August 13, 2018

TO: Christopher Stone

Ken Zimmer Key Z FROM: Stormwater Engineering Division

## SOUTH FIRE BURNED AREA BRIEF

The South Fire started on June 9, 2018, and was contained on June 11, 2018. The fire burned approximately 109 acres, south of Calgrove Boulevard within the Newhall community of the City of Santa Clarita and in the adjacent unincorporated County of Los Angeles area. This report focuses on potential mudflow impacts to County-owned/maintained facilities and the health and safety of residences below the burned areas. The City requested that Public Works contact residents who may be impacted by debris flows and offer engineering advice.

### Summary of Potential Sediment Impact

On June 14 2018, Stormwater Engineering Division (SWED) staff conducted a field reconnaissance of the burned area to determine the residential and/or County-owned/maintained facilities that could potentially be impacted by flooding/debris flows during storm events. The South Fire is divided into 22 subareas across 2 Debris Production Area (DPA) Zones (DPAs 3 and 5). During a design storm event (a 50-year frequency rainfall), debris from the burned canyons may potentially flow from the burned areas and possibly cause flooding and sediment impacts to:

- La Salle Debris Basin and Private Drain 1358, located adjacent to the La Salle Debris Basin. The debris basin and inlet is under the purview of the Los Angeles County Flood Control District (District) and maintained by Stormwater Maintenance Division (SWMD).
- Residential properties below the burned hillsides along Ebelden Avenue, White Oak Court, Heritage Oak Court, and La Salle Canyon Drive (private street) may be impacted by mud and debris.
- A portion of the La Salle Canyon Drive may be inundated with mud and debris.

The location map for the South Fire is included as Attachment A and the Burned Area Map is included as Attachment B. Detailed descriptions of potential sediment impacts are contained in Attachment C. A more detailed discussion of the potential postfire debris flow impacts is provided as Attachment D.

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### **Debris Flow Phase Maps**

The phase maps for the fire are found in Attachment D. The phase maps (Phases 1, 2, and 3) identify the critical locations of potential debris flow impacts below the burned area for varying storm magnitudes. These maps are prepared when potential debris flows pose a major impact to homes, roadways, flood control facilities, or other public infrastructure. The maps and this report can be accessed through the internet at <u>http://www.dpw.lacounty.gov/wrd/fire</u>. SWED will post debris and debris flow potential forecasts on the internet at the aforementioned site for each forecasted significant storm event throughout this storm season and the four subsequent storm seasons.

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

SC:le  $MM^{P \wrd POSTFIRE DRAINAGE \FIRE \2018 FIRE \South Fire in Newhall \South Fire Bar \South Fire Burn Area Brief.docx$  $\Lambda^{\prime}$  Attach.

cc: Disaster Services (Eazell) Road Maintenance (Abramson) Stormwater Maintenance (Swanson) Stormwater Engineering (Zimmer)

# ATTACHMENT C

# SOUTH FIRE DESCRIPTION OF BURN AND POTENTIAL SEDIMENT IMPACT

Fire Name:South FireDate of Fire:June 9 to 11, 2018Burned Area:109 AcresLocation:The fire occurred on the slopes located south of Calgrove Boulevard just<br/>east of the 5 freeway within the City of Santa Clarita and a portion of the<br/>unincorporated County of Los Angeles area.Refer to Attachment A<br/>(Thomas Guide page: 4640–F4, G3, and G4).

### Vegetation Types before Burn

Medium to heavy brush, primarily chamise chaparral, sagebrush scrub, and oak vegetation.

### Fire History

Public Works' fire history records indicate numerous fires that have previously occurred in the South Fire burned area (Attachment E).

### Summary of Potential Postfire Debris Flow Impacts

The South Fire burned approximately 109 acres within the City of Santa Clarita and adjacent unincorporated County of Los Angeles area. The burn area is divided into 22 subarea watersheds across 2 Debris Production Area (DPA) Zones (DPAs 3 and 5). SWED staff offered/provided engineering advice to all properties identified as potentially impacted by postfire debris flows in or below Subareas 1 through 22. The debris volumes noted herein are those resulting from a moderate to severe storm event.

La Salle Debris Basin - During moderate to severe storms, a debris volume potential of 10,760 cubic yards (cy) from Subarea 1, which is burned about 31 percent may flow to the La Salle Debris Basin. The facility's capacity is 14,900 cy and maintained by SWMD. The cleanout threshold for the facilities should be reduced to 5 percent full during the next 5 years of postfire recovery in the fire area. It is SWMD's established postfire routine to monitor its facilities in fire areas for debris inflow during storms and clean out the facilities as necessary.

**Private Drain 1358** – During moderate to severe storms, a debris volume potential of 590 cy from 93 percent burned Subarea 17, may plug the 18-inch inlet (PD 1358) and travel along the property line boundary toward La Salle Canyon Drive. SWMD routinely monitors the inlet and clears it as necessary during and after storms (Attachment D).

La Salle Canyon Drive – During moderate to severe storms, a debris volume potential of 140 cy and 310 cy from Subarea 8 and 10, respectively may flow onto the La Salle Canyon Drive, which is a privately maintained street (Attachment D).

The City of Santa Clarita requested Public Works to contact residents potentially impacted by debris flows and offered engineering advice. Public Works reviewed potential impacts to 8 residences below the burned canyons and hillsides. Engineering advice was offered and/or provided to 6 residents in the City. For the remaining 2 residences, SWED left a mudflow information packet with a contact number in clear view at their door.

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