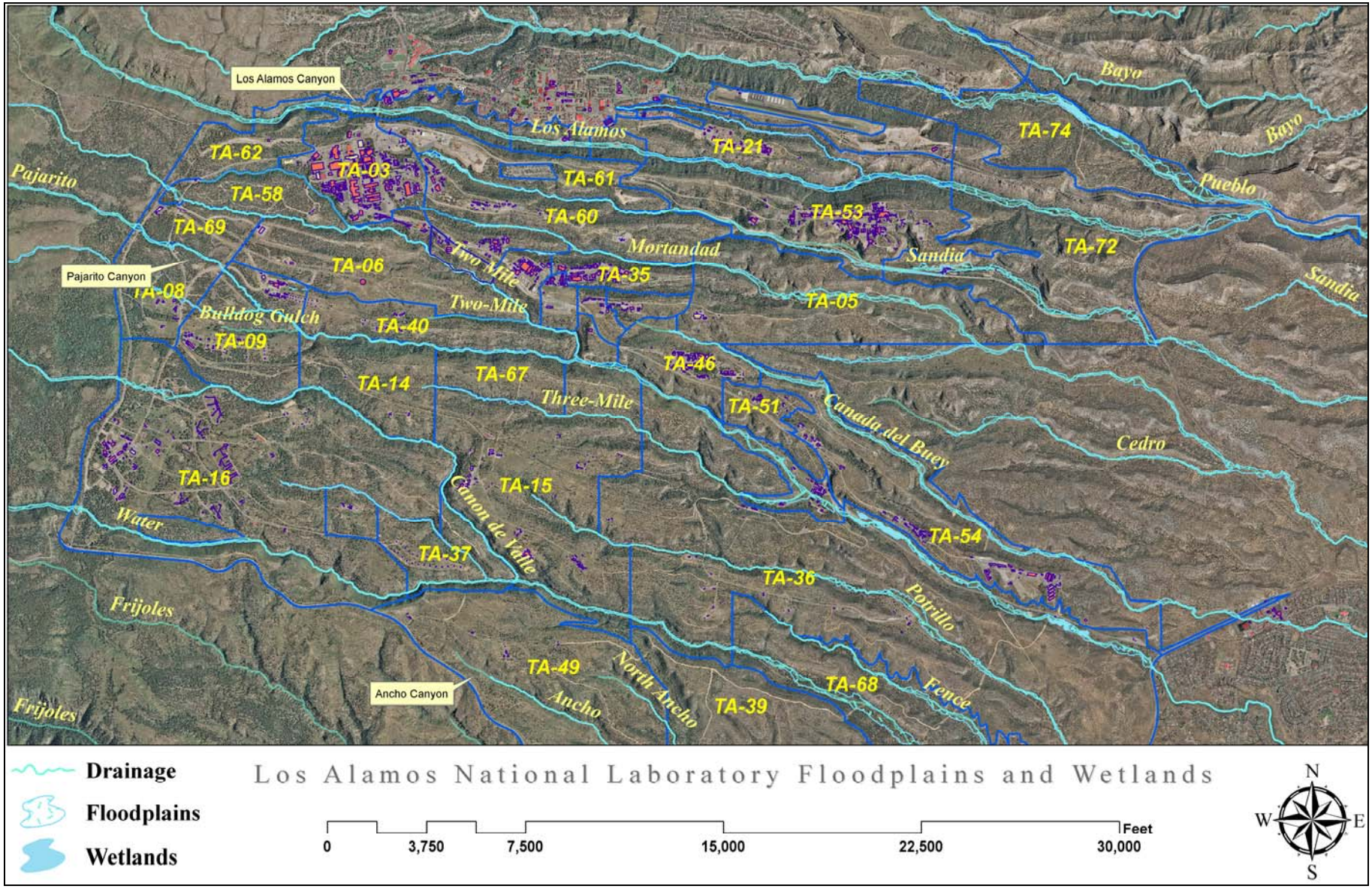

Figure 2. Wetlands and 100-year floodplains at Los Alamos National Laboratory.