

Santa Rosa Fire Department Wildland Resiliency & Response Strategic Plan

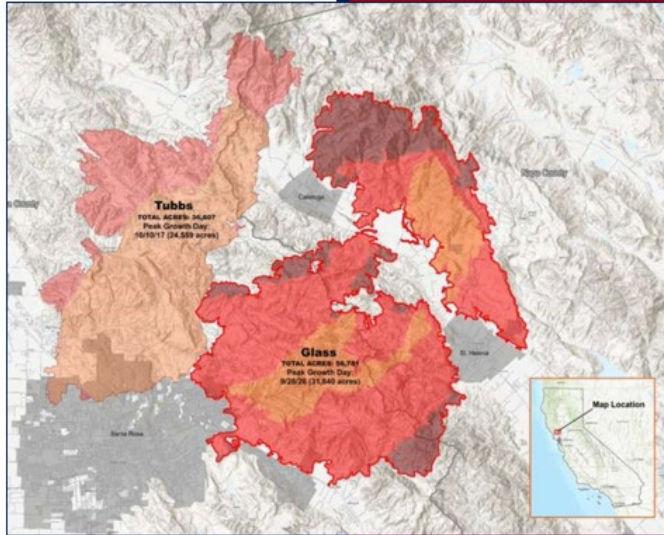
Public Safety Subcommittee

November 23, 2020

Fire Department

2020

Santa Rosa Fire Department Wildland Resiliency and Response Strategic Plan



Purpose

- The Santa Rosa Fire Department (SRFD) Wildland Resiliency and Response Strategic Plan (Plan) examines the risk and threat potential of wildland fires and adjusts the prevention, mitigation, and operational response components of the organization.
- The Plan will be a holistic assessment and adjustment to the organization to better prepare for and respond to the increased threat of wildland fires within or entering the City limits.
- The Plan will be a living document to guide the Department over the course of the next five (5) years at which time an assessment of the Plan will be completed, and a new plan created based off a new SWOT analysis.
- Aligns with Council Goals: Crises Response through early 2021
 - Public Safety Priorities and Reform

Background

- Prior to 2017, the threat of a wildland fire within the City limits was high, yet the realization of a large scale event was kept relatively minimal.
- SRFD has remained an industry leader in wildland fire prevention and response.
- Since October 2017, Sonoma County and the City of Santa Rosa have faced a continual onslaught of large-scale wildland fires.
- Associatively, the region has seen a significant change in weather patterns to much longer, hotter, drier, and windier fire seasons.
- 2017 can no longer be viewed as a “50-year event” or as an anomaly.
- The wildland fire threat is the new normal that the community faces, and the organization must adjust to this model in order to best protect our citizens, carry out the mission of the Department, adhere to the goals of the City Council.



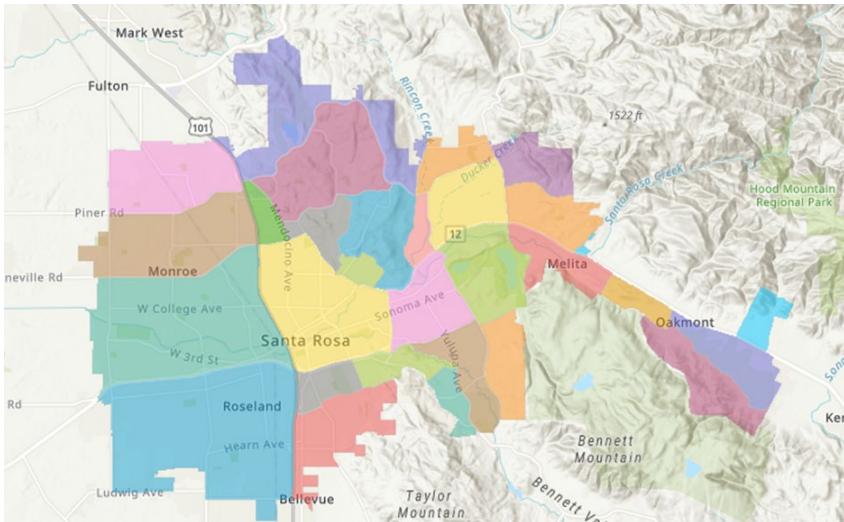
Current Implementation of Best Practices (pre-2017)

- Fire Prevention standards that meet or exceed state and federal guidance.
- Defined Wildland Urban Interface (WUI) standards for prevention, mitigation, and response.
- Local Mutual-Aid and Automatic-Aid agreements, part of the California Master Mutual Aid (CMMA) system.
- Aggressive firefighting strategies and tactics in line with CalFire procedures.
- Industry leading training for wildland fire command, response, and mitigation.
- Top of the line, CalFire spec wildland firefighting personal protective equipment.
- Deployment of a Type 3 Engine, Type 6 Engine, and Water Tender



Current Implementation of Best Practices (post-2017)

- Development and implementation of a Community Wildfire Protection Plan.
- Development of a Vegetation Management Inspector (pending).
- City based ability to send iPAWS (EAS, WEA) emergency alert messaging.
- Access to advanced fire camera system and weather station systems.
- Development and implementation of evacuation zones.
- Enhanced communication and cooperation with federal, state, regional, and City partners.
- Enhanced firefighting strategies and tactics based off lessons learned.
- Aggressive upstaffing programs during critical weather conditions with the City and region.



Top 5 Fires by Acres Burned

Address	Date	Acres
1570 Lofty Perch	6/28/2003	42
2285 San Miguel	8/26/2004	14
2965 Dutton Ave.	8/8/2017	6.5
Pythian at Elizabeth	8/23/2010	5
3680 Kelsey Knolls	5/23/2012	4

Top 5 Wildland Fires by Fire Loss

Address	Date	Structure Loss*	Dollar Loss
1570 Lofty Perch	6/28/2003	3	\$750,000
2285 San Miguel	8/26/2004	6	\$125,000
119 7th Street	4/3/2015	1	\$26,500
Parker Hill Court	8/12/2006	0	\$5,000
2060 Llano Road	5/20/2014	0	\$1,000

*Structures could include: houses, outbuildings, sheds, etc.

Risk Assessment

2003 to pre-Tubbs 2017

Risk Assessment (post-Tubbs Fire)

Tubbs	Kincade	Walbridge/Meyers	Glass/Shady
<ul style="list-style-type: none">• 24 Fatalities• 36,807 acres• 5,636 Structures Destroyed• 317 Structures Damaged	<ul style="list-style-type: none">• 0 Fatalities• 77,758 acres• 374 Structures Destroyed• 60 Structures Damaged	<ul style="list-style-type: none">• 0 Fatalities• 57,300 acres• 157 Structures Destroyed• 135 Structures Damaged	<ul style="list-style-type: none">• 0 Fatalities• 67,484 acres• 301 Structures Destroyed
City: 9 Fatalities 3098 Structures Destroyed			City: 0 Fatalities 42 Structures Destroyed

Other fires of note: Mendocino Complex and Camp Fire (2018)

Analytical Conclusions

- The wildland fire threat to the City of Santa Rosa has suddenly and seriously increased.
- Many improvements have been made since 2017 while in the midst of fire recovery, continual crisis management, and a global pandemic.
- It has become essential that the preparedness of the City, community, and SRFD proactively improve to enhance factors of prevention, mitigation, and response.
- The SRFD must adapt to these challenges by taking a 'zero-based budgeting' approach to assess and adjust all factors, across all bureaus, of the SRFD wildland programs.
- The SRFD Wildland Resiliency and Response Strategic Plan will assess and adjust six (6) major strategies that comprise the SRFD wildland programs.
- The enhancement of these strategies will holistically improve the SRFD and ultimately the City and community in the new normal that we collectively face.

Strategy Outline

1. LEGISLATION
2. CAPITAL ENHANCEMENTS
3. NON-CAPITAL ENHANCEMENTS
4. OPERATIONS
5. STAFFING
6. COMMUNITY ENGAGEMENT

Legislation

This strategy will continue and enhance efforts to institute changes to local, state and federal governing and guidance as the cornerstone to success in the improvement and enhancement of prevention, mitigation, and recovery capabilities. Efforts will be focused on:

- Local Fire Prevention statutes and ordinances
- Local and State Fire Code changes
- Community Wildfire Protection Plan (continue progress)
- Vegetation Management Program
- State policy and standards related to prevention, alerting, response, and recovery
- Federal policy related to alerting, communications, response, and recovery
- Improvements with utility providers safety, commodity distribution methods, and resiliency
- Proper utilization of funds from statewide propositions, regional measures, and local tax revenue

Capital Enhancements

The ability to have the proper tools for the job when necessary is a crucial element to success. Since 2017, the SRFD has not added or replaced any capital items (particularly apparatus) dedicated directly to wildland fire prevention or suppression. The SRFD becomes drawn down on wildland firefighting equipment often (Strike Teams, Upstaffing, Recalls, etc.) throughout the season. The ability to have the correct type and amount of apparatus staffed and operating is a vital element to successful operations. Efforts will be focused on the purchase of:

- Type 3 Wildland Fire Engines
- Type 6 Wildland Fire Engines
- Tactical Water Tenders
- Pickup Trucks with Skid Mount Pumps
- Support Vehicles

These items may be considered one-time expenditures due to the fact that the replacement time is 12-15 years depending on usage and will be placed into the fleet replacement system.

Non-Capital Enhancements

Placing the correct tools and protective equipment into the hands of the personnel engaged in prevention and suppression efforts is a pivotal part of the success equation. The ability to upstaff and perform department recalls and have appropriate resources for personnel to be effective is in need of vast improvement. Surging daily staffing from 39 (standard) to 48 (first phase upstaffing) or then again to 130+ (department recall) creates incidents of resource and supply shortages. The enhancement of supply caches coupled with additional apparatus would significantly improve the ability for the SRFD to provide enhanced protection to the community when a fire or other natural disaster enters the City limits. Efforts will be focused on the purchase of:

- Personal Protective Equipment
- Wildland Firefighting Tools and Equipment
- Mobile and Portable Radios

Operations

The SRFD has historically prided itself on remaining on the cutting edge of operations and proactively engaged in advancing command, strategies and tactics in all realms of emergency response. As part of the holistic assessment and adjustment of the SRFD wildland programs, it is necessary to look at how the SRFD fights wildland fires and protects the community. Utilizing lessons learned from recent local and regional fire events, internal subject matter expertise, and examining best practices used throughout the state of California, the SRFD will assess and enhance all operational aspects of the wildland programs. Efforts will be focused on:

- Response Matrix (daily response, reinforced response, and extended response)
- Wildland Training
- Company Standards
- Strategies and Tactics
- Command and Control



Staffing

As in all ventures, people are the most important asset to an organization. While this plan will focus on improvement and enhancements that can be made using current staffing levels, that is not to take away from the need for additional personnel as outlined in the SRFD Staffing Needs Assessment. Using current staffing levels, the SRFD will assess and improve how it uses employees during a predicted or realized large scale event. This strategy will utilize lessons learned, industry best practices, and internal subject matter expertise to build staffing models and policy that provides additional staffing when necessary while at the same time emphasizes consistency and safe work hours. Efforts will be focused on:

- Upstaffing Plan
- Staffing Patterns or Models
- All Call or Department Recall Policy Revision



Community Engagement

The key to protecting the community lies within the community itself. The two-way relationship between public safety providers and the community they protect is the bedrock for success. Before, during, and after a disaster, the more the community is prepared to protect themselves, the better the network becomes and allows public safety providers to focus on different priorities. This strategy will look at the relationship and communication features of both the SRFD and the community regarding wildfires. This strategy will be an ongoing effort in improvement in how the SRFD both listens and speaks to the broad and diverse community we serve to ensure that all citizens are better prepared and aware. Efforts will be focused on:

- Evacuation Planning
- Alert and Warning Capabilities
- Community Outreach
- Community Preparedness
- Utilization of RAWs (Remote Automated Weather Stations)
- COPE/CERT Program Feasibility

SRFD Wildland Resiliency and Response Strategic Plan Costs

Strategy	One-Time Funding*	On-Going Funding
Strategy 1 - Legislation	Vegetation Management Program - \$5M**	Staff time \$50,000 per year
Strategy 2 - Capital Enhancements	\$2M	CSR Maintenance and Replacement Fund \$50,000 per year
Strategy 3 - Non-Capital Enhancements	\$750,000	SRFD Maintenance and Replacement Fund \$20,000 per year
Strategy 4 - Operations	-	Staff time and materials \$5,000 per year
Strategy 5 - Staffing	-	Staff time
Strategy 6 - Community Engagement	-	Staff time \$100,000 per year
Total Cost:	\$2.75M	\$225,000 per year

*One-Time Funding for apparatus due to 12 to 15-year lifespan and replacement program.

**Vegetation Management Program funding requested as standalone item during September 25, 2020 - Public Safety Subcommittee Meeting.

Questions?