



COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

GAIL FARBER, Director

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November 10, 2009

IN REPLY PLEASE

REFER TO FILE: PR-0
A3168-5

TO: Each Supervisor

FROM: Gail Farber *Gail Farber*
Director of Public Works

**BOARD MOTIONS OF SEPTEMBER 8 AND 15, 2009
AGENDA ITEMS 61-A AND 54-D
AUGUST/SEPTEMBER 2009 WILDFIRES
FIFTH DISASTER RECOVERY REPORT – NOVEMBER 10, 2009**

The August/September series of wildfires resulted in significant damage to County roads and infrastructure in the Angeles National Forest. On September 8, 2009, your Board made a finding that an emergency situation existed that required immediate measures be undertaken to repair the damage, restore access to homes and businesses, and prevent and reduce potential flooding and damage due to mudflows. Your Board authorized the Director of Public Works to negotiate and execute emergency construction contracts, amend existing service contracts, and enter into new short-term contracts. In accordance with the Public Contract Code, Government Code, and County Code, your Board must review the necessity of these emergency contracting procedures every 14 days. As part of this requirement, attached is the fifth Disaster Recovery Report.

In view of ongoing disaster recovery activities, it is recommended that your Board determine: (1) there is still a need to continue the emergency action and (2) the Executive Office continue to place this item on the agenda for Board review every 14 days in accordance with Section 22050 of the Public Contract Code, the California Emergency Services Act (Government Code, Section 8550 et seq.), and Section 2.68.120 of the Los Angeles County Code.

BS:al

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Attach.

cc: Chief Administrative Office (William T Fujioka, Lari Sheehan)
Executive Office

**DEPARTMENT OF PUBLIC WORKS
RECOVERY REPORT FOR THE AUGUST/SEPTEMBER 2009 WILDFIRES
NOVEMBER 10, 2009**

Total Damage Estimates

Transportation		\$ 8,280,000
Tree Removal	935,000	
Guardrail Repair and Replacement	2,730,000	
Sign Replacement	161,000	
Striping Restoration	46,000	
Road Shoulder and Culvert Debris Removal	4,348,000	
Miscellaneous (Catch Basin, Headwall Repairs)	60,000	
Public Works Buildings		1,505,000
Assistant Dam Operator House (Big Tujunga Dam)	320,000	
Office and Crew Quarters at RD 557A Subyard	1,185,000	
Communication Systems		195,000
San Gabriel Dam	15,000	
Pacoima Dam	30,000	
Big Tujunga Dam	150,000	
Flood Control		365,000
Repair Electrical System at Morris Dam	100,000	
Repair Electrical System at Big Tujunga Dam	250,000	
Repair/Replace Rain Gauges and Repeaters	15,000	
Total		\$10,345,000

**Roadway Culvert Upgrades and Debris Basin Cleanouts/Modifications
Necessitated by the Fires**

Transportation		\$ 2,406,000
Road Culvert Inlet Upgrades	1,977,000	
Erosion Barriers (K-rails - Unincorporated Area)	429,000	
Flood Control		7,080,000
Debris Basin Cleanout	1,800,000	
Debris Basin Modification and Expansion	5,000,000	
Erosion Barriers (K-rails - City of La Canada)	280,000	
Total		\$ 9,486,000
Grand Total		\$ 19,831,000

**DEPARTMENT OF PUBLIC WORKS
RECOVERY REPORT FOR THE AUGUST/SEPTEMBER 2009 WILDFIRES
NOVEMBER 10, 2009**

Public Works Expenditures as of November 10, 2009

Total Expenditures (including overtime)	\$ 4,318,793
Total Encumbrances	\$ 3,332,520
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Total Expenditures and Encumbrances	\$ 7,651,313
Total Overtime ¹	\$ 513,242

Notes:

- ¹ Overtime represents the amount paid to the employee (straight time + premium time). It does not match the posted amount in eCAPs and what is posted to the general ledger. It represents all overtime paid through October 31, 2009.

COORDINATED AGENCY RECOVERY EFFORT (CARE)

The CARE team has grown to include Public Works, US Forest Service (USFS), National Incident Management Organization, U.S. Geological Survey (USGS), Natural Resources Conservation Service, Caltrans, the County of Los Angeles Fire and Sheriff's Departments.

CARE team members have now conducted a total of 23 council/community meetings with two additional council/community meetings planned for December. The CARE team is also working to organize a community meeting in the Palos Verdes area to educate residents about storm season preparations and debris flow risks following the Palos Verdes Fire. The CARE team also assisted in the coordination of a special meeting between Public Works, USFS, and residents of Stoneyvale and Vogel Flats to discuss rebuilding and permitting procedures. A tour of debris basins for Board staff and USGS representatives was held on Thursday, October 15, 2009.

The CARE team continues to handle media inquiries about debris flow preparations, particularly in the wake of the recent release of the USGS debris flow assessment. The CARE team also coordinated the announcement of the October 12, 2009, road closures and the subsequent October 13, 2009, reopening, and handled subsequent media inquiries. A dedicated CARE website has been set up at www.dpwcare.org to provide updated information about mudflow forecasts and road closures as well as links to other fire recovery and storm preparation information. The website has so far received more than 3,200 visitors and continues to receive wide exposure through the media.

**DEPARTMENT OF PUBLIC WORKS
RECOVERY REPORT FOR THE AUGUST/SEPTEMBER 2009 WILDFIRES
NOVEMBER 10, 2009**

The CARE team is also distributing copies of the Homeowner's Guide for Flood Debris and Erosion Control at community meetings and has made an electronic version of the guide available on the website. Water Resources Division (WRD) staff has provided engineering advice to approximately 475 residents to date and continues to receive calls via the toll-free telephone number. The CARE team is also scripting public service announcements (PSAs) for broadcast on city cable TV channels, including the Danger Debris Flow video. The PSAs will be videotaped by November 11, 2009.

The CARE team members continue to field questions about the reopening of Angeles Forest Highway and Big Tujunga Canyon Road.

The CARE team is also working with the National Weather Service (NWS) and USGS on the deployment of the SMART-R mobile radar unit to monitor rainfall over the burn area and send real-time reports to NWS for use in warning decisions. The unit is expected to be deployed to Burbank Airport. The CARE team is currently working with the University of Oklahoma to extend the unit's deployment to April 29, 2010. Once deployed, the CARE team will organize a media event updating the storm season preparation and announcing the unit's arrival.

LOS ANGELES AREA RESPONSE GROUP/INCIDENT MANAGEMENT TEAM

The USFS initiated a meeting between various governmental agencies in an effort to establish an ongoing unified effort to plan for and prepare for the effects of recent wildfires. This effort has lead to the formation of an Incident Management Team, spearheaded by the County of Los Angeles Fire Department in collaboration with the County of Los Angeles Office of Emergency Management; Public Works; municipal cooperators; and other Federal, State, and local partners, including the USFS, National Guard, California Emergency Management Agency, Caltrans, Army Corp of Engineers, National Oceanic and Atmospheric Administration, and USGS. Meetings are conducted weekly at Public Works.

At the meeting held October 14, 2009, subworking groups were created according to an agency's responsibilities, i.e. public information, law, logistics, operations, and finance. It was determined that all of the subworking groups need time to develop products to bring back to the main group for review and integration at the next meeting.

ROAD REOPENING-TRAFFIC COMMITTEE

Traffic and Lighting Division (T&L) has been meeting on a weekly basis with the USFS and Caltrans to discuss the reopening of roads. The USFS wants to consider some

**DEPARTMENT OF PUBLIC WORKS
RECOVERY REPORT FOR THE AUGUST/SEPTEMBER 2009 WILDFIRES
NOVEMBER 10, 2009**

type of permit in order to distinguish who has a reason for being on the roads and who does not.

The Station Fire caused damage to guardrail, signage, and pavement markings on Angeles Crest Highway (State Route 2), which is under the maintenance purview of Caltrans. We have remained in close contact with Caltrans during the recovery phase of this disaster to ensure that steady progress is made towards reopening Angeles Forest Highway to commuter traffic in tandem with the reopening of Angeles Crest Highway. A target of this reopening to commuter traffic is mid-November 2009. However, we, along with Caltrans, have been working with the USFS to ensure that the highway network in the burn area be closed to all traffic when the potential for mud and debris flow exists.

The recent rainfall caused a minor hillside slip-out on Angeles Crest Highway that required the placement of a retaining structure by Caltrans. Caltrans has completed this repair work. Since each of these routes remains an active construction zone during the storm season due to utility and hazard mitigation work, such as culvert upgrades, we will continue to meet with Caltrans to determine the advisability of keeping the routes closed to commuter traffic indefinitely.

TRANSPORTATION

Palos Verdes Fire

No impacts reported.

Morris Fire

Glendora Mountain Road and East Fork Road

Closed on August 25, 2009. The roads were reopened on October 1, 2009. Wooden covers for rural catch basins have been damaged. Road Maintenance Division (RMD) estimates the cost to replace the catch basin covers is \$10,000. Operational Services Division (OSD) reported that 20 signs related to flood control facilities have been damaged/destroyed. OSD estimates the cost to replace the signs at \$2,500.

Station Fire

Angeles Forest Highway – Mt. Emma Road/Angeles Crest Highway

Closed on August 26, 2009. The road is open only to local residents, emergency personnel, and contractors. Through traffic is prohibited, with access allowed only from the north or via Big Tujunga Canyon Road through Sunland. Angeles Forest Highway is

**DEPARTMENT OF PUBLIC WORKS
RECOVERY REPORT FOR THE AUGUST/SEPTEMBER 2009 WILDFIRES
NOVEMBER 10, 2009**

barricaded at Angeles Crest Highway. This road has a reported Average Daily Traffic (ADT) volume of 4,544 vehicles. It is a commuter route primarily used by residents of the Antelope Valley.

Design Division (DES) estimates the cost of guardrail repairs at \$1,050,000. OSD reports that approximately 400 roadway signs have been destroyed, and the cost to replace the signs is estimated to be \$80,000. OSD completed the sign replacement work on September 24, 2009. OSD has also restored the striping and raised pavement markers at an estimated cost of \$20,000. RMD completed the removal of approximately 600 burned trees. RMD has reviewed 172 existing culverts and has determined that 50 locations need trash rack or standpipe to mitigate the effects of mud/debris flow during storms. Five locations on Angeles Forest Highway will be done by force account and the rest will be by contract. We received the USFS approval letter for this work on October 30, 2009. Plans have been completed. Construction is scheduled to begin in November 2009, and scheduled to be completed by January 2010.

Plans for replacement of the guardrail were completed on September 11, 2009. The construction contract was awarded on September 24, 2009. Construction is estimated to take six weeks and be completed by November 16, 2009. Pipe gates on Angeles Forest Highway just north of Angeles Crest Highway and just north of Aliso Canyon Road will be constructed by the contractor through a change order to aid in closing this road to traffic when needed during storms/disasters.

DES has completed the contract plans to replace the fire-damaged bridge railings on the Mill Creek bridge at Angeles Forest Highway. The work will be added as a change order to the Angeles Forest Highway guardrail replacement project. The cost for this work is estimated to be about \$80,000. In the interim, DES requested MD 5 to install temporary K-rails and crash cushions at this location. MD 5 has installed the temporary K-rails and crash cushions at an estimated cost of \$20,000.

RMD recommends installing by force account approximately 6,730 linear feet of K-rails at various locations along the shoulders of Angeles Forest Highway to keep mud and debris off the roadway during storms. The cost to purchase and install these K-rails is estimated at \$276,000. The K-rail installation is scheduled to be completed by November 23, 2009.

Public Works will coordinate with Caltrans to develop a plan and schedule for reopening Angeles Forest Highway in conjunction with Angeles Crest Highway. Caltrans reports that Angeles Crest Highway will remain closed for at least the next several weeks.

**DEPARTMENT OF PUBLIC WORKS
RECOVERY REPORT FOR THE AUGUST/SEPTEMBER 2009 WILDFIRES
NOVEMBER 10, 2009**

Big Tujunga Canyon Road – L.A. City Boundary/Angeles Forest Highway

Closed on August 28, 2009. The road is only open to local residents, emergency personnel, and contractors. Through traffic is prohibited. This road has a reported ADT of 825 vehicles.

DES estimates the cost of guardrail repairs at \$560,000. OSD completed the replacement of 200 roadway signs effective September 24, 2009, at an estimated cost of \$40,000. OSD has also restored the striping and raised pavement markers at an estimated cost of \$10,000. RMD completed the removal of approximately 160 burned trees. RMD has reviewed 60 existing culverts and has determined 35 locations that need trash rack or standpipe to mitigate the effects of mud/debris flow during storms. We received the USFS approval letter for this work on October 30, 2009. Plans have been completed. Construction is scheduled to begin in November 2009 and scheduled to be completed by January 2010.

RMD recommends installing by force account approximately 2,160 linear feet of K-rails at various locations along the shoulders of Big Tujunga Canyon Road to keep mud and debris off the roadway during storms. The cost to purchase and install these K-rails is estimated at \$89,000. The K-rail installation was completed on November 2, 2009.

Plans for replacement of the guardrail were completed on September 16, 2009. The construction contract was awarded on September 28, 2009. Construction is estimated to take four weeks and be completed by November 5, 2009. Pipe gates on Big Tujunga Canyon Road just east of Vogel Flats Road and just north of Angeles Forest Highway will be constructed by the contractor through a change order to aid in closing this road to traffic when needed during storms/disasters.

Upper Big Tujunga Canyon Road – Angeles Forest Highway/Angeles Crest Highway

Closed on August 28, 2009. The road is only open to local residents, emergency personnel, and contractors. Through traffic is prohibited. Access is available via Angeles Forest Highway, with a hard closure at Angeles Crest Highway. This road has a reported ADT of 176 vehicles.

DES estimates the cost of guardrail repairs at \$1,120,000. OSD has replaced approximately 100 roadway signs effective September 24, 2009, at an estimated cost of \$21,000. OSD completed the sign replacement work on September 24, 2009. OSD has also restored the striping and raised pavement markers at an estimated cost of \$9,000. RMD completed the removal of approximately 400 burned trees. RMD has reviewed 84 existing culverts and has determined that 36 locations need trash rack or standpipe to mitigate the effects of mud/debris flow during storms. We received the

**DEPARTMENT OF PUBLIC WORKS
RECOVERY REPORT FOR THE AUGUST/SEPTEMBER 2009 WILDFIRES
NOVEMBER 10, 2009**

USFS approval letter for this work on October 30, 2009. Plans have been completed. Construction is scheduled to begin in November 2009 and scheduled to be completed by January 2010.

RMD recommends installing by force account approximately 1,070 linear feet of K-rails at various locations along the shoulders of Upper Big Tujunga Canyon Road to keep mud and debris off the roadway during storms. The cost to purchase and install these K-rails is estimated at \$44,000. The K-rail installation is scheduled to be completed by November 23, 2009.

Plans for replacement of the guardrail were completed on September 21, 2009. The construction contract was awarded on October 1, 2009. Construction is estimated to take 6 weeks and be completed by November 24, 2009. Pipe gates on Upper Big Tujunga Canyon Road just west of Angeles Crest Highway and just east of Angeles Forest Highway will be constructed by the contractor through a change order to aid in closing this road to traffic when needed during storms/disasters.

Aliso Canyon Road – Angeles Forest Highway/Ave Y-8

Closed on August 30, 2009. Reopened on September 3, 2009. DES and RMD estimate that guardrail repairs at bridge approaches for Bridge No. 3797 will cost \$49,000. This work will be included in the guardrail contract for Angeles Forest Highway. RMD will need to remove three burned trees pending USFS approval. OSD has replaced the approximately 20 roadway signs that were destroyed by the fires at an estimated cost of \$5,000. OSD has also restored the striping and raised pavement markers at an estimated cost of \$3,000.

Mt. Emma Road – 47th Street East/Angeles Forest Highway

Closed on August 30, 2009. Reopened on September 3, 2009.

Little Tujunga Canyon Road – Gold Creek Road/Sand Canyon Road

Closed on August 29, 2009. Reopened on September 6, 2009. RMD conducted a detailed survey of the guardrails and found no fire-damaged guardrails. Upon field review, OSD reports no damage to the roadway signs and striping. RMD found no trees or roadway drainage structures impacted by the fire.

Sand Canyon Road

Closed on August 29, 2009. Reopened on September 9, 2009. OSD reports no damage to the roadway signs and striping. RMD found no trees or roadway drainage structures impacted by the fire.

**DEPARTMENT OF PUBLIC WORKS
RECOVERY REPORT FOR THE AUGUST/SEPTEMBER 2009 WILDFIRES
NOVEMBER 10, 2009**

Mt. Wilson Red Box Road

Closed on August 29, 2009. The road was reopened by emergency personnel on September 28, 2009. DES conducted a detailed survey of the guardrails and found no fire-damaged guardrails. OSD reports no damage to the roadway signs. OSD has restored the striping at an estimated cost of \$4,000. RMD completed the removal of approximately 23 burned trees. RMD has assessed roadway drainage structures and recommended trash rack/standpipes at 8 locations. This work will be done by County forces.

Other

Needed drainage inlet upgrades, such as trash racks and stand pipes, have been identified by RMD along Angeles Forest Highway, Big Tujunga Canyon Road, Upper Big Tujunga Canyon Road, and Mt. Wilson Red Box Road to protect these roads from storm flows. The work will be divided into three contracts, allowing for up to three contractors to be working at the same time. The estimate to install these improvements is \$1,411,900 of which \$211,400 will be done by force account and \$1,200,500 by contract. We received the USFS approval letter for this work on October 30, 2009. Plans have been completed. Construction is scheduled to begin in November 2009, and scheduled to be completed by January 2010.

The removal of about 1,200 fire damaged trees along Angeles Forest Highway, Big Tujunga Canyon Road, Upper Big Tujunga Canyon Road, Mt. Wilson Red Box Road, and Aliso Canyon Road is required. This work was done by force account and emergency contract at an estimated cost of \$839,000. Approximately 1,200 burned trees have been removed by both as-needed contractors and County forces. The tree removals were completed on October 4, 2009. RMD estimates approximately 1,000 trees/shrubs need to be removed within the culvert inlet areas, which will be done by force account at an estimated cost of \$325,000. Approximately 220 trees/shrubs have been removed to date. This work is scheduled to be completed by December 19, 2009.

RMD reports that approximately 340 culvert markers were burned and were replaced at an estimated cost of \$12,000. This work was completed on November 6, 2009.

The total number of raised reflective markers installed to date is 4,300.

PUBLIC WORKS BUILDING DAMAGE

Palos Verdes Fire

No impacts reported.

**DEPARTMENT OF PUBLIC WORKS
RECOVERY REPORT FOR THE AUGUST/SEPTEMBER 2009 WILDFIRES
NOVEMBER 10, 2009**

Morris Fire

No impacts reported.

Station Fire

The Assistant Dam Operator's residence at Big Tujunga Dam was destroyed in the Station Fire. Project Management Division II (PMD II), County Disaster Assistant Team, and the Office of Emergency Services inspected the house at Big Tujunga Dam on October 10, 2009. PMD II has informed us that the demolition and removal of debris is scheduled to be completed by November 20, 2009. FMD estimates the demolition and cost to rebuild will be \$320,000.

The office and crew quarters (1800 sf) at the RD 557A yard at Mill Creek were destroyed in the Station Fire. Architectural Engineering Division (AED) estimates the demolition and cost to rebuild will be \$1,185,000.

OTHER COUNTY DEPARTMENTS BUILDING DAMAGE

No impacts reported.

PRIVATE PROPERTY DAMAGE

Palos Verdes Fire

Three structures in the City of Rolling Hills suffered eave/roof damage. Building and Safety (B&S) is working with the City to assist residents with erosion control advice and with building permits for any necessary fire damage repairs.

Morris Fire

No impacts reported.

**DEPARTMENT OF PUBLIC WORKS
RECOVERY REPORT FOR THE AUGUST/SEPTEMBER 2009 WILDFIRES
NOVEMBER 10, 2009**

Station Fire

As of September 10, B&S staff has inspected 67 properties with destroyed or damaged structures as reflected in the following table:

OCCUPANCY	DESTROYED (100%)	DAMAGED (<100%)
Dwellings	32	4
Cabins	26	1
Detached Garage	23	3
Accessory (RES)	19	8
Commercial	1	2
Other	8	2
Total	109	20

The number of affected properties/structures may grow as new locations are discovered by the Fire Department and/or reported by the public. Damage estimate is not available at this time.

B&S is currently working with property owners to facilitate the proper demolition of the destroyed structures and the removal of debris. Property owners have been advised to (1) contact their insurance companies prior to cleanup, (2) verify that utilities have been cleared for safety by the utility companies (gas, electrical, and water), and (3) use a licensed contractor to perform the cleanup.

A demolition permit must be obtained from B&S. A 10-day notification to South Coast Air Quality Management District (SCAQMD) is required prior to cleanup along with the filing of a construction debris recycling plan with Environmental Programs Division (EPD). BFI will be providing large construction debris roll-off bins free of charge to residents in the Big Tujunga Canyon vicinity as part of the cleanup and recovery effort.

EPD is currently working with the Los Angeles and Lahontan Regional Water Quality Control Boards to authorize the acceptance of fire debris at (1) Sunshine Canyon, Puente Hills, and Chiquita Canyon Landfills, and (2) Antelope Valley and Lancaster Landfills, respectively. According to the Los Angeles Regional Water Quality Control Board staff, a formal authorization is anticipated to be issued this week. However, based on preliminary discussions with the Lahontan Regional Water Quality Control Board staff, a formal authorization will most likely not be immediately issued since it requires Water Board approval rather than staff approval.

**DEPARTMENT OF PUBLIC WORKS
RECOVERY REPORT FOR THE AUGUST/SEPTEMBER 2009 WILDFIRES
NOVEMBER 10, 2009**

Browning Ferris Industries and Waste Management Inc., will be working with community groups and town councils to provide donated dumpsters (and discounted dumpster services on a case-by-case basis) to affected property owners as part of the cleanup and recovery effort in the La Crescenta/Tujunga area and Antelope Valley.

Provided the Water Board authorizes the acceptance of fire debris, BFI and Waste Management will also provide discounted gate rates at Sunshine Canyon and Lancaster Landfills, respectively, for all self-hauled fire debris.

In addition, EPD, in coordination with the Fire Department, is currently planning a special household hazardous/electronic waste collection event near the unincorporated County area of Tujunga. The event date has not yet been scheduled.

In coordination with our B&S, EPD has waived all waste diversion requirements for debris from fire-damaged structures and removed the need for property owners to make an extra trip to Public Works' headquarters.

COMMUNICATION SYSTEMS

Palos Verdes Fire

No impacts reported.

Morris Fire

A communication line at the San Gabriel Dam facility was damaged as a result of the Morris Fire and has been repaired at a cost of approximately \$5,000.

Station Fire

Communication lines and poles at the Big Tujunga Dam facility were damaged. ITD will work with OSD to determine reconstruction options (e.g. poles versus underground) and provide estimated costs. ITD is unaware of communication damage to Pacoima Dam as a result of the Station Fire.

The Road Weather Information System (RWIS) at RD 557A (Mill Creek) is not operational. ISD is assessing the cost to repair the system.

ITD determined there is no communication damage to Cogswell Dam and Mt. Disappointment. Both sites are on generator power.

**DEPARTMENT OF PUBLIC WORKS
RECOVERY REPORT FOR THE AUGUST/SEPTEMBER 2009 WILDFIRES
NOVEMBER 10, 2009**

FLOOD CONTROL SYSTEM

Palos Verde Fire

No impacts reported. Mudflow Phase maps have been completed and are currently available through the Public Works and CARE websites.

Morris Fire

No impacts reported to flood control operation. Minor damages were sustained to phone line, power lines, and signage in the vicinity of Morris Dam. The cost to repair this damage is approximately \$100,000. Electricity has been restored to Morris Dam.

Post fire mudflow impacts to San Gabriel, Morris, and Cogswell Dams have been evaluated and recommendations were made for measures to prevent damage to facilities, maintain reliable dam operations, and provide dependable access on-site of these dams.

Station Fire

Post fire mudflow impacts to Big Tujunga Dam have been evaluated and recommendations were made for measures to prevent damage to facilities, maintain reliable dam operations, and provide dependable access on-site.

The clean-out of seven debris basins, namely Dunsmuir, Eagle, Gould, Mullaly, Pinelawn, Rowley, and Shields have been completed. The clean-out of Gould Upper Debris Basin will commence when access issues between the underlying property owner and the City of La Canada-Flintridge are resolved. This work provides additional capacity for the anticipated increased volume of debris in the coming storm season resulting from the fire. The cost of the debris removal is estimated to be \$1.8 million.

WRD and DES have evaluated the need to increase storage capacity at seven debris basins within the fire area, namely Big Briar, Mullally, Snover, Pickens, Starfall, Pinelawn, and Rowley. Scope of work and corresponding cost estimates have been developed for all with the exception of Rowley Debris Basin. The estimated cost for these temporary improvements is approximately \$650,000. Flood Maintenance Division (FMD) has completed the work at Starfall Debris Basin and will be installing the temporary capacity enhancements at the remaining five debris basins within the next four weeks. In addition, WRD is still investigating and evaluating locations that may require rail and timber structures or similar type of structures to minimize property damage. WRD is pursuing the permanent enlargements to six undersized debris basins

**DEPARTMENT OF PUBLIC WORKS
RECOVERY REPORT FOR THE AUGUST/SEPTEMBER 2009 WILDFIRES
NOVEMBER 10, 2009**

in burned watersheds of the Station Fire, namely Big Briar, Mullally, Snover, Pickens, Starfall, and Pinelawn. The concepts for all six have been developed. The development of design plans and specifications has been initiated. The goal is to have all of the construction contracts awarded by the end of April using the emergency contract authority. All construction work is anticipated to be completed by October 15, 2010. The cost for these basin improvements is estimated to be approximately \$5 million.

Public Works Engineering Advice Teams have provided advice to approximately 475 residences within the City of La Canada-Flintridge, City of Glendale, City of Los Angeles, and the unincorporated County areas of La Crescenta, Big Tujunga, and Acton. WRD expects to complete their efforts to provide engineering advice to residents of City of Los Angeles by November 17, 2009.

OSD completed their inspection of the power lines at Big Tujunga Dam and an initial recovery scoping meeting with FMD, WRD, and OSD occurred on September 23, 2009. Electrical upgrades may likely be constructed with the recovery process. WRD will be providing project updates with schedules and estimates. A contractor will be needed to perform the work to bring power to the dam and outlying facilities.

Upon further investigation only one ALERT rain gauge station and one repeater were damaged or destroyed at Chilao and Mt. Gleason, respectively. The estimated cost to repair and/or replace the equipment is \$15,000. The rain gauge has been replaced. The repeater is being procured and is expected to be installed by November 30, 2009.

WRD has entered into five funding agreements with the Natural Resources Conservation Service (NRCS) for the implementation of mudflow protective measures for residences along streets potentially impacted by mudflows as well as the installation of temporary capacity enhancements at four debris basins/inlets.

RMD is placing K-rail, sandbags, and crash barrels in La Canada-Flintridge and La Crescenta per approved agreements with NRCS. The installation of K-rail and associated crash barrels has been completed. Approximately 2,000 sandbags have been installed to date.

Mudflow phasing maps for the unincorporated County areas of La Crescenta, Tujunga, Acton, as well as the Cities of La Canada-Flintridge and Glendale have been completed and are currently available on the DPW and CARE websites.

**DEPARTMENT OF PUBLIC WORKS
RECOVERY REPORT FOR THE AUGUST/SEPTEMBER 2009 WILDFIRES
NOVEMBER 10, 2009**

FMD has constructed pipe and timber debris retaining walls at various locations in Dunsmuir Sediment Placement Site to keep the debris from going onto the residential streets.

WATERWORKS SYSTEMS

No impacts reported.

COUNTY SEWER SYSTEMS

No impacts reported.

COUNTY AIRPORTS

No impacts reported.

**County of Los Angeles Department of Public Works
AUGUST/SEPTEMBER 2009 WILDFIRES EVENTS
EMERGENCY CONSTRUCTION CONTRACTS**

ID	PROJECT NAME	DESCRIPTION/SCOPE OF WORK	ESTIMATED CONTRACT COST	CONSTRUCTION	
				ESTIMATED START DATE	ESTIMATED FINISH DATE
1	Station Fire - Angeles Forest Highway Guardrail Replacement	Guardrail Restoration.	\$ 600,000	October 2009	November 2009
2	Station Fire - Big Tujunga Canyon Road Guardrail Replacement	Guardrail Restoration.	\$ 400,000	October 2009	November 2009
3	Station Fire - Upper Big Tujunga Canyon Road Guardrail Replacement	Guardrail Restoration.	\$ 800,000	October 2009	November 2009
4	Angeles Forest Highway - Station Fire Culvert Improvement Project	Reconstruct damaged trash racks and standpipes in culvert inlet areas within MD 5.	\$ 360,500	November 2009	January 2010
5	Big Tujunga Canyon Road - Station Fire Culvert Improvement Project	Reconstruct damaged trash racks and standpipes in culvert inlet areas within MD 5.	\$ 312,900	November 2009	January 2010
6	Upper Big Tujunga Canyon Road - Station Fire Culvert Improvement Project	Reconstruct damaged trash racks and standpipes in culvert inlet areas within MD 5.	\$ 527,100	November 2009	January 2010
7	Tree Removal	Remove burned/dead trees within County roadways in MD 5.	\$ 550,000	September 2009	October 2009
8	Debris Basin Expansions	Provide additional capacity at the Big Briar, Mullaly, Snover, Pickens, Starfall, Pinelawn, and Rowley Debris Basins.	\$ 5,000,000	April 2010	October 2010
9	Mill Creek Office/Crew Room Reconstruction	Reconstruction of 1,800 square foot office and crew quarters at the RD 557A yard at Mill Creek.	\$ 1,185,000	July 2010	December 2010
10	Mill Creek Bridge - Bridge Rail and Approach Guardrail Replacement	Repair and replace fire damaged bridge railing and approach guardrails at the Mill Creek Bridge at Angeles Forest Highway.	\$ 80,000	November 2009	December 2009
TOTAL AUGUST/SEPTEMBER 2009 WILDFIRES EMERGENCY CONSTRUCTION CONTRACTS			\$ 9,815,500		