

80 STONE PINE ROAD, SUITE 100 HALF MOON BAY, CA 94019

DRAFT Minutes of the Regular Meeting of the Board of Directors September 17, 2020 4:00 pm – 6:00 pm via Zoom teleconference

<u>Directors present</u>: Barbara Kossy, TJ Glauthier, Adrienne Etherton, Jim Reynolds <u>RCD staff present</u>: Kellyx Nelson, Lau Hodges, Kasey Butler, Amy Kaeser, Joe Issel, Sheena Sidhu, Sara Polgar Guests present: Ron Sturgeon, Rita Mancera, Aaron Hebert, Rosanna Petralia, Neil Panton

1. <u>Call to Order</u>

Kossy called the meeting to order at 4:01 p.m.

2. <u>Approval of Agenda</u>

Glauthier moved to approve the agenda, Reynolds seconded. Motion passed unanimously.

3. Introductions of Guests and Staff

All in attendance introduced themselves.

4. Public Comment

There was no public comment.

5. <u>Consent Agenda</u>

Glauthier moved to approve the consent agenda, Reynolds seconded. Motion passed unanimously. Etherton abstained.

6. <u>Regular Agenda</u>

6.1 Presentation by Aaron Hébert, Senior Resource Management Specialist at Midpeninsula Regional Open Space District (MROSD), about results of sediment study conducted in El Corte de Madera Open Space Preserve. (see attached)

• There was discussion about Hébert's presentation; operational needs for rural roads, including access to fight fire, and the feasibility/ cost of utilizing the V* methodology at watershed scale.

6.4 Diversity, Equity and Inclusion

- Nelson asked Mancera whether the fires and recovery exasperated inequities in the community. Mancera explained that Puenta de la Costa Sur had done a lot of emergency preparedness but were not prepared for the fire. She noted the following issues:
 - Disparity in communication (lack of bilingual updates);

- TalkingPoints, a program allowing people to translate text into Spanish, was not always trustworthy;
- The Latino community was less likely to have a camper to stay in or have a credit card to use at a hotel;
- Students who were displaced without access to computers were falling behind in school;
- The biggest loss to the Latino community was lost wages;
- Those who were evacuated over the hill had been separated from their community;
- Lack of clear communication regarding fire updates, whether it was safe to return home and understanding the maps and zoning; and
- Fear of the Federal Emergency Management Agency among some in the community due to the current administration's relationship with undocumented workers.
- There was discussion regarding priority needs for the community, which included access to computers (the library provided hotspots for internet connectivity); Pie Ranch provided produce and TomKat Ranch provided meat; tree removal and clearing around homes (RCD is helping); safe drinking water (RCD is helping).

6.2 Discussion about RCD's role in fire: supporting suppression in recent fire, assisting with post-fire recovery, and programs to build fire resilience and forest health.

- (Sidhu presentation attached below)
- Sidhu was acknowledged and thanked for her work.
- There was discussion about RCD's work and partnerships for post-wildfire recovery, prevention, and safe evacuation routes.
- Petralia expressed a desire for empowerment and training to local communities for fire response.
- 6.3 Discussion about the RCD's role as local sponsor to the Army Corps of Engineers for restoration of seasonal wetlands in Half Moon Bay on the Wavecrest property in partnership with the landowners: City of Half Moon Bay, Peninsula Open Space Trust, and Coastside Land Trust.
 - Polgar showed a map of the location (see attached) and Glauthier asked if the Board's approval was required; Polgar explained that it would be once the RCD received the federal stamp of approval.
 - Kossy expressed appreciation for the project.

6.5 Executive Director's Report

• Nelson reported on the following:

- On October 14, 2020 the RCD will present to the Midcoast Community Council on the topic of fire on the Coastside.
- The RCD would be holding two strategic planning sessions; October 1, 2020 from 8 a.m. 12 p.m. and October 15 from 8 a.m. 12 p.m.
- Chelsea Beakes would be starting at the RCD on Monday as an administrative assistant for special projects.
- Challenges with timely processing of water rights for streamflow enhancement projects.
- Near final draft of the Cutting Green Tape paper on Secretary Wade Crowfoot's desk.
- Increased competitiveness for grant monies putting more importance on the need to diversify revenue.
- Need to appoint someone to complete Neal Kramer's term. Does not require action by County Board of Supervisors to complete his term. RCD board can appoint someone.

6.6 NRCS report

• Howard was unable to attend due to fire recovery efforts.

6.7 Directors' reports

- Glauthier drove down Highway 1 and noted the fire had burned down to Año Nuevo State Park. He was also delighted to see the new RCD sign at the top of the 92.
- Reynolds enjoyed his creek walk with Fisher.
- Etherton had nothing to report on, she had been busy being a new mom.
- Kossy expressed how proud she was of the entire RCD staff.

7 Adjourn Meeting

• Kossy adjourned the meeting at 6:16 p.m.



NIDPENINSULA R e G I O N A L OPEN SPACE Sediment Monitoring Results El Corte De Madera Creek OSP Watershed Protection Program

Aaron Hébert, Senior Resources Management Specialist September 17th, 2020 San Mateo Resource Conservation Districtt







Outline and Purpose

Share the results of the stream monitoring study in El Corte De Madera Creek Open Space from 2004-2020

Outline:

- Background on the Watershed Protection Program
- Sediment Study
- Questions? 10-min



Recent Survey Results

JANUARY 9-23, 2020 MIDPENINSULA REGIONAL OPEN SPACE DISTRICT 320-876-WT N=889 MARGIN OF SAMPLING ERROR ±3.5% (95% CONFIDENCE INTERVAL) A/B SPLIT

• Residents most value Midpen goals that have to do with water, caring for the natural environment, redwood forests, wildlife, and wildland fire prevention. Across multiple surveys done by many agencies, water quality protection consistently ranks as a top priority. Notably, every goal listed was listed as "extremely" or "very important" by a majority of residents.

FM3

RESEARCH

Water and wildlife are equally important themes (80% of respondents say both themes increase favorability). Water quality ranks high on many environmental issues and attitude surveys. Here, nearly half (49%) say they have a "much more favorable view" of Midpen once they hear about how Midpen preserves protect water supplies and prevent water pollution, and another 31% have a "somewhat more favorable" view. Nothing is more important than clean drinking water. By protecting and

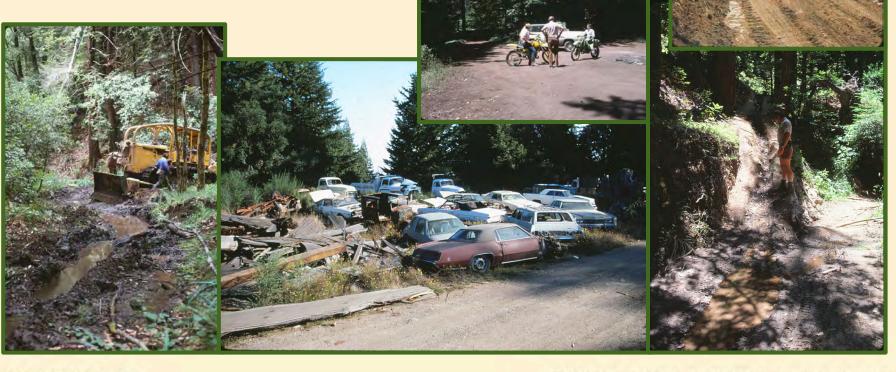
Water pollution was a significantly bigger concern to Coastsiders (56% compared to 38%).





History of the Preserve

- Was heavily logged as early as the 1860s through 1988.
- Was once a motorcycle park
- Old abandoned vehicles
- Led to many erosion issues





Background

- 2001: Citizen complaint about sediment from Preserve Met with CDFW, USFWS, and RWQCB. Four requirements:
 - I. Identify sources of sedimentation in the preserve that originate from roads and trails;
 - 2. Evaluate recreation, maintenance, or management activities that may be responsible for sedimentation;
 - 3. Develop a plan to implement the necessary repairs or corrective actions at high-priority sites throughout the preserve; and
 - 4. Establish a monitoring program to track the success of corrective actions.



Timeline

<u>2002</u>: Contracted with Tim Best (CEG) to assess roads, trails, and sediment sources

- 2004-15: Watershed Protection Program (WPP) Implementation
- <u>2004-09:</u> Contracted with Balance Hydrologics to develop and implement annual stream and sediment monitoring program
- <u>2010:</u> Discontinued monitoring; 2004-09 data adequate for 'before'.
- <u>2016:</u> Tim Best reassessed WPP sites. Substantial completion.
- <u>2018-20</u>: Effectiveness Monitoring and Final Report

Watershed Protection Program Implementation 2003 - 2016 And 2015-2020 Ongoing Maintenance



MROSD Preserves

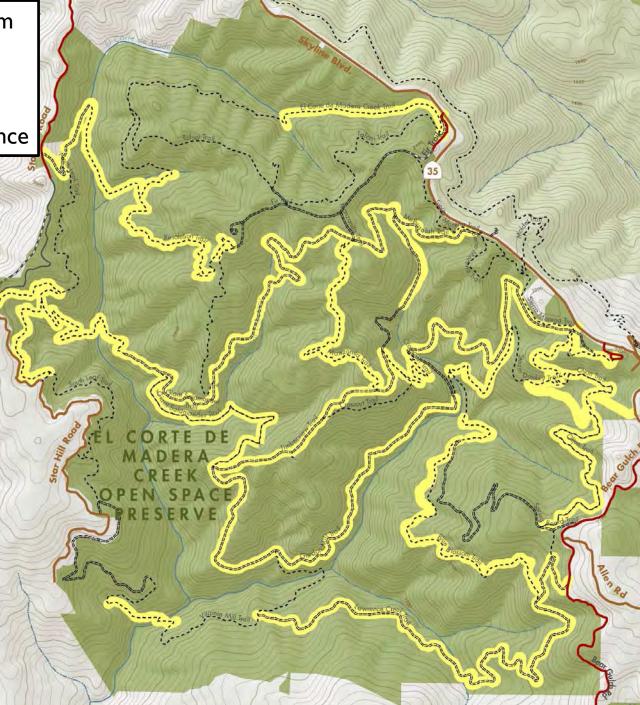
Other Protected Lands

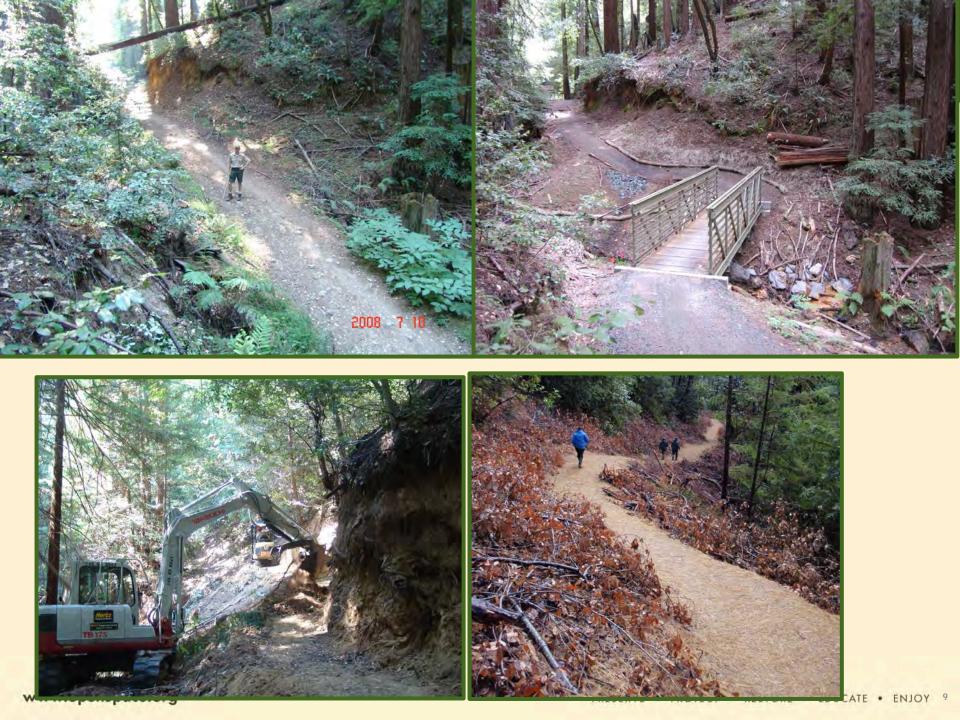
Private Property

Completed Treatment

== Unpaved Road ----- Unmaintained Road

-- Trail







Summary of Work Completed

- Permits from 5 agencies
- Work on 17 (of 19) trails
- Over 10 work seasons
- 24 miles completed
- 8 new bridges
- 3 new puncheons (small bridges)
- 4 miles formally abandoned
- Old culverts removed or replaced
- Road and trail rocking
- Road to trail conversion
- Rerouting
- \$1.25m in hard costs and \$2-3m in staff labor





Sediment Monitoring Methods

- Stream Gage at the bottom of El Corte De Madera
 - Measuring Flow
 - Turbidity
 - Sediment Sampling
- Inventory of Large Landslides
- V* Sediment Pool Monitoring
- Stream Texture/Substrate



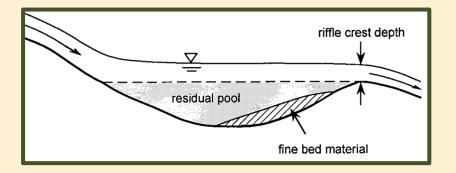
What is V*?

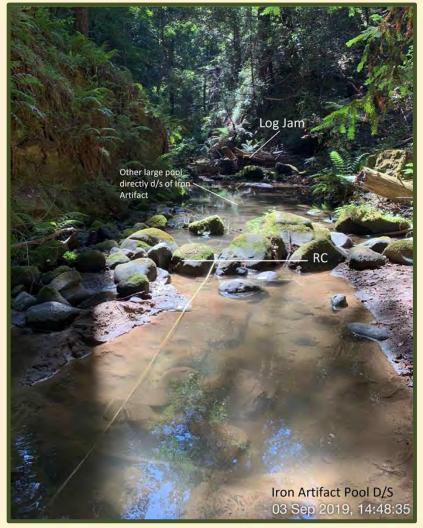
V* method monitors sediment in the creeks over time.

The V* Value

V* =

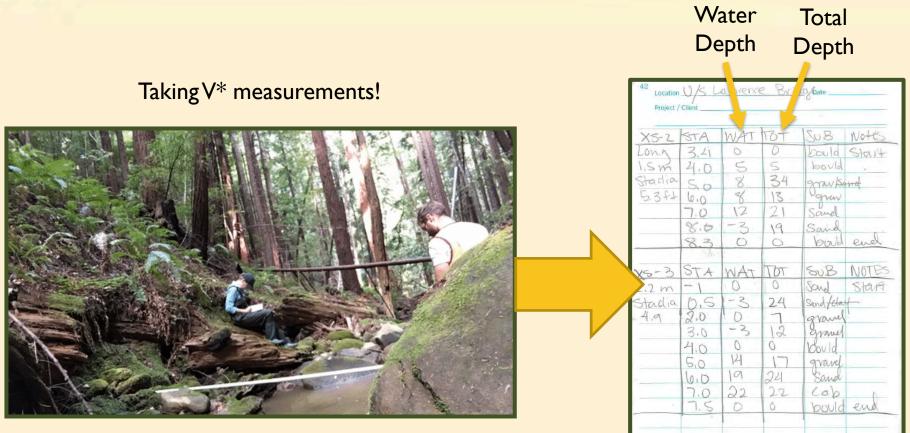
<u>Volume of fine sediment</u> Total 'residual' pool volume





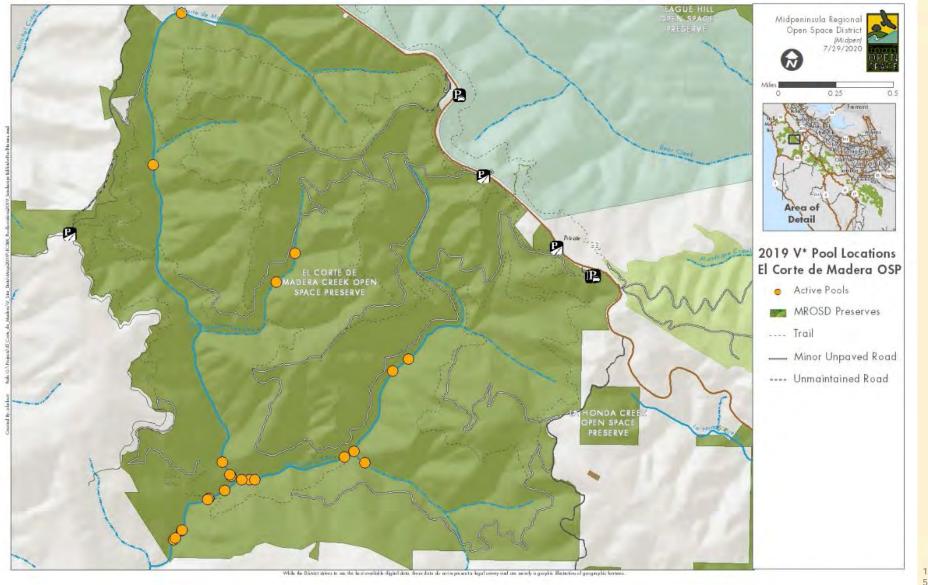


The V^{*} Method





2018 – 2019 Pool Locations

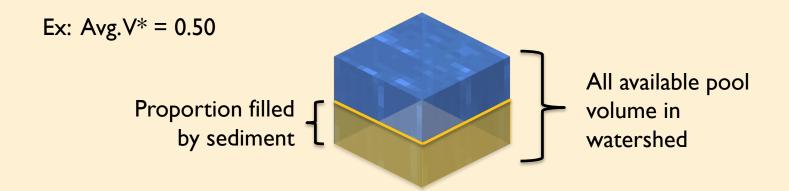




How do you compare V* over time?

Weighted V* Average = $\frac{\sum (Volume of fine sediment)}{\sum (Volume of residual pool)}$

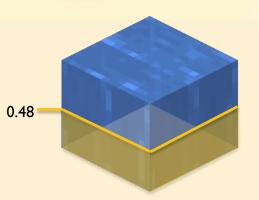
For all pools within the preserve, in a given year.





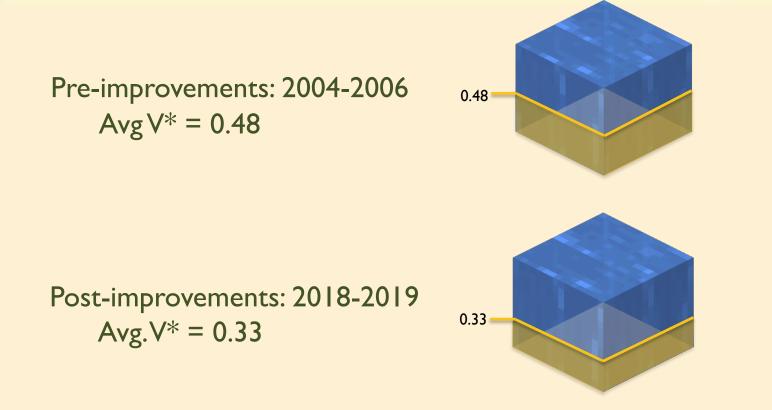
ECDM V* Results

Pre-improvements: 2004-2006 Avg $V^* = 0.48$





ECDM V* Results



The volume of fine sediment, per unit volume of pool, has gone down over time.

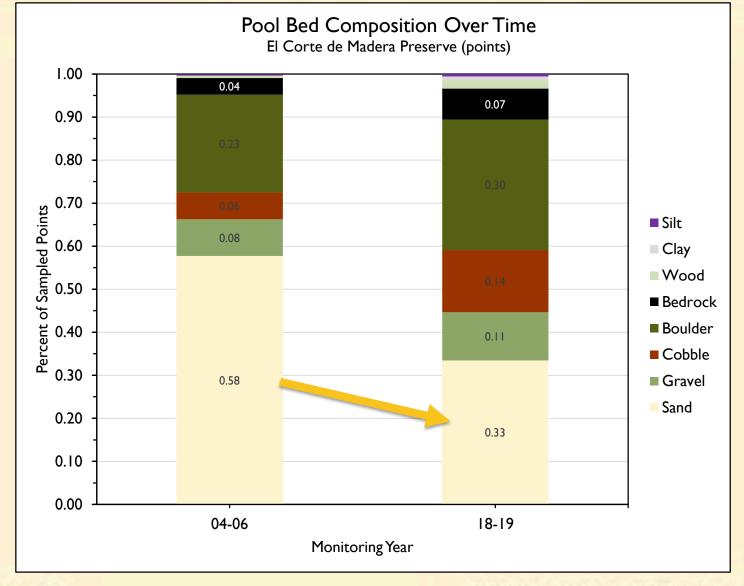


Counting Rocks!





Streambed Materials Change Over Time



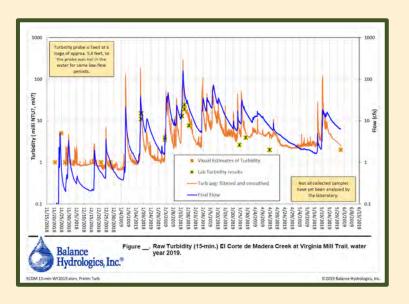


Additional Monitoring Efforts

Turbidity Sensor Data

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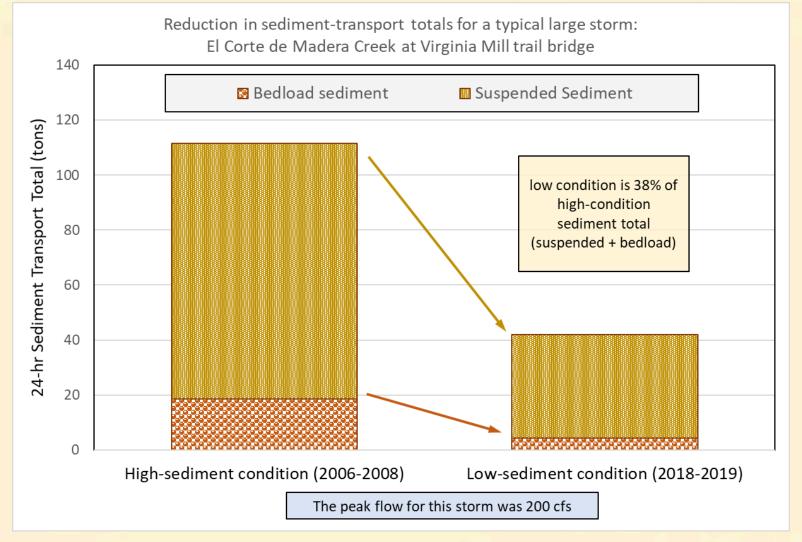


Direct Sediment Load Measurements





Pre-WPP Sediment and Post-WPP Sediment





2006 – 2008 Sediment Rating Curve

Suspended Sediment WY2019

Suspended Sediment WY2018

Suspended sediment WY2007

------ Suspended-sediment rating curve WYs2006-2008

WY 2018 and 2019 suspended-

sediment measurements plot

generally below the WY 2006-2008 composite curve. These data do

warrant shifting the curve for WYs 2018 and 2019. This indicates that there was a

measureable change in the amount of suspended sediment entrained at a

given flow.

∆ Suspended sediment WY2008

Suspended sediment WY2006

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0

Sediment Discharge (tons per day)

10

1

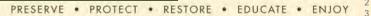
0.1

0.01

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Balance Hydrologics, Inc.

www.openspace.org



2

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Shifts upward in

future years would

indicate higher rates of sediment transport.

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Shifts downward indicate lower rates of sediment transport.

100

1000

Note the axes are logarithmic

 \diamond Ó

A

10

Instantaneous Streamflow (cfs)

Figure 7. Sediment-discharge measurements and rating

curve, El Corte de Madera Creek at Virginia Mill

Trail.



2018 – 2019 Sediment Rating Curve

Suspended Sediment WY2019

Suspended sediment WY 2008

Suspended sediment WY 2007

Bedload sediment WY 2008

Bedload-sediment WY 2007 Suspended sediment WY 2006

Bedload sediment WY 2006

Suspended-sediment rating curve 2006-2008
Bedload-sediment rating curve 2006-2008

WY 2018 and 2019 suspended-

sediment measurements plot generally below the WY 2006-2008 composite curve. These data do warrant shifting the curve for WYs 2018 and 2019.

This indicates that there was a

1

Trail.

Δ

10

Instantaneous Streamflow (cfs)

Figure 7. Sediment-discharge measurements and rating

curve, El Corte de Madera Creek at Virginia Mill

measureable change in the amount of suspended sediment entrained at a given flow.

Δ

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Balance Hydrologics, Inc.

Sediment Discharge (tons per day)

Bedload Sediment WY2019 Suspended Sediment WY2018 Bedload Sediment WY2018



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2 ?

Shifts upward in future years would

indicate higher rates of sediment

transport.

ΔB

4

Shifts downward indicate lower rates of sediment transport

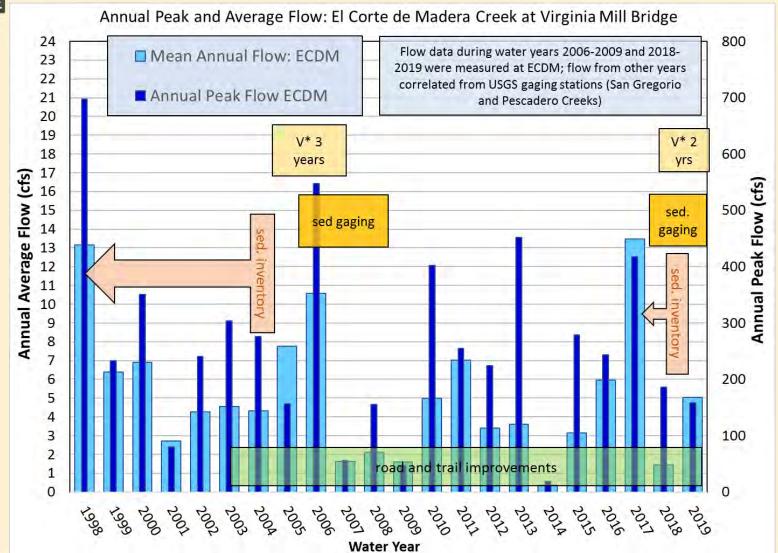
100

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Note the axes are logarithmic



Putting it in Context





Outreach

38th Annual Salmonid Restoration Conference

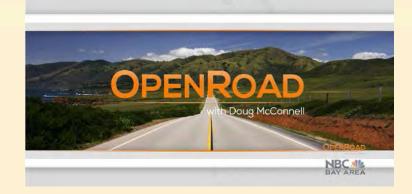
March 31 – April 3, 2020 Santa Cruz, CA

2020 Vision for California's Salmonscape



Field Tour Leaders: Aaron Hébert, Midpeninsula Regional Open Space District, Jonathan Owens, Balance Hydrologics

Midpeninsula Regional Open Space District and Balance Hydrologics will present technical information and lessons learned about 18 years of sediment reduction efforts in a popular mountain biking preserve with a focus on instream sediment monitoring and the V* method. A technical briefing in the morning will be followed by a field tour of the project site, El Corte de Madera Open Space Preserve, and a hands on demonstration of the V* method.



SAN MATEO RESOURCE CONSERVATION DISTRICT



San Francisco Bay Regional Water Quality Control Board



Midpen Staff















Supporting Consultants





Barry Hecht Founder, Principal Geomorphologist / Hydrogeologist



Tim Best, CEG

Jonathan Owens

Principal Hydrologist / Engineer

Chelsea Neill Geomorphologist / Hydrologist





QUESTIONS?



CZU Lightning Complex Fire Recovery Response

Presentation to RCD Board of Directors

September 17, 2020

CZU Lightning Complex



Lightning caused multiple fires overnight, Sunday August 16

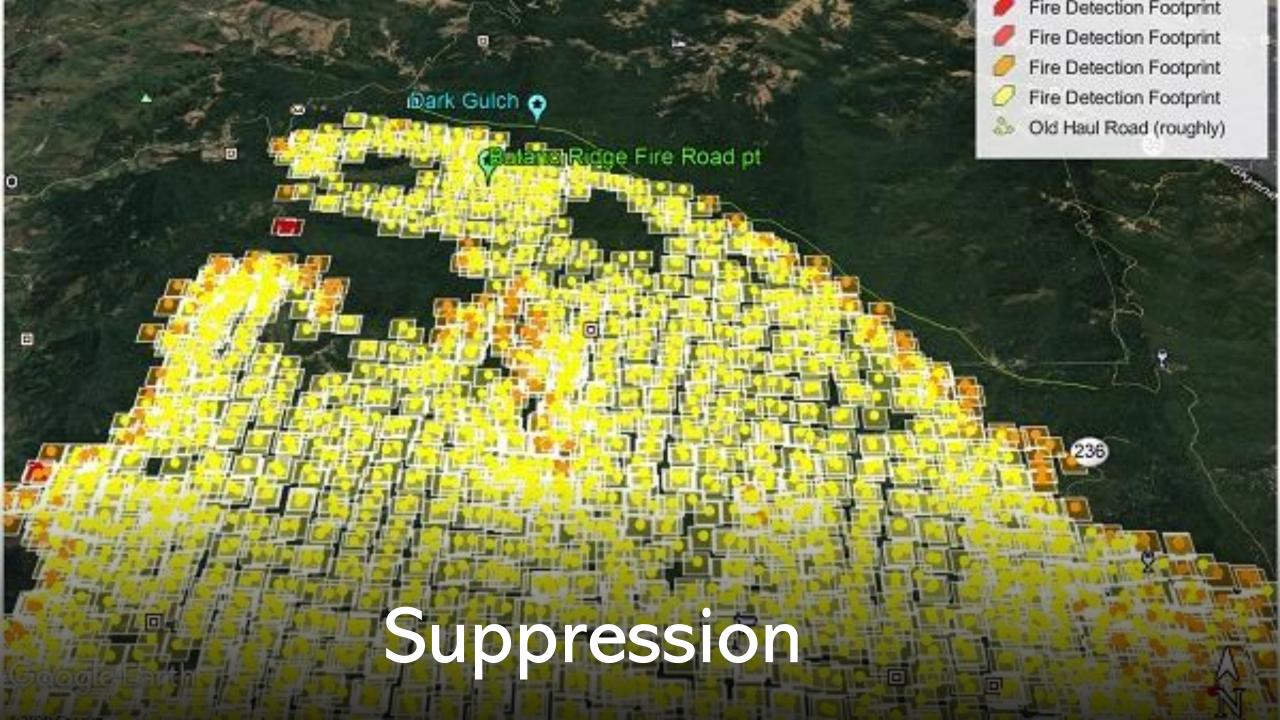


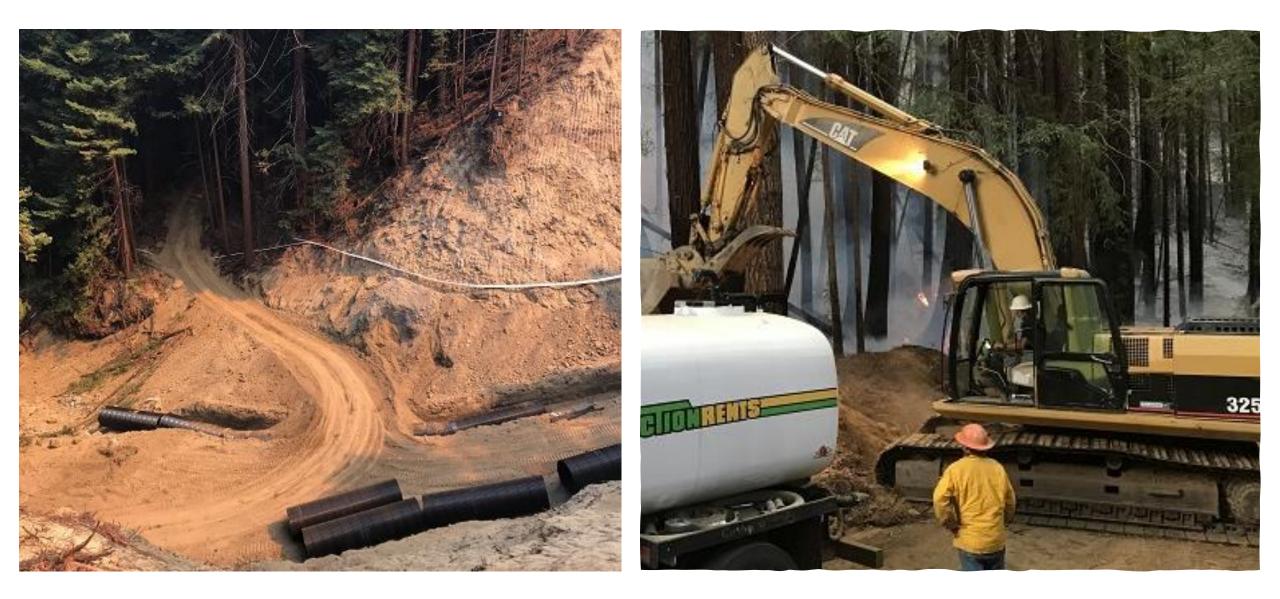
By Tuesday August 18, CAL FIRE partners shared that the threat was increasing and resources were limited



RCD immediately responded to assists where possible







Community

- Reaching out (emails, newsletter, calls...)
- Online resource tracking list for the community
- Livestock evacuations (County Parks offer)
- Translation services for KPDO
- Fire Safe Council communications (website, newsletter, twitter)

Being Nimble





Responding to Community Needs



Outreach and Education

- 1. Created web page with resources for recovering from fire
- 2. Webinar series (will be recorded and on website)
- 3. County hosted public meeting for coastside about fire- RCD presented, a lot of follow up interest
- 4. Newsletters focused on fire sent to thousands
- 5. Resource Center in Pescadero
- 6. Fire Safe Council
- 7. Extensive individual contacts and distribution lists
- 8. Presenting soon to Midcoast Community Council







PROTECTING YOUR LAND AFTER A WILDFIRE



This FREE online series will provide residents with an understanding of the short and long-term effects of wildfire on the landscape and best practices for aiding the recovery process.

POST-FIRE RESTORATION: WHAT WORKS & WHAT'S A WASTE OF TIME

SATURDAY, SEPTEMBER 12 - 10:00 AM TO 11:00 AM Rich Casale, Certified Professional in Erosion and Sediment Control

and Post Fire Restoration Specialist, Retired NRCS

UNDERSTANDING FOREST REGENERATION & HAZARD TREE MANAGEMENT

TUESDAY, SEPTEMBER 15 - 6:00 PM TO 7:00 PM

Steve Auten, Registered Professional Forester, ARC – Auten Resource Consulting

MANAGING DRAINAGE & EROSION ON PRIVATE PROPERTY & ROADS AFTER FIRE

SATURDAY, SEPTEMBER 19 - 10:00 AM TO 11:00 AM Matt Weld, Register Professional Engineer, CFM & CPESC, Waterways Consulting Inc.

PREPARING FOR POST-FIRE CHANGES ALONG STREAMS & WATERWAYS

TUESDAY, SEPTEMBER 22 - 6:00 PM TO 7:00 PM *Kristen Kittleson, Fisheries Resource Planner, County of Santa Cruz*

RSVP required | www.rcdsantacruz.org

For more information call Angie Gruys at 831.419.8710 Open to residents of Santa Cruz and San Mateo Counties





Prevention Programs

- Large scale fuel load reduction projects
- Chipper program
- Streamlined permitting
- Assisting Fire Safe Council
- Regional planning

Everything in Partnership

- NRCS
- RCD Santa Cruz County
- CAL FIRE
- San Mateo County
 - Parks
 - Ag Commissioner
 - Supervisor Horsley
- State Parks
- Amah Mutsun Land Trust
- Landowners who invite us

