

September 23, 2009

Approved

*Steven Sheridan*  
for Christopher Stone

TO: Christopher Stone  
FROM: Patricia Wood *P.W.*  
Facilities Section  
Water Resources Division

**PALOS VERDES FIRE  
BURNED AREA REPORT**

The Palos Verdes Fire occurred on August 27, 2009, and burned a total of 203 acres, all of which were within the Los Angeles County Flood Control District boundary. The burned area is located entirely within the City of Rancho Palos Verdes and the City of Rolling Hills.

Recommendations

1. Authorize us, by copy of this report, to provide confirmation to Flood Maintenance Division (FMD) of potential sediment impacts to a storm drain facility (Project No. 570, Line C) maintained by Public Works located in Paintbrush Canyon and within the burned area. It is recommended that FMD assess possible damage to the storm drain outlet structure and monitor the facility for postfire sediment impacts during storms. Monitoring should continue for the next four to five years until the watershed has significantly recovered from the burn.
2. Authorize us to send copies of this report to the following entities apprising them of the potential impacts of the burn:
  - Supervisor Don Knabe's Office
  - Los Angeles County Fire Department
  - City of Rancho Palos Verdes
  - City of Rolling Hills

Attachments

- A. Burned Area Map
- B. Description of Burn and Potential Sediment Impact
- C. Mudflow Phase Maps:
  - Attachment C-1, Phase 1 Map
  - Attachment C-2, Phase 2 Map
  - Attachment C-3, Phase 3 Map

### Summary of Potential Sediment Impact

The Palos Verdes Fire, which occurred on August 27, 2009, burned approximately 203 acres in the City of Rancho Palos Verdes and the City of Rolling Hills. The burned area (Attachment A) is divided into a total of 3 subarea watersheds across one Debris Producing Area (DPA Zone 6). The detailed evaluation of potential mudflow impacts to facilities in this report concentrates on County maintained facilities.

A storm drain outlet structure (Project No. 570, Line C), which is located within the Paintbrush Canyon Watershed area is maintained by Public Works. This facility may have been damaged in the fire and is subject to sediment impacts during storms. The storm drain should be monitored for the next five years of the burned watershed's recovery.

Increased sediment deposition is anticipated at a small debris basin located within Portuguese Canyon, above Burma Road, on property owned by the City of Rancho Palos Verdes. It is anticipated that during storms, there will be potential plugging of the basin's outlet pipe. Evaluation of this impact is under the purview of the City of Rancho Palos Verdes.

The culverts (non-Public Works facilities) under Palos Verdes Drive South in the lower region of the Portuguese Canyon, the Paintbrush Canyon Watersheds, and in the City of Rancho Palos Verdes may be subject to potential sediment deposition. The culverts are not maintained by Public Works, so the structure's design storm flow capacities are not known. Assessing impacts to the culverts during storms is under the purview of the City of Rancho Palos Verdes.

Details of potential sediment impacts are provided in Attachment B (Description of Burn and Potential Sediment Impact).

### Mudflow Phase Maps

The phase maps for the fire are found in Attachment C. These maps are prepared when potential mudflows pose a major threat to homes, roadways, flood control facilities, or other public infrastructure. The phase maps identify the critical locations and magnitudes of potential mudflow impacts below the burned areas and are used in conjunction with the mudflow phase forecasts that are prepared prior to and during significant storms. The maps and mudflow phase forecasts can be accessed by emergency response agencies and the public at the Public Works' website. The website also provides the means for individuals to sign up for automatic notifications of newly posted mudflow forecasts.

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The approved Burned Area Report will be posted on the internet at <http://www.dpw.lacounty.gov/wrd/fire>.

If you have any questions regarding this report, please contact Michael Miranda at Extension 6164.

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Attach.

cc: Mark Pestrella  
Flood Maintenance (Lee, Pedersen)

**ATTACHMENT A**  
**BURNED AREA MAP**

# **ATTACHMENT B**

## **DESCRIPTION OF BURN AND POTENTIAL SEDIMENT IMPACT**

## **ATTACHMENT B**

### **Palos Verdes Fire Description of Burn and Potential Sediment Impact**

Fire Name: Palos Verdes Fire  
Date of Fire: August 27, 2009  
Burned Area: Approximately 203 acres  
Location: The burned area is located in the Portuguese Bend area of the Palos Verdes Peninsula. The fire was generally contained south of Crest Road, north of Palos Verdes Drive South, west of Portuguese Bend Road, and east of Crenshaw Boulevard in the City of Rancho Palos Verdes and the City of Rolling Hills. The burned area is delineated in Attachment A. (Thomas Guide page 823, C3).

#### Vegetation Type Before Burn

Grass  
Coastal Sage Scrub

#### Improvements Damaged

The Los Angeles County Fire Department reports no structures were destroyed as a result of this fire.

#### Fire History

The 907-acre Crenshaw Fire, which started on June 22, 1973, is the most recent significant fire in the same area. The Palos Verdes Fire overlapped approximately 86 percent of the 1973 Crenshaw Fire burned area.

#### Potential Sediment Impact Below/Within the Burned Area

The burned area is divided into a total of 3 subarea watersheds (Attachment A). One Debris Producing Area (DPA-6) lies within the burned area.

#### Subarea 1 – Portuguese Canyon

Subarea 1 has a total area of 164 acres, which comprises most of the watershed of Portuguese Canyon. The burned area within the watershed is located on property owned by the City of Rancho Palos Verdes and managed by the Palos Verdes Peninsula Conservancy. The subarea was 35 percent burned creating an adjusted debris production potential of 5,900 cubic yards and it will potentially impact the Portuguese Bend Nature Reserve. As a result, during major storms, mud and debris from the burned hillsides could potentially deposit into the lower region of Portuguese

Canyon and plug a culvert which passes under Palos Verdes Drive South. Evaluation of potential impacts is under the purview of the City of Rancho Palos Verdes.

#### Subarea 1A – Upper Portuguese Canyon

Subarea 1A has a total area of 92 acres, which consists of the upper Portuguese Canyon watershed and is located within the City of Rancho Palos Verdes and the City of the Rolling Hills. The subarea was 71 percent burned creating an adjusted debris production potential of 5,200 cubic yards. During major storms, mud and debris flows from the burned canyon will potentially deposit in a small debris basin above Burma Road. This debris basin is not maintained by Public Works and is under the purview of the City of Rancho Palos Verdes.

#### Subarea 2 – Paintbrush Canyon

Subarea 2 has a total area of 300 acres, which consists of the watershed of the Paintbrush Canyon and an unnamed canyon westerly and adjacent to it. The subarea is located within the City of Rancho Palos Verdes and the City of the Rolling Hills. The subarea was 27 percent burned creating an adjusted debris production potential of 8,500 cubic yards. During major storms, mud and debris flows from the burned hillsides could potentially deposit into the lower region of the Paintbrush Canyon watershed at a culvert under Palos Verdes Drive South. This culvert is not maintained by Public Works and is under the purview of the City of Rancho Palos Verdes.

A storm drain (Project No. 570, Line C), which collects runoff from Portuguese Bend Road and Rancho Road, outlets in Paintbrush Canyon. The outlet structure is within the burned area. It is recommended that FMD assess possible fire damage to the outlet structure and monitor the facility for postfire sediment impacts during storms. Monitoring should continue for the next four to five years until the watershed has significantly recovered from the burn.

## **ATTACHMENT C**

**PHASE 1 MAP – C-1**

**PHASE 2 MAP – C-2**

**PHASE 3 MAP – C-2**