

Approved *Christopher Stone*
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August 25, 2015

TO: Christopher Stone

FROM: Patricia Wood *Patricia Wood*
Facilities Section
Water Resources Division

CALGROVE FIRE BURNED AREA REPORT

The Calgrove Fire started on June 24, 2015, and was contained on June 26, 2015. The fire burned approximately 415 acres within the Wildwood Canyon area of the City of Santa Clarita and in the adjacent unincorporated Los Angeles County area. This report focuses on potential impacts to County-owned/maintained facilities and the health and safety of residences below the burned areas.

Summary of Potential Debris Impact

In June and July 2015, Water Resources Division (WRD) 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 Calgrove Fire burned area is approximately 415 acres within the City of Santa Clarita and in the adjacent unincorporated Los Angeles County area, and is divided into 37 subarea watersheds across 2 Debris Production Area (DPA) zones (DPAs 3 and 5). During storm events, debris flows from the burned area may impact:

- Debris basins and inlets under the purview of the Los Angeles County Flood Control District (District) and maintained by Flood Maintenance Division (FMD): La Salle Debris Basin, Private Drain 1788-Line E Upper and Lower Debris Retaining Inlets, Valley Debris Basin, and Wildwood Debris Basin.
- The Old Road, which is maintained by Road Maintenance Division (RMD), along with its underlying culverts and adjacent watercourse.
- Streets within the boundaries of the City of Santa Clarita: Cross Street, Davey Avenue, Haskell Vista Lane, Calgrove Boulevard, and the privately owned portion of Wildwood Canyon Road.

- Residential properties below the burned hillsides along Agramonte Drive, Cross Street, Davey Avenue, Haskell Vista Lane, and Wildwood Canyon Road, and within the Crescent Valley Mobile Home Park.

The Burned Area Map for the Calgrove Fire is included as Attachment A. A more detailed discussion of the potential postfire debris flow impacts is provided as Attachment B.

Debris Flow Phase Map and Debris Flow Forecasts

The Debris Flow Phase map for the Calgrove Fire is provided as Attachment C. The Phase Map (for Phases 1, 2, and 3) identifies the critical locations of potential debris flow hazards below the burned area for varying storm magnitudes. Debris Flow Phase maps are prepared when potential debris flows pose a severe threat to residences, roadways, flood protection facilities, or other public infrastructure. WRD will prepare and post Debris Flow Potential Forecasts on the Internet at Public Works' website for each forecasted significant storm event throughout the storm season for the next 4 to 5 years of burned area recovery. The approved Burned Area Report, Burned Area Map, Debris Flow Phase Map, and all future debris flow potential forecasts will be posted on the Internet at <http://www.dpw.lacounty.gov/wrd/fire>.

Debris Flow Mitigation Measures

The watersheds of all of the debris basins and inlets in the vicinity of the fire area are more than 20 percent burned. The cleanout threshold for these facilities should be reduced to 5 percent full during the next 5 years of postfire recovery in the fire area. FMD field staff reviewed the flood protection facilities in the fire area and found only Wildwood Debris Basin requires a prestorm season cleanout. FMD is arranging for that cleanout. It is FMD's established postfire routine to monitor its facilities in fire areas for debris inflow during storms and clean out the facilities as necessary. The monitoring and as-needed cleanouts are expected to last the next 4 to 5 years until the burned area has significantly recovered from the burn.

RMD field staff reviewed The Old Road and its appurtenant facilities. RMD is installing risers on the culverts to mitigate for the anticipated elevated debris levels in runoff from the burned canyons and hillsides. RMD's standard routines call for monitoring the road and its appurtenant facilities for postfire debris impacts during storms and cleaning them as necessary. The monitoring and as-needed cleanings are expected to last the next 4 to 5 years until the burned area has significantly recovered from the burn.

Field review of the fire area by FMD, WRD, Design Division, and the City of Santa Clarita revealed the potential efficacy of temporary debris mitigation measures in the vicinity of Haskell Vista Lane in the City of Santa Clarita, and the Crescent Valley Mobile Home Park in the nearby unincorporated Los Angeles County area. On August 11, 2015, the County of Los Angeles Board of Supervisors authorized Public Works to coordinate with the City of Santa Clarita and any other entities as necessary to install temporary debris mitigation measures. Public Works, in coordination with the City of Santa Clarita, is pursuing installation of debris barriers on City-owned lands above Haskell Vista Lane and above the mobile home park. Public Works is also coordinating with the owner of the mobile home park to determine the feasibility of installing additional on-site measures.

Coordination

Local Property Owners/Managers:

On June 25, 2015, the City of Santa Clarita requested Public Works to provide postfire engineering advice to its residents. WRD staff has offered/provided engineering advice to a total of 31 homes in the City and unincorporated area that could potentially benefit from the advice, including those in the Crescent Valley Mobile Home Park. For those residents who were not home at the time of the visit, WRD staff left in clear view at the residents' front doors a debris flow information packet with a telephone number to contact WRD. For those residents who were home or called back requesting advice, WRD staff discussed potential protective measures including, where warranted, evacuation during storms. WRD provided these residents with written advice forms, except when residents declined written advice.

On August 4, 2015, FMD, WRD, and Survey/Mapping and Property Management Division (SMP) staff met with the owner of the Crescent Valley Mobile Home Park, staff from the City of Santa Clarita, and Southern California Edison to discuss potential postfire debris impacts to mobile home park residents, proposed debris mitigation measures on lands above the mobile home park and within the mobile home park itself, and how to implement the mitigation measures in coordination with current efforts in the area to restore power transmission facilities damaged by the fire.

Interagency Coordination Meetings:

On August 6, 2015, WRD staff met with staff from the City of Santa Clarita, Los Angeles County Fire Department, and the National Weather Service to initiate discussion of potential postfire debris impacts to facilities and residents, postfire activities, and public

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outreach to prepare for the upcoming storm season, and protocols for activities and public outreach during the storm season. It is anticipated additional multiagency coordination meetings between Public Works and these entities and other first responders will occur to solidify storm season protocols. To aid in this effort, copies of this report will be sent to these entities.

Public Meetings:

The City of Santa Clarita is considering hosting and coordinating a community meeting with its fire area residents prior to storm season to go over potential postfire impacts in their neighborhoods, mitigation measures being undertaken by the City and Public Works, measures residents can take, and notification and evacuation protocols. The Los Angeles County Fire Department is coordinating a community meeting for unincorporated area residents in the fire area.

Attachments

- Attachment A: Burned Area Map
- Attachment B: Description of Burn and Potential Debris Impacts
- Attachment C: Debris Flow Phase map
- Attachment D: List of Properties Visited for Engineering Advice

If you have any questions regarding this report, please contact Gary Guo at Extension 6342.

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- cc: Design (Zandieh)
Disaster Services (Doudar, Eazell)
Flood Maintenance (Kumar, Swanson)
Road Maintenance (MacGregor, Caddick)
Survey/Mapping & Property Management (Rothman)
Water Resources (Guo, Wood)

ATTACHMENT A
BURNED AREA MAP

ATTACHMENT B

**DESCRIPTION OF BURN AND
POTENTIAL DEBRIS IMPACT**

ATTACHMENT B

CALGROVE FIRE DESCRIPTION OF BURN AND POTENTIAL DEBRIS IMPACT

Fire name: Calgrove Fire
Date of Fire: June 24, 2015
Burned Area: 415 acres
Location: The fire occurred on the hillsides and canyons in the City of Santa Clarita and the adjacent unincorporated Los Angeles County area. The burned area is entirely within the boundaries of the Los Angeles County Flood Control District (District). The burned area boundary is delineated in Attachment A. (Thomas Guide page 4640)

Vegetation Type before Burn

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

Fire History

Water Resources Division's (WRD) fire history records indicate there have been five significant fires that have previously occurred in the same area as the Calgrove Fire. The 1985 Calgrove Fire burned approximately 226 acres and overlapped approximately 28 acres of the 2015 Calgrove Fire. The 1970 Clampitt Fire burned approximately 42,750 acres and overlapped approximately 73 acres of the 2015 Calgrove Fire. The 1957 Gavin Canyon Fire burned approximately 878 acres and overlapped approximately 234 acres of the 2015 Calgrove Fire. The 1946 Gavin Fire burned approximately 215 acres and overlapped approximately 19 acres of the 2015 Calgrove Fire. The 1942 La Salle Fire burned approximately 800 acres and overlapped approximately 209 acres of the 2015 Calgrove Fire.

Summary of Potential Postfire Debris Flow Impacts

The Calgrove Fire burned approximately 415 acres within the City of Santa Clarita and adjacent unincorporated Los Angeles County area. The burn area is divided into 37 subarea watersheds across 2 Debris Production Area (DPA) zones (DPAs 3 and 5). WRD staff offered/provided engineering advice to all properties identified as potentially impacted by postfire debris flows in or below Subareas 1 through 37. The debris volumes noted herein are those resulting from a moderate to severe storm event.

There are several debris basins and inlets in the fire area vicinity that are under the purview of the District and maintained by Flood Maintenance Division (FMD): La Salle Debris Basin, Private Drain 1788-Line E Upper and Lower Debris Retaining Inlets,

Valley Debris Basin, and Wildwood Debris Basin. The watersheds of all of these facilities are more than 20 percent burned. The cleanout threshold for these facilities should be reduced to 5 percent full during the next 5 years of postfire recovery in the fire area. FMD field staff reviewed the flood protection facilities in the fire area, and found only Wildwood Debris Basin requires a prestorm season cleanout. FMD is arranging for that cleanout. It is FMD's established postfire routine to monitor its facilities in fire areas for debris inflow during storms and clean out the facilities as necessary. The monitoring and as-needed cleanouts are expected to last the next 4 to 5 years until the burned area has significantly recovered from the burn.

RMD field staff reviewed The Old Road and its appurtenant facilities. RMD is installing risers on the culverts to mitigate for the anticipated elevated debris levels in runoff from the burned canyons and hillsides. RMD's standard routines call for monitoring the road and its appurtenant facilities for postfire debris impacts during storms and cleaning them as necessary. The monitoring and as-needed cleanings are expected to last the next 4 to 5 years until the burned area has significantly recovered from the burn.

La Salle Canyon Drive – During moderate to severe storms, a debris volume potential of 12,600 cubic yards (cy) from Subarea 1 may flow to La Salle Debris Basin. The facility's capacity is 14,900 cy.

Briardale Way – During moderate to severe storms, a debris volume potential of 360 cy from Subarea 2 may be produced. The debris is anticipated to settle out on the access road for the water tank.

Creekside Drive – During moderate to severe storms, debris volume potentials of 1,700 cy and 1,800 cy from Subareas 3 and 4, respectively, may be produced. These subareas drain to Private Drain 1788-Line E Upper and Lower Debris Retaining Inlets, which have capacities of 1,800 cy and 850 cy, respectively. It is anticipated the majority of the debris from Subarea 4 will settle out in a flat area above the lower debris inlet before reaching the facility.

Calgrove Boulevard – During moderate to severe storms, a debris volume potential of 3,500 cy from Subarea 5 may be produced. Subarea 5 is tributary to Valley Debris Basin, which has a capacity of 4,000 cy. Portions of the debris may flow onto a privately owned tennis court and onto Calgrove Boulevard.

Agramonte Drive – During moderate to severe storms, debris volume potentials of 50 cy, 10 cy, 80 cy and 180 cy from Subareas 6, 7, 8, and 9, respectively, may be produced. Much of the debris is anticipated to settle out above the properties along Agramonte Street. A portion of the debris may overwhelm existing bench drains located above one property and deposit into the rear of the property. The resident of that property was provided engineering advice.

Haskell Vista Lane – During moderate to severe storms, debris volume potentials of 60 cy, 750 cy, and 150 cy from Subareas 10, 11, and 12, respectively, may be produced. The debris from Subarea 10 is anticipated to settle out within the subarea. Public Works is coordinating with the City of Santa Clarita to install debris barriers on City-owned property above Haskell Vista Lane to mitigate the effects from the debris produced by Subareas 11 and 12. If debris flows exceed the capacity of the barriers, the debris is anticipated to flow down Haskell Vista Lane and may reach Cross Street, potentially impacting several residences along Haskell Vista Lane and at the Cross Street intersection. The residents of those properties were provided engineering advice.

Cross Street – During moderate to severe storms, debris volume potentials of 210 cy, and 10,500 cy from Subareas 13 and 14, respectively, may be produced. The majority of the debris from these subareas is anticipated to settle out in wide, flat areas above two properties on Cross Street. The residents of those properties were provided engineering advice.

Wildwood Canyon Road – During moderate to severe storms, debris volume potentials totaling 7,890 cy from Subareas 15 through 24 may be produced. It is anticipated this debris may reach the portion of Wildwood Canyon Road from its terminus down to the vicinity of Green Crest Drive. This portion of the road is privately owned. One property in the unincorporated Los Angeles County area near the road's terminus may also be impacted by debris. The resident of the property was provided engineering advice.

Wildwood Debris Basin – The watershed of Subarea 37 drains to Wildwood Debris Basin. Within this watershed are Subareas 13 through 24. During moderate to severe storms, the debris basins' watershed could produce a debris volume potential of 17,400 cy. The debris basin's capacity is 21,000 cy.

The Old Road – During moderate to severe storms, debris volume potentials totaling 23,660 cy from Subareas 25 through 34 may be produced. It is anticipated debris from Subareas 25, 26, 27, 29, 31, 32, 33, and 34 may reach The Old Road and deposit on the road. Debris from Subareas 28 and 30 is anticipated to deposit in a watercourse located adjacent to The Old Road. The road and the watercourse are owned by the County of Los Angeles and are maintained/under the purview of RMD.

Mobile Home Park – The mobile home park is in unincorporated Los Angeles County area. During moderate to severe storms, debris volume potentials of 1,600 cy and 2,900 cy from Subareas 35 and 36, respectively, may be produced. Public Works is coordinating with the City of Santa Clarita and the mobile home park owner to install debris barriers on City-owned property above the mobile home park and trashracks/debris posts at two access road culvert sites to mitigate the effects from the debris produced by these two subareas. If debris flows exceed the capacity of the mitigation measures, the debris is anticipated to flow down into the mobile home park and impact nine homes and access for the remaining mobile home park residents.

Debris may also reach the watercourse located adjacent to The Old Road. The watercourse is within the road's right of way. The road right of way is under the purview of RMD. The residents of the potentially impacted homes were provided engineering advice. Public Works is coordinating with the mobile home park owner to determine the feasibility of additional on-site debris mitigation measures.

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ATTACHMENT C
DEBRIS FLOW PHASE MAP

ATTACHMENT D

**LIST OF RESIDENCES VISITED FOR
ENGINEERING ADVICE**