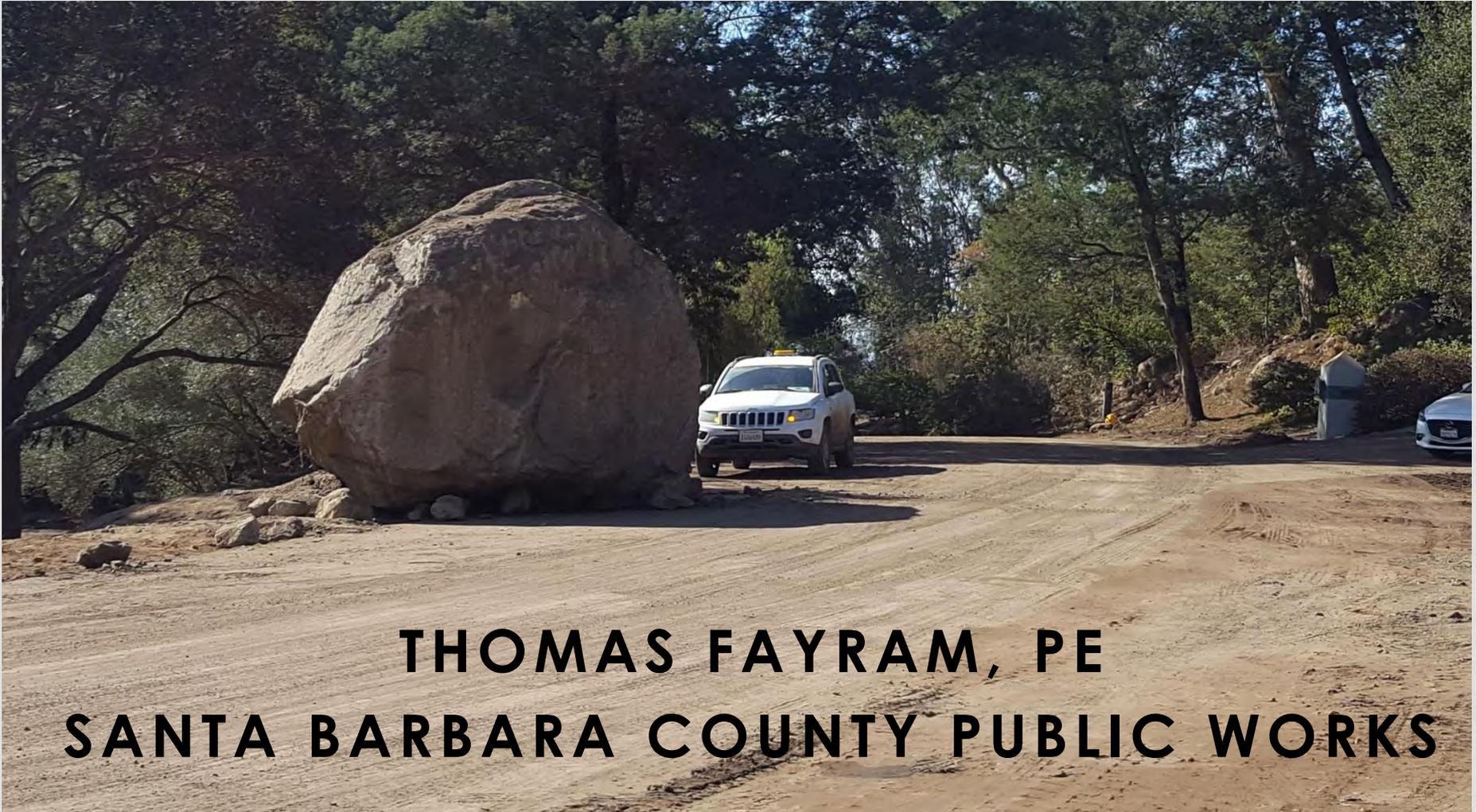


# THOMAS FIRE AND THE 1-9 DEBRIS FLOW DECEMBER 2017 – JANUARY 2018



**THOMAS FAYRAM, PE**  
**SANTA BARBARA COUNTY PUBLIC WORKS**

# THOMAS FIRE FOOTPRINT



Department of Public Works  
Water Resources Division  
County of Santa Barbara

## Legend

Fire Perimeter 12/26/2017  
10:00 A.M.

	Acreage	% of Burned Watershed
Rincon	7,558	83%
Steer	4,681	92%
Carpinteria	3,091	67%
Miller	355	37%
Franklin	521	80%
High School	177	24%
Santa Monica	2,004	82%
Arroyo Paredon	1,066	35%
Toro Canyon	1,086	47%
Picay	1,929	51%
San Ysidro	2,011	77%
Oak Creek	235	25%
Montecito	2,842	77%
Sycamore	292	30%
Mission	200	5%

## Basins

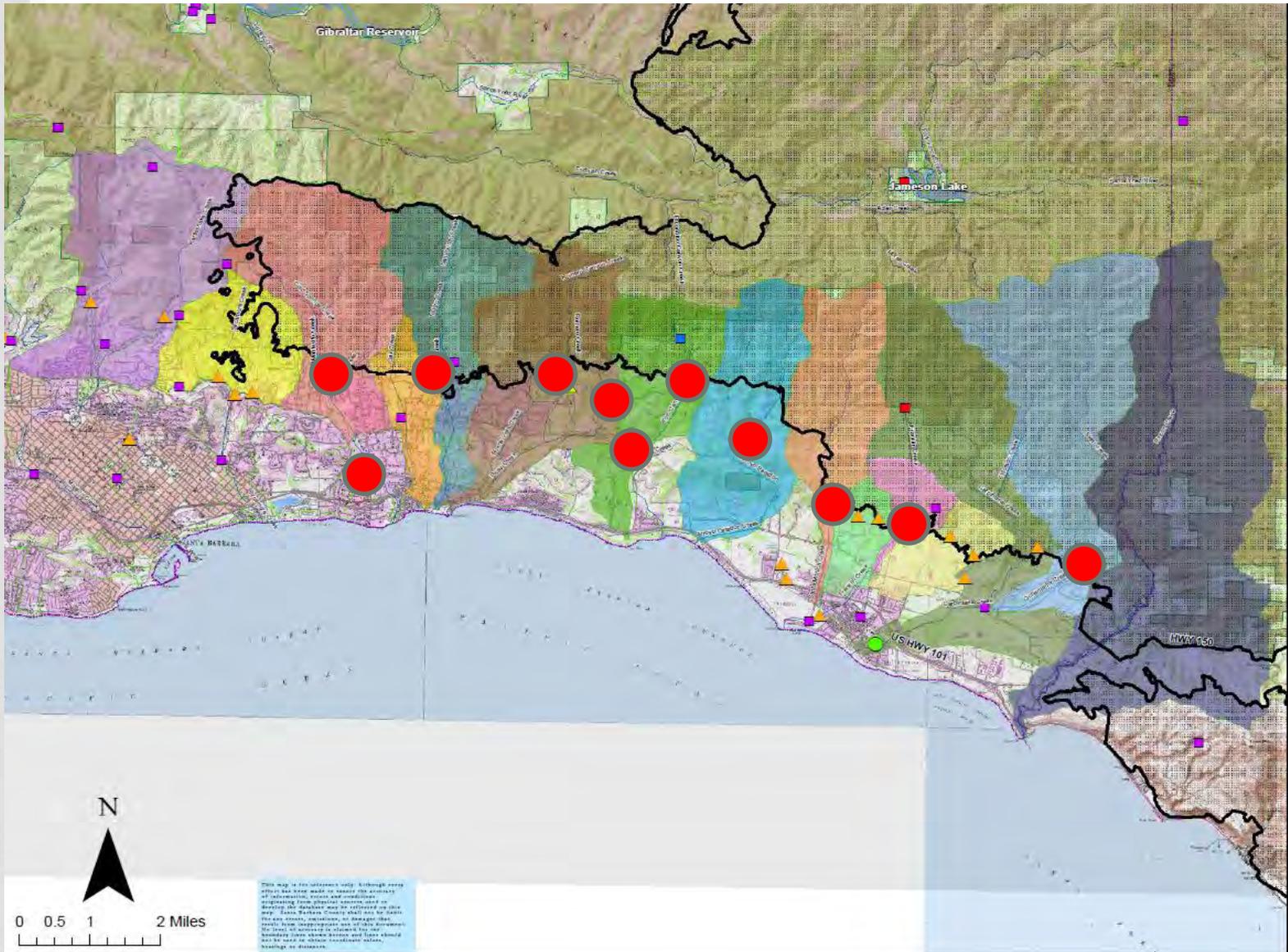
- Basin
- Basin Cleanout
- Basin Cleanout - completed
- Basin Inlet Cube Structure

## Hydrolic Station

- Hydrolic Station
- Hydrolic Station Repair
- Hydrolic Station Upgrade

## Channels

- Channel Debris Removal
- Reservoirs
- Los Padres National Forest
- County Boundary



This map is for informational use only. Although every effort has been made to ensure the accuracy of information, errors and omissions are inevitable. The County of Santa Barbara is not responsible for any damages that may be incurred as a result of using this map. Santa Barbara County shall not be liable for any costs, penalties, or damages that result from the use of this map. The County of Santa Barbara is not responsible for any damages that may be incurred as a result of using this map. Santa Barbara County shall not be liable for any costs, penalties, or damages that result from the use of this map.

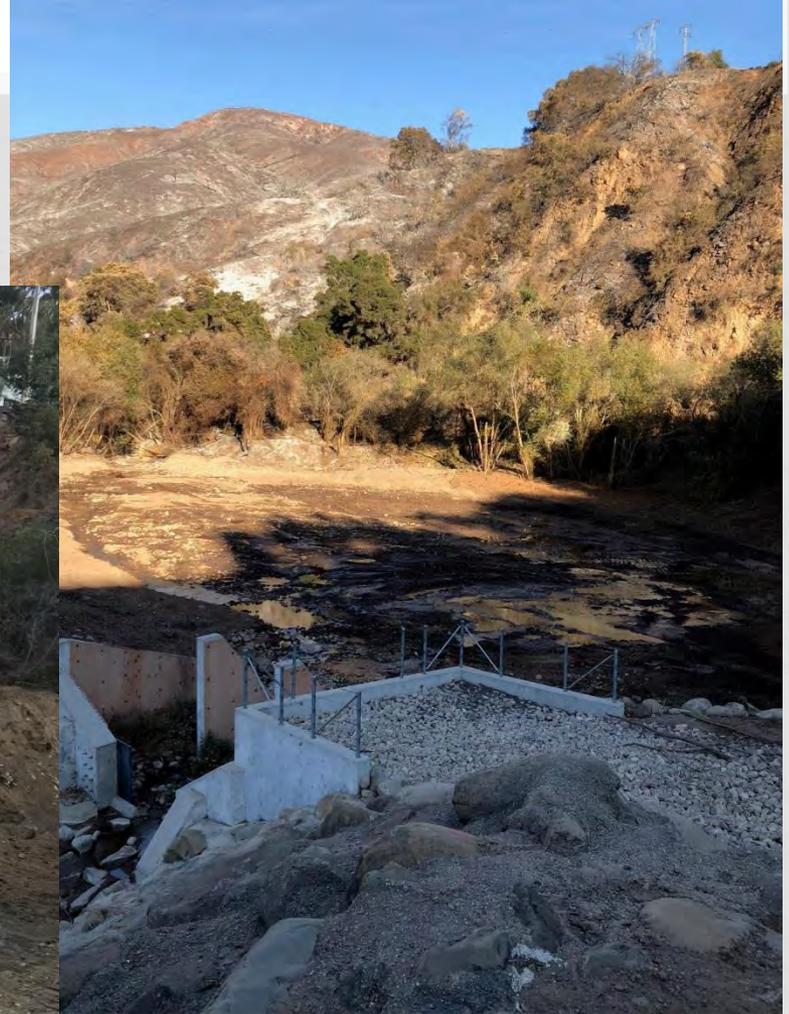
## Thomas Fire Protective Measures

Santa Barbara County, California

Prepared by the Water Resources Division 1/5/2018

# GOBERNADOR DEBRIS BASIN

Clearing  
December 2017



Post clearing  
December 2017



# BEFORE THE STORM (DEC 15 – JAN 5) RACE TO MAKE 11 BASINS “WHISTLE CLEAN”

- 11 Debris Basins cleared
- Work completed on Jan. 5, 2018



# DEBRIS MOVEMENT

- Upper creek reaches scoured clear
- Lower reaches enormous deposition



# CHANNELS OVERWHELMED



Creek

Meadow Wood Lane



# January 9, 2018 Storm Clean-up Progress Map

## Legend

### Basin Cleanout

- Complete
- In Progress
- ✓ Spillway Repair

### Bridge Clearing

- Complete
- In Progress

### Stream Clearing

- Work Done by USACE
- Complete
- In Progress
- To Be Done
- Thomas Fire



This map is for reference only. Although every effort has been made to ensure the accuracy of information, errors and conditions originating from physical sources used to develop the database may be reflected on this map. Santa Barbara County shall not be liable for any errors. No level of accuracy is claimed for the boundary lines shown hereon and lines should not be used to obtain coordinate values, bearings or distances.

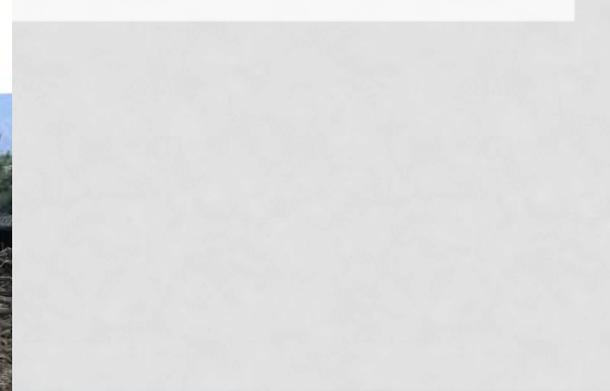
# COUNTY / CORPS CHANNEL CLEARING





**San Ysidro Creek Cleanout at US 101 – County Forces**

# POST "INITIAL CLEARING" - FINAL CLEARING



**Montecito Creek at Olive Mill**

# CHANNEL CLEARING

County / Corps

County Forces



# GOBERNADOR DEBRIS BASIN

Post Debris Flow

Post Corps Cleanout



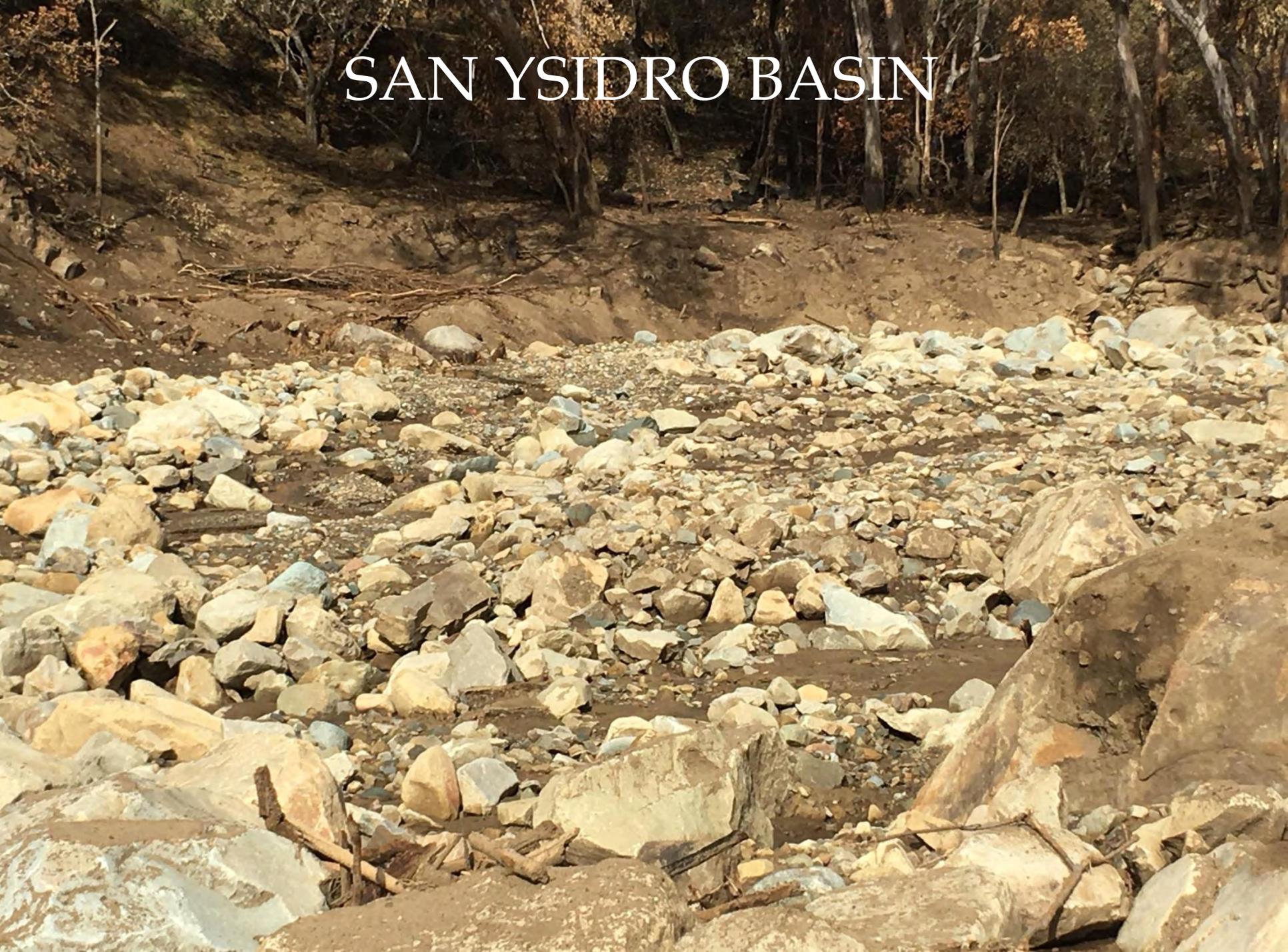
# COLD SPRINGS DEBRIS BASIN



# COLD SPRINGS DEBRIS BASIN



# SAN YSIDRO BASIN



# SAN YSIDRO CREEK DEBRIS BASIN



# DEBRIS BASINS OVERWHELMED SAN YSIDRO BASIN



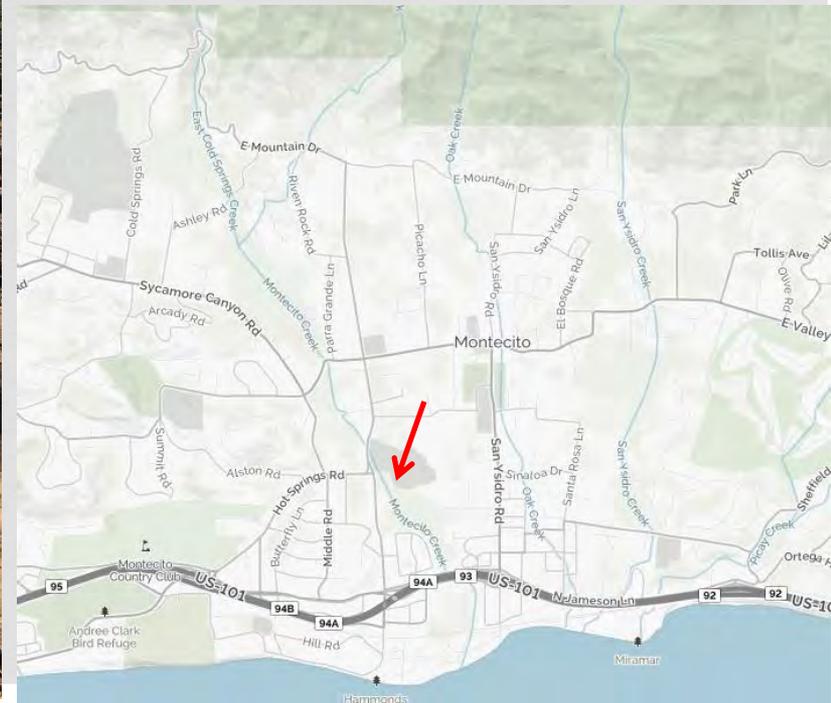
# MONTECITO CREEK DEBRIS BASIN





# MONTECITO CREEK DEBRIS BASIN

← Approximate Debris  
Flow Line



# SAN YSIDRO CREEK, HWY 192



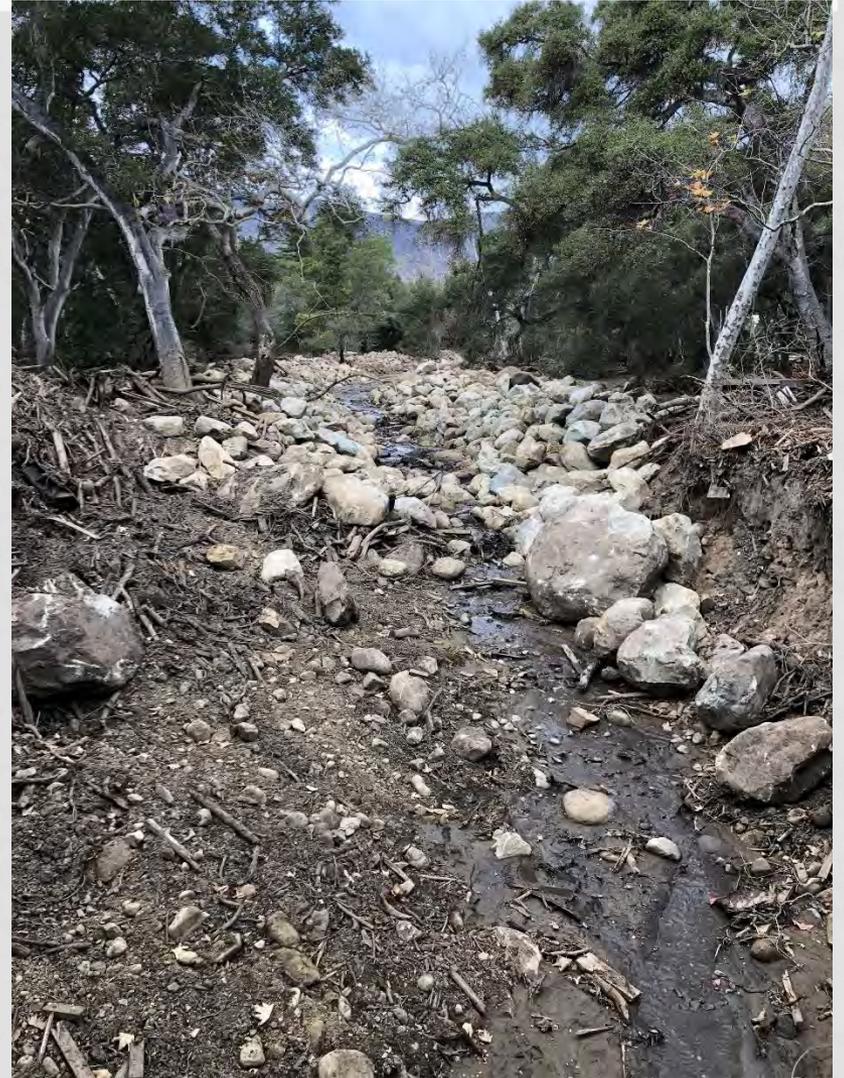
**BASINS**

AS OF: 08 MAR 2018 @ 1700 hours

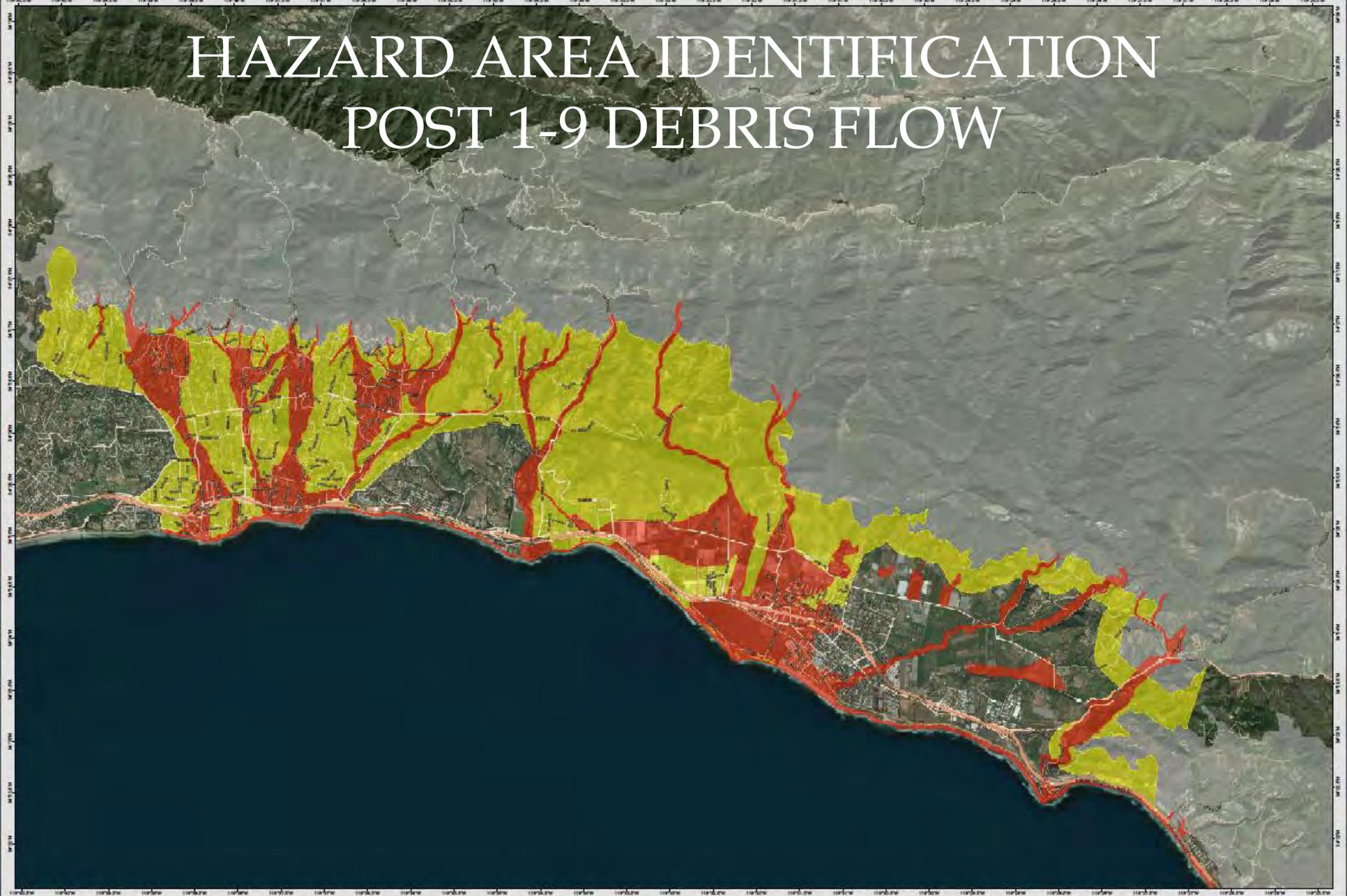
Basin/Site	Hauling Start Date	Status	Truck Loads	CY	Total to date	Revised Quantities	Actual / Estimated	Expected End Date
Cold Springs	14-Jan	Hauling Complete	0	0	24,782	24,782	Actual removed (complete)	Debris removal complete
Montecito	17-Jan	Hauling Complete	0	0	2,325	2,325	Actual removed (complete)	Debris removal complete
Gobernador	16-Jan	Hauling Complete	0	0	11,408	11,408	Actual removed (complete)	Debris removal complete
Franklin	18-Jan	Hauling Complete	0	0	1,162	1,162	Actual removed (complete)	Debris removal complete
Santa Monica	15-Jan	Stockpiling & breaking rock	48	531	146,199	156,000	Estimated (basin capacity + overburden)	15-Mar
San Ysidro	16-Jan	Hauling Complete	0	0	21,747	21,747	Actual removed (complete)	Debris removal complete
Romero	21-Jan	Hauling Complete	0	0	43,216	43,216	Actual removed (complete)	Debris removal complete
Arroyo Paredon Basin	17-Jan	Hauling Complete	0	0	24,029	24,029	Actual removed (complete)	Debris removal complete
Toro Upper West	21-Jan	Hauling Complete	0	0	15,916	15,916	Actual removed (complete)	Debris removal complete
Toro East	21-Jan	Hauling Complete	0	0	15,151	15,151	Actual removed (complete)	Debris removal complete
Toro Lower West	23-Jan	Hauling Complete	0	0	12,277	12,277	Actual removed (complete)	Debris removal complete
			48	531	318,212	328,013	Percent complete	97%

**STREAMS AND CREEKS**  
AS OF: 08 MAR 2018 @ 1700 hours

Basin/Site	Hauling Start Date	Status	Truck Loads	Cubic Yardage	Overall Quantities	
					Estimated quantities	Total to date
Montecito Meadow (@ Ashley Rd)	7-Feb	Hauling Complete	0	0	3,388	3,388
Montecito Creek (Hot Springs Creek)	8-Feb	Hauling Complete	0	0	2,352	2,352
Romero Creek (@ Sheffield)	9-Feb	Hauling Complete	0	0	5,489	5,489
Montecito Creek (Meadow Wood Lane)	12-Feb	Hauling Complete	0	0	5,341	5,341
Arroyo Paredon Creek (u/s HWY 192)	14-Feb	Hauling Complete	0	0	3,365	3,365
East Toro Creek (u/s of HWY 192)	18-Feb	Hauling Complete	0	0	5,819	5,819
Hot Springs Creek (@ Riven Rock Road)	27-Feb	Hauling Complete	0	0	6,625	6,625
Toro Cyn Creek (Torito Rd)	14-Feb	Hauling Complete	0	0	3,796	3,796
Toro West Creek (at SR-192)	23-Feb	Hauling Complete	0	0	3,041	3,041
San Ysidro Creek (upstream of San Leandro)	20-Feb	Hauling Complete	0	0	5,925	5,925
Santa Monica Creek (upstream of Santa Monica Derbis Basin)	TBD		0	0	20,000	0
<b>PERCENT COMPLETE</b>		<b>69%</b>	<b>0</b>	<b>0</b>	<b>65,141</b>	<b>45,141</b>



# HAZARD AREA IDENTIFICATION POST 1-9 DEBRIS FLOW



**DEBRIS FLOW RISK AREAS / ÁREAS DE RIESGO DE FLUJO DE ESCOMBROS**  
Santa Barbara County EOC  
2018 Storm 1 - 18STM1



- Legend / Leyenda**
- Extreme Risk / Riesgo Extremo
  - High Risk / Riesgo Alto
  - Thomas Fire Burn Area - High Risk  
Incendio Thomas Área Quemada - Riesgo Alto

2018  
January Storms  
Tormentas de enero  
Data: 7/26/2018

# QUESTIONS



**“If the rain comes as predicted and the debris flow estimates are true, it’s probably going to be something we haven’t seen before,”**