


October 3, 2013

Approved 
for Christopher Stone

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

**WILSON TERRACE FIRE
BURNED AREA REPORT**

Recommendations

1. Authorize Water Resources Division (WRD) to send a copy of this report to Flood Maintenance Division (FMD) as confirmation of the potential sediment impacts to Sycamore Canyon Channel's storm drain. It is FMD's established postfire routine to monitor its drains in postfire areas for sediment inflow during storms and clean out as necessary. The monitoring will likely continue for the next four to five years until the watershed has significantly recovered.
2. Authorize WRD to send a copy of this report to the City of Glendale Public Works to inform them of the potential impacts to its facilities and residents.

Background

Fire Name: Wilson Terrace Fire
Date of Fire: May 3, 2013
Burned Area: 36 acres
Location: Between Sycamore Canyon and Glenoaks Canyon in the City of Glendale. Refer to Thomas Guide Page 564-J3. The burned area boundary is delineated in Attachment A.

Attachments

- A. Burned Area Map
- B. Description of Burn and Potential Sediment Impact
- C. Mudflow Phase Map
- D. List of Residents Offered Mudflow Protection Advice

Summary of Potential Sediment Impact

The Wilson Terrace Fire, which started on May 3, 2013, burned approximately 36 acres located within the City of Glendale. The burned area, which is located entirely in Debris Producing Area (DPA) 2, is subdivided into a total of 11 subarea watersheds (see Attachment A). During storms, debris laden flows from the burned areas may exceed

Christopher Stone
October 3, 2013
Page 2

the capacities of drainage facilities adjacent to Chevy Chase Drive, Chevy Oaks Circle, and Solway Street. The drainage facilities are maintained by FMD. Drainage facilities adjacent to Hollister Terrace and Scholl Drive, which are maintained by the City of Glendale, may also be at risk of having their capacities exceeded. This may result in flooding and sediment deposition on roadways for the next four to five years until the watershed has recovered. These potentially impacted roadways are maintained by the City of Glendale.

Details of potential sediment impacts are provided in Attachment B.

Mudflow Phase Map

The Phase Map for the Wilson Terrace Fire area is found in Attachment C. The Phase Map (Phases 1, 2, and 3) identifies the critical locations of potential mudflow hazards below the burned area for varying storm magnitudes. These maps are prepared when potential mudflows pose a severe threat to residences, roadways, flood control facilities, or other public infrastructure. WRD will post Debris and Mudflow Potential Forecasts on the Internet at the County of Los Angeles Department of Public Works' website for each forecasted significant storm event throughout the storm season. The approved Burned Area Report, Burned Area Map, Phase Map, and all future mudflow forecasts will be posted on the Internet at <http://www.dpw.lacounty.gov/wrd/fire>.

Coordination

WRD staff contacted and/or provided mudflow engineering advice to 21 residences that may be impacted by potential flooding/debris flows during storms. WRD contacted Glendale City Engineer Roubik Golanian prior to offering advice to constituents. Six residences were given detailed postburn advice forms and two residences were provided verbal advice. Residents at 13 properties were not at home; mudflow information packets were left at their doors. The list of these residences and their addresses are found in Attachment D.

If you have any questions regarding this report, please contact Kenneth Rickard at Extension 6154.

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cc: Flood Maintenance (Vander Vis)

ATTACHMENT A

BURNED AREA MAP

ATTACHMENT B

DESCRIPTION OF BURN AND POTENTIAL SEDIMENT IMPACTS

ATTACHMENT B

Wilson Terrace Fire Description of Burn and Potential Sediment Impact

Fire Name: Wilson Terrace Fire
Date of Fire: May 3, 2013
Burned Area: Approximately 36 Acres
Location: The fire occurred on the ridges and canyons between Sycamore Canyon and Glenoaks Canyon entirely within the City of Glendale, the burned area boundary is delineated in Attachment A. (Thomas Guide Page 564-J3).

Vegetation Type Before Burn

Vegetation in and around the watershed subareas prior to the fire consisted of grasses, coastal sage scrub, and oak vegetation.

Improvements Damaged

The Glendale Fire Department reports no structures were damaged or destroyed.

Fire History

The 1964 Chevy Chase Fire is the most recent significant fire in the same area. The 2,300 acre Chevy Chase Fire burned area overlapped 98 percent of the Wilson Terrace Fire burned area. The 1975 Solway Fire and 1979 Chevy Oaks Fire are other significant fires, which burned in the same area.

Potential Sediment Impact Below/Within the Burned Area

On May 8, 2013, Water Resources Division (WRD) staff conducted a field reconnaissance of the burned area to determine if residential properties and/or Public Works owned/maintained facilities could potentially be impacted by the flooding/debris flows during significant storm events. The Wilson Terrace Fire burned approximately 36 acres entirely within the City of Glendale. The burned area boundary (Attachment A) is divided into eleven subarea watersheds across one Debris Producing Area (DPA Zone 2). During moderate to severe storms, mud and debris may flow from the burned areas and possibly cause flooding and sediment deposition on Chevy Chase Boulevard, Chevy Oaks Circle, Solway Street, Hollister Terrace, and Scholl Drive (all maintained by the City of Glendale).

Our field observations revealed that Sycamore Canyon Channel, a facility maintained by Flood Maintenance Division (FMD), could be impacted by storm-produced debris flows from the burned watershed.

Subarea 1

Subarea 1 consists of a total of 6 acres and was 49 percent burned creating an adjusted debris potential of 1,000 cubic yards (cy). During moderate to severe storms, mud and debris from the burned canyon may flow into the yards and impact the homes of six residences along Solway Street. Mudflow may eventually find its way onto Solway Street causing flooding and sediment deposition potentially blocking access to residents. It is recommended that residents along Solway Street be advised by the City to not park vehicles on the roadway during storms. Mud and debris may flow into Sycamore Canyon Channel storm drain. Large amounts of mud and debris may cause the catch basin inlet to plug. It is FMD's established postfire routine to monitor its drains in postfire areas for sediment inflow during storms and clean out as necessary.

Subarea 2

Subarea 2 consists of a total of 10.2 acres and was 98 percent burned creating an adjusted debris potential of 2,300 cy. At the mouth of the burned canyon is a privately owned property containing a building, swale and parking area. During moderate to severe storms, mud and debris from the burned area may flow through the concrete swale adjacent to the building and deposit sediment in the main parking area of the facility. Mud may flow toward the two privately maintained storm drain inlets in the parking area and into Sycamore Canyon Channel storm drain. Large quantities of mud and debris may cause the inlets to plug. It is FMD's established postfire routine to monitor its drains in postfire areas for sediment inflow during storms and clean out as necessary. WRD provided advice to the property owner on measures to mitigate potential impacts to the property and ensure continued drainage through the private inlets.

Subarea 3

Subarea 3 consists of a total of one half acre and was 97 percent burned creating an adjusted debris potential of 140 cy. During moderate to severe storms, mud from the burned hillside may flow down toward the rear of the non-residential structure causing flooding and sediment deposition. WRD provided advice to the owner on measures to mitigate potential impacts to the structure.

Subarea 4

Subarea 4 consists of a total of 4.1 acres and was 95 percent burned creating an adjusted debris potential of 900 cy. During moderate to severe storms, mud and debris from the burned canyon may flow down toward an unimproved lot where sediments can spread out and settle on the wide, flat area. The children's play area adjacent to the unimproved lot may be impacted by flooding and sediment deposition. WRD provided advice to the owner on measures to mitigate potential impacts to the property.

Mudflows that reach the far end of the lot will flow into the catch basin inlet for Sycamore Canyon Channel. Large quantities of mud and debris may cause the catch basin inlet to plug. It is FMD's established postfire routine to monitor its drains in postfire areas for sediment inflow during storms and clean out as necessary.

Subarea 5

Subarea 5 consists of a total of 1.5 acres and was 50 percent burned creating an adjusted debris potential of 260 cy. During moderate to severe storms, mud and debris from the burned hillside may flow onto the driveway of a residential property on Chevy Oaks Circle and block access to the property. It is anticipated that mud and debris will continue to flow down Chevy Oaks Circle to the street's intersection with Chevy Chase Drive causing flooding and sediment deposition.

Subarea 6

Subarea 6 consists of a total of 5.8 acres and was 87 percent burned creating an adjusted debris potential of 1,220 cy. During moderate to severe storms, mud and debris may flow toward the residence at the mouth of the canyon and fill the swimming pool with mud. It is anticipated that additional mudflow quantities will accumulate against the rear of the residence until the flows can work their way around the structure. Mudflows will then continue to flow down Chevy Oaks Circle and join with debris laden flows from Subarea 5. WRD provided advice to the owner on measures to mitigate potential impacts to the structure.

Subarea 7

Subarea 7 consists of a total of 3.4 acres and was 4 percent burned creating an adjusted debris potential of 400 cy. The subarea is only 4 percent burned and the impact of the fire on watershed erosion is negligible.

Subarea 8

Subarea 8 consists of a total of 3.4 acres and was 13 percent burned creating an adjusted debris potential of 440 cy. During moderate to severe storms, sediments generated from the freshly burned area are anticipated to get caught up in the dense vegetation of the subarea below the burned area boundary and have little impact on the overall sediment production.

Subarea 9

Subarea 9 consists of a total of 27.5 acres and was 40 percent burned creating an adjusted debris potential of 4,360 cy. During moderate to severe storms, mud and debris laden flows may deposit sediment on the relatively flat vegetated terrain within the canyon and on the paved private driveway in the lower part of the subarea. Residences on either side of the driveway may be impacted by mudflows. It is

anticipated that mudflows may be further conveyed via the private driveway and spill out and settle onto the Hollister Terrace/Scholl Drive intersection may cause flooding and impede traffic.

Subarea 10

Subarea 10 consists of a total of 3.8 acres and was 19 percent burned creating an adjusted debris potential of 500 cy. During moderate to severe storms, mud and debris from the burned subarea may flow into the terraced yard of the residence at the mouth of the canyon. Sediment deposition may occur on the terraces and in the swimming pool. Additional mudflow quantities may accumulate until the flows work their way around the residence. WRD provided advice to the owner on measures to mitigate potential impacts to the swimming pool and structure. Mud and debris will then continue to flow down the property driveway where the sediment may spread onto the Hollister Terrace/Scholl Drive intersection, where it may cause flooding and impede traffic.

Subarea 11

Subarea 11 consists of a total of 4.6 acres and was 7 percent burned creating an adjusted debris potential of 560 cy. The subarea is only 7 percent burned and the impact of the fire on watershed erosion is negligible.

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ATTACHMENT C

MUDFLOW PHASE MAP

ATTACHMENT D

**LIST OF RESIDENTS OFFERED
MUDFLOW ENGINEERING ADVICE**