September 16, 2020

TO: Adam Ariki
FROM: Ken Zimmer

Postfire Engineering and Drainage Needs Program

SOLEDAD FIRE BURNED AREA BRIEF

The Soledad Fire started on July 5, 2020, and was contained on July 10, 2020. The fire burned 1,525 acres in the Agua Dulce area of unincorporated Los Angeles County (County). This brief focuses on potential mudflow impacts to residences within and below the burned areas. There are also 20 drainage culverts along Aqua Dulce Canyon Road that could be impacted by storm produced debris flows maintained by Road Maintenance Division.

Summary of Potential Sediment Impact

The Soledad Fire burn area, located in Debris Production Areas 8 and 9, was divided into 31 subarea watersheds. During a design debris event (50-year frequency storm), debris from the burned hillsides may impact about four properties and possibly cause flooding on Aqua Dulce Canyon Road from the Antelope Valley Freeway, south toward Soledad Canyon Road.

Detailed descriptions of potential sediment impacts are in Attachment A.

Attachments/Links

All the attachments can be found on the internet at http://www.pw.lacounty.gov/wrd/fire.

Attachment A – Description of Burn and Potential Sediment Impacts
Attachment B – History Map
Postfire Debris Flow Hazards Map: https://apps.gis.lacounty.gov/dpw/m/index.html?viewer=Post-Fire_Debris_Flow_Hazards_Map

Postfire Debris Flow Hazards Map

The postfire debris flow hazards map (Phases 1, 2, and 3) identifies the critical locations of potential debris flow impacts below the burned area for various storm magnitudes. This map is prepared when potential debris flows would pose a significant impact to homes, roadways, flood control facilities, or other public infrastructure. Stormwater Engineering Division (SWED) will post debris flow potential forecasts through the County’s eNotify System and on the internet for each forecasted significant storm event throughout this storm season and the four subsequent storm seasons. The map and forecast system have been provided to the County’s first responders.
Coordination

Stormwater Engineering Division's staff conducted a field reconnaissance of the burned area to verify the fire boundary. SWED reviewed and surveyed potential impacts to County facilities and residences below burned canyons and hillsides on August 6, 2020. SWED investigated four properties and provided verbal engineering advice to one resident.

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

Attach.

cc: Disaster Services (Eazell)
    Road Department (MacGregor)
    Stormwater Maintenance (Bunker)
    Stormwater Engineering (Zimmer)
ATTACHMENT A

SOLEDAD FIRE
DESCRIPTION OF BURN AND POTENTIAL SEDIMENT IMPACT

Fire Name: Soledad Fire
Date of Fire: July 5 to 10, 2020
Burned Area: 1,525 acres
Location: Agua Dulce area of unincorporated Los Angeles County including Aqua Dulce Canyon Road from the Antelope Valley Freeway south toward Soledad Canyon Road.

Vegetation Types before Burn
California montane chaparral and oak woodlands.

Fire History
There have been many fires that have burned within the perimeter of the Soledad Fire, but the latest significant fire was the Agua Dulce Fire in 1994. Fires older than 1994 are not shown on the Soledad Fire History Map.

Summary of Potential Postfire Debris Flow Impacts
The Soledad Fire burned area is divided into 31 subareas located in Debris Production Area zones 8 and 9. The debris production volumes noted in the Postfire Debris Flow Hazards Map are those resulting from a moderate to severe storm event. Parts of Aqua Dulce Canyon Road may be inaccessible due to flooding and sediment deposition during storm events.

Twenty drainage culverts along Aqua Dulce Canyon Road could be impacted by storm produced debris flows that are maintained by the Los Angeles County Road Maintenance Division.

Evacuations
Evacuation of four potentially impacted properties in the area was under the purview of the Los Angeles County Sheriff's Department and Los Angeles County Fire Department otherwise referred to as Unified Command.

Engineering Advice
Public Works reviewed and surveyed potential impacts to four residences below the burned canyons and hillsides of the Agua Dulce area of unincorporated Los Angeles County. Postburn mudflow engineering advice was provided verbally to one resident.
NOTES: FOR EMERGENCY PLANNING ONLY

Due to the method, procedures, and assumptions used to develop the mudflow areas, the limits of mudflow shown are approximate and should be used as a guideline for planning purposes. Actual mudflow areas will depend on actual storm conditions and may differ from the areas shown on the map. We make no warranties in relation to any future mudflow events.

FIRE HISTORY

<table>
<thead>
<tr>
<th>Name</th>
<th>Year</th>
<th>Burned Area (acres)</th>
<th>Overlapped with Soledad Fire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agua Dulce Fire</td>
<td>2011</td>
<td>28</td>
<td>74%</td>
</tr>
<tr>
<td>Burke Fire</td>
<td>2000</td>
<td>172</td>
<td>15%</td>
</tr>
<tr>
<td>Freeway Fire No. 2</td>
<td>1995</td>
<td>1,268</td>
<td>1%</td>
</tr>
<tr>
<td>Agua Dulce Fire</td>
<td>1994</td>
<td>1,180</td>
<td>49%</td>
</tr>
</tbody>
</table>

Agua Dulce Fire (1994) 1,180 Acres
Agua Dulce Fire (2011) 28 Acres
Soledad Fire Perimeter
Burke Fire 172 Acres
Freeway Fire No. 2 1,268 Acres
Soledad Fire

ATTACHMENT B

DATE 9/10/2020
SOLEDAD FIRE FIRE HISTORY MAP
BURNED AREA: 1,525 acres
DATE OF FIRE: 7/5/2020
SCALE AS SHOWN

PUBLIC WORKS
LOS ANGELES COUNTY