



**MARIN MUNICIPAL
WATER DISTRICT**

220 Nellen Avenue
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www.marinwater.org

July 16, 2019

Marin County Civil Grand Jury
3501 Civic Center Drive, Suite 275
San Rafael, CA 94903

Attn: Pat Randolph, Foreperson

Subject: Marin County Civil Grand Jury Wildfire Preparedness Report –
Response to Recommendations per CA Penal Code 933.05

Dear Madam Foreperson,

The Marin County Civil Grand Jury concluded a review of countywide fire preparedness on April 18, 2019 with the release of the report “Wildfire Preparedness: A New Approach”¹. The report is based on interviews with Marin County officials (fire chiefs, law enforcement, emergency planning staff), individuals with an expertise in wildfire education, public advocacy and transportation, and a review of existing fire preparedness plans, emergency alert platforms, emergency transportation studies, previous Grand Jury reports, fire-related websites, and visits to wildfire-impacted areas of Butte and Sonoma counties. The report identifies four critical areas of vulnerability including Vegetation Management, Public Education, Emergency Alerts, and Evacuation. The Grand Jury offers twenty-two findings and issues fifteen recommendations with the goal of improving wildfire preparedness in Marin County.

The Grand Jury has requested that Marin Municipal Water District (District) respond to the following recommendations per California Penal Code Section 933.05:

Recommendation 1 – *“Create a comprehensive, countywide vegetation management plan that includes vegetation along evacuation routes, a campaign to mobilize public participation, and low-income subsidies.”*

Recommendation 2 – *“Hire at least 30 new civilian vegetation inspectors and at least eight fire/fuels crews focused on fuel reduction in the high risk areas of the county, including federal, state and local public lands.”*

Recommendation 15 – *“Establish in the form of a Joint Powers Authority an umbrella organization for wildfire planning and preparedness (vegetation management, public education, alerts, and evacuation), funded by a ¼ cent sales tax.”*

¹ Marin County Civil Grand Jury. [“Wildfire Preparedness: A New Approach”](#). April 25, 2019

This letter formally acknowledges our receipt of the request to respond to three specific recommendations within the Grand Jury report, includes additional information to clarify the scope and rate of ongoing fuels and vegetation management on district lands, and describes our active multi-agency fire preparedness planning efforts.

Grand Jury Report Facts

Page 5 of the Grand Jury report inaccurately references an article by Dick Spotswood of the Marin Independent Journal and states:

“The Marin Municipal Water District owns approximately 21,500 acres of wildland and has been clearing only 30 acres per year.”²

The referenced article clearly articulates that the District is implementing numerous vegetation management actions across watershed lands; not just the 30 acres per year treated under the Resilient Forest Pilot project:

“Like Marin County Parks, MMWD is clearing areas around fire breaks and fire roads to slow a spreading fire while providing defensible areas where firefighters can make a stand. The whole effort is to prevent a small fire from metastasizing into a firestorm. MMWD’s Resilient Forest Project tackles 30 acres a year by chipping underbrush and “limbing” trees 10 feet from the ground. The goal is decreasing a fire’s intensity by preventing grass fires from running up trees and producing wind-blown red-hot embers that could spread the conflagration.”³

The District requests that the report be modified to incorporate the following eight elements to accurately reflect its ongoing fire preparedness work as follows:

- (1) Cyclical Maintenance for Fire Roads and Fuel Breaks** – The District proactively manages vegetation to maintain 900 acres of constructed fuel breaks and 100 miles of fire roads to support emergency response on the Mt Tamalpais watershed. To effectively maintain the function of this fuelbreak network across the watershed the District carries out a range of strategic vegetation management activities annually, which far exceed the 30 acres referenced in the grand jury report. Vegetation management activities completed in 2017/2018 included 160 acres of brush clearing and mowing within the fuelbreak infrastructure, 20 acres of fine fuel mowing, 250 acres of invasive broom management within fuel breaks, 320 acres of invasive broom management adjacent to fuel breaks, 35 acres of Douglas-fir abatement, 20 acres of pile burning, construction of 5 acres of new fuelbreak infrastructure, 100 acres of surveying and management of new priority invasive plants as part of the Early Detection Rapid Response program, 16 acres of fuel load management in Sudden Oak Death impacted forests and management of hazardous trees surrounding day-use facilities. Additionally, the District coordinates annual management of defensible space with surrounding private property owners,

² Marin County Civil Grand Jury. [“Wildfire Preparedness: A New Approach”](#). April 25, 2019. Page 5 of 37

³ Spotswood, Dick. [“Challenge becomes clear in visit to MMWD watershed”](#). *Marin Independent Journal*. 25 Sept. 2018

leased properties, and other land management agencies. The District also coordinated with PG&E to facilitate vegetation management along 15 miles of transmission lines.

- (2) Biodiversity, Fire, Fuel Integrated Plan (BFFIP)** – The Draft Biodiversity, Fire, and Fuels Integrated Plan (BFFIP) describes future actions that the District may take to minimize fire hazards and maximize ecological health on 21,600 acres of watershed lands that contribute to the District's reservoirs and water supply network. The BFFIP reviews threats and trends on watershed lands, including factors associated with climate change, and describes 27 actions that could be implemented to enhance protection of the Mt. Tamalpais Watershed and water quality. Adoption of BFFIP as the new vegetation management plan would be made by the District's Board of Directors and as such, is considered a discretionary action and subject to the California Environmental Quality Act (CEQA). For the purposes of CEQA, the District has prepared a Draft Programmatic Environmental Impact Report (Programmatic EIR) for public review and comment. This Programmatic EIR addresses the effects of the plan as specifically and comprehensively as possible. District staff released the BFFIP Programmatic EIR for public comment at the Watershed Committee/ Board of Directors meeting on March 21, 2019. The public comment period closed on June 19, 2019. Following the comment period, staff plans on returning to the Board to review the response to comments. Based on that review, staff would then bring back to the Board of Directors a request for the Board to certify the Programmatic EIR and adopt the BFFIP. The BFFIP would replace the current vegetation management plan which was published in 1994. More information is available on the District website at www.marinwater.org/BFFIP.
- (3) Chief's Fund** – The Chief's Fund was established in 1988 with the adoption of District Board Policy 17 (revised in 2003). This program funds up to \$150,000/year for small to moderate sized fire-flow and safety improvement projects that are developed and submitted to the District each year by the Marin County Fire Chief's Association. Typical projects include installation or replacement of individual fire hydrants, new pipelines, replacement pipelines, or other fire flow and training improvements based on input from local fire chiefs who submit a list of priority projects each year for District consideration. This program represents just one way the District is working and collaborating across jurisdictional lines with local fire districts.
- (4) Fireflow Improvements** – First established in 1997, and revised in 2012, the Fire Flow Improvement Program is funded entirely by a \$75/year parcel fee (~\$5 million/year) and has a goal of improving the firefighting capability and seismic reliability of the District's water system. To date, the program has funded over \$100 million in pipeline replacement (upsizing) projects, redwood tank replacements, and treatment plant upgrades that improve the District's ability to respond to and support fire-fighting efforts.
- (5) Fire/Fuels Grant Planning** – The District is an integral component of a multi-agency and cross-jurisdictional group with a focus acquiring grants to implement vegetation management actions on Marin's public lands. As a member of OneTam, the District assisted in developing a successful grant application that will bring between \$300,000 to

\$700,000 to strengthen coordination and planning to promote fire resiliency and forest health on District, National Park Service, Marin County Parks, and State Parks lands. The grant will help complete planning level analyses that are required for future Cal Fire Forest Health or Prevention Program grants. The District is also leading an effort to secure a Cal Fire grant that will scale up the Resilient Forest Project to reduce fuel loads on over 1,000 acres of fire-prone areas in Marin County. For this project the District is working with OneTam to seek funding for vegetation management on lands owned by Marin County Parks, National Park Service, and a group of adjacent landowners. The District has committed staff time to develop the grant package and is commissioning a requisite carbon modeling study. The grant procurement process represents the District's commitment to coordinated and collaborative fire-planning efforts that must address fire and fuels at the landscape scale and across jurisdictional boundaries.

- (6) *Wildfire Task Force*** – The District recently formed a Wildfire Task Force; a group of engineers, facilities managers, and operations and maintenance staff at MMWD, to holistically evaluate and identify potential risks to the watershed and critical grey infrastructure in the water system. This working group meets monthly and will be working to identify risks, developing mitigation actions to lessen the potential for catastrophic failure associated with fire (structure hardening, fuels management, defensible space, etc.), developing fire response and preparedness plans and recovery processes that are critical to water supply. District staff expect this internal MMWD infrastructure focused group to coordinate more broadly with other fire preparedness groups in the County (Fire Safe Marin, Marin County Fire, etc.)
- (7) *Fire Preparedness & Multi-Agency Emergency Response Planning*** – The District is committed to county-wide fire preparedness planning. Our watershed manager sits on the board of FIRESafe Marin and attends monthly meetings to collaborate and stay engaged with county-wide fire planning efforts led by the non-profit organization. The FIRESafe Marin board of directors, which include a Mill Valley Battalion Chief, Novato Fire Protection Chief, Marin County Parks superintendent, PG&E's Vegetation Program Manager, Marin County Vegetation Management Program Battalion Chief, and a suite of local community interest groups, represents a substantial cross section of fire preparedness groups across the County. In the event of an emergency, fire or otherwise, the District has staff identified to orchestrate and communicate with the Marin County Office of Emergency Services. The District actively participated in collaborative efforts to prepare the 2016 Marin County "Community Wildfire Protection Plan" and the Marin County Fire Department's 2018 report titled "Lessons Learned 2017 North Bay Fire Siege".
- (8) *Public Safety Power Shutoff (PSPS) & Emergency Generators*** – The District operates 94 pump stations and two water treatment plants within the Wildland Urban Interfaced (WUI). Providing power to these facilities is essential to maintaining water-pressure in the distribution system that supports fire response to a single isolated, or large-scale event. The District owns a fleet of mobile generators that can be dispatched to pump stations experiencing an outage. All District staff are offered generator tender training to ensure there's a large pool of qualified staff to support logistical operations. The

District has obtained an additional 25 generators through rental agreements and is pursuing permanent power backup systems at the most critical system locations.

Response to Recommendations

Recommendation 1 – *“Create a comprehensive, countywide vegetation management plan that includes vegetation along evacuation routes, a campaign to mobilize public participation, and low-income subsidies.”*

Response – *This recommendation requires further analysis.*

The District recognizes that within Marin County there is a need for additional vegetation management within urban areas and on open space lands. Over the last 10 years the District has developed a comprehensive vegetation management plan tailored to the Mt. Tamalpais Watershed’s unique biodiversity. The BFFIP includes watershed-scale fuel reduction actions and resource surveys to document, assess, and adapt to system response. The science-based vegetation management plan is the result of considerable environmental review and integrates public input on critical vegetation management approaches such as the use of herbicides. On May 28, 2019 the District Board of Directors passed a new Capital Improvement Program (CIP) which dedicated a \$1,000,000/year to wildfire safety operations and vegetation management in the watershed. With this new funding the District has committed over \$13 million dollars to this program over the next 5 years which will result in treatment of over 1,850 acres of land.

The District acknowledges that a comprehensive, countywide vegetation management plan could help reduce fire risk to critical water supply infrastructure embedded in local neighborhoods, such as pump stations and tanks, by prioritizing the enforcement of defensible space requirements for adjacent private and public properties. Over the next 6 months the District is interested in collaborating with the Grand Jury Proposed Wildfire Preparedness JPA Member Agencies (Appendix D, Wildfire Preparedness: A New Approach) to determine the feasibility of such a plan.

Recommendation 2 – *“Hire at least 30 new civilian vegetation inspectors and at least eight fire/fuels crews focused on fuel reduction in the high risk areas of the county, including federal, state and local public lands.”*

Response – *This recommendation requires further analysis.*

The District currently maintains defensible space for 125 tank sites, 94 pump stations, and 3 treatment plants in addition to its vegetation management efforts for fire risk reduction and emergency access on watershed lands. As summarized in the BFFIP, there are over 25,000 structures within 2 miles of the District’s Mount Tamalpais Watershed. The District is working to expand its current vegetation management efforts in the 21,600 acres of watershed lands following environmental review and adoption of the BFFIP. The District is adding capacity to its watershed staff through the utilization of private contractors who carry out vegetation management work on the watershed and around District facilities. The District has active vegetation management contracts with Marin County Fire, California Conservation Corps,

California Conservation Corps North Bay, Forster and Kroeger, Mountain Enterprise, Youth 2 Work, WRA, Golden Gate National Parks Conservancy, and West Coast Arborists. Current efforts and expanded efforts include fuel reduction actions in high risk areas identified in this recommendation. In addition the District will continue to assess and monitor for effectiveness through an adaptive management process.

Over the next 6 months the District is interested in collaborating with the Grand Jury Proposed Wildfire Preparedness JPA Member Agencies (Appendix D, Wildfire Preparedness: A New Approach) to determine the feasibility of such a plan.

Recommendation 15 – *“Establish in the form of a Joint Powers Authority an umbrella organization for wildfire planning and preparedness (vegetation management, public education, alerts, and evacuation), funded by a ¼ cent sales tax.”*

Response – *This recommendation requires further analysis.*

The District is committed to continuing its vegetation management efforts and expanding those efforts through implementation of the BFFIP. As part of that effort the District will continue its active collaboration and coordination with other local, state, and federal agencies who may be pursuing fire preparedness activities and associated funding approaches.

Over the next 6 months the District is interested in collaborating with the Grand Jury Proposed Wildfire Preparedness JPA Member Agencies (Appendix D, Wildfire Preparedness: A New Approach) to determine the feasibility of such a plan.

Sincerely,

A handwritten signature in black ink, appearing to read "Ben Horenstein". The signature is written in a cursive, flowing style.

Ben Horenstein, General Manager
Marin Municipal Water District