

CITY OF SANTA ROSA
CITY COUNCIL

TO: MAYOR AND CITY COUNCIL
FROM: ALAN ALTON, INTERIM CHIEF FINANCIAL OFFICER
SUBJECT: WILDFIRE PREPAREDNESS, MITIGATION AND RESILIENCY
PROJECTS: PROPOSED USES OF PG&E SETTLEMENT
FUNDS

AGENDA ACTION: NO ACTION REQUIRED

RECOMMENDATION

It is recommended by the Finance Department, Fire Department, Transportation and Public Works Department, and the Police Department that the City Council hold a Study Session to receive a report on proposed uses of PG&E settlement funds for wildfire preparedness, mitigation and resiliency projects.

EXECUTIVE SUMMARY

In this Study Session, staff will provide a presentation showing specific projects related to wildfire preparedness, mitigation and resiliency, all of which could be funded with PG&E settlement funds. This is the third presentation highlighting projects that could qualify for the use of the funds.

This presentation includes projects totaling approximately \$355.3 million of one-time capital needs, including projects solely under City control, including approximately \$96 million in projects and one-time needs identified in prior presentations, and regional projects requiring the City to partner with other jurisdictions for funding. Additionally, there are approximately \$4 million of ongoing staffing costs.

BACKGROUND

In July 2020, the City received a \$95 million settlement from PG&E to recoup damages sustained from the 2017 Tubbs wildfire that were not recoverable through state, federal, or insurance reimbursements. At Council direction, City staff solicited input from 2017 fire survivors and the community at large for input on proposed uses for the settlement money. In addition, staff has worked internally to develop projects that could bolster the City's wildfire preparedness and make the City more resilient in the event of future wildfires.

PRIOR CITY COUNCIL REVIEW

Staff presented two prior study sessions for the use of the PG&E settlement funds. On November 17, staff presented the results of three virtual public input sessions and a Citywide digital survey providing public input for the use of the PG&E settlement funds. On December 8, Council received a presentation on “Housing Investment Opportunities” for PG&E Settlement funds.

ANALYSIS

City Staff from the Fire Department, Police Department, and Transportation and Public Works have identified projects to increase the City’s wildfire preparedness and resiliency. These projects have been developed based on critical needs identified during natural disasters over the last three years (the Tubbs Fire, the Kincade Fire, and the Glass Fire), and from Public Safety Power Shutoffs that occur each year over the past three years.

The projects are categorized as projects that would need to be funded solely by the City, and regional projects requiring funding from the City and other jurisdictions. For City-controlled projects, the total one-time capital needs are estimated at \$355.3 million, plus approximately \$4 million of annual staffing costs. Regional Projects total approximately \$121 million of one-time capital needs.

LOCAL, CITY-CONTROLLED PROJECTS

Move and rebuild Fire Station 5 (\$15,000,000)

To replace and relocate Fire Station 5 that was lost during the Tubbs Fire, staff recommends rebuilding Fire Station 5 at the corner of Stagecoach Road and Fountaingrove Parkway. The rebuild of Fire Station 5 will restore permanent service to the Fountaingrove neighborhood and protection of the Wildland Urban Interface (WUI). The new location will enhance service to the entirety of Fountaingrove and also improve the service level to the northern portions on north Mendocino Avenue and adjacent areas. Staff has worked tirelessly with consultants to secure federal funding to rebuild Fire Station 5, however have been unsuccessful in that venture largely due to federal policy. The land for the new Fire Station 5 has been purchased and is currently in the CEQA process.

Move and add fire stations to provide better coverage (\$60,000,000)

To improve the strategic locations of fire stations to better serve wildland fire protection services, staff recommends the construction of four (4) new fire stations. These additions will align with the Santa Rosa Fire Department (SRFD) Strategic Plan and Standards of Coverage/Deployment Analysis. These stations would allow the Fire Department to increase service levels in several areas of the City (Roseland, Rincon Valley,

Fountaingrove, Skyhawk, and South Park). In addition to providing increased service to these areas, the additions would benefit the entire City as a whole by reducing call volume at high volume stations and increasing the number of fire engines and personnel on duty, thus reducing response times throughout the entire system. Increasing the number of fire stations from ten (10) to twelve (12) and daily staffing from 39 personnel to 46 personnel will increase the capacity of the Fire Department to respond to expanding or large-scale incidents of any nature within the City limits or in surrounding jurisdictions. Two of these additions would add protection to the Wildland Urban Interface (WUI) directly in the Rincon Valley/East Fountaingrove areas, add protection to the Mount Taylor area, and add protection to the Roseland/Lower Santa Rosa Avenue area. The Santa Rosa Fire Department (SRFD) Strategic Plan and Standards of Coverage/Deployment Analysis call for the following fire stations:

Construction of four (4) fire stations - \$15,000,000 per station totaling \$60,000,000

- Move Fire Station 6 (Calistoga Road) to the area of Mountain Hawk Drive and Highway 12;
- Construct Fire Station 12 in the area of Mission Boulevard and Montecito Avenue;
- Move Fire Station 8 (Burbank Avenue) to the area of Hearn Avenue between Whitewood Drive and Highway 101;
- Construct Fire Station 9 in the area of Kawana Terrace and Franz Kafka Avenue.

Hiring of additional personnel to staff new fire stations (\$4,650,000/year)

To adequately staff the additional fire stations and provide proper management and supervision, staff recommends the addition of twenty-one (21) additional full-time employees (FTE). The relocated stations will use current personnel for staffing. The new fire stations (Fire Station 9 and Fire Station 12) will require additional staffing. The Fire Department currently staffs each engine company with three (3) personnel across three (3) shifts. In order to adequately staff these new fire stations, the Fire Department would require the addition of eighteen (18) additional FTEs. Additionally, in order to properly manage and supervise the additional stations and personnel, the Fire Department needs to add an additional on-duty Battalion Chief. Currently there is one Battalion Chief on-duty daily who supervises twelve companies, while the industry standard is three (3) to seven (7), optimal being five (5) companies. The addition of two fire stations would increase a single Battalion Chief's span of control to 14 to 1. Adding a second on-duty Battalion Chief across three (3) shifts (3 FTE) would improve oversight and supervision by reducing the span of control of Battalion Chiefs to 7 to 1.

Addition of personnel (twenty-one (21) FTE) to staff new fire stations - \$4,650,000/year

- Eighteen (18) Firefighter/Paramedic salary and benefits - \$3,600,000/year
- Three (3) Battalion Chiefs salary and benefits - \$1,050,000/year

Purchase of additional apparatus to staff new fire stations (\$2,305,000)

To adequately provide fire suppression and emergency response from the two new fire stations, staff recommends the purchase of two (2) additional Type 1 fire engines, two (2) additional Type 6 fire engines, and one (1) utility pickup truck. The relocated stations will use current apparatus for response. The new fire stations (Fire Station 9 and Fire Station 12) will require new apparatus for daily operations with the ability to cross staff a wildland specific fire engine. This is in addition to the request for additional engines in the Santa Rosa Fire Department Wildland Resiliency and Response Strategic Plan. The purchase of these apparatus would increase the abilities and capacities of the Fire Department on a daily basis as well as in times of need for upstaffing, Department recalls, and during large scale incidents that occur within or adjacent to the City limits.

Addition of apparatus for new fire stations - \$2,305,000

- Two (2) Type 1 Fire Engines plus equipment - \$1,700,000
- Two (2) Type 6 Fire Engines plus equipment - \$540,000
- One (1) Utility Pickup Truck - \$65,000

Implementation of a comprehensive Vegetation Management Program (\$5,250,000)

In September of 2020 the City Council unanimously approved the final draft of the Community Wildfire Protection Plan (CWPP). This plan, the first of its kind in our City, is the result of a community-wide planning effort to quantify and evaluate the wildfire threat to the City and develop hazard mitigation strategies that enhance protection of life safety and other community assets from wildfire. Using the latest wildfire science and community input this plan serves to guide the development and implementation of a comprehensive Vegetation Management Program. The Fire Department has proposed a five-year program in our effort to mitigate future wildfire threats to our City. The proposed program will focus on improving evacuation routes, community wildfire education, wildfire and evacuation preparedness, structural hardening of the built environment, vegetation treatments to reduce the wildfire threat, implementation of defensible space standards and increased staffing dedicated to the wildfire mitigation workload. As proposed this program will also provide annual updates to Council and at the conclusion of the five-year period will allow funding to complete an updated CWPP.

Implementation of Wildland Resiliency and Response Strategic Plan (\$2,750,000)

To improve the prevention, mitigation, and response capabilities of the Fire Department using current staffing and stations, staff recommends funding for implementation of the Santa Rosa Fire Department Wildland Resiliency and Response Strategic Plan. This plan was presented to the Public Safety Subcommittee on November 23, 2020 and is a holistic assessment of the Fire Department's wildland fire programs with recommended adjustments to the organization across all bureaus. Implementation of this plan would

provide additional resources to legislative efforts, community engagement and education, additional wildland firefighting apparatus and equipment. This plan does not address the need for additional personnel or fire stations; however, it would significantly improve the Fire Department's capacity and abilities to prevent, mitigate, and respond to wildland fires using current staffing and fire stations.

Traffic signalization to aid evacuation choke points (\$ \$10,230,000)

To improve the evacuation of the WUI areas within the city staff recommends the addition of quick connections, portable generators and closed-circuit cameras to key intersections as well as a fiberoptic interconnect along key evacuation corridors. These additions will allow Traffic Engineering staff to more effectively assist Police and Fire in managing the evacuation process by ensuring the signals along critical evacuation corridors remain operational and controlled in real-time from the Traffic Operations Center at MSCS. Cameras will allow both the Traffic Engineering and Police dispatching teams to evaluate where physical resources are required to assist with the evacuation process. Some of these activities will occur in the state highway and will require coordination in the form of an encroachment permit but should not require a longer more complicated process.

Fiber-Optic Interconnect (\$500,000 per mile) - \$10,000,000

- College Avenue – 0.75 miles
- 4th Street – 1.0 miles
- Sonoma Highway – 7.0 miles
- Fountaingrove Parkway – 4.25 miles
- Montecito Avenue – 1.5 miles
- Calistoga Road – 1.0 miles
- Mendocino Avenue – 1.75 miles
- Farmers Lane – 1.2 miles
- Hoen Avenue – 1.5 miles

Closed-Circuit Cameras (@ \$10,000 each if fiber connected) - \$120,000

- Mendocino Ave @ Fountaingrove Parkway
- Fountaingrove Parkway @ Stagecoach Road
- Fountaingrove Parkway @ Brush Creek Road
- Montecito Boulevard @ Calistoga Road
- Sonoma Highway @ Pythian Road (optional)
- Sonoma Highway @ Oakmont Drive
- Sonoma Highway @ Calistoga Road
- Sonoma Highway @ Mission Boulevard
- Farmers Lane @ 4th Street
- Farmers Lane @ SR-12 Interchange/Hoen Avenue
- Mendocino Avenue @ College Avenue
- Mendocino Avenue @ Bicentennial Avenue
- Mendocino Avenue @ Steele Lane

Portable Generators & Quick Connections - \$10,000

- 10 portable 2000 watt generators
- Quick connections at 20 intersections

Evacuation Route Flush Plans - \$100,000

Improve Evacuation Routes from WUI Areas - \$88,000,000

There are four primary evacuation routes from the WUI providing access to either US Highway 101 or the western part of the city away from the WUI areas. Each of these routes requires additional investment to ensure safe, efficient and timely evacuations during an emergency. The three routes that are within the city's control to implement are as follows:

- Chanate Road (\$10,000,000) – The current road is one lane in each direction with pinch points at the Parker Hill, Franklin Avenue and Mendocino Avenue intersections. Improvements would likely include the construction of a traffic circle at Parker Hill, removal of the raised medians and a widening with lane reconfiguration between Franklin Avenue and Mendocino Avenue to accommodate two west-bound lanes.
- Santa Rosa Avenue/Petaluma Hill Road (\$28,000,000) – While the lower Bennett Valley, South Park and Taylor Mountain areas have not been impacted by the three most recent fires, all exist within the WUI around Taylor Mountain. The Hearn Avenue Interchange is the primary access point to Hwy 101 and the western side of the city. The current interchange configuration is outdated and under capacity. Improvements require the reconstruction of the interchange. The project is shovel-ready and fully designed with a current approved environmental certification.
- Sonoma Highway (Farmers Lane Extension) (\$50,000,000) – The SR-12/Hwy 101 Interchange does not have the capacity to accommodate the significant evacuations seen during the Tubbs, Kincade and Glass fires. Preliminary estimates place reconstruction of the interchange at well over \$100 million with significant impacts to adjacent properties. Recent studies have shown that the construction of Farmers Lane Extension with a connection to a reconfigured Hearn Avenue Interchange significantly reduces the burden on the SR-12/Hwy 101 Interchange to a point where it begins to function more smoothly. Farmers Lane Extension would include two travel lanes with bike lane shoulders from Bennett Valley Road to Petaluma Hill Road and continuing on Yolando Avenue to the Hearn Avenue Interchange. The Farmers Lane Extension project is close to shovel ready at 90% designed with a certified environmental document that will require updating.

Evacuation Equipment - \$650,000

- 30-foot diesel bus with multiple wheelchair tiedowns and fold-up seats (\$500,000) – Utilizing the current CityBus fleet for evacuations has shown that the large 40-

foot vehicles in a standard transit configuration may not be best suited to evacuate the multiple senior assisted living centers, hospitals and other care facilities during mass evacuations. Having a piece of equipment that is built to support these operations while being able to facilitate daily transit operations would be a huge benefit.

- Barricades and message boards with transport trailer (\$150,000) – Public Works has worked closely with Police and Fire to deploy a variety of barricades to assist with evacuations, PSPS outages and crowd control of various types. Having a ready-to-go stock of barricades will facilitate easy deployment rather than needing to rely on rental agencies, contractors or mutual aid to provide and transport to the sites. Barricades include a combination of concrete k-rail, plastic waterfilled barrier, lighted a-frame barricades, light towers, message boards and transport trailer.

Modernize Radio Infrastructure – \$2,756,000

The new digital city-wide radio infrastructure and equipment require a maintenance and software upgrade agreement to remain reliable over the next nine years. This agreement will maintain the new system's highest level of performance and functionality by continually upgrading to the latest hardware and software available. It enables the city to mitigate the risks of security failures as well as falling behind the technology curve, as occurred with the prior radio system and provides professional and seamless system upgrades with minimal interruption to the daily operations, which is critical for all departments that utilize this system.

Build “Hot” Emergency Operations Center (EOC) - \$550,000

The City of Santa Rosa's EOC is currently located at the Utilities Field Office (UFO) building in its three large training rooms. These rooms are multi-purpose rooms that are heavily utilized by numerous departments throughout the City for meetings and trainings. The EOC equipment is kept in a storage closet so that the space is available for these other City purposes. This type of EOC is considered “cold”. Upon notification of an emergency and activation of the EOC, staff are required to shuffle around tables and chairs, pull IT equipment and phones out of the storage closet, and set everything up prior to responding to the emergency at hand. This set-up process can take an hour or more depending on how many staff are available to assist. This results in a loss of valuable time that could be applied towards the emergency response and critical life safety work. As we have seen from 2017 Tubbs and 2020 Glass the first hours of an emergency can be the most critical in getting people to safety and properly coordinating communication and response.

The City continually faces unprecedented disasters, especially no notice fast moving wildfires. However, fire is not the only hazard Santa Rosa faces. The City lies on a major earthquake fault line. The City also regularly responds to Public Safety Power Shutoffs

(PSPS) initiated by PG&E, as well as floods, mudslides, civil unrest and the ongoing response to the Coronavirus pandemic. The City must also be ready for cyber threats, terrorism, and significant chemical spills or hazardous materials response. The last four years alone have demonstrated the need for an EOC facility that is ready to operate at a moment's notice in order to save lives, protect property, and support the response to emergencies throughout the City. The proposal for a "hot" - or always equipped and operational - EOC at the Transit Operations Building (TOB)/MSCN buildings will provide the City of Santa Rosa with the opportunity to be even more timely and efficient in its response to emergencies, and in turn will provide for a safer community for its residents.

FIRE FLOW FACILITY IMPROVEMENTS - \$ \$26,100,000

The Water Department, working with a consultant, identified fire flow improvements that would increase Water Operations ability to quickly increase pumping capacity to refill water reservoirs during fire-fighting events. These improvements are located within the City's wildland urban interface and are the first line of defense during wildland fires. In addition to pipeline improvements which will increase flow with the installation of larger diameter pipe estimated at \$13 million, facility improvements for tanks and/or pump stations are necessary to meet station flow and fire flow goals. These improvements are in various locations throughout the water system, as follows:

- **Bennett Valley Near Annadel State Park (Pressure Zone 10) - \$2.6M - 3.5M**
Additional high flow pumping capacity is needed at Pump Station 10. The station should be able to pump 1,500 gallons per minute (gpm) at minimum pressures of 20 psi. Suction pipeline improvements are recommended to increase suction pressures at Station 10 to a minimum of 20 psi. Pipeline improvements are needed along Woodview Drive from the pump discharge through the zone up to Skycrest Way and Skycrest Drive.
- **Oakmont (Pressure Zones 13 and 14) - \$4.8M**
Increasing water station pumping capacity in this pressure zone will help compensate for limited storage availability. Due to operational constraints, the installation of high flow pumps at Station 13 and 14 and associated pipeline improvements are needed.
- **Fountaingrove (Pressure Zones 16 and 17) – \$4.8 M**
Installation of two 1,500 gpm high flow pumps would support the existing pumps to maximize the flow from Station 16 and 17, increasing the Water Department's ability to move water to higher pressure zones and over the top of Fountaingrove to assist zones on the west side of the hill.

Radio Telemetry System – Remote Communication Between Water Reservoirs and Pump Stations - \$450,000

The Water Department needs to increase the reliability of its remote telemetry system for use in decision making during emergency situations. Several water reservoirs lost

connectivity during the Tubbs fire, which made it difficult for the Water Department to “see” what was happening in the distribution system and operate remotely.

The current radio system is an outdated point-to-point system utilizing 9600 baud, serial-based, radios. The remote radios located at the water pump stations communicate with one of two relay radios located at the top of the Fountaingrove Parkway at Reservoir 7 or at Reservoir 17 located in the hills east of Calistoga Road. A master radio is located at the Utilities Field Office (UFO) on Stony Point Road through one of two repeater radio sites. The existing telemetry system is subject to obsolete equipment and discontinued manufacturer technical support. Upgraded radios will provide higher data rates, reduce interference, and provide more efficient use of the overly dense existing wireless spectrum.

REGIONAL PROJECTS (FUNDED THROUGH MULTIPLE JURISDICTIONS)

Improve Evacuation Routes from WUI Areas - \$100,000,000

There are four primary evacuation routes from the WUI providing access to either US Highway 101 or the western part of the city away from the WUI areas. Each of these routes requires additional investment to ensure safe, efficient and timely evacuations during an emergency. The two routes that require significant coordination with Caltrans are as follows:

- Fountaingrove Parkway (\$50,000,000) – The Mendocino Overcrossing Interchange is very unconventional with an unusual orientation and lacks the capacity to efficiently help evacuees onto US Highway 101 or the western portion of the city. A new interchange is required to improve conditions. In addition, an improved interchange will significantly increase the viability of commercial and retail in the northern portion of the city.
- Sonoma Highway (\$50,000,000) – There has been concern that the two-lane section of Sonoma Highway between Melita Road and Pythian Road creates a bottleneck for Oakmont and Kenwood area evacuations. Some community members have advocated for the widening of this 3 miles segment of Sonoma Highway to either three or four lanes. No preliminary studies have been conducted on this proposal.

Underground Utilities in WUI Areas - \$21,000,000

There are certain areas within the WUI that do not have adequate circulation in the event of an evacuation order. These areas are further compromised by the presence of overhead utilities that can block the limited and narrow evacuation routes. Undergrounding overhead utilities in these areas would eliminate potential blockage during the most critical times. Undergrounding has only been conducted through the Rule 20A program on the city’s primary arterials at a cost of \$4,000,000 per mile. To be conservative, this utilized for this exercise.

- Montecito Heights - \$16,800,000

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- Los Olivos Road – 1.34 miles
- Alta Vista Ave – 1.10 miles
- Montecito Ave – 1.75 miles
- Figure Eights - \$4,200,000
 - Osage Ave – 0.20 miles
 - Del Rosa Ave – 0.20 miles
 - Juliet Drive – 0.15 miles
 - Sunrise Ave – 0.50 miles

FISCAL IMPACT

There is no fiscal impact from holding a study session.

ENVIRONMENTAL IMPACT

This action is exempt from the California Environmental Quality Act (CEQA) because it is not a project which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, pursuant to CEQA Guideline section 15378.

BOARD/COMMISSION/COMMITTEE REVIEW AND RECOMMENDATIONS

Not applicable

NOTIFICATION

Not applicable

ATTACHMENTS

None

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