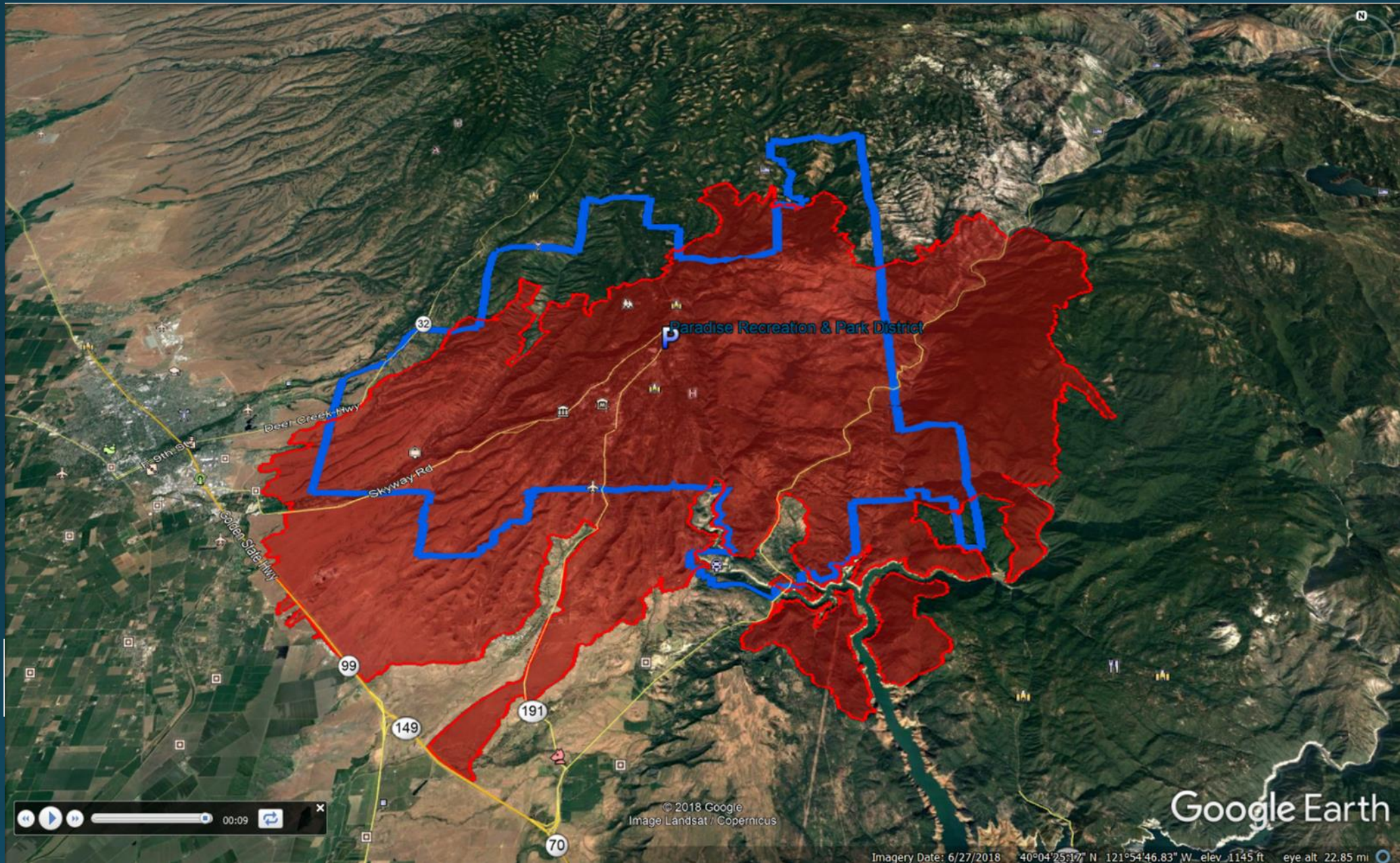


Request for Proposal (RFP): Innovative Wildfire Risk Reduction Buffers

Dan Efseaff

Paradise Recreation and Park District





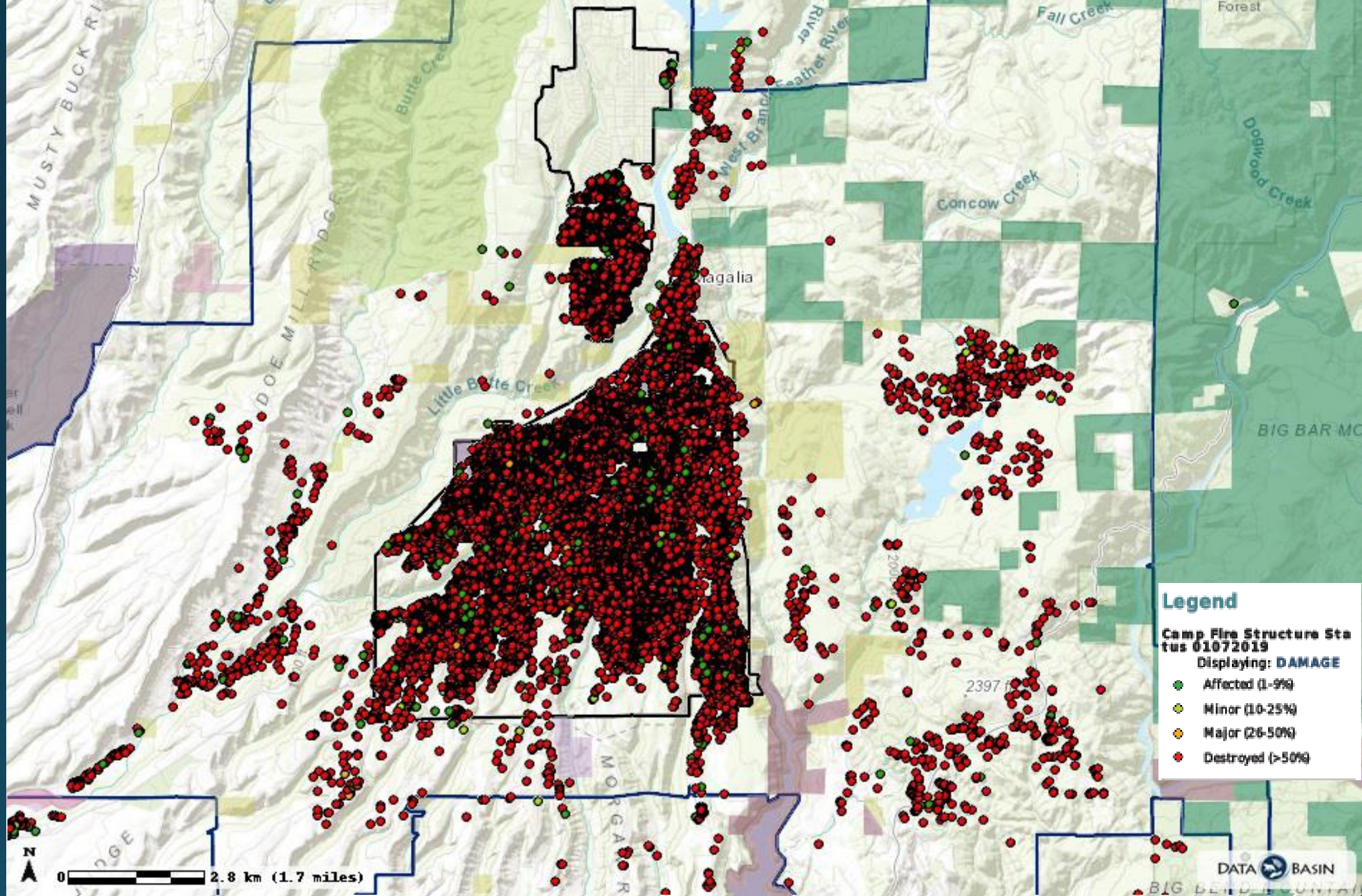
Paradise Recreation & Park District

Google Earth

Imagery Date: 6/27/2018 40°04'25.17" N 121°54'46.83" W elev. 1145 ft eye alt 22.85 mi

© 2018 Google
Image Landsat / Copernicus

00:09



Legend

Camp Fire Structure Status 01072019

Displaying: DAMAGE

- Affected (1-9%)
- Minor (10-25%)
- Major (26-50%)
- Destroyed (>50%)



An Overview of the Wildfire Risk Reduction Buffer Concept

Community Needs and Partnerships

Clean-up and
hazard / fuels
reduction

Investment in
community
improvements

Expert problem
solving for
adaptations

Parks and
recreational
opportunities

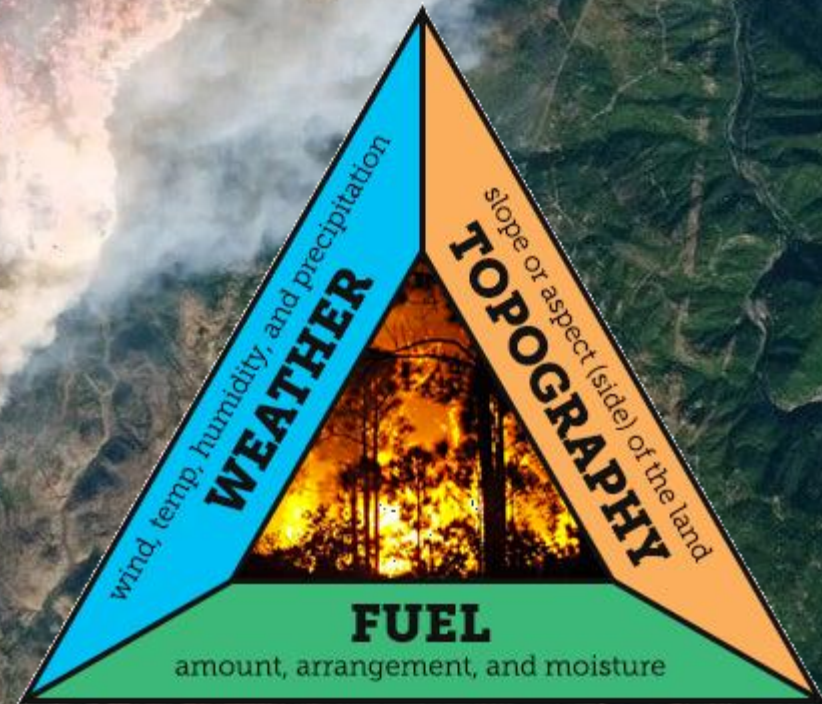
Adverse Childhood
Experiences and
Community-wide
trauma

Mechanisms and
partnerships

Parks Make Life Better – and Save Lives

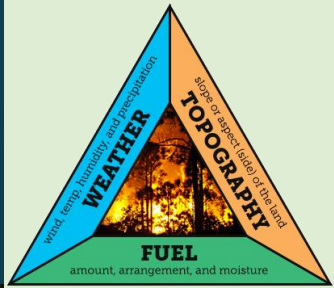


Modern Wildfires Demand a New Approach

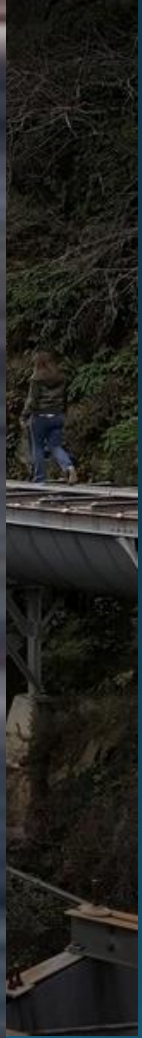


Fire Behavior Triangle

Fuel

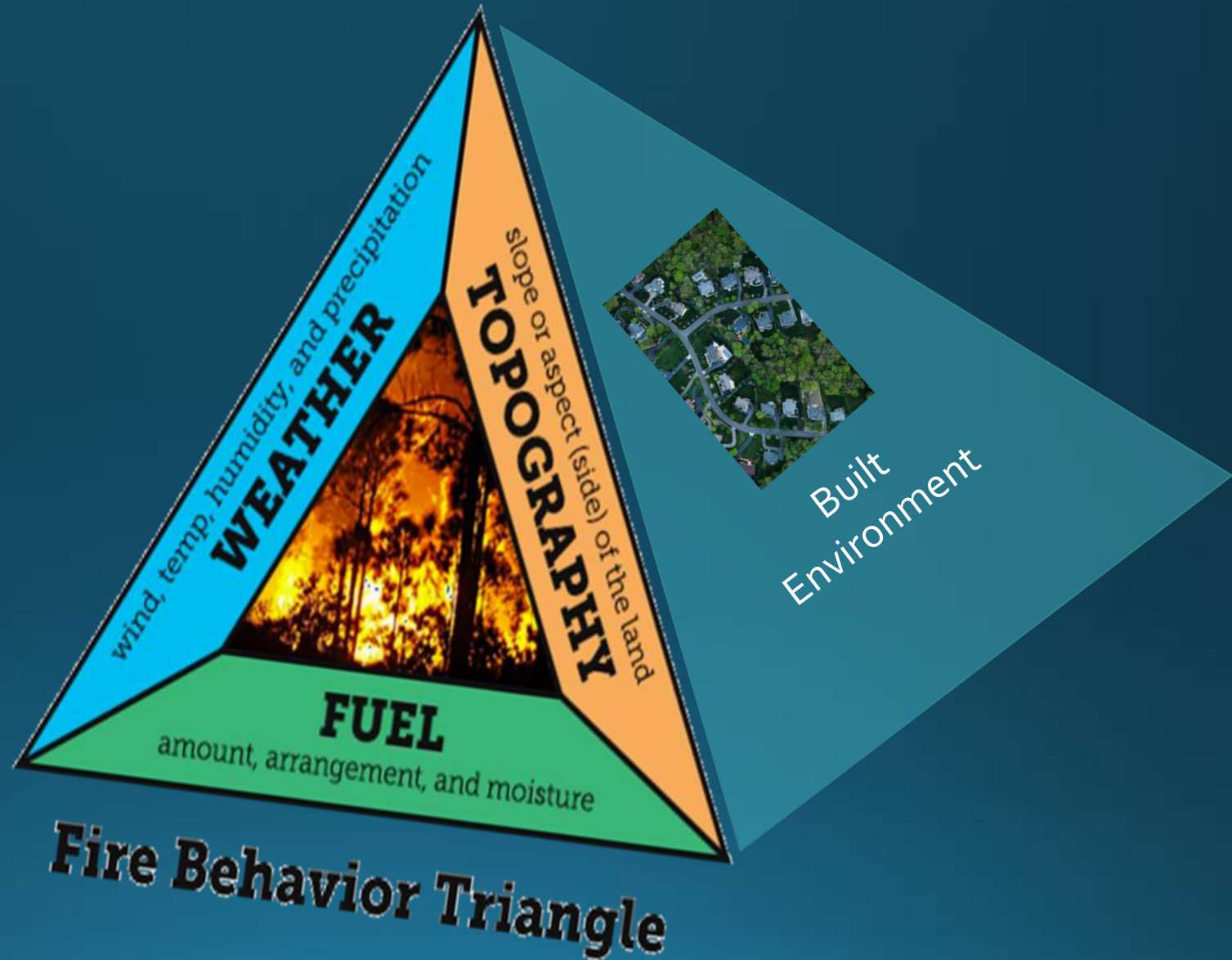


Fire Behavior Triangle



Fire Behavior Pyramid?

- Development patterns, composition, and integration with Wildland Areas



Scales of Planning Decisions

**Won't better building
codes solve the
problem?**



Individual Building
Scale

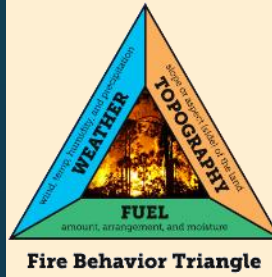
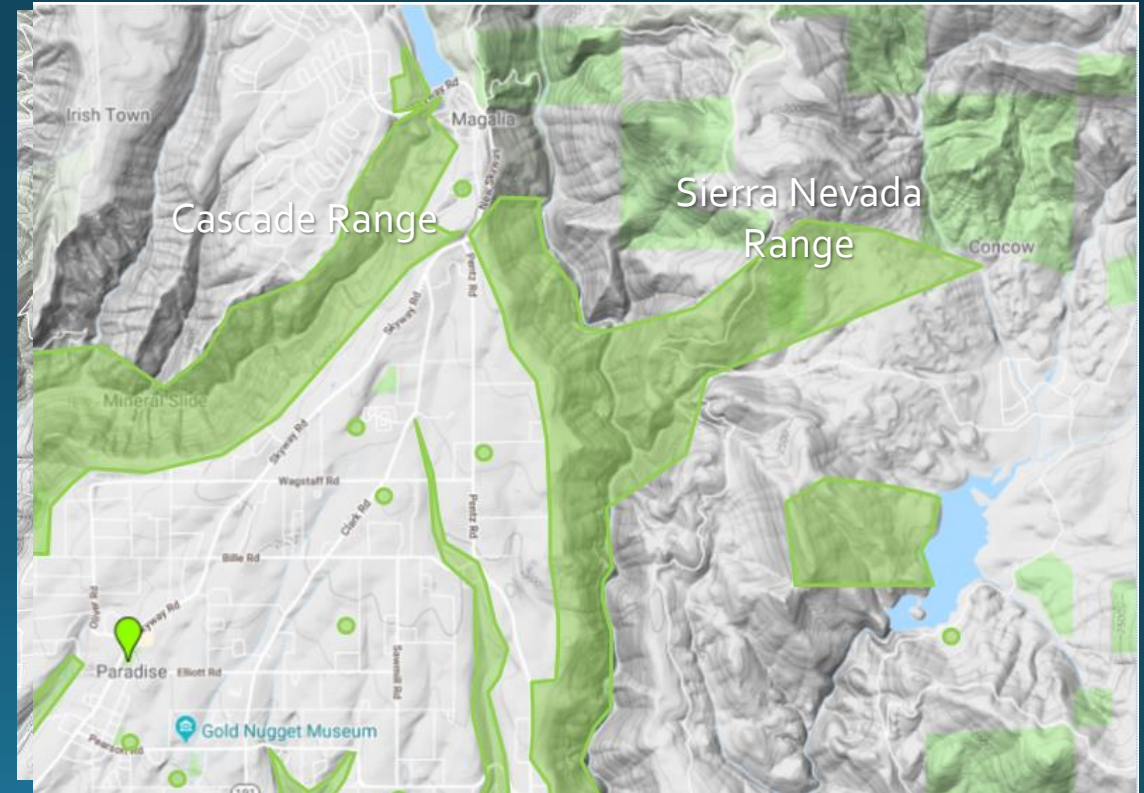
(Duerksen et al. 2011)

Defensible Space

For Homes

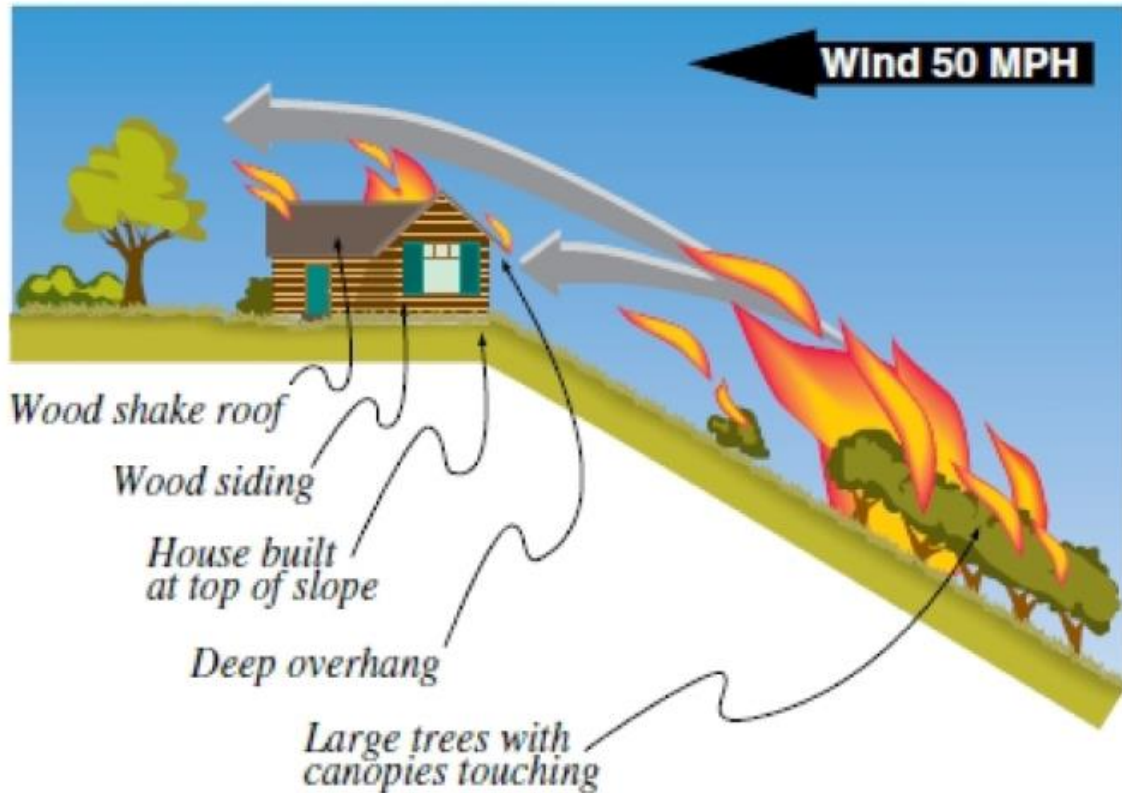


For Communities

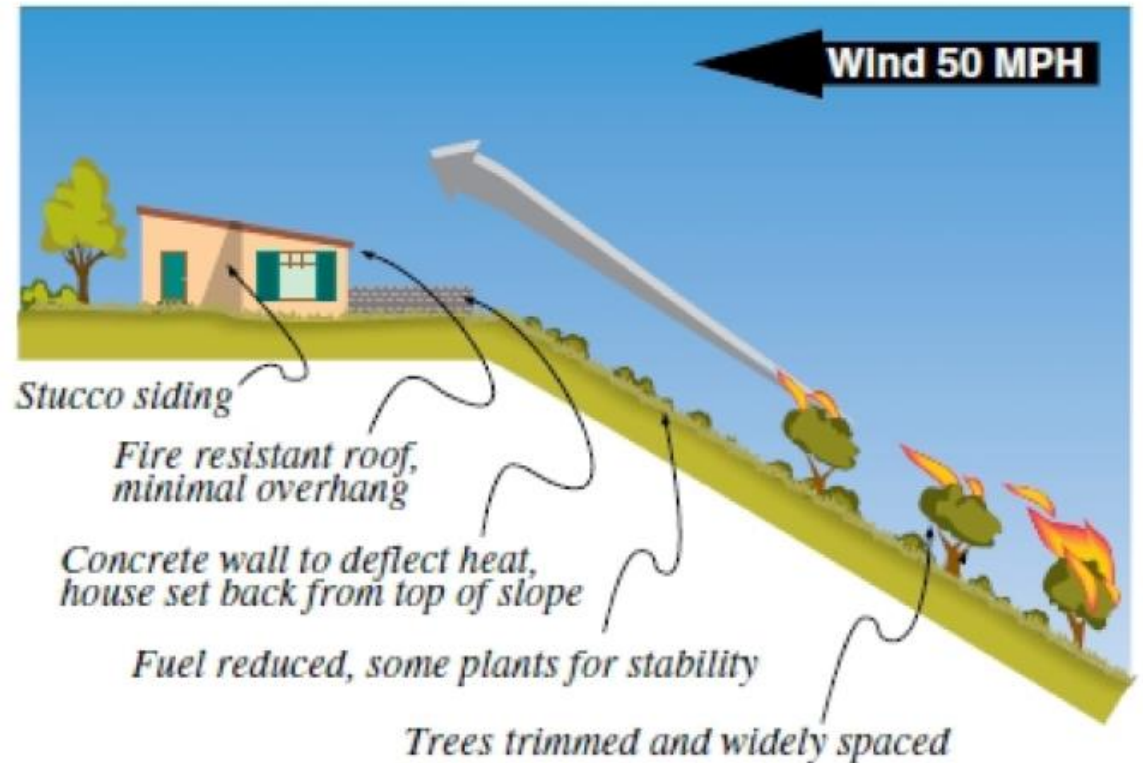


Consider the landscape

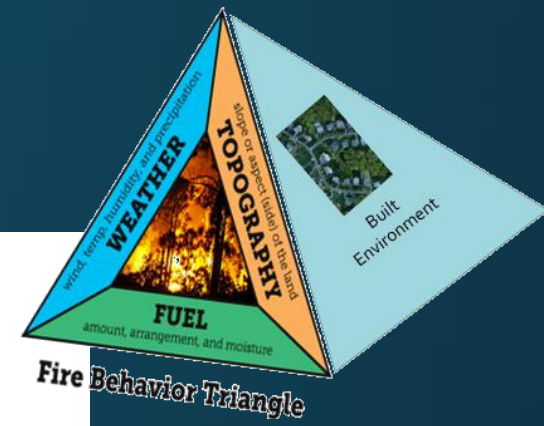
Dangerous materials and conditions for sloped sites



Landscaping and structures designed for fire safety



Buffer Options and Patterns



The diffuse spacing of homes shown requires larger "zones of defense" and more clearing of native vegetation. The development pattern also requires more firefighting resources and makes fire suppression more complex. Source: Fire Mitigation in the Wildland Urban Interface.



Clustering homes is safer because the agricultural land (shown as striped rows) provides a protective buffer. This pattern of development also is easier to defend from fire and requires fewer fire suppression resources. Source: Fire Mitigation in the Wildland Urban Interface.

Options



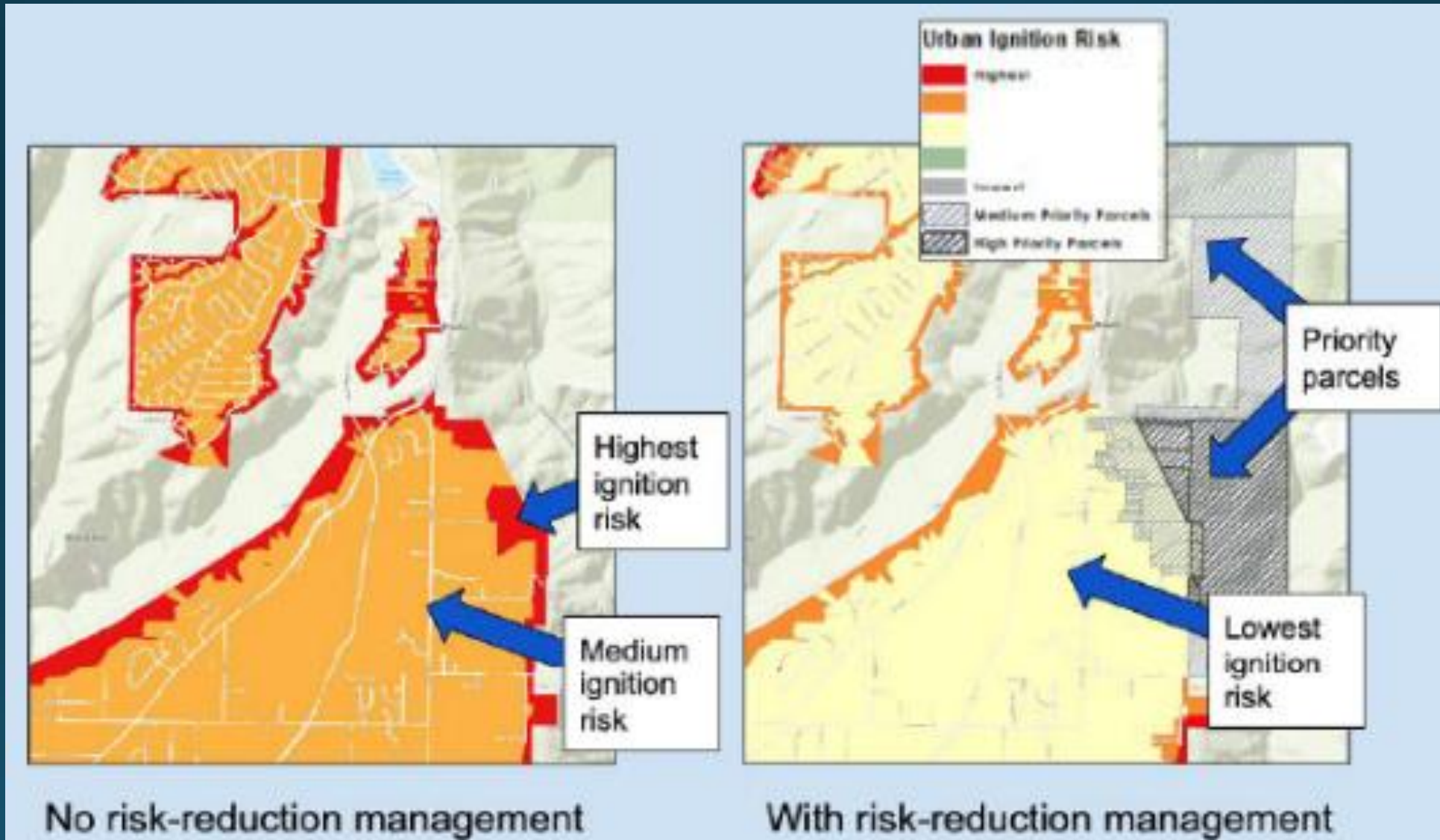
The hashmarks shows an area that is often developed, perpetuating community adjacency to wildlands. Instead, this buffer area could be zoned for land uses that can also act as a fire break, as shown in Scenario 2. These schematics were adapted from the "Fire Mitigation in the Wildland Urban Interface SmartCode Module" written by Martin Dreiling. The SmartCode was created by the Center for Applied Transect Studies.



Agricultural lands (hashmarks), managed wildlands (dark green), and recreation areas can be stitched together to form a fuel break.




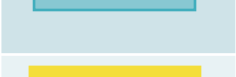

- TNC Credit See: https://www.scienceforconservation.org/assets/stories/TNC_FireReport_ParadisePoint_2022.pdf

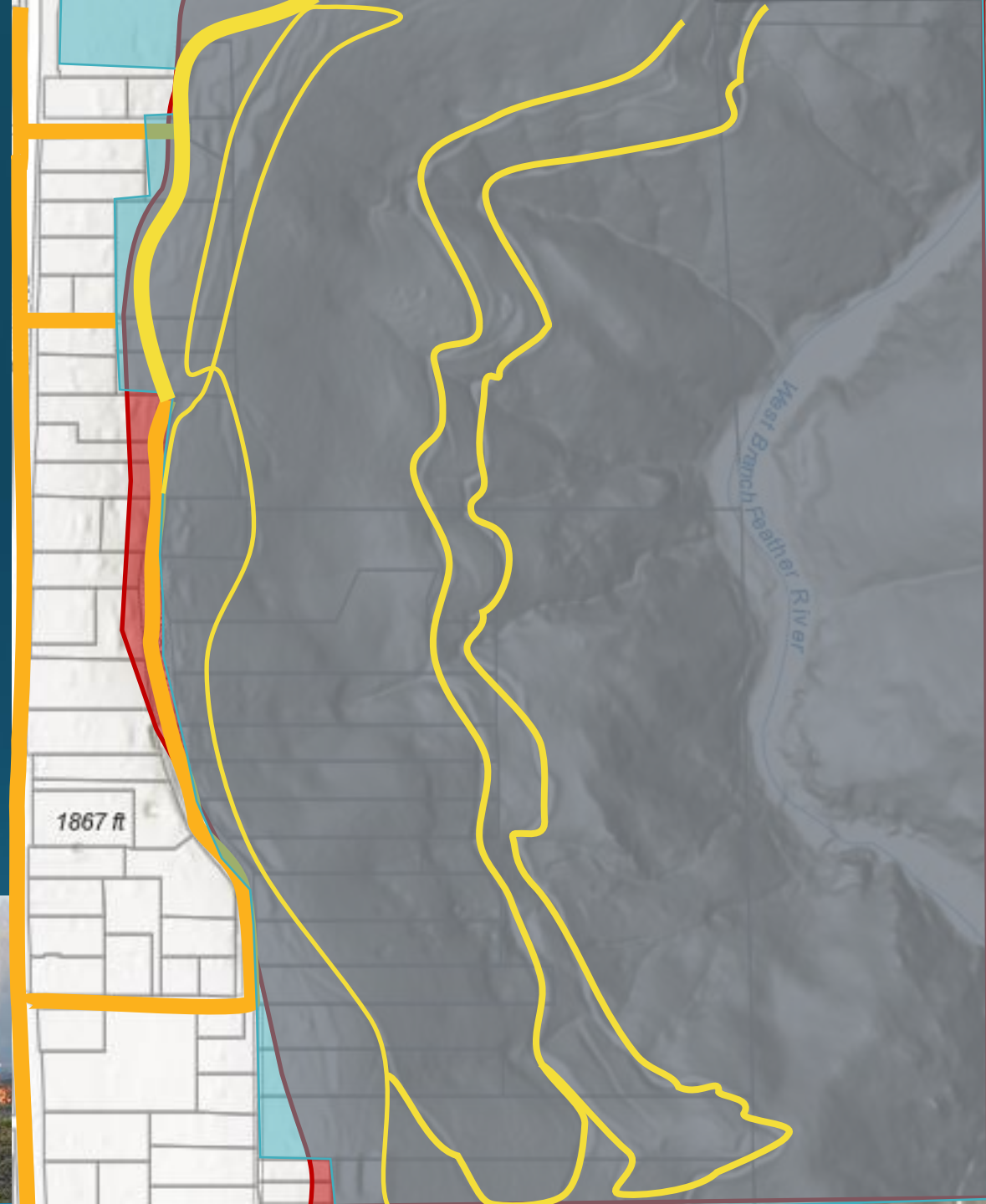
Buffer planning and efforts



How might it work?

- Theoretical 200-acre example

	
	Existing Roads
	High Fire Risk
	Managed Lands
	Connector Road or Trail



Summary of Resiliency Parks and Multiple Objectives

Exploring potential to

- Reduce Wildfire Risks and insurance costs
- Provide financial mechanisms for enlightened land management and risk reduction
- Promote Recreational Uses and create more functional open space
- Community Economic Development (Rec and Tech) and support Improved Service Delivery
- Public Safety (connect roads, remove people and infrastructure from harm, Develop Interconnected Trail System
- Conservation (Species and Services) - Restore habitats and reduce wildfire risks



Applying some concept now to Park Design

Coming 2025

- Seeking Resiliency HUB Funding



PROP
68

LAKERIDGE PARK

CONCEPTUAL MASTER PLAN - MAGALIA, CA



#2501 08.31.21

MDG
MELTON DESIGN GROUP

Building Resilient Infrastructure in Communities (BRIC) Grant

BRIC 2020 Paradise Recreation & Park District Innovative Wildfire Risk Reduction Buffers (Camp Fire)

FY20 Building Resilient Infrastructure and Communities Program Grant #2020-001, Project #PJoog1, FIPS #007-91002

- Total BRIC Funding: \$203,000 + match
- Overall project: completed by April 13, 2024
- BRIC application: November 30, 2023.

Purpose: The project explores options to reduce risks and provide multiple benefits to the community. The project centers around the exploration, creation, and long-term maintenance of a risk-reduction buffer to protect communities. Strategically located, landscape-scale, nature-based, open-space buffers show promise in providing a cost-effective approach to mitigate the risk of catastrophic wildfire through community-scale protection and additional, multiple benefits.

Action: Building Resiliency in Communities (BRIC) Project

- Planning project to scope and refine scenarios for community-scale risk-reduction buffers (Resiliency Parks) as nature-based wildfire mitigation action
- Builds on previous scientific analysis and partnerships with TNC, agency partners, and strong local support.
- Approved under review, awaiting agreement (\$200,000 requested)
- **Submitted 2020, still awaiting agreement.**
- **Seek non-federal resources (\$100,000), agency support, coordination with other projects, and expertise.**

Overall Project Tasks

Task 1 - Procurement

Task 2 - Project Management and Startup

Task 3 - Technical Analyses

- 1. Data Collection
- 2. Wildfire and Probability Modeling.
- 3. Property Analysis
- 4. Feasibility Assessment:
- 5. Third Party Review and Guidance: Technical Advisory Committee (TAC)

Task 4 - Future Grant Application and

Benefit Cost Analysis (BCA)

- 1. Grant Application
- 2. Benefit Cost Analysis (BCA.

Task 5 - Action/Implementation Plan

- 1. Implementation Plan
- 2. Land Management Plans
- 3. Real Estate Transaction Plan

Task 6 - Outreach and Education

- 1. Community Engagement Plan
- 2. Conduct Outreach

Task 7 - Project Closeout

RFP - Scope of Work For Technical Analyses (Task 3 in Proposal)

- 1. Data Collection
- 2. Wildfire and Probability Modeling
- 3. Property Analysis
- 4. Feasibility Assessment

Please see details in RFP

Paradise Nature-Based Fire Resilience Project Final Report
Conservation Biology Institute, June 2020



Wildfire Risk Reduction Buffers (WRRBs)

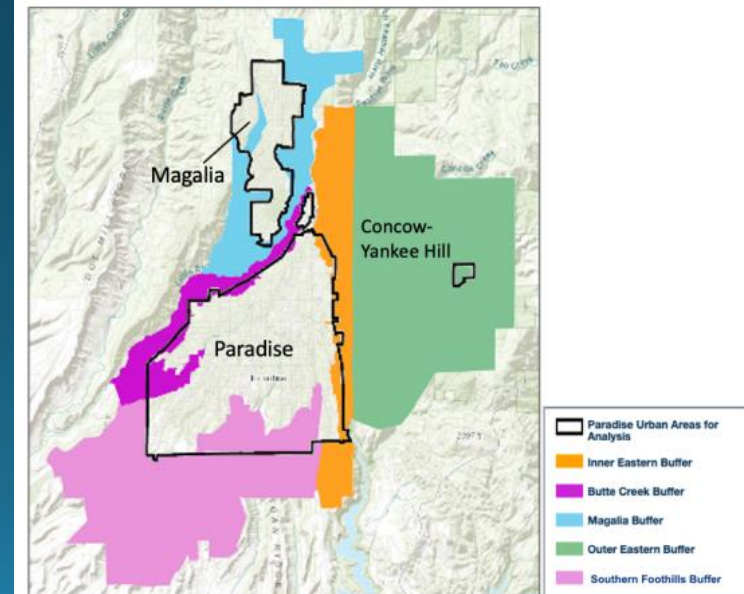


Figure 1. The five Wildland Risk-Reduction Buffers around the densest residential areas of Paradise, Magalia, and Concow-Yankee Hill.

Important Dates

RFP Milestone	Date
Proposal Release Date	4/12/2023
Pre-Proposal Conference	4/19/2023 11:00 am PST
Last Date/Time for Questions	4/26/2023 12:00 pm PST
Proposals Due Date:	05/05/2023 2:00 pm PST
Submit Proposals to:	Mail, Delivery, or Email

Evaluation Criteria

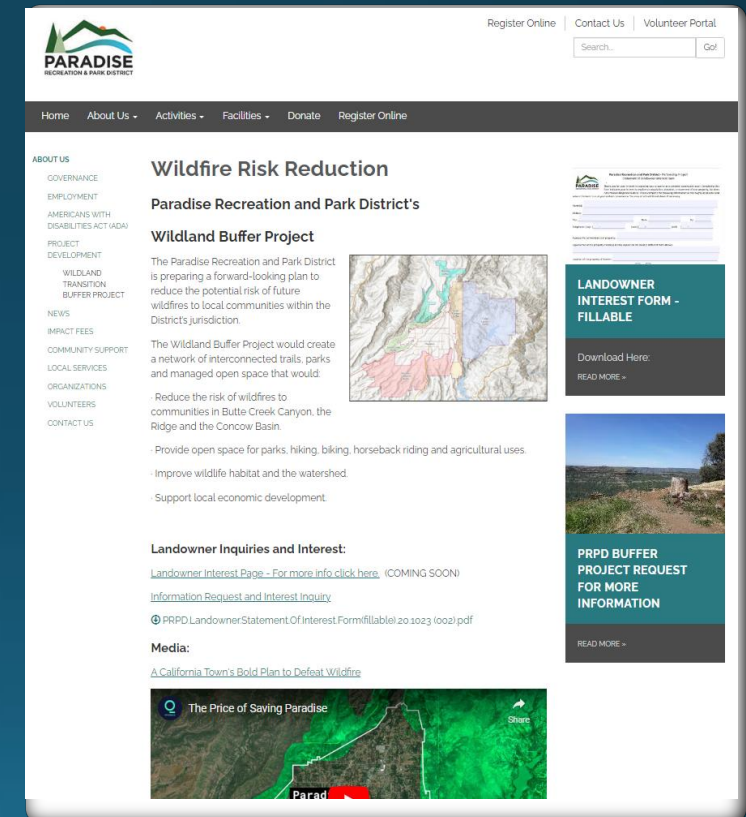
Criteria	Max Points
Completeness and Quality of Proposal	5
Project Understanding and Approach	10
Scope of Services	25
Qualifications of Personnel and Partners	10
Experience and Resources	10
Past Performance/References	5
Project Schedule	10
Project Cost	25
Total	100

Important Points

- Collaborative Teams encouraged
- Information may inform District approach
- Main point of contact
- Use of District Agreement

Useful Links

- [PRPD Wildfire Buffer page](#)
- [PRPD – CBI/TNC Buffer Study \(see public Documents\)](#)
- [Butte County Upper Ridge Community Plan – Demographics and Market Conditions Analysis](#)
- [Guy Carpenter Quantifying Insurance benefits of a Nature-based Approach to Reducing Risk: Wildfire Risk Reduction](#)
- And others...



Questions





Parks improve life for the people
living here today and for
generations to come.

Thank You

Dan Efseaff, District Manager

530-872-6393, info@paradisepripd.com

