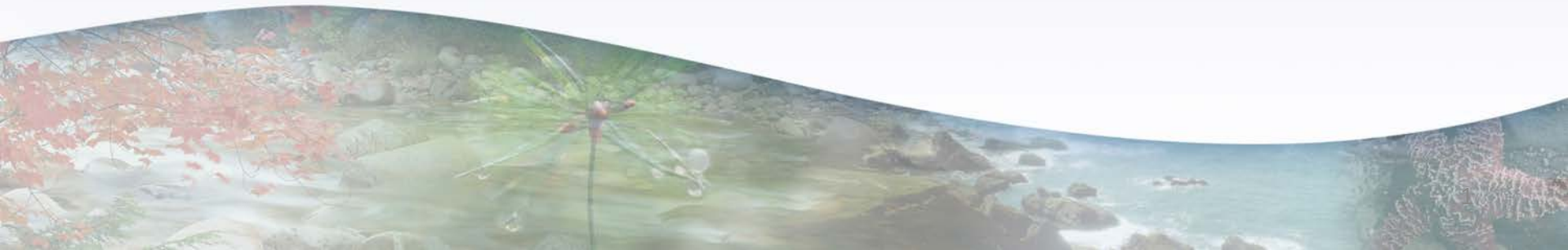


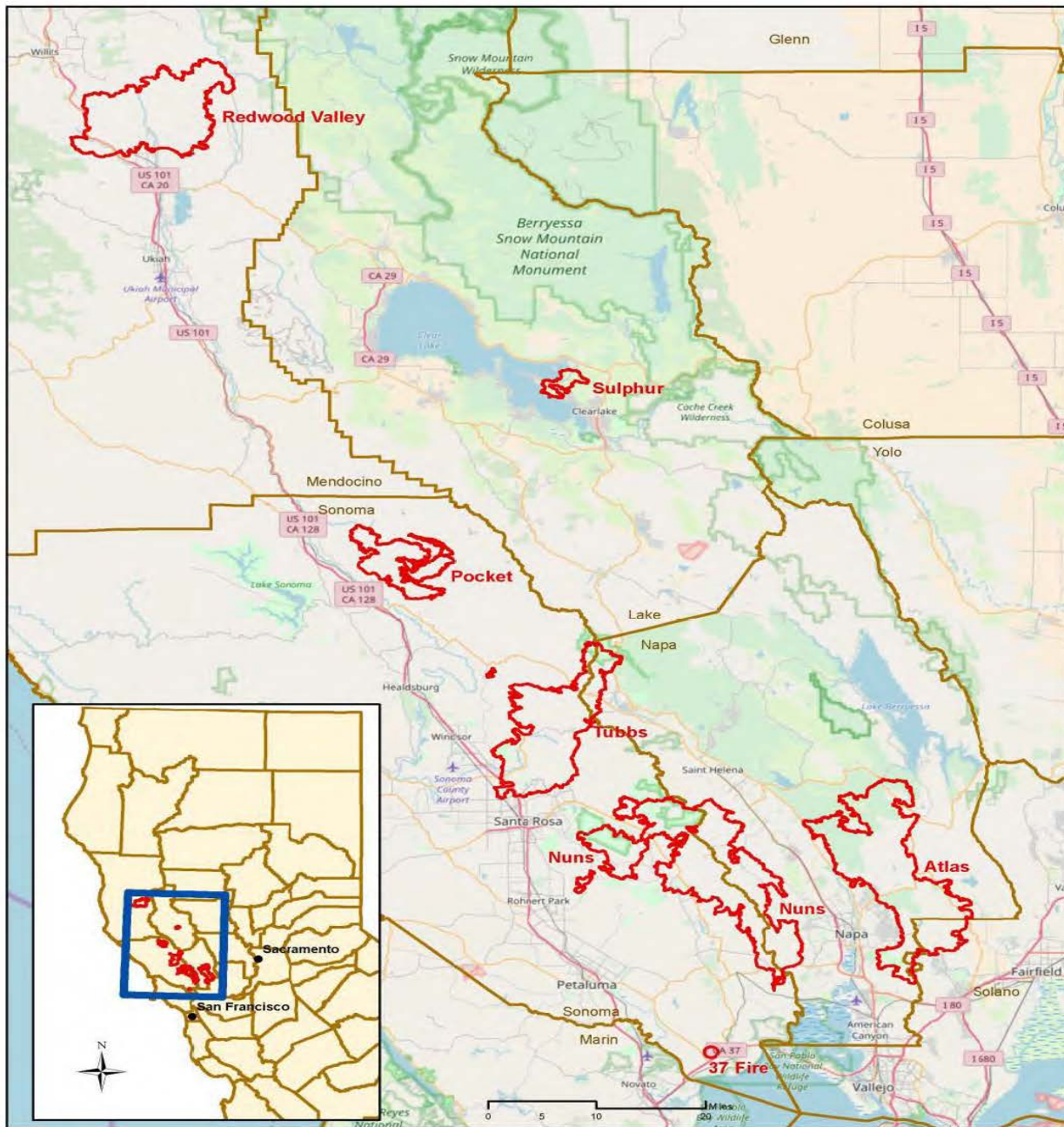
# Item 11

## Update on Regional Water Board's Post Fire Response and Recovery Actions

North Coast Regional Water Quality Control Board

December 13, 2017; Santa Rosa, CA





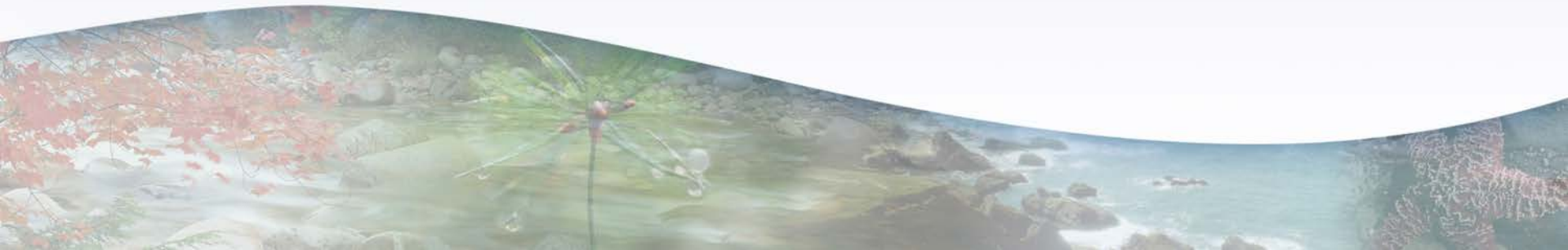
**Wine Country Fires  
October 2017**

Mendocino County - Redwood Valley  
 Lake County - Sulphur  
 Sonoma County - Pocket, Tubbs, Nuns, 37  
 Napa County - Nuns, Atlas

Fire Perimeters

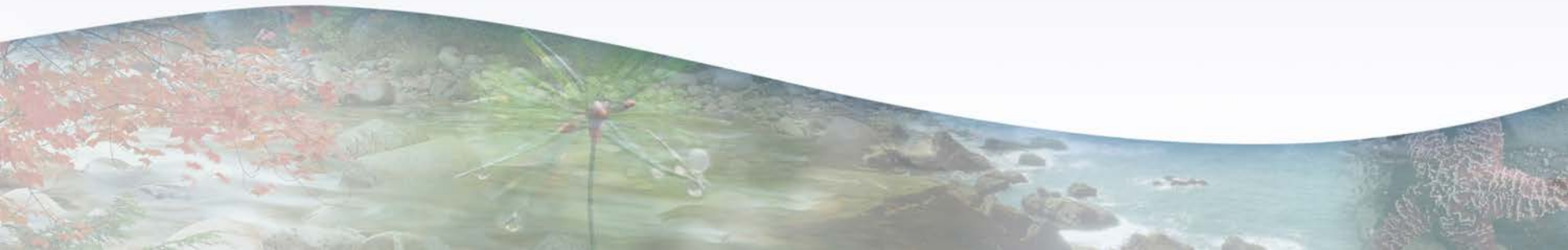
# Introduction

- October 2017 wildfires - greatest human and environmental impact in nation's history
- Defining moment for Sonoma and Mendocino Counties
  - Every community and citizen impacted
  - Resilience through adversity
  - A new reality
  - Opportunity to rebuild resilient communities and landscapes

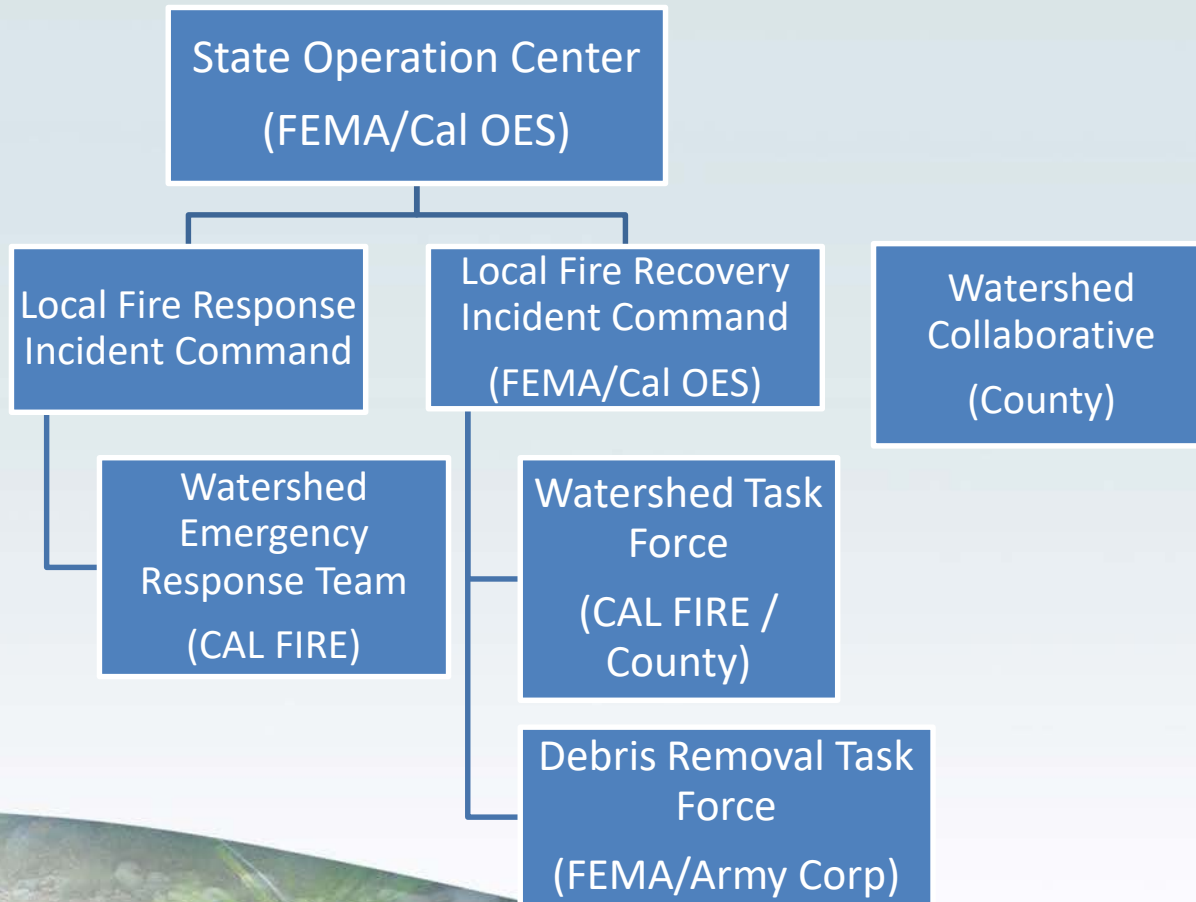


# Regional Water Board's Response

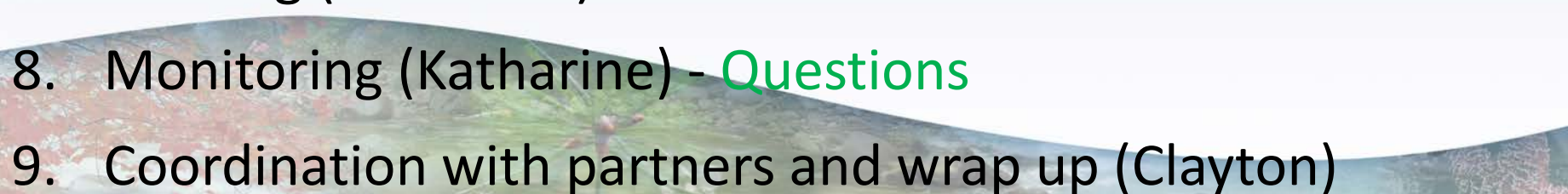
- We are part of the community
- Office closed October 9th-16<sup>th</sup>
- Initial focus on ensuring safety of staff's families
- Since October 16<sup>th</sup> devoted > 3,000 hours to fire response
- Fires created new and exacerbated existing threats to water quality



# Fire Response – Agency Coordination



# Topics/Outline

1. Introduction (Matt)
  2. Watershed Emergency Response Team (Jim) - Questions
  3. CalOES Mission task and watershed assessments (Josh)
  4. Urban pollution controls (Mona and Jeremiah) - Questions
  5. Data and information management (Chuck)
  6. Regulatory actions
    - a) Fire Debris Waivers (Claudia)
    - b) In-stream work and 401 water quality certifications (Stephen)
  7. Funding (Katharine)
  8. Monitoring (Katharine) - Questions
  9. Coordination with partners and wrap up (Clayton)
- 

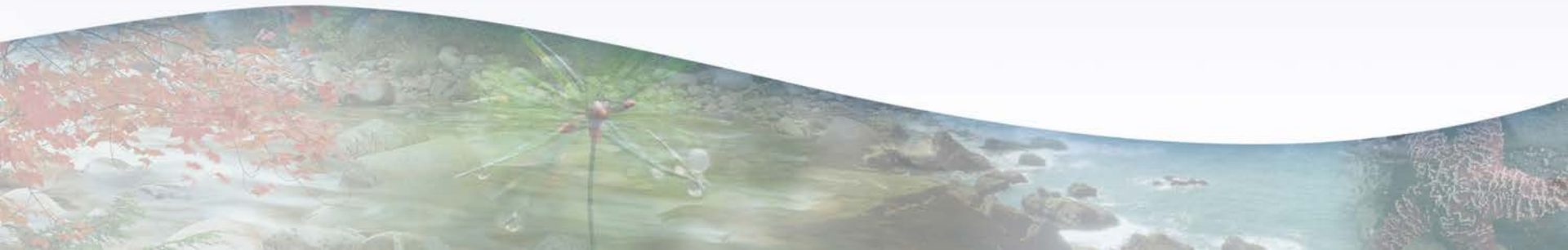
## Watershed Emergency Response Team (WERT)

### GOAL:

- Identify threats to lives and property from debris flows and flooding following large fires

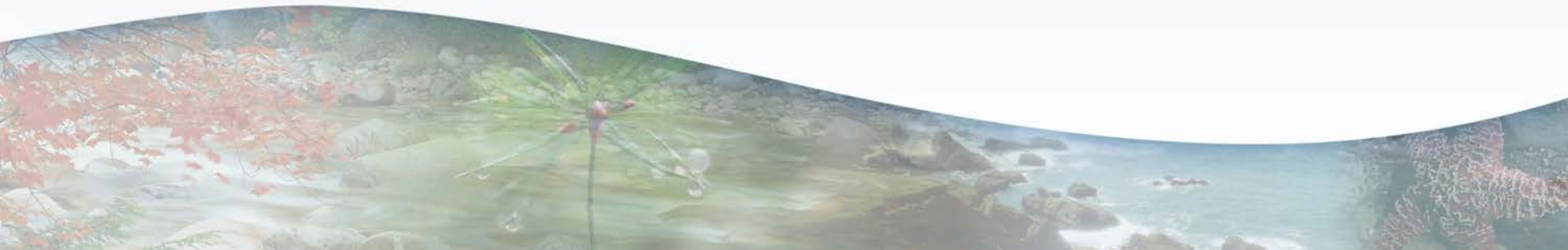
### PRODUCTS:

- Maps of areas with elevated risk debris flows and flooding
- Maps of Values At Risk (VARs)
- Report with recommended emergency protection measures



## **Factors to determine whether to assemble WERT:**

- Fire size, location in relation to values at risk  
Proximity of intensely burned areas to housing developments
- Presence of other critical infrastructure
- Likelihood of debris flows based on topography, geology, climate, etc.
- Proximity to flood prone areas





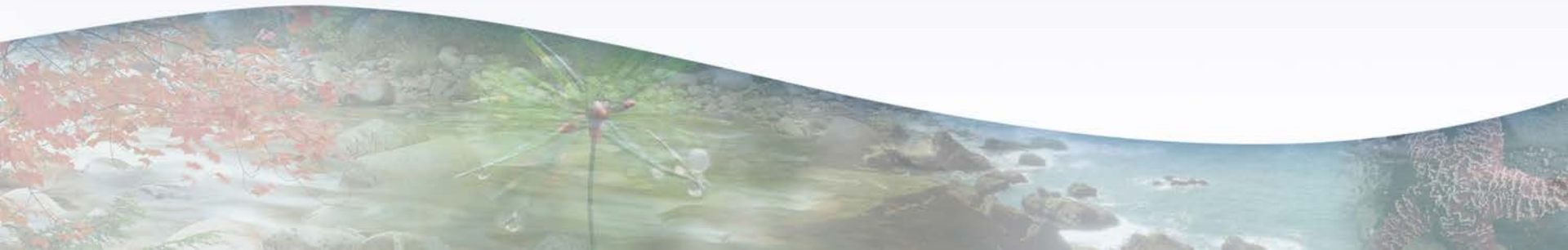
## WERT Personnel:

- Licensed engineers, geologists, hydrologists, and foresters from CAL FIRE, California Geological Survey, and Regional Water Board
- Two North Coast Regional Water Board staff:
  - Dave Kuszmar: Tubbs Fire
  - Jim Burke: Nuns Fire
  - Rene Leclerc (R2): Atlas Fire



## **WERT Methods:**

- Obtain Bare Area Reflectance Classification Maps
- Field Verify BARC maps
- Generate burn severity maps
- Develop debris flow hazard map
- Model changes in erosion and runoff
- Identify Values at Risk (VARs)
- Draft Report with recommended emergency protection measures



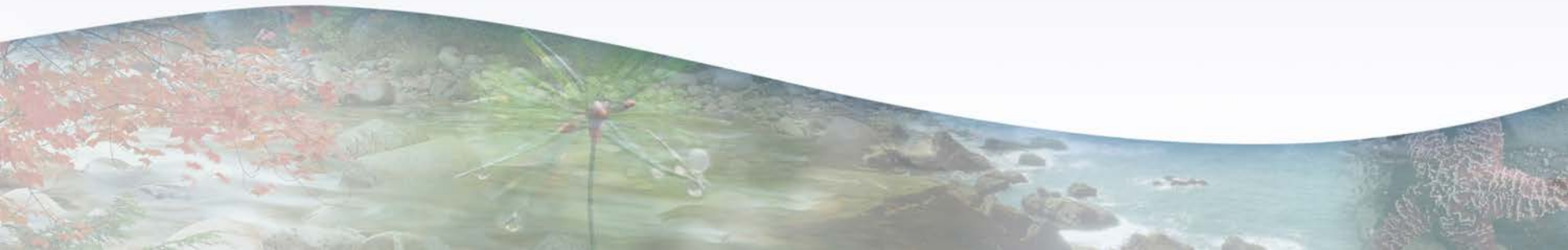
## Findings:

- 10-year flood flows increase up to 73%
- Up to 500% increase in post fire erosion rates
- Possible debris flows and flooding impacts to the Adobe Canyon and Pythian Road areas, Camp Newman, Kimball Reservoir, and Linda Lane
- Identified many at risk structures, roads, culverts
- Flooding in the Cities of Sonoma and Calistoga and along Highway 12
- Potential toxic laden runoff discharge to domestic water supplies and other aquatic resources



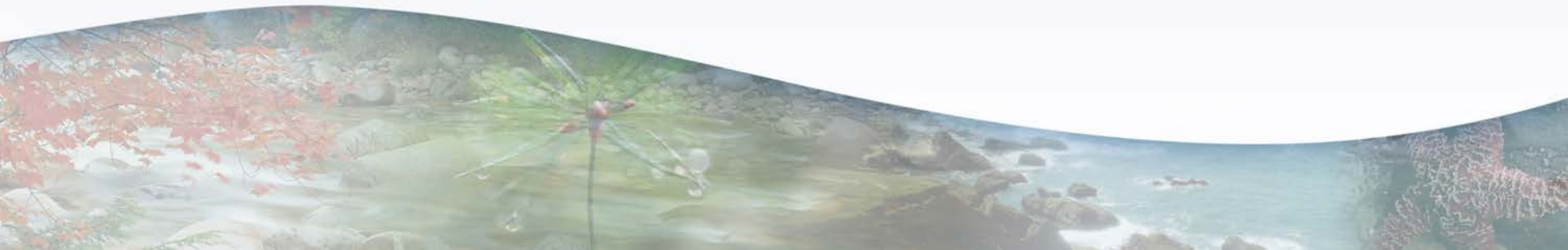
## Recommendations:

- Utilize early warning systems and expand existing radar system for detecting storm intensities
- Perform storm patrols and monitor road drainage infrastructure
- Properly locate temporary housing
- Close campgrounds and recreational area access during storms

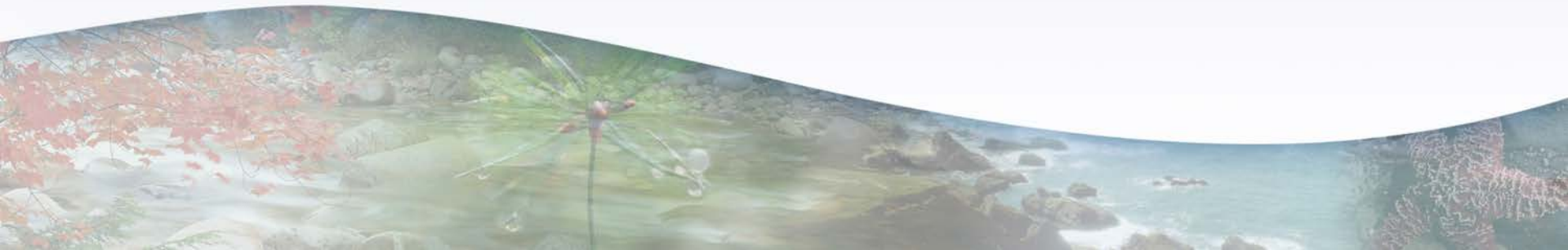


## **RWB Participation:**

- Opportunity for RWB staff to observe post-fire conditions
- Opportunity to provide WQ perspective
- Assist our sister agency (collaboration)



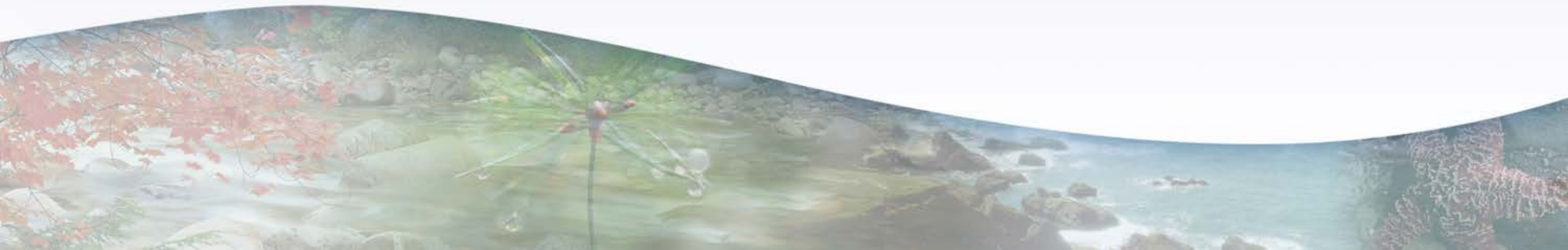
# Questions?



# Cal OES Mission Tasking

## # 2017-SOC-42661

- The Emergency Services Act provides Cal OES the authority to **task** state agencies to respond to local emergency needs
- Task Description: Five teams of 2-3 personnel to do technical assessments to check for potential erosion and provide suggestions for transport of storm water pollutants.



# Mission Task Response Timeline

## Friday November 3, 2017

12:30 PM – Mission Tasking Received

2 PM – Gather Staff

10:27 PM – 1<sup>st</sup> Draft of Assessment Form developed

## Saturday November 4, 2017

7 AM – Staff arrived at office

11 AM – Assessment Forms & Process Developed

12 PM – Field teams deployed

## Sunday November 5, 2017

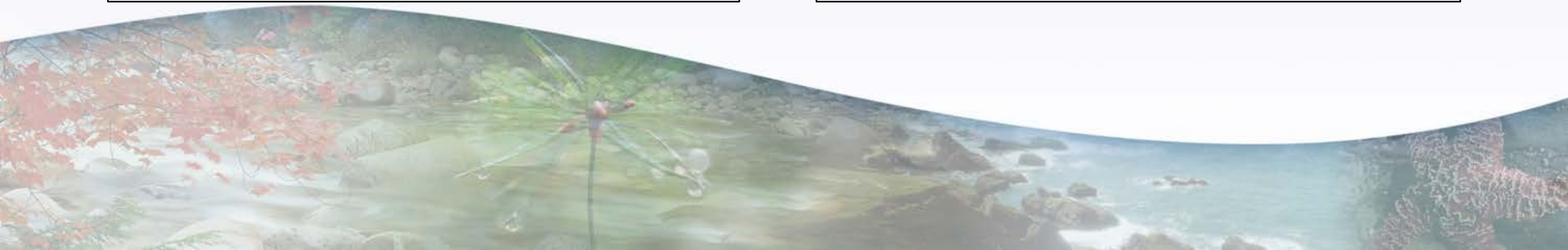
7 AM – Staff arrived at office

8 AM – Field teams deployed

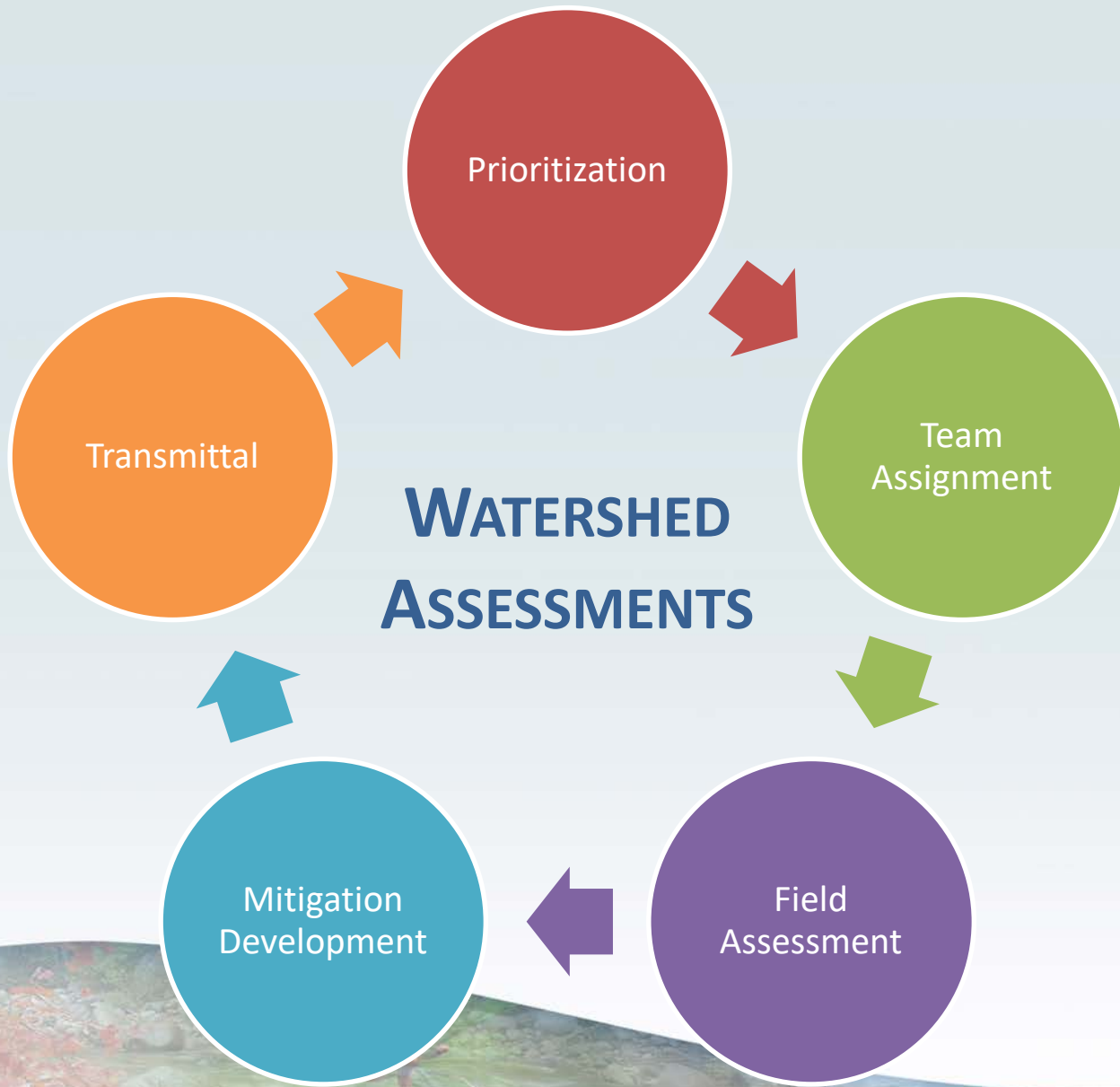
12 PM – Threat Mitigation Project Form (TMPF) developed

2 - 4 PM – Field teams return and begin developing mitigation project recommendations

6 PM – First TMPFs were transmitted to the Incident Command







**WATERSHED  
ASSESSMENTS**

Transmittal

Prioritization

Team  
Assignment

Field  
Assessment

Mitigation  
Development

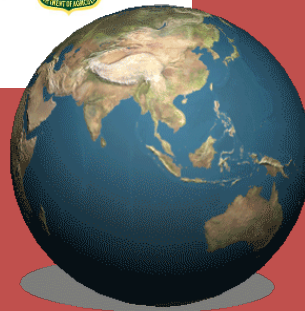
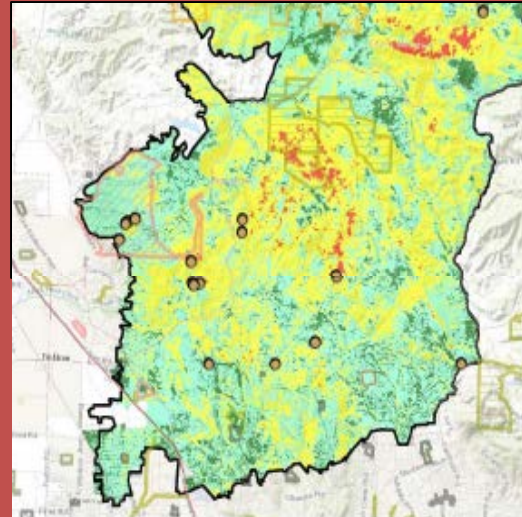
# Prioritization

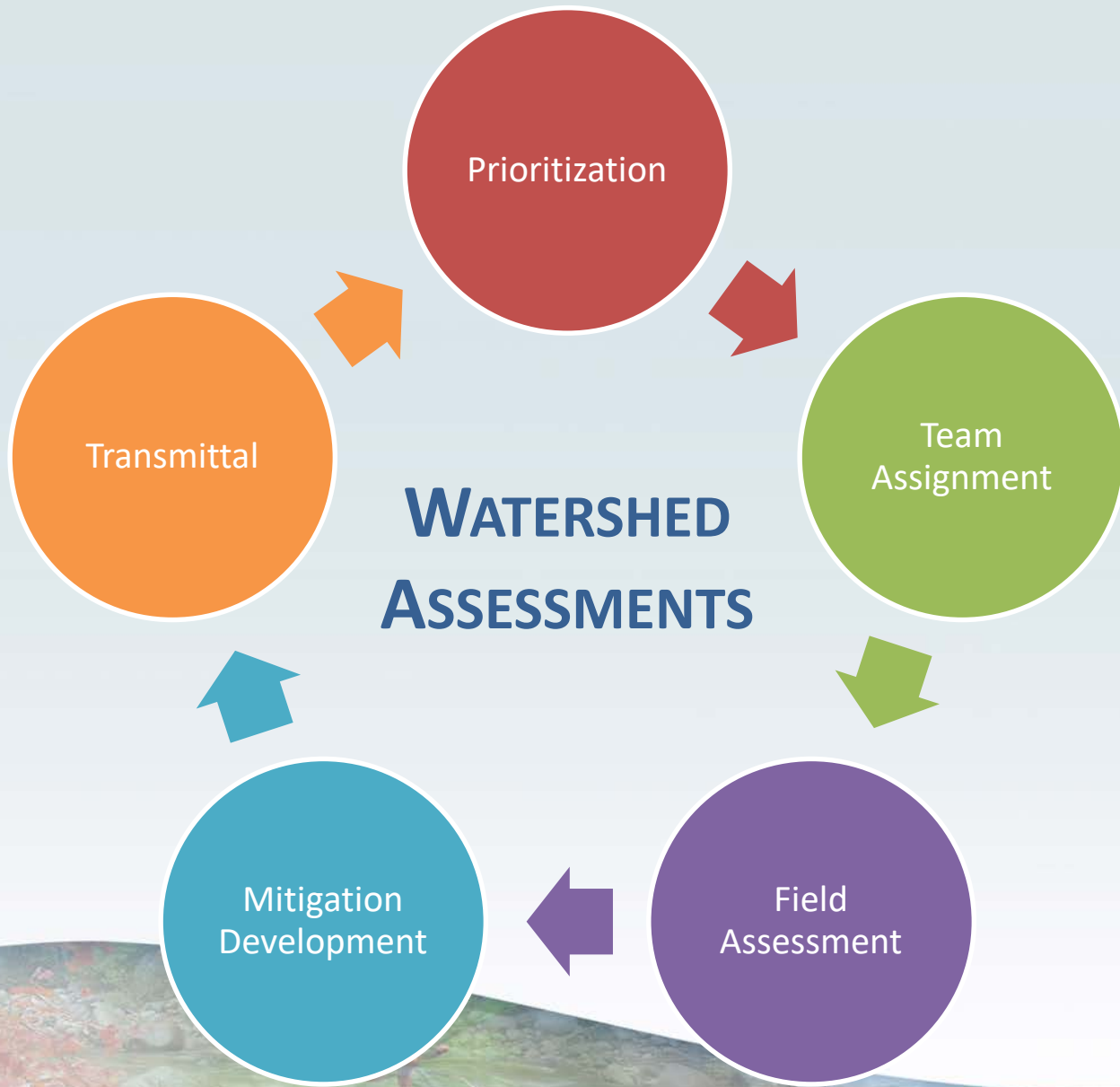
## **TUBBS FIRE** Watershed Emergency Response Team FINAL REPORT



CA-LNU-010104

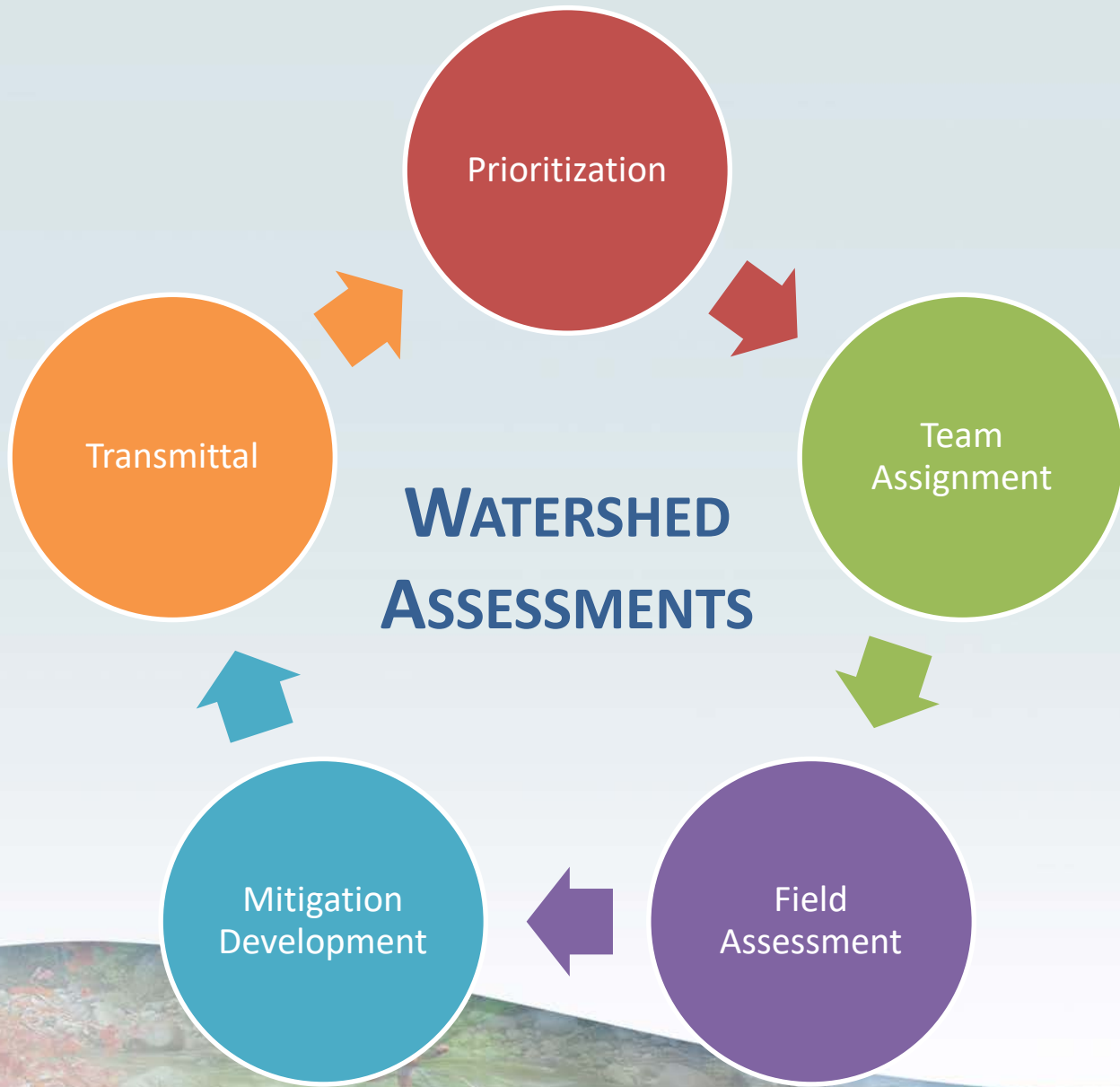
November 15, 2017





# Field Assessment





# Mitigation Development

TMPF #     22    

**Sonoma County Disaster Recovery Watershed Task Force Incident  
Threat Mitigation Project Form**

Water Quality Threat Rating (circle one):  Medium  Low

General Response Area: X Reibli Road

Project Location Information  
Address Start: X Reibli Road Address End: X Reibli Road  
or  
Start Latitude: 39.50482 End Lat: 39.50499  
Start Longitude: -122.70226 End Long: -122.70194

Work Area: Roadside  In-creek  Hillslope  Project Dimensions (approx.): \_\_\_\_\_

Water Quality Threat Description:  
3 Burned Structures are along a road and within 10 feet of a drainage ditch leading into a class III watercourse. There is a high potential to deliver hazardous materials to the creek.

Recommended Mitigation Actions (include total material types & amounts needed):  

1. Direct Runoff away from ditch by using straw and weighted wattles. 40 feet of wattles needed on north-western structure. 40 feet of wattles needed on eastern structure.
2. Use 2 x 6 foot lengths of compost socks along stone wall between north-western structure and ditch.
3. Surround perimeter of drainage inlet and sink hole on eastern structure with 1 x 5 ft and 2x6 ft. compost socks, respectively.

Logistical Constraints or Issues (i.e. access, equipment, or private property concerns):  
Twine, wattles, stakes, sandbags, gloves. Check with landowner for permission.

Special Instructions:  
\_\_\_\_\_

Safety Concerns:  
Watch for traffic while working.

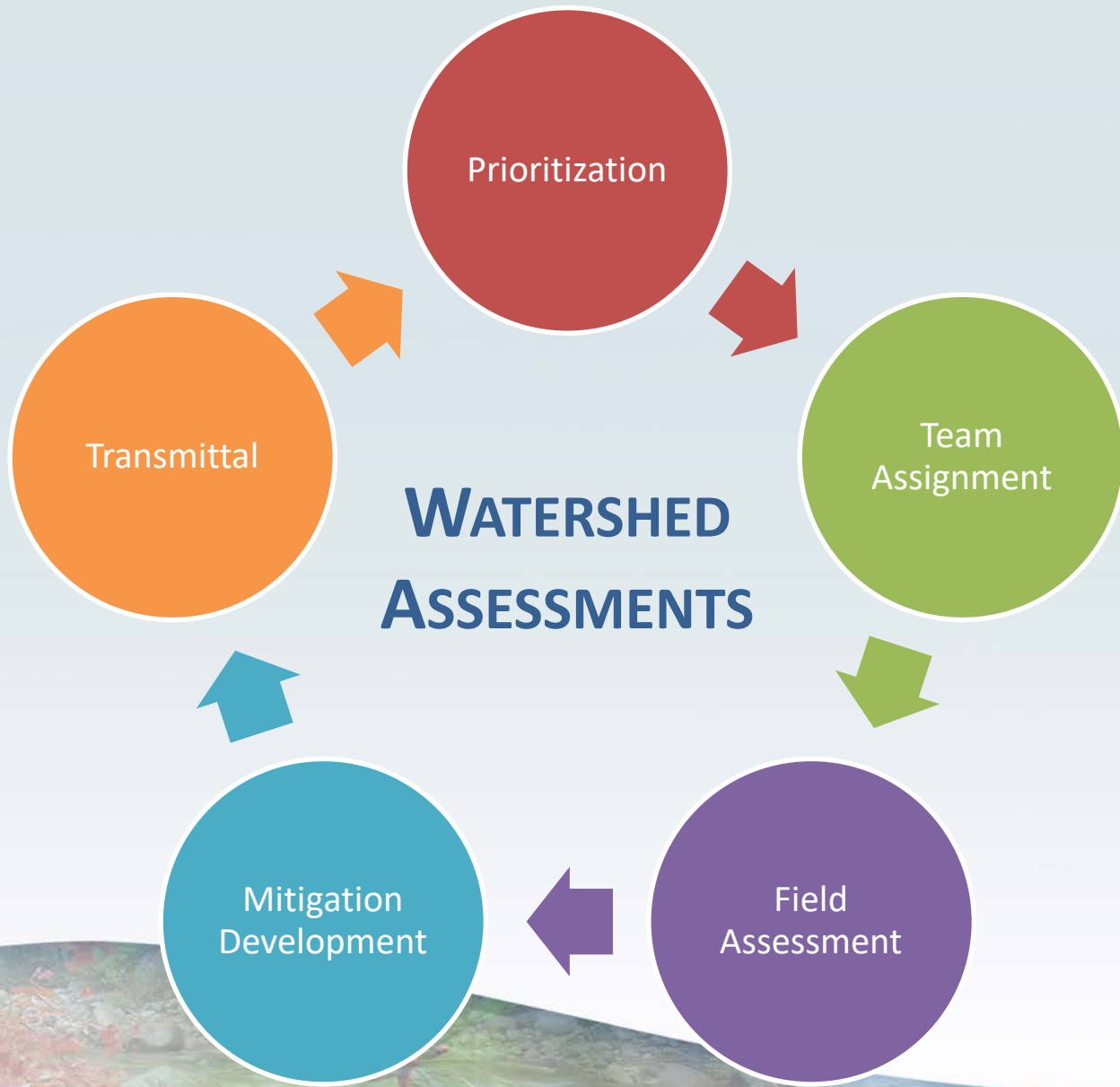
Other Information:  
\_\_\_\_\_

Attachments  Map  Photo(s)  Threat Identification Form(s)

Date provided to Sonoma Co Disaster Recovery Watershed TF: \_\_\_\_\_

Project developed by North Coast Regional Water Quality Control Board as part of Mission 2000 assessments of significant water quality threats





Prioritization

Transmittal

**WATERSHED  
ASSESSMENTS**

Team  
Assignment

Field  
Assessment

Mitigation  
Development

# Technical Specialists

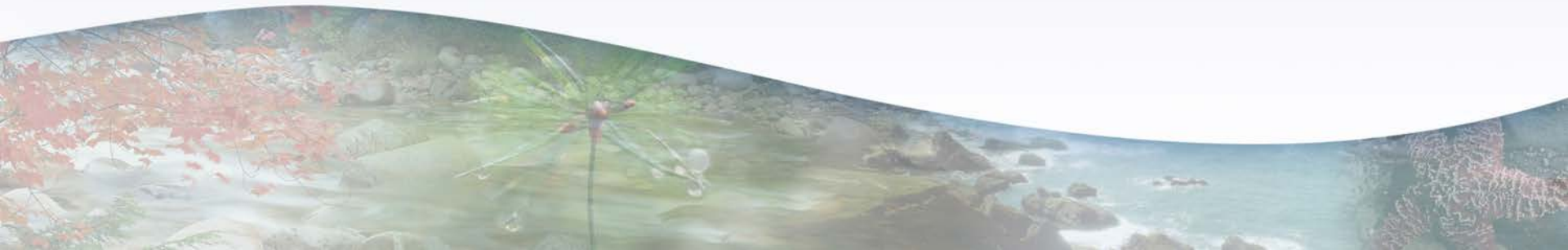
- Cal FIRE Incident Command requested technical assistance
- Provided in the field guidance on the proper placement and configuration of BMPs
- Provided 2-3 teams per day





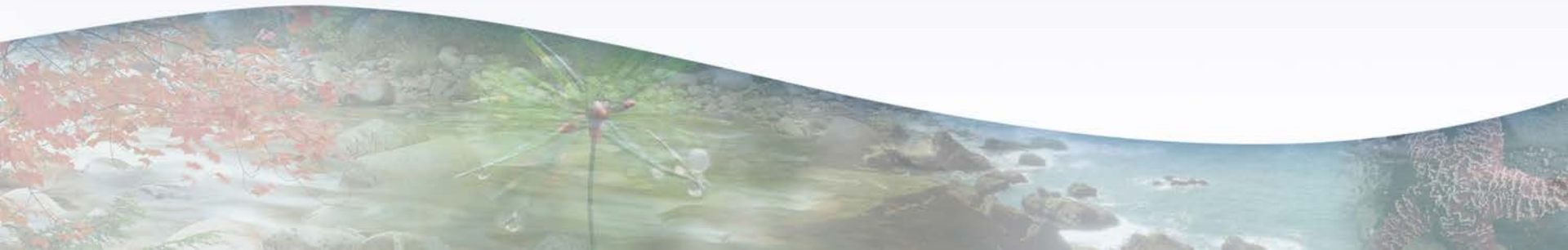
# Evolution of Effort

- Rural and Urban teams merged
- Threat Mitigation Project Forms adopted by Incident Command for other agencies and partners
- Desk top assessments



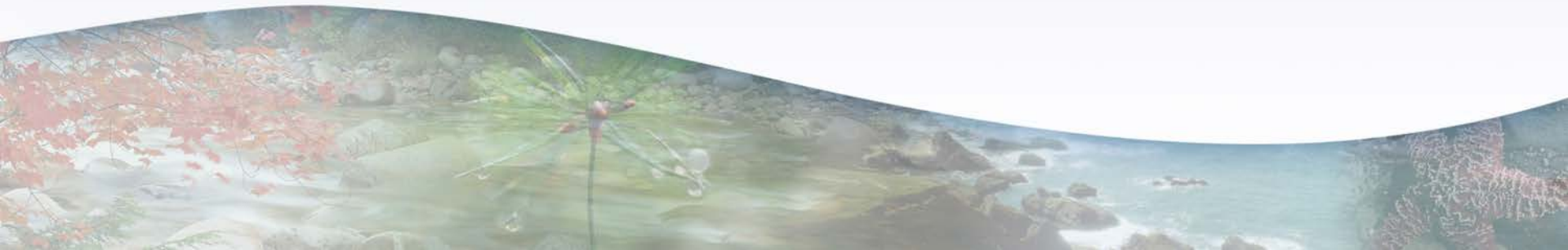
# Coordination With City and County for Urban Areas

- Close coordination with City and County
  - City submits Early Action Plan
- Watershed Task Force Meeting
  - Most immediate threat: runoff from hardscape areas
- Directive letters for Compliance with Municipal Storm Water Permit



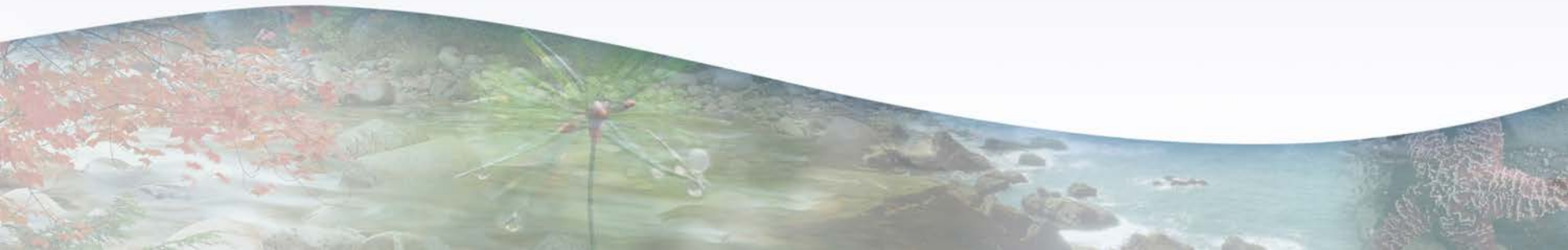
# Directives for MS4 Compliance

- Implement and maintain erosion and sediment controls
- Conduct street sweeping
- Capture storm water and divert to sewer collection system for treatment at a wastewater treatment facility
- Install and maintain storm drain inlet protection
- Clean storm drains with a vacuum truck
- Apply soil stabilization (e.g. hydraulic mulch seeding) to burned soil surfaces
- Intercept debris from driveways to avoid discharge to the street
- Assess BMP efficiency and conduct BMP performance monitoring as appropriate



# Cleanup and Abatement Account

- Immediate need for funding for BMPs
- Applied to CAA
  - \$250,000 for erosion control supplies
  - \$550,000 for application of hydromulch to 90 acres in Fountaingrove

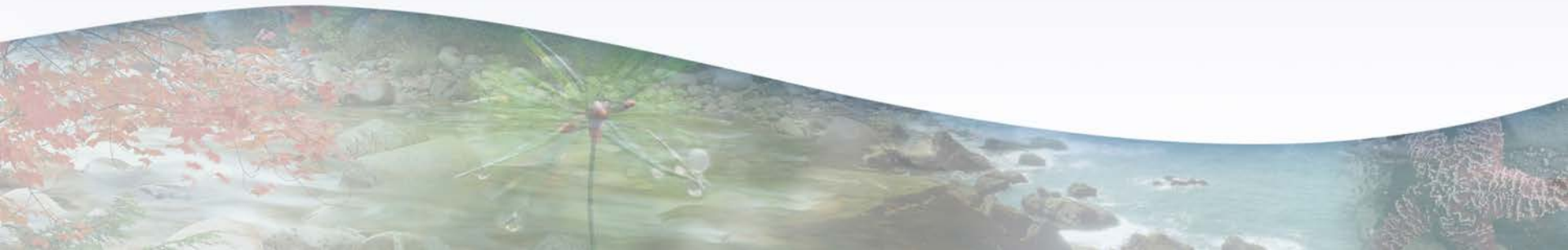




NO  
PARKING

# Cleanup and Abatement Account

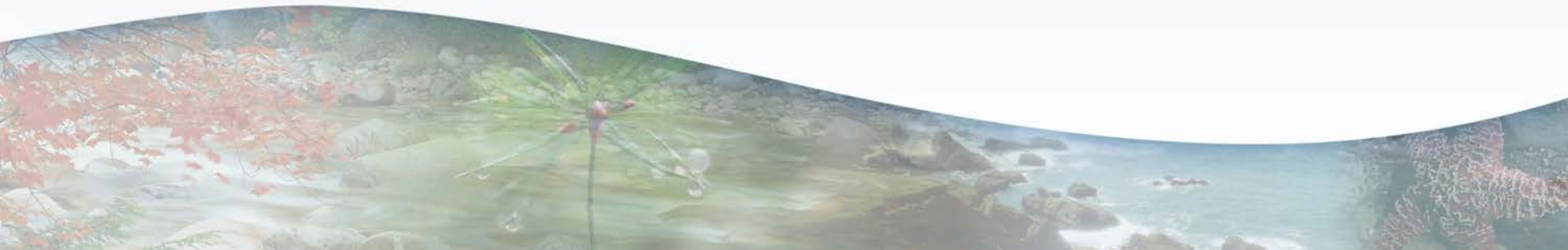
- Wattles and other erosion control supplies
  - City, County, RCDs, Volunteer Groups, and private homeowners
- Urgent need to protect storm drains
  - Installed by our staff and partners
  - Storm drain protection design collaboration between RB1 and City





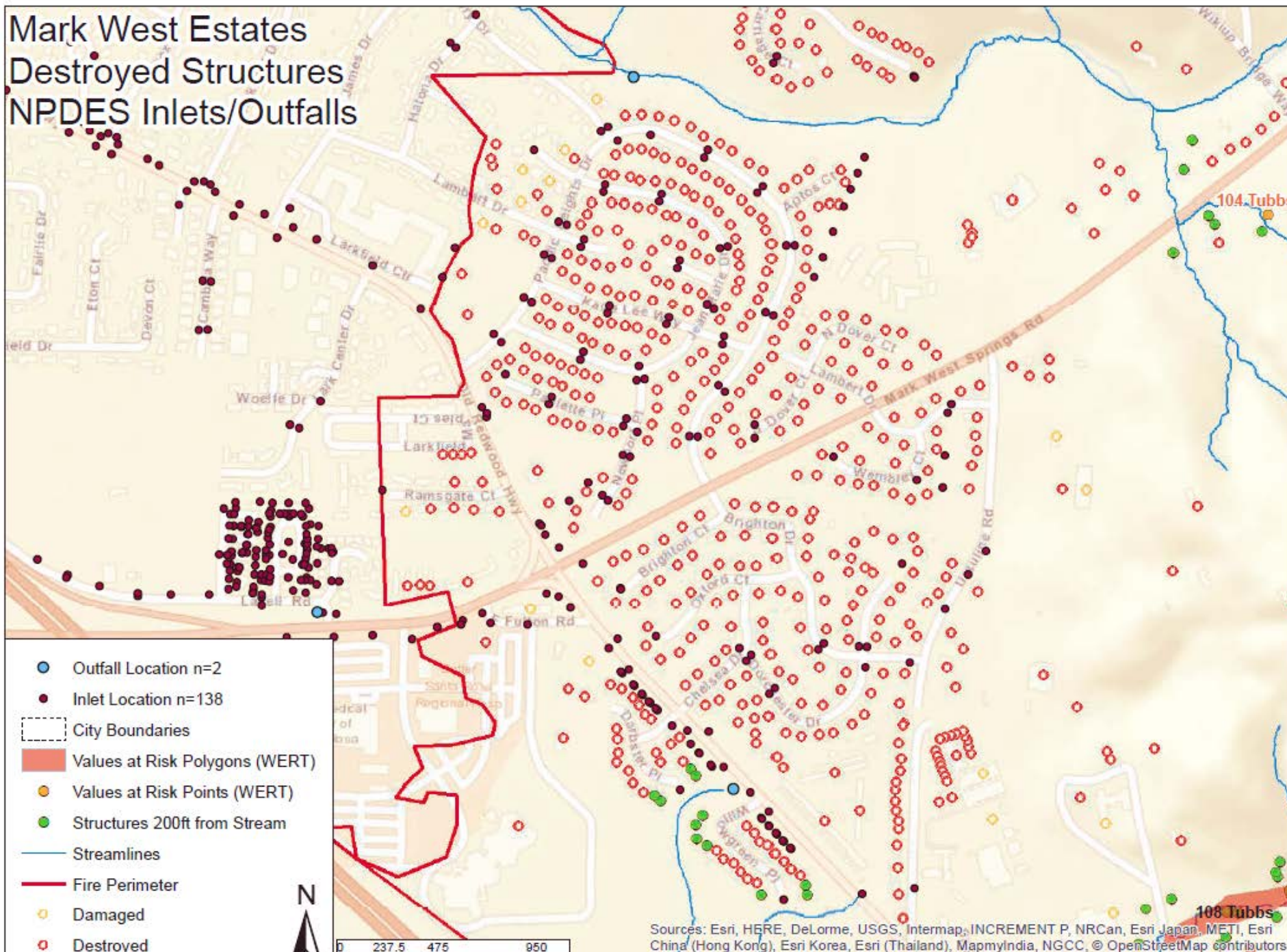
# Urban Assessment Plan

- City requests assistance with urban areas
- Urban Water Quality Assessment – Best Management Practice Installation and Maintenance Team
  - Support the City and County with water quality risk evaluations and BMP recommendations for urbanized areas
  - Jeremiah organizes implementation



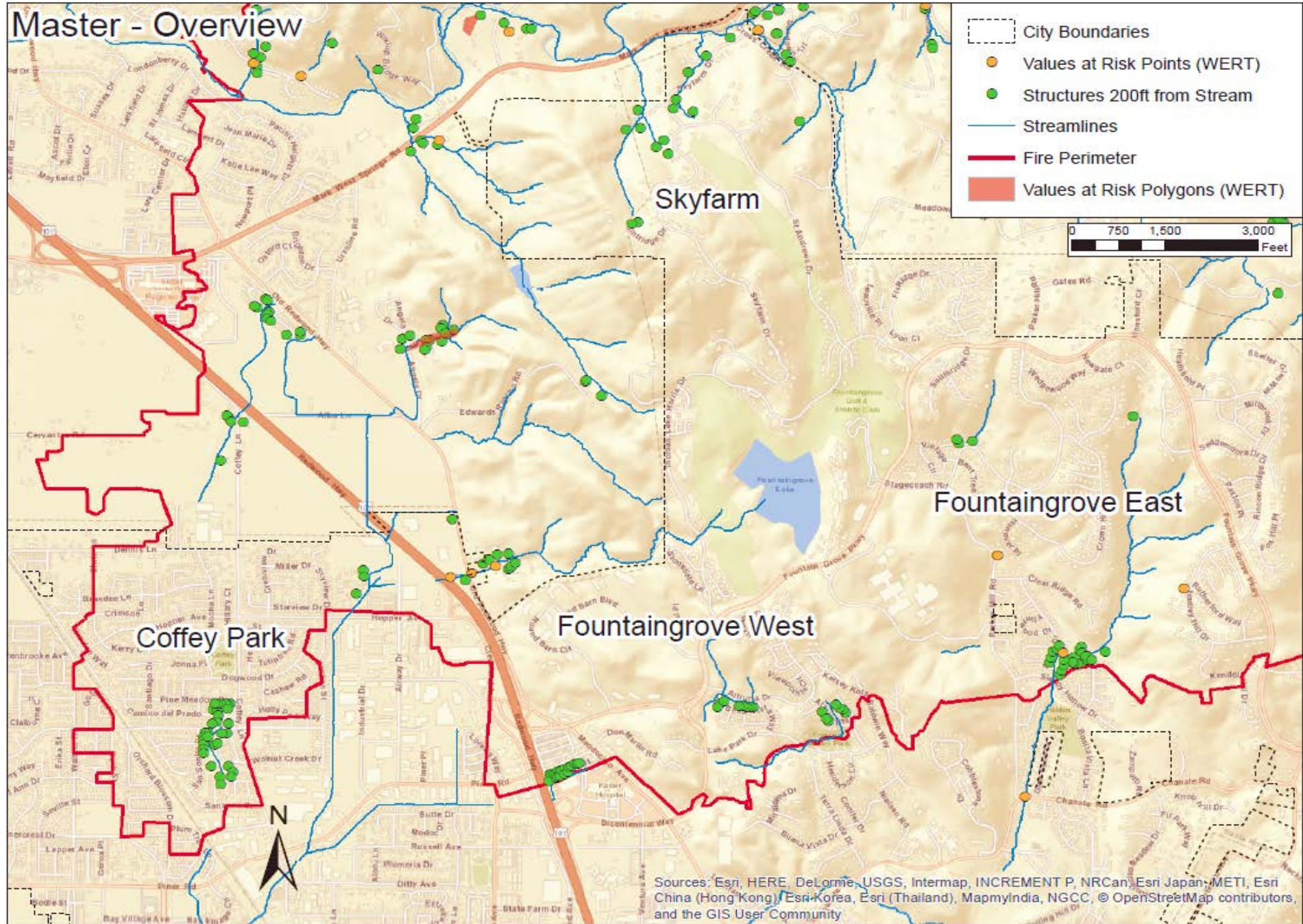


# Mark West Estates Destroyed Structures NPDES Inlets/Outfalls

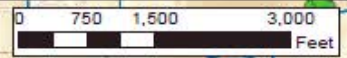


- Outfall Location n=2
- Inlet Location n=138
- City Boundaries
- Values at Risk Polygons (WERT)
- Values at Risk Points (WERT)
- Structures 200ft from Stream
- Streamlines
- Fire Perimeter
- Damaged
- Destroyed

# Master - Overview



- City Boundaries
- Values at Risk Points (WERT)
- Structures 200ft from Stream
- Streamlines
- Fire Perimeter
- Values at Risk Polygons (WERT)



Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community

# Threat Mitigation Projects

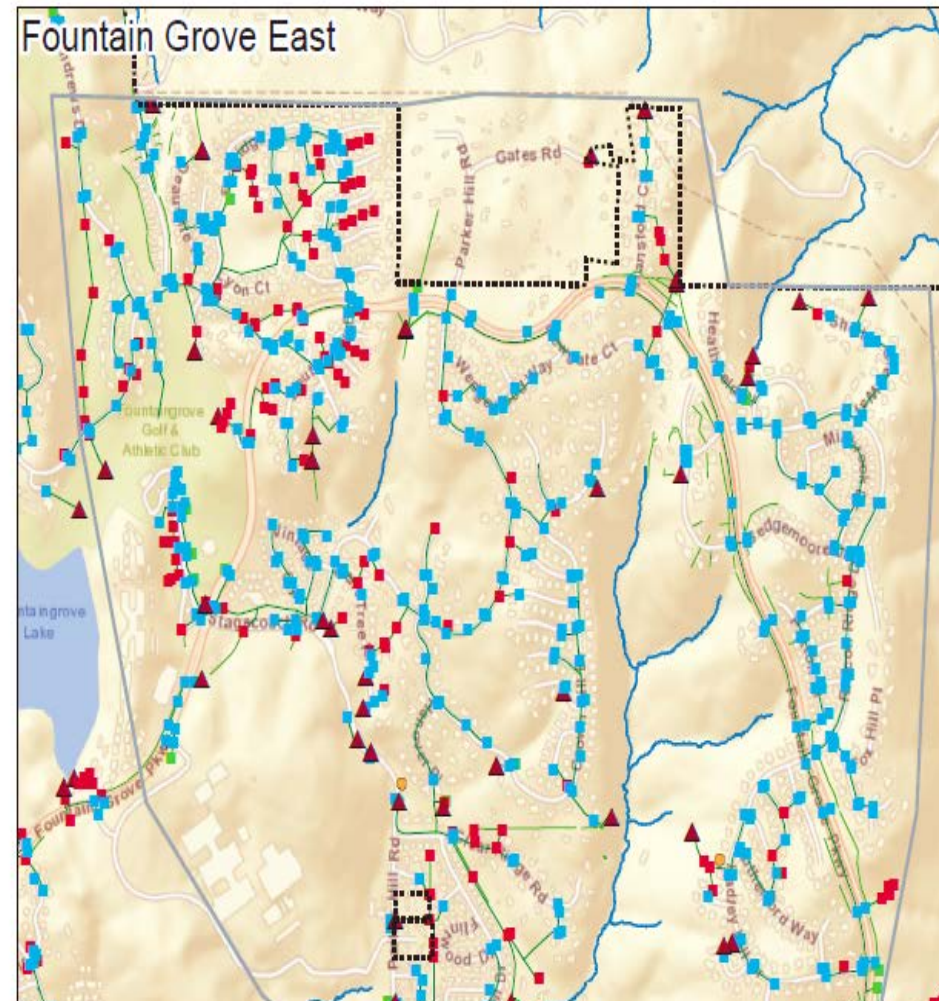
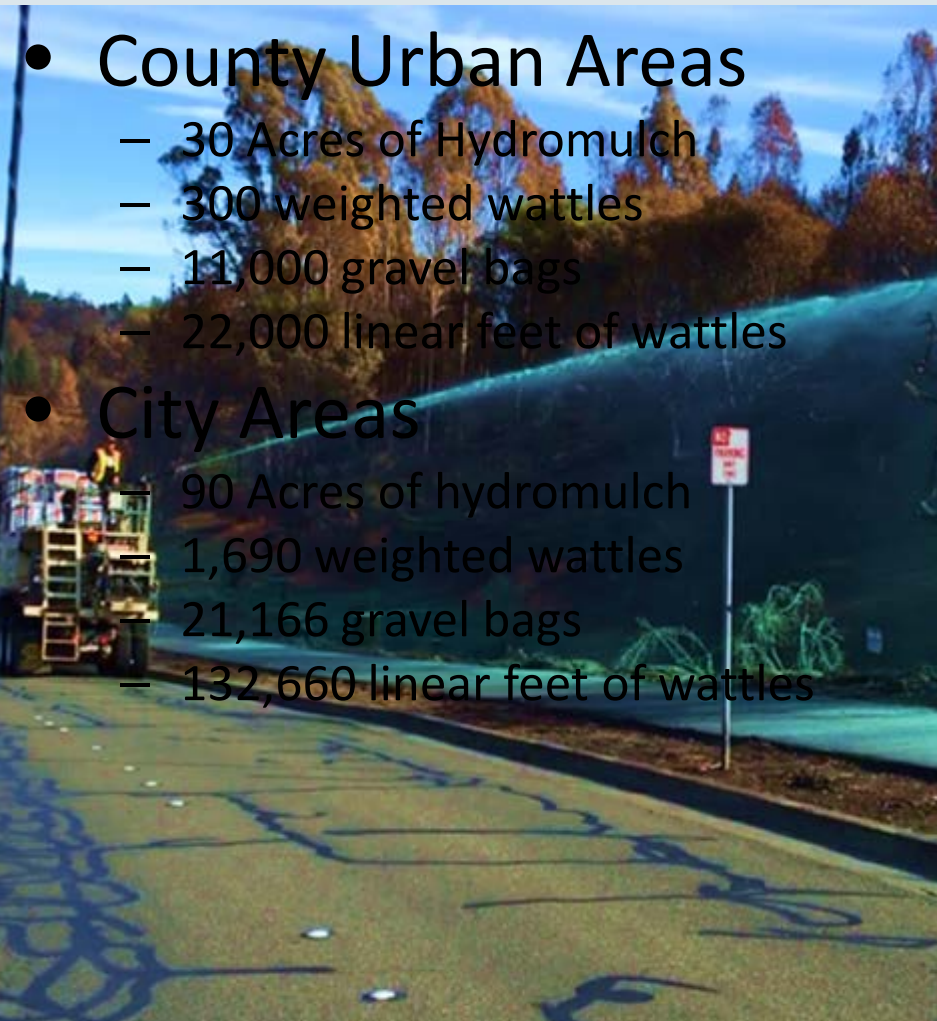
- Large areas associated with values at risk
- Recommending BMPs storm drains, driveways & slopes

- **County Urban Areas**

- 30 Acres of Hydromulch
- 300 weighted wattles
- 11,000 gravel bags
- 22,000 linear feet of wattles

- **City Areas**

- 90 Acres of hydromulch
- 1,690 weighted wattles
- 21,166 gravel bags
- 132,660 linear feet of wattles



# Questions?



# Data and information management

- Early data collection and distribution; interagency coordination
- Support for assessment teams and responding agencies
- Use of Avenza app
- Evolution of approach – transition of roles
- Tracking and accounting – long-term monitoring



- Coffey Street
- Aerial\_Franz\_East-4500
- Aerial\_Franz\_West-4000
- Aerial\_Foothill\_Ranch\_Ridge\_Rd-7000
- Aerial\_Bayberry-15400
- Aerial\_Lower\_Rincon-16000
- Aerial\_Porter\_Creek\_East-14500
- Aerial\_Porter\_Creek\_West-7600
- Foothill-Riebli Recommended Wattle (9000 ft)
- Sonoma County - Structure Status 10/23
- Values at Risk (VAR)
- Stream Crossings
- BMPs Placed
- Roads
- Streamlines
- Basemap
- Sites Visited
- Garmin\_Waypoints
- Road\_DebrisFlow\_Intersect
- parcel\_streams
- Stream\_Parcel
- Map\_Extent
- Areas\_Not\_Assessed
- Sonoma\_Parcels\_FEMA\_rural\_visited
- Sonoma\_County\_Parcels\_FEMA
- City Boundaries
- Assessment\_Work\_Status
- Fire Perimeter
- Post Fire Debris Flow Likelihood for Nuns, Tubbs and Atlas Fires
- r1.sde.Transportation\_SON\_SONCO\_Roads
- Sonoma\_County\_Parcels
- Tubbs\_SBS.tif
- Bare\_Earth\_Slope
- High Resolution Post Fire Imagery (Vexel, 10,16 to 10,18)
- Basemap
- Basemap
- Basemap

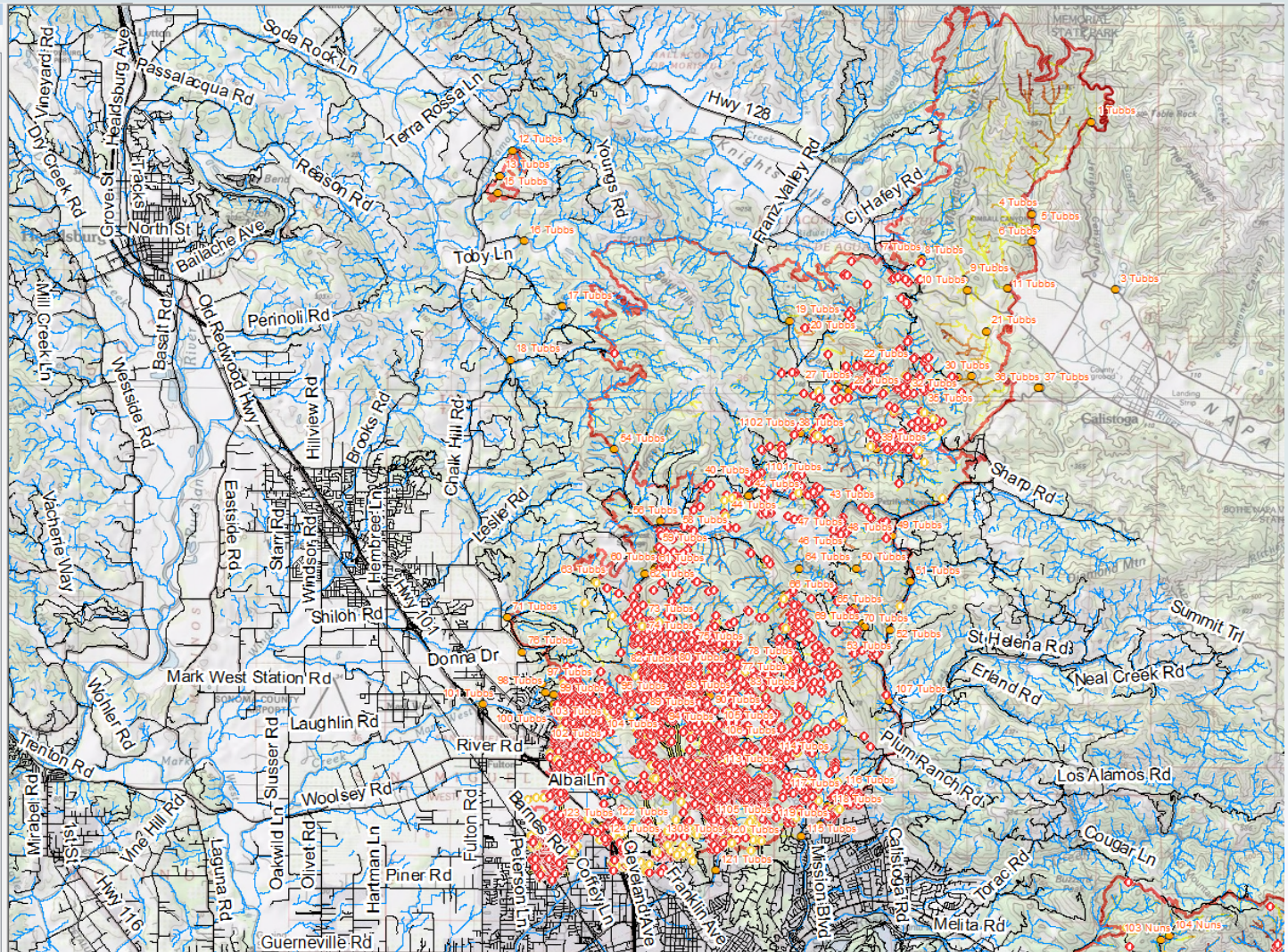
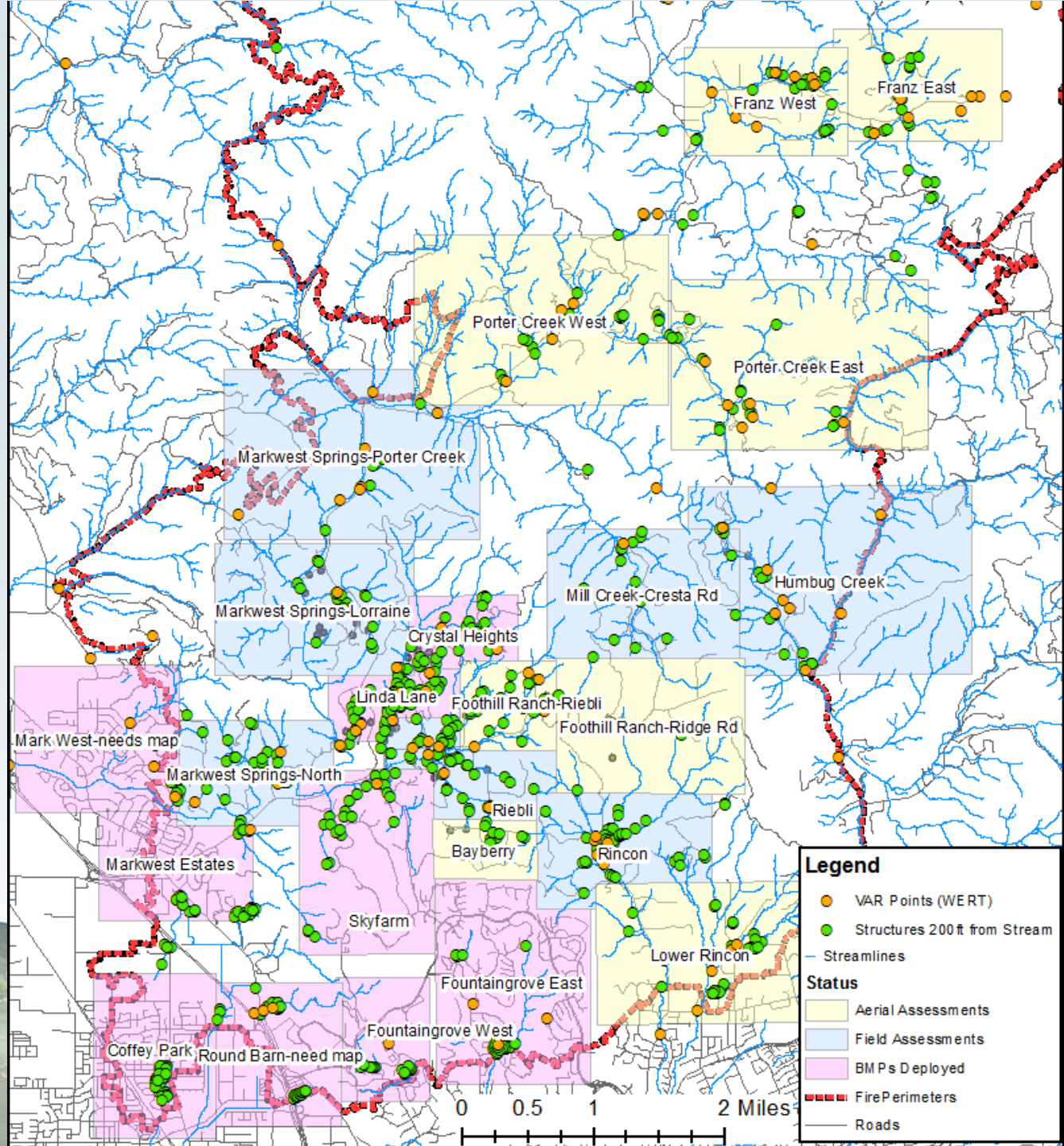


Table Of Contents

- Aerial Assessments
  - Aerial\_Franz\_East-4500
  - Aerial\_Franz\_West-4000
  - Aerial\_Foothill\_Ranch\_Ridge\_Rd-7000
  - Aerial\_Bayberry-15400
  - Aerial\_Lower\_Rincon-16000
  - Aerial\_Porter\_Creek\_East-14500
- Aerial\_Porter\_Creek\_West-7600
- Foothill-Riebli Recommended Wattle (9000 ft)
- Sonoma County - Structure Status 10/23
- Values at Risk (VAR)
- Stream Crossings
- BMPs Placed
- Roads
- Streamlines
- Basemap
- Sites Visited
- Garmin\_Waypoints
- Road\_DebrisFlow\_Intersect
- parcel\_streams
- Stream\_Parcel
- Map\_Extent
- Areas\_Not\_Assessed
- Sonoma\_Parcels\_FEMA\_rural\_visited
- Sonoma\_County\_Parcels\_FEMA
- City Boundaries
- Assessment\_Work\_Status
- Fire Perimeter
- Post Fire Debris Flow Likelihood for Nuns, Tubbs and Atlas Fires
- r1.sde.Transportation\_SON\_SONCO\_Roads
- Sonoma\_County\_Parcels
- Tubbs\_SBS.tif
- Bare\_Earth\_Slope
- High Resolution Post Fire Imagery (Vexcel, 10/16 to 10/18)
- Basemap
- Basemap
- Basemap



# Assessment Zones



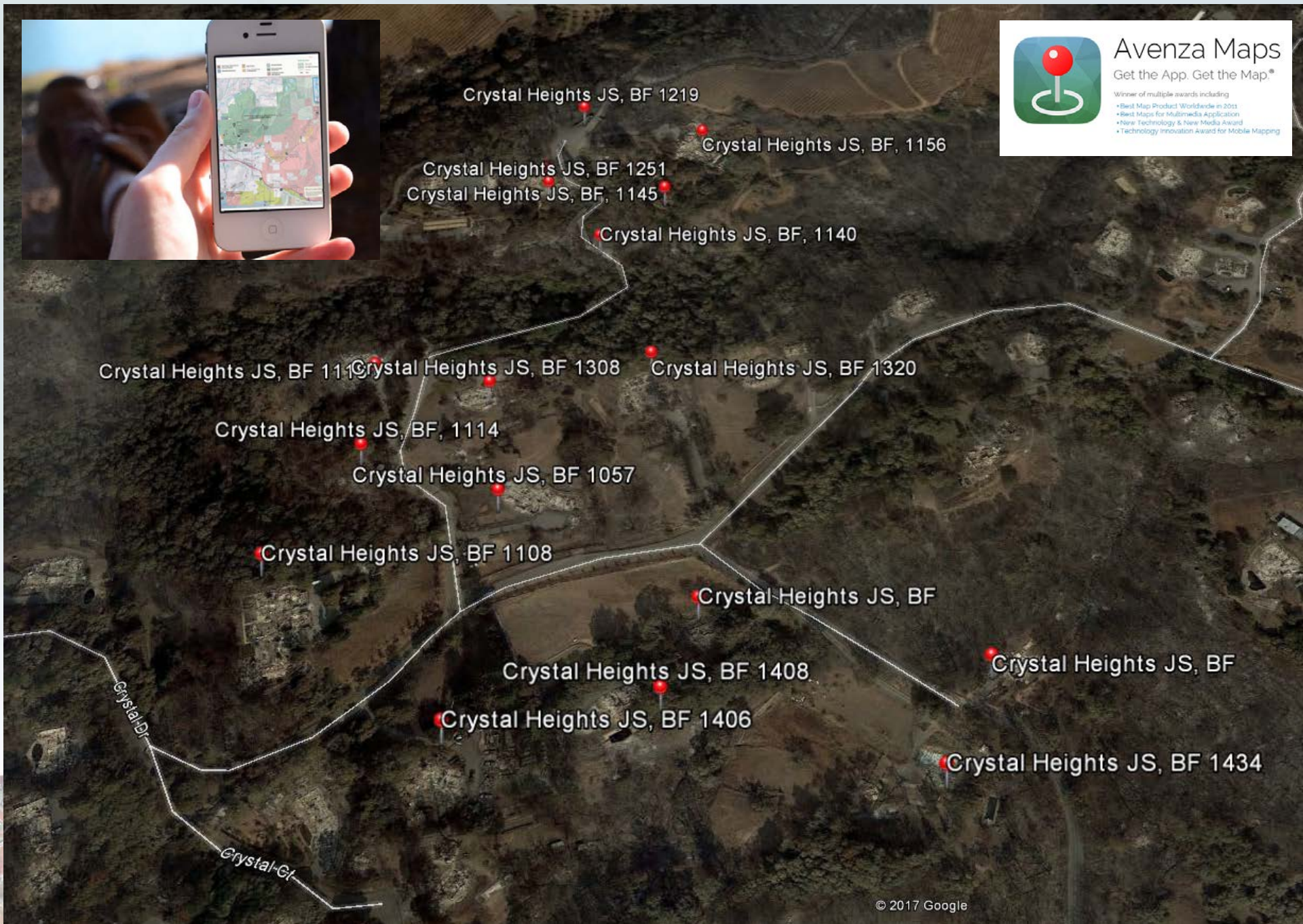




**Avenza Maps**  
Get the App. Get the Map.<sup>®</sup>

Winner of multiple awards including

- Best Map Product Worldwide in 2011
- Best Maps for Multimedia Application
- New Technology & New Media Award
- Technology Innovation Award for Mobile Mapping





**Avenza Maps**  
Get the App. Get the Map.®

Winner of multiple awards including

- Best Map Product Worldwide in 2011
- Best Maps for Multimedia Application
- New Technology & New Media Award
- Technology Innovation Award for Mobile Mapping

Crystal Heights JS, BF 1219

Crystal Heights JS, BF, 1156

Crystal Heights JS, BF 1251  
Crystal Heights JS, BF, 1145

Crystal Heights JS, BF, 1140

Crystal Heights JS, BF 1110

Crystal Heights JS, BF 1308

Crystal Heights JS, BF 1320

Crystal Heights JS, BF, 1114

Crystal Heights JS, BF 1057

Crystal Heights JS, BF

Crystal Heights JS, BF 1408

Crystal Heights JS, BF 1406



**Sonoma County Disaster Recovery Watershed Task Force Incident  
Threat Mitigation Project Form**

Water Quality Threat Rating (circle one): **High** Medium Low

General Response Area: **Stallion and Winter Brook Lanes**

**Project Location Information:**

Address Start: 3599 Stallion Dr. W Address End: 3871 Stallion Dr. W

Also, 1704 Riebli Road and Winter Brook Lane at first gate (car)

Work Area: Roadside:  In-creek:  Hillslope:  Project Dimensions (approx.): \_\_\_\_\_

**Water Quality Threat Description:**

Burned structures within 3 meters of creeks or conveyance discharging directly to creek. Pollutants from burned areas will discharge directly to creek without perimeter filtration.

**Recommended Mitigation Actions:**

Place approximately 1,400 linear feet compost socks: 1) At top of creek banks where fire-impacted stormwater may go over top of creek bank; 2) Within roadside ditches or swales, perpendicular to flow, that convey stormwater from burnt structures to creeks; 3) Around perimeter of burned structures in locations where stormwater may discharge; 4) Around drain inlet at 3825 Stallion Dr. W; 5) Around burnt car on Winter Brook Ln.

**Logistical Constraints or Issues: (i.e. access, equipment, or private property concerns)**

Private roads. Stallion Dr. locations must be accessed via Winter Brook Lane. Ryan Bey (707-799-5843) contacting neighbors for access permission. Crews must get access ahead of time; many of the property owners know we are coming out.

**Special Instructions:**

**Other Information:**

Compost socks are highly desired. If compost socks not available, substitute with weighted wattles.

Attachments:  Map  Photo(s)  Threat Identification Form(s)  BMP Sheet  Other

Date provided to Sonoma Co Disaster Recovery Watershed TF: \_\_\_\_\_

Date Completed: \_\_\_\_\_ FRWQP ID(s): RiebliRB0921, 1000, 1100, 1130, 1230

*Project developed by North Coast Regional Water Quality Control Board staff through watershed field assessments of significant water quality threats as part of Mission Tasking Number: 2017-SOC-42661*

Assessment ID: Riebli RB 0921

= creek (3m from top)

Photos: 1

IM LOW

receiving water body.

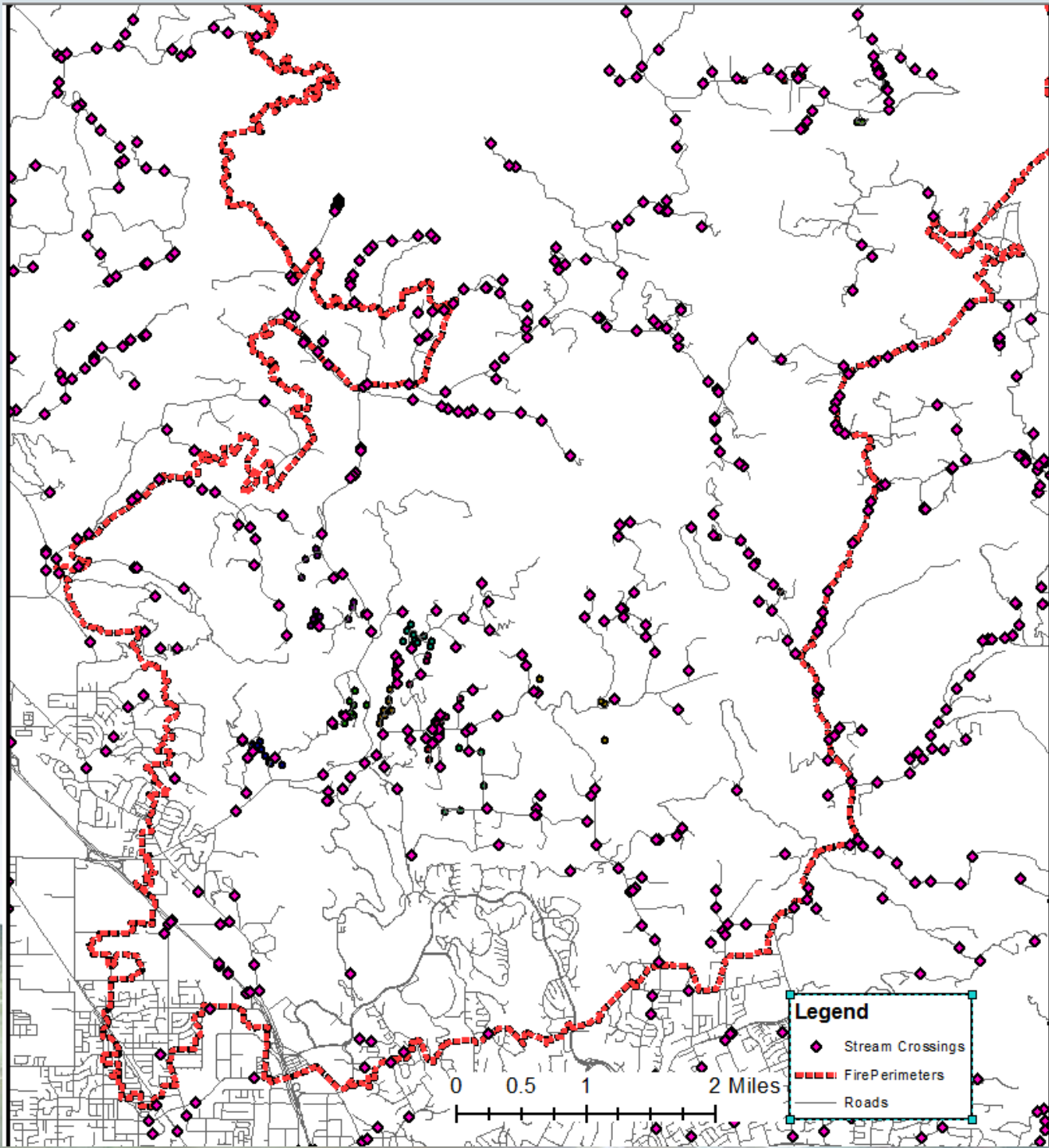
if be removed  
wattles 60 feet

we car

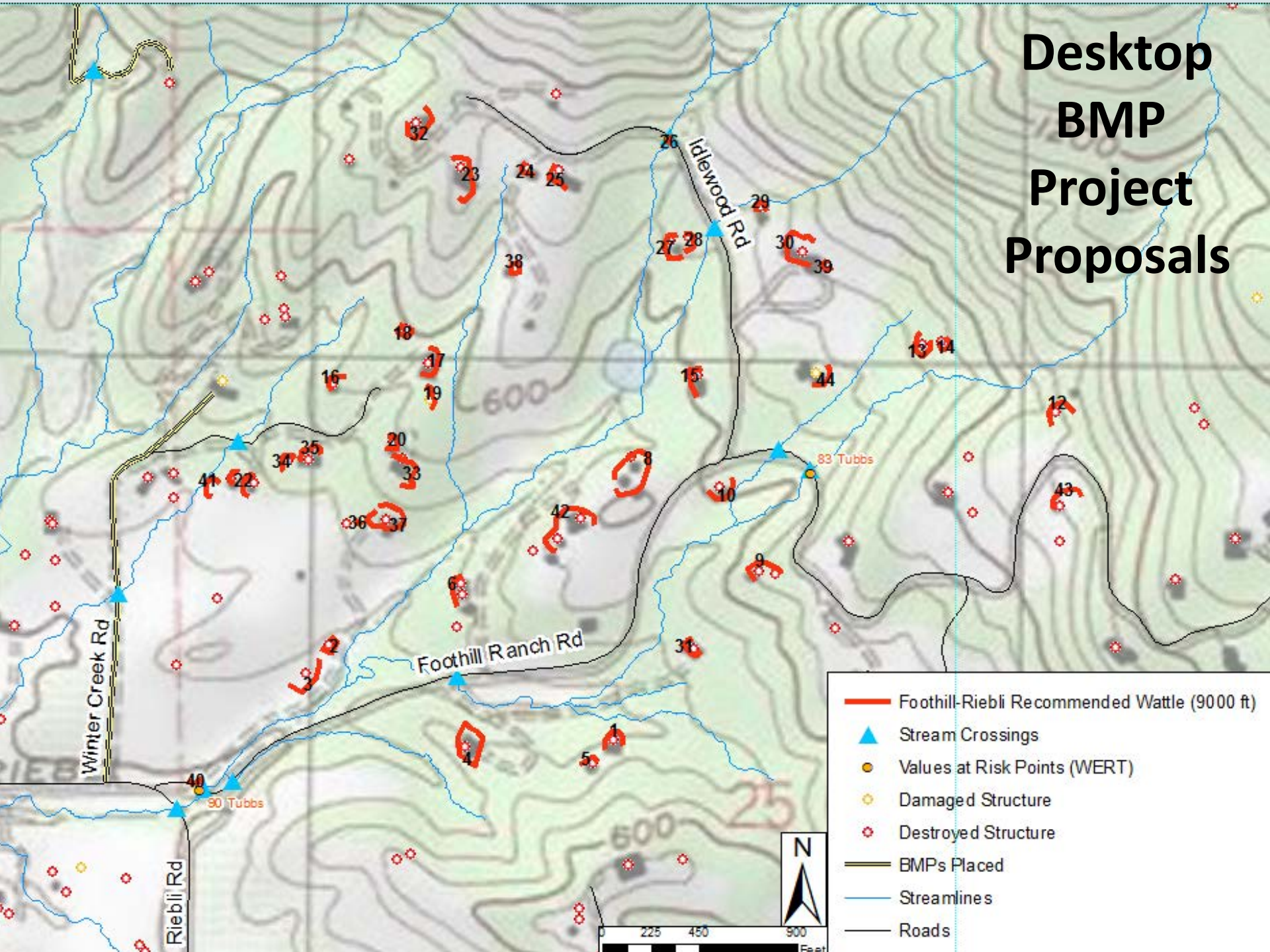
describe): \_\_\_\_\_






















































































# Data-driven Desktop Assessments and Modeling



# Desktop BMP Project Proposals

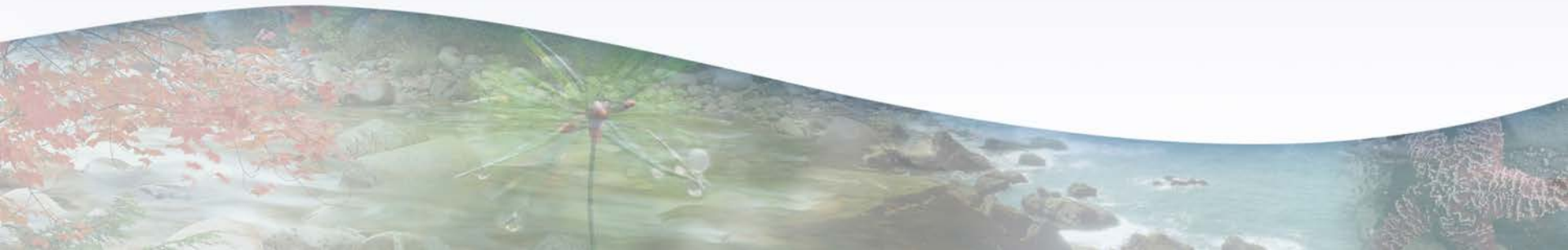


-  001\_TMPF\_RinconCB1655.pdf
-  002\_TMPF\_RinconCB1616.pdf
-  003\_TMPF\_RinconCB1531.pdf
-  004\_TMPF\_RinconCB1444.pdf
-  005\_TMPF\_RiebliRB.pdf
-  006\_TMPF\_Dana Drive\_LindaLE1106.pdf
-  007\_TMPF\_LindaLE1050.pdf
-  008\_TMPF\_(Culvert)\_LindaLE1335.pdf
-  009\_TMPF\_(Culvert)\_LindaLE1335.pdf
-  010\_TMPF\_(Culvert)\_LindaLE1433.pdf
-  011\_TMPF\_Linda Lane.pdf
-  012\_TMPF\_Linda Lane\_LindaLE952.pdf
-  013\_TMPF\_Linda Lane\_LindaLE953.pdf
-  014\_TMPF\_Linda Lane\_LindaLE1003.pdf
-  015\_TMPF\_Linda Lane\_LindaLE1604.pdf
-  016\_TMPF\_1326 Michelle Way.pdf
-  017\_TMPF\_1214 Michelle Way.pdf
-  018-020\_TMPF\_Michele Way.pdf
-  021\_TMPF\_1840 Reibli Road Structures\_RiebliBT1640.pdf
-  022\_TMPF\_2020 Reibli Road 2 Structures\_RiebliBT1552.pdf
-  025\_TMPF\_LavenderLE1148.pdf
-  026\_TMPF\_LavenderLE1158.pdf
-  027\_TMPF\_LavenderLn\_LindaLE1209.pdf
-  028\_TMPF\_Lavender-Linda Lane (packet).pdf
-  029\_TMPF\_LavenderLn\_LindaLE1224.pdf
-  030\_TMPF\_LavenderLn\_LindaLE1229.pdf
-  031\_TMPF\_LindaLane171109.pdf
-  032\_TMPF\_3614\_3528 Stallion Dr East\_RiebliRB1300.pdf
-  033\_TMPF\_WallaceRd171109.pdf
-  034\_TMPF\_WilshireDrive\_LindaLE1128.pdf
-  035\_TMPF\_Winter Creek\_LindaLE1242.pdf
-  036\_TMPF\_WilshireDrive171109.pdf
-  037\_TMPF\_Crystal\_Heights\_JS\_BF\_171108\_1057\_Compost\_Berm.pdf
-  038\_TMPF\_Michele Way MWS\_Culvert.pdf
-  039\_TMPF\_Michele Way JP 1324.pdf
-  040\_TMPF\_Crystal\_Heights\_JS\_BF\_171108\_1108\_Hydroseed.pdf
-  041\_TMPF\_HumbugGF\_debris\_171107.pdf
-  042\_TMPF\_Crystal\_Heights\_JS\_BF\_171108\_1118\_WeightedWattles.pdf
-  043\_TMPF\_Crystal\_Heights\_JS\_BF\_171108\_1156\_SandBags.pdf
-  044\_TMPF\_Crystal\_Heights\_JS\_JF\_BF\_171107\_1057\_Clear\_Culvert.pdf
-  045\_TMPF\_Crystal\_Heights\_JS\_JF\_BF\_171107\_1057\_Sand\_Bags.pdf
-  046\_TMPF\_Crystal\_Heights\_JS\_JF\_BF\_171107\_1119\_Compost\_Berm.pdf
-  047\_TMPF\_Crystal\_Heights\_JS\_JF\_BF\_171107\_1135\_Weighted\_Wattles\_Culvert.pdf
-  048\_TMPF\_Mill Creek South\_kh\_171108\_1136\_wattles.pdf
-  049\_TMPF\_Mill Creek South\_kh\_171108\_1344\_culverts.pdf
-  050\_TMPF\_HumbugGF\_debris\_171107.pdf
-  051\_TMPF\_HumbugGF\_SedControlWattles\_171107.pdf
-  052\_TMPF\_Mark West Lane\_JL\_1346\_Debris.pdf
-  053\_TMPF\_Mark West Lane\_JL\_1346\_wattles.pdf
-  054\_TMPF\_Mark West Spings Above Loraine\_WBSU\_171108\_1432.pdf
-  055\_TMPF\_Mark West Spings to Porter Creek\_WBSU\_171108\_1155.pdf
-  056\_TMPF\_Meadow Vista Trail\_JL\_1100.pdf
-  057\_TMPF\_Meadow Vista Trail\_JL\_1100\_Debris.pdf
-  058-060\_TMPF Mark West North.pdf
-  061\_TMPF\_HumbugGf - Culverts 11-07-17.pdf
-  062\_TMPF\_Crystal\_Heights\_JS\_BF\_171108\_1114\_RemoveTanks.pdf
-  063\_TMPF\_MarkWestEstates.pdf
-  064\_TMPF\_FountainGroveWest.pdf
-  065\_TMPF\_Carriage.pdf
-  066\_TMPF\_Coffee Park.pdf
-  067\_TMPF\_Skyfarm\_final.pdf
-  068\_TMPF\_HumbugCreek.pdf
-  069\_TMPF\_Mark West Lane and Porter Creek.pdf
-  070\_TMPF\_Mark West Springs Above Loraine.pdf
-  071\_TMPF\_Mill Creek-Cresta.pdf
-  072\_TMPF\_Bayberry.pdf
-  073\_TMPF\_Foothill Ranch-Ridge Road.pdf
-  074\_TMPF\_Foothill Ranch-Riebli.pdf
-  075\_TMPF\_FranzEast.pdf
-  076\_TMPF\_FranzWest.pdf
-  077\_TMPF\_Lower Rincon.pdf
-  078\_TMPF\_Porter Creek East.pdf
-  079\_TMPF\_Porter Creek West.pdf
-  080\_TMPF\_FountainGrove HM Final Project.pdf
-  081\_TMPF\_Mill Creek South.pdf
-  082\_TMPF\_Foothill Ranch, Riebli and Upper Rincon.pdf
-  083\_TMPF\_Franz East and West.pdf
-  084\_TMPF\_Lorraine, Linda, and Crystal Heights.pdf
-  085\_TMPF\_Lower Rincon.pdf
-  086\_TMPF\_Markwest Estates and North.pdf
-  087\_TMPF\_Mill and Humbug Creeks.pdf
-  088\_TMPF\_Mark West Springs and Porter Creek Road.pdf
-  089\_TMPF\_Porter Creek East and West.pdf



# Recommendations

- Disaster response training specific to data management and information management
- Greater pre-disaster coordination between Resource and Responding agencies (focus on intelligence and information sharing)
- Clear procedures/protocols on resource-related post-disaster mobilization



# Debris Management

- Temporary Conditional Waiver
  - Applies to waste streams necessary to protect life and property during cleanup actions following recent fires
  - Expires December 31, 2017
- Long-term 5-year Conditional Waiver
  - Applies to waste streams to protect life and property during cleanup following fires, earthquakes, floods, mass animal mortalities, etc.
  - Effective January 1, 2018, to January 1, 2023
- Debris Taskforce Participation and Local Agency Coordination





# 401 Permitting

- Fire recovery projects (culverts, bridges, homes) in waters of the state may need authorization
  - Exemption, Waiver, general or individual 401 Certification
- Coordinate with Army Corps, CDFW, Sonoma County
- Updated guidance on our website & simplified application

[https://www.waterboards.ca.gov/northcoast/water\\_issues/programs/water\\_quality\\_certification/pdf/12012017\\_Update\\_State\\_of\\_Emergency\\_Permitting\\_Webpage.pdf](https://www.waterboards.ca.gov/northcoast/water_issues/programs/water_quality_certification/pdf/12012017_Update_State_of_Emergency_Permitting_Webpage.pdf)

- Track all projects
- Staff have been providing guidance to applicants and are issuing authorizations quickly.



# Identify Fire Recovery Funding Sources

Document available at:

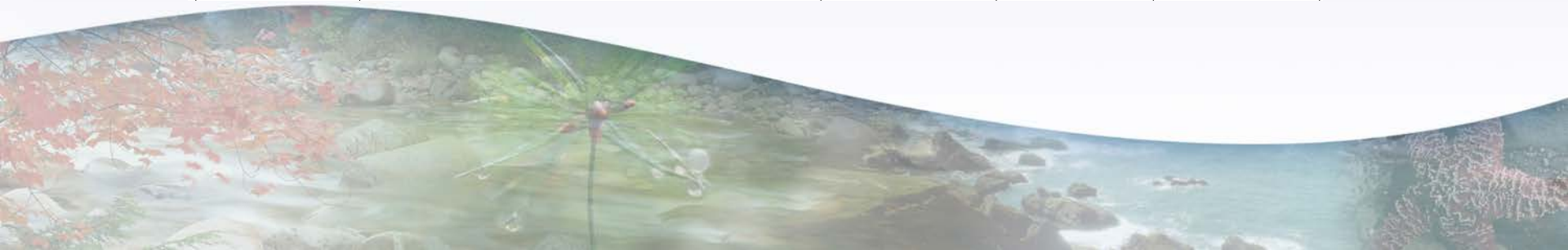
[https://www.waterboards.ca.gov/northcoast/publications\\_and\\_forms/available\\_documents/pdf/171025\\_FireRecoveryFunds\\_Final.pdf](https://www.waterboards.ca.gov/northcoast/publications_and_forms/available_documents/pdf/171025_FireRecoveryFunds_Final.pdf)

## Fire Recovery Funding

Updated 10/25/17

This is the short list of the most relevant grants and loans. For the long list of state grants, see [http://resources.ca.gov/docs/bonds\\_and\\_grants/Agency\\_Grants\\_and\\_Loans\\_August\\_2017.pdf](http://resources.ca.gov/docs/bonds_and_grants/Agency_Grants_and_Loans_August_2017.pdf). Federal grants can be found at [www.grants.gov](http://www.grants.gov).

Administering Agency	Program Information & Webpage	Solicitation Period	Funding Source	Funds Available Statewide
NRCS	<p><b>EQIP (Environmental Quality Incentives Program)</b> resources for Catastrophic Wildfire Recovery Incentive Program for erosion controls. In 2017, \$4 million was allocated. In 2017 NRCS also had funds allocated for Forest Health (\$~1.8 million) and Forest Tree Mortality (\$5 million) – these will likely be important to fund as efforts increase to reduce fuel for Catastrophic Wildfires. NRCS will again be making funds available to support response to the fires. The funding programs are listed at the link below: Link- <a href="https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/eqip/">https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/eqip/</a></p>	<p>On going</p> <p>California Fires News Release <a href="https://content.govdelivery.com/accounts/USDAO C/bulletins/1bedf0e">https://content.govdelivery.com/accounts/USDAO C/bulletins/1bedf0e</a></p>	<p>FEDERAL USDA NRCS</p>	<p>US wide (&lt;\$4 million); funds are subject to the Adjusted Gross Income (AGI) limit which will of ~ \$900K/yr total income from all sources – low for many farms)</p>



# Identify Fire Recovery Funding Sources

Document available at:

[https://www.waterboards.ca.gov/water\\_issues/programs/nps/docs/319grants/2018/FINAL%20w\\_ChangeSheet%202018%20NPS%20Grant%20Guidelines.pdf](https://www.waterboards.ca.gov/water_issues/programs/nps/docs/319grants/2018/FINAL%20w_ChangeSheet%202018%20NPS%20Grant%20Guidelines.pdf)



## 2018 Nonpoint Source Grant Program Guidelines

Clean Water Act section 319(h) and  
Timber Regulation and Forest Restoration Funds

### 2018 Nonpoint Source Grant Cycle

- State Water Resources Control Board anticipates that up to \$3,000,000 will be available to post-fire recovery projects.
- Applications due February 8, 2018

## B. Eligibility, Review, and Selection Process

**Post-Fire Recovery Projects:** To address recovery needs in areas affected by fire (as indicated in the emergency proclamations by Governor Edmund G. Brown<sup>2</sup>), the 2018 Nonpoint Source Program Preferences (see Section D Statewide Preferences) include post-fire recovery projects. Please indicate “post-fire recovery” in the title of your application if applying for these funds. For these projects, the Deputy Director of the Division of Water Quality may waive certain application and eligibility requirements to the extent that the waiver is not contrary to the requirements of the Federal Grant. The waived application and eligibility provisions include, but are not limited to:

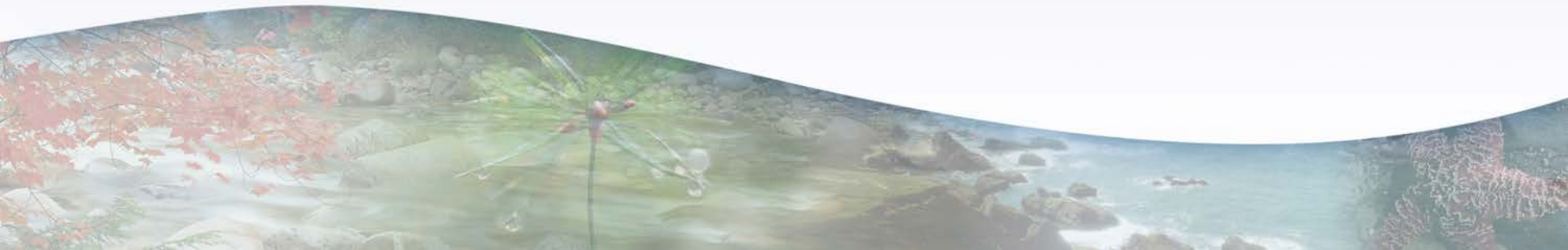
- *Project need not meet the funding match requirements described in Section E, Attachment F, Proposal Instructions for Match Funding Requirements.*
- *Projects need not implement an adopted or nearly-adopted total maximum daily load (TMDL), or TMDL alternative*
- *Project need not submit information demonstrating climate change resilience of the project.*

For a complete set of waived provisions and application requirements, all applicants for post-fire recovery funds are asked to contact your Regional Water Board Grant Manager.

# Identify Fire Recovery Funding Sources

Additional 319(h) Funds available immediately

- \$626,626 available for projects
- Funds to be divided between 3 regions  
(including the North Coast Region)
- Costs must be incurred by early April 2018



# Monitoring & Assessment

## Near-Term:

- Focus on documenting water quality within burned areas during storm events with focus downstream of urban areas highly impacted by the fires to determine best management practice effectiveness.

## Long-Term:

- Participate in collaborative process for assessing long-term impacts and identifying recovery actions.

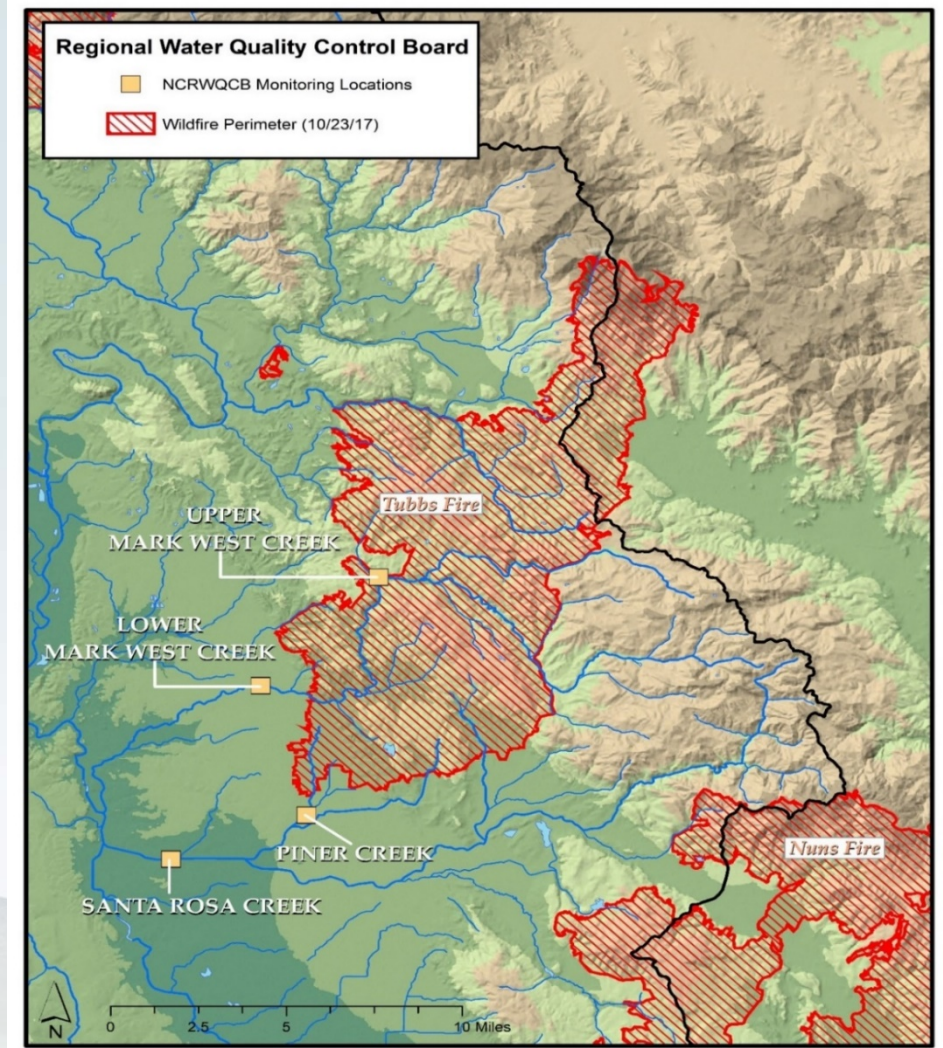


# Monitoring & Assessment

Near-term

Sonoma County Water Agency

North Coast Regional Water Board

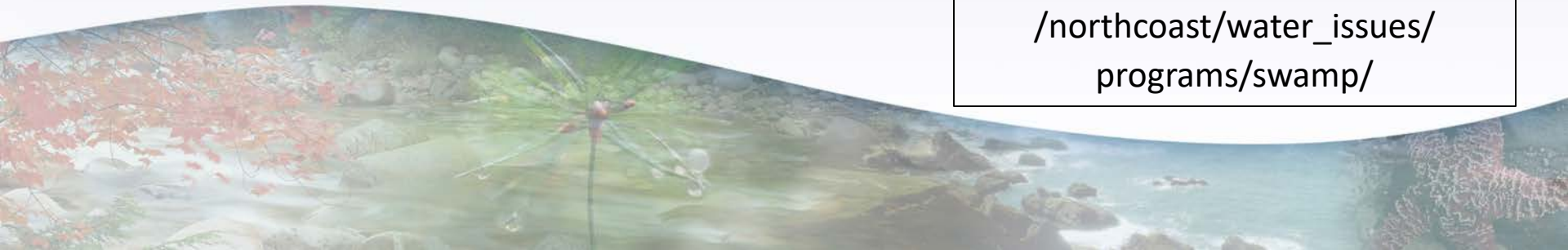


# Monitoring & Assessment

Near-term

- Samples Collected:
  - November 1: prior to rain event
  - November 8: 1 inch rain event
  - November 15: 2 inch rain event
- Existing Data Summary:
  - No increases in pollutant concentration over background/historic levels
  - No toxicity

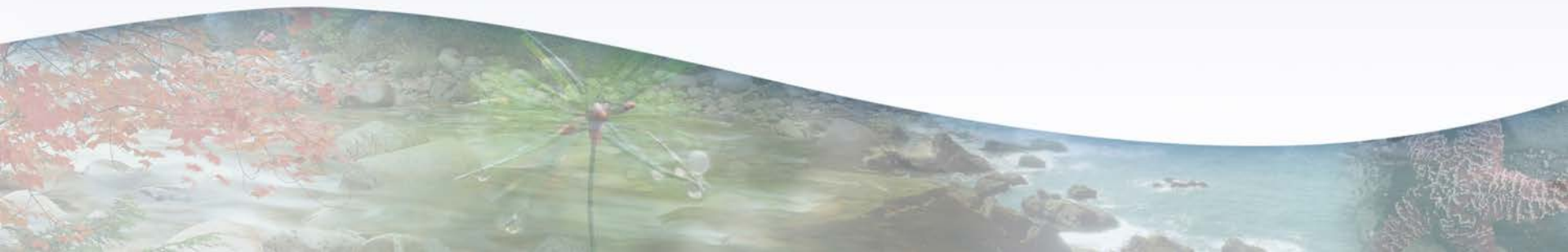
Regional Water Board Monitoring  
Plan Available at:  
[https://www.waterboards.ca.gov/northcoast/water\\_issues/programs/swamp/](https://www.waterboards.ca.gov/northcoast/water_issues/programs/swamp/)



# Monitoring & Assessment

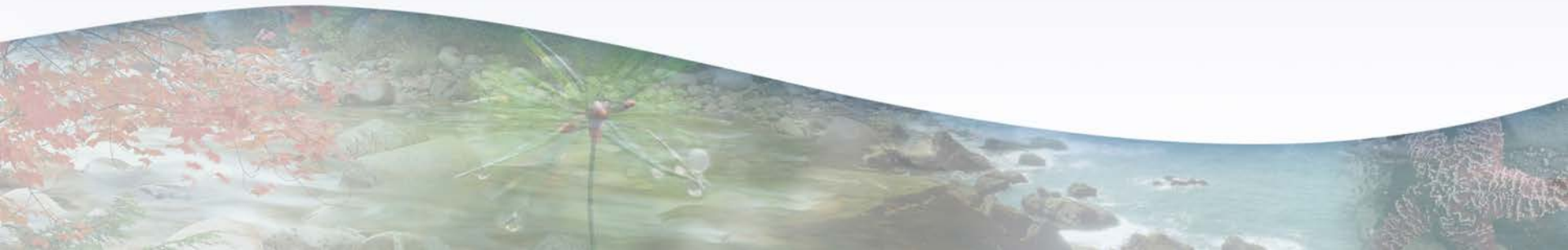
Long-term

- Participate in a collaborative process for long-term monitoring and recovery assessment efforts
- Use Russian River Regional Monitoring Program (R3MP) as a platform for coordination and information sharing



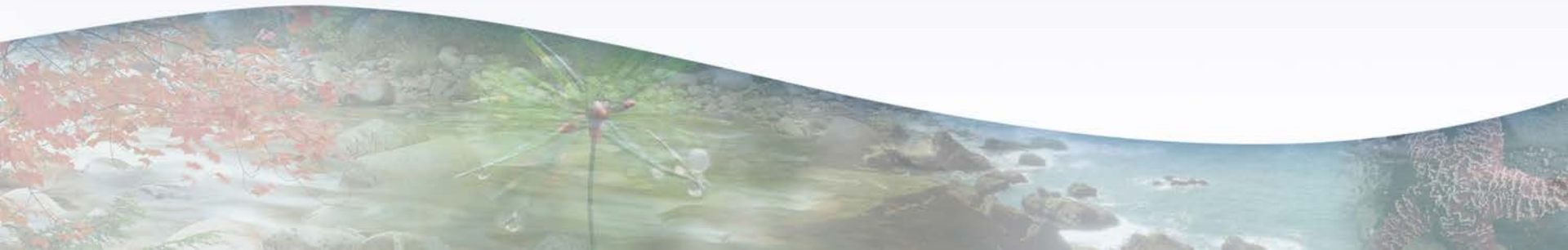


# Questions?



# Coordination with Partners

- Emergency response is an atypical role for Regional Water Board staff
- Utilized our existing expertise and resources
- Coordinated with our partners
- Utilized Cleanup and Abatement funds



# Coordination with Partners

- Worked with City, County, and others
- Developed post-fire assessment materials & conducted field assessments
- Worked with Watershed Collaborative Teams & other entities
- Provided input and expertise on mechanisms to protect water quality
- Advocated for environmental outreach

