August 14, 2018

TO: Christopher Stone

| FROM: | Ken Zimmer | Ran | 2 |
|-------|---------------------------------|-----|---|
| | Postfire Drainage Needs Program | | |
| | Stormwater Engineering Division | | |

STONE FIRE BURNED AREA BRIEF

The Stone Fire started on June 4, 2018, and was contained on June 7, 2018. The fire burned approximately 1,352 acres, north of Agua Dulce Canyon off Anthony and Hierba Roads, within the unincorporated County of Los Angeles area and partially within the City of Palmdale (Attachment A). This brief, discusses in general, potential debris mudflow impacts to County-owned/maintained facilities and residences within or below the burned area.

Summary of Potential Sediment Impact

On June 11, 2018, Stormwater Engineering Division' (SWED) staff conducted a field reconnaissance of the burned area to determine the residences and/or County-owned/maintained facilities that could potentially be impacted by flooding/debris flows during storm events. The Stone Fire is divided into 7 subareas across Debris Production Area (DPA) Zone 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 the following:

- Private drain inlet located adjacent to Anthony Road at address 35100.
- Residential properties and ranches within or below the burned hillsides along Anthony Road.
- A portion of Anthony Road may be inundated with mud and debris.

The Burned Area Map for the Stone Fire is included as Attachment B. Attachment C contains detailed descriptions of potential sediment impacts.

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

Christopher Stone August 14, 2018 Page 2

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.

EV:vt

P:\wrd\POSTFIRE DRAINAGE\FIRE\2018 FIRE\Stone Fire\Stone Fire BAR\Stone Fire Burn Area Brief.docx

Attach.

CC: Disaster Services (Eazell) Road Maintenance (Abramson) Stormwater Maintenance (Swanson) Stormwater Engineering (Miranda)

ATTACHMENT C

STONE FIRE DESCRIPTION OF BURN AND POTENTIAL SEDIMENT IMPACT

Fire Name:Stone FireDate of Fire:June 4 to 7, 2018Burned Area:1,352 AcresLocation:The fire occurred on the slopes located north of Agua Dulce Canyon
and the Antelope Valley Freeway 14, along Anthony Road within the
unincorporated County of Los Angeles area, and partially within the
City of Palmdale. The fire is partially within the Angeles National Forest
boundary. Refer to Attachment A (Thomas Guide pages: 4283 and 4284).

Vegetation Types before Burn

Light grass to medium brush.

Fire History

Public Works' fire history records indicate two fires that have previously occurred in the Stone Fire burned area since 2003 (Attachment E).

Summary of Potential Postfire Debris Flow Impacts

The Stone Fire burned approximately 1,352 acres within the unincorporated County of Los Angeles area. The burn area is divided into 7 subareas across Debris Production Area (DPA) Zone 5. Stormwater Engineering Division (SWED) staff offered/provided engineering advice to all properties identified as potentially impacted by postfire debris flows in or below Subareas 1 through 7. The debris volumes noted herein are those resulting from a moderate to severe storm event. Public Works reviewed potential impacts to four residents below the burned canyon and hillsides. Engineering advice was offered and/or provided to three residents in the area. For the one remaining resident, SWED left a mudflow information packet at their residence.

There are no Public Works maintained facilities impacted by storm produced debris flows from the burned watershed.

Private Drain Inlet – During moderate to severe storms, 100 percent burned Subarea 6 has potential to create an adjusted debris production potential (50-year rainfall frequency rainfall) of 7,500 cubic yards. Debris mudflow from Subarea 6 may plug the private drain inlet located adjacent to Anthony Road, at address 35100. As a result, flooding and sediment may occur and travel down Anthony Road into a natural creek. This private inlet should be monitored and cleared of debris for the next four to five years until the watersheds have significantly recovered from the burn.

Anthony Road – During moderate to severe storms, portions of the debris volume potential of 28,700, 10,500, 4,700, and 7,500 cubic yards from Subarea 3, 4, 5, and 6, respectively may flow onto Anthony Road, a privately maintained road (Attachment D). During moderate to severe storms, debris from the burned hillside may potentially flow onto the roadway surface. The flooding and accumulated mud and debris may potentially block access to residences along Anthony Road. It is recommended that the residents monitor Anthony Road during storms and clear the roadway as necessary. The monitoring should continue for the next four to five years until the watershed has significantly recovered from the burn (Attachment D).

p:/wrd/postfire drainage/fire/2018 fire/stone fire/stone fire bar/stone fire description of potential impact attachment c.docx