

Minutes from the October 23rd, 2024, Bolinas Fire Protection District Board Meeting at the Bolinas Fire Station.

Pres. Molesworth called the meeting of the Bolinas Fire Protection District to order at 7:00 P.M. Vice Pres. Torrey, Dir. Martinelli and Dir. Dunne were present. Also present: Chief Krakauer and Administrative Manager Isaac Taylor. Dir. Pierce was absent.

Pres. Molesworth asked for unanimous consent to approve the Agenda, with the amendment to move item 5a to the beginning of the meeting. Seeing no objections, the amended Agenda was approved.

PUBLIC EXPRESSION

Judith Shaw and other attendees made public expression under item 5a.

CHIEF'S REPORT

MERA

Chief Krakauer reported the MERA Gen 2 system is fully active and operational, and the department is coordinating with the MERA and its contractors to resolve some initial technical issues.

Chiefs

No update.

MWPA

No update.

Prevention

Chief Krakauer reported a fun and successful Fire Safety Day held by the department on Sunday, October 20th, though attendance was lower than in previous years. Pres. Molesworth suggested the department consider ways to expand attendance.

Roads

Chief Krakauer reported Don Murch has been working with the department and neighborhood groups to fill potholes on sections of the Mesa. The District is supporting costs of this work for sections identified by Chief Krakauer as posing hazards to emergency vehicle access. He reported an incident last year when an ambulance bounced out of a pothole and had to be towed out of the mud by firefighters.

Chief Krakauer also reported the Bolinas Wye Wetlands Restoration Project is ongoing, but he understands work will be suspended for the winter season and resume in spring. The intersection of Olema-Bolinas Rd. and Shoreline Highway will therefore remain closed for this extended period, and Chief Krakauer hopes the completed project will be improved and safer.

Inspections

No update.

Planning

No update.

Grants

Chief Krakauer reported that the District's recent FEMA Assistance to Firefighters grant proposal was not selected, but the department is looking into additional grant opportunities.

Training

Chief Krakauer reported that training has been focused annual CPR recertification.

Volunteers

Chief Krakauer reported one new volunteer, Cass Kostelnik, as well as a new prospective cadet. Chief Krakauer is excited by the new energy and motivation coming into the department, and reported training today with four new volunteers. This weekly daytime training is an auxiliary to the department's regular weekly training.

Apparatus

Chief Krakauer reported that Engine 285 recently developed problems losing power, affecting shifting and disengaging the engine pump. Mechanics diagnosed a faulty turbo, which was replaced. Mechanics also flushed the transmission and rebuilt the vehicle's emissions system. Staff are monitoring the repaired engine.

Disaster Council

No update.

Resource Recovery

Chief Krakauer reported that a grind was completed last week, as the site continues to receive substantial green waste. A berm on the site was repaired by Don Murch after being damaged by a fallen tree. Chief Krakauer and Isaac Taylor continue to meet with BCPUD administration to discuss financial and operational planning for the site, with a likelihood of eventual fee increases to sustain operations.

Buildings and Grounds

Chief Krakauer reported that all lights in the community meeting room and front office have been replaced with more durable and efficient LED panels. Chief Krakauer thanked Capt. Smith and Ian Johnson for completing this project.

Chief Krakauer reported the station's fuel tank will receive its annual testing next week.

General Operations/Administration

Chief Krakauer reported the department continues to respond to almost one call per day.

Chief Krakauer reported he and four volunteers attended a prescribed burn operation at the Martin Griffin Preserve last week with wildland Engine 265. This was the first live fire training for several volunteers.

Chief Krakauer also acknowledged the ongoing investigation by the County of Marin into surfacing wastewater and bacteria detection along a closed section of Bolinas Beach. Chief Krakauer reported he and Isaac Taylor attended a virtual town hall tonight, at which the primary update was results of additional testing which indicates the wastewater does not have a human source. Directors inquired about this surprising finding, but further information was unavailable. County official indicated there may be additional testing of soil instead of water.

Chief Krakauer reported that new MERA pagers have been experiencing intermittent function issues, and Asst. Chief Marcotte and Ian Johnson are working with multiple

County, MERA and local fire officials to resolving these issues. The department has requested pages be activated twice while the problem is sorted out.

Isaac Taylor shared that the District recently reported its annual revenue and expenditures for the Measure W TOT tax, including a rollover from prior years which is expected to be allocated to future additional staffing. Vice Pres. Torrey suggested staff explore the purchase of additional PPE with rollover funds. Chief Krakauer reported that the District is already acquiring additional PPE within its operating budget.

Dir. Martinelli asked whether the District had received any follow-up to its response to a recent OSHA safety complaint, and Isaac Taylor reported no further communications.

Isaac Taylor also reported the stations traditional copper landline is now enrolled in CalNET, through a state contract with AT&T. This program will reduce the cost of maintaining this communication line.

Isaac Taylor reported the BCPUD will hold its regular monthly board meeting at the same time as the District on Wednesday, November 20th. The District's meeting will likely be held inside the apparatus bay.

Isaac Taylor reported that Directors reappointed in-lieu of the upcoming election will be sworn in during the December meeting.

Isaac Taylor reported the District is still awaiting its draft annual audit report, and that Ian Johnson has been working with the District's bookkeeper to improve remote access.

Personnel

Chief Krakauer shared that Asst. Chief Marcotte has returned from a recent trip, but Capt. Smith remains on leave, and staff are covering additional shifts.

GENERAL BUSINESS

Discussion Item #1 – District Emergency Warning & Mass Notification Systems

Chief Krakauer presented to the Board on the current department approach to emergency warning and mass notification systems, specifically as they relate to evacuations. Chief Krakauer mentioned two potential scenarios that could require an evacuation order. First, a tsunami warning, in which the department would likely have some amount of lead time in which to organize an evacuation response downtown. Second, a fast-moving wildfire that occurs during the night, when there is little time to respond and many people would be asleep. In the latter case, an emergency alert that is able to wake residents is most important.

Currently the District employs and recommends a variety of emergency warning and mass notification tools:

Nixle is a mobile phone alerting system for non-emergency information, such as the current prescribed burn on Mount Tamalpais.

Twitter/X may be utilized for real-time updates by public agencies (NPS, Marin County Fire, or BFPD) on longer-term incidents such as the Woodward Fire of 2020.

Alert Marin will provide mobile phone alerts for critical and life-threatening emergencies. Residents must register for the service, and may be able to set audible alerts for these notifications. Approximately 80% of Bolinas residents are registered for the service, which is a high percentage for Marin communities.

WEA (wireless emergency alert) are audible mobile phone alerts that can be sent to every mobile device in a defined area, with no need for registration. Currently this system is used for Amber Alerts, and these audible alerts override silent settings. *WEA* would also be used in the case of a critical evacuation order.

NOAA emergency alert weather radios will receive audible alerts through OEM and NOAA in an emergency. These radios operate with backup batteries and do not depend on cellular networks. *NOAA Radios are available for purchase at the Bolinas Fire Station.*

Hi-Lo sirens have been installed on all law enforcement and emergency vehicles throughout Marin County. The recognizable “hi-lo” siren pattern is intended for evacuation *only*. “Hi-Lo means *time to go.*”

Sirens include both mechanical sirens which sound an alarm only, and newer models which are able to broadcast voice messages, known as LRAD or long-range acoustic devices. LRAD sirens are available as fixed, stationary models and as mobile units. Fixed units have an initial cost of approximately \$120,000, plus annual maintenance of approximately \$10,000, and each unit requires electrical connection and a lease agreement for the ground space they occupy. The operational life expectancy for each unit is approximately 15 years, and possibly less due to exposure to salt air in coastal areas. Installation of such units may also require Coastal Commission permitting and associated environmental studies. The manufacturer Genasys estimated Bolinas would require 10 fixed units to achieve complete coverage of our fire district.

Chief Krakauer reported he has attended tests of the LRAD sirens in Bolinas and at other fire districts within Marin County. The audibility of messages from these units depends on many factors, such as distance, wind, and topography, and messages can sometimes sound garbled or inaudible depending on these factors. During a test in Bolinas on a sunny day with minimal wind, some staff were unable to hear alerts clearly from within a home at a fixed distance. This test convinced Chief Krakauer that a fixed unit system would likely be less effective than a mobile unit, which could be sounded at multiple locations and distances during an evacuation.

The District purchased a mobile LRAD unit in 2023 using funding from MWPA for local prevention initiatives. This unit can be rapidly deployed on any vehicle, and driven to multiple locations for targeted messaging. The unit is capable of producing alarms such as the Hi-Lo siren, pre-recorded messages, or ad hoc messages recorded on the spot. Chief Krakauer believes the addition of this unit improves the department’s emergency alerting capabilities, especially in regard to tsunami warnings, as it can be targeted along beaches and over water. He also reported the District is investigating the purchase of an additional mobile unit.

Chief Krakauer also reported the District is planning an evacuation drill in the near future that will feature Alert Marin, Hi-Lo sirens, as well as the new mobile LRAD unit. Such a drill has been delayed in recent years due to COVID-19 and the Marin County Office of Emergency Management’s move from the Sheriff’s office to Marin County Fire Department.

Recently, the OEM has conducted a study on sirens in coordination with MWPA, and Chief Krakauer hopes to report back on the results of this study once they are shared with local agencies. Chief Krakauer reported that although Southern Marin Fire Protection District has opted to install a fixed-LRAD siren system, each community has a different profile of terrain, population density, and hazard areas. Chief Krakauer also reported that many local fire agencies are continuing to study these solutions and how they may be applied to their areas. While there is no broad consensus on these systems, Chief Krakauer reported that the District will continue to evaluate all available tools and weigh their effectiveness for the needs of the Bolinas community.

Vice Pres. Torrey asked Chief Krakauer how the District can communicate these capabilities to the public. Chief Krakauer responded that board minutes will summarize the information discussed, but the best public outreach will likely be an evacuation drill, which will be scheduled sometime in the next few months. Chief Krakauer stated that the drill would be noticed in the Bolinas Hearsay, on Nextdoor, and with street signs. An informational Nixle alert will also be requested. Pres. Molesworth recalled a previous evacuation drill held in 2019, and Chief Krakauer described that event, which was for a section of the big mesa only. Vice Pres. Torrey suggested advance communication regarding the drill procedure, and Chief Krakauer suggested that might be done by issuance of a postcard, like the District's previous evacuation checklist postcard. Pres. Molesworth suggested making the drill annual, and Chief Krakauer indicated he was open to the idea.

Dir. Dunne asked whether the department would be able to simultaneously deploy multiple mobile sirens, and Chief Krakauer answered that it would. He elaborated that under an evacuation order, evacuation becomes the first priority of staff. Judith Shaw asked about the range of the mobile siren, and Chief Krakauer responded that the effective range is $\frac{1}{4}$ to $\frac{1}{2}$ mile, based on his experience. Shaw asked whether these units could be fixed to permanent locations, and Chief Krakauer responded they could, but he believes they are more effective as a mobile tool.

On the point of efficacy, Pres. Molesworth asked Chief Krakauer how he would allocate funding similar to the cost of a fixed multi-siren system, were the funds available for his disposal. Chief Krakauer responded that he would prefer to invest those funds in staffing, and believes mobile sirens are a more effective solution to supplement the other evacuation tools already used by the District and its partners.

Chief Krakauer responded to a question about response time in a fast-moving wildfire scenario by stating the department has tested deployment time at the station, and response times will vary based on location. The questioner also stated they were not aware of NOAA radios until this meeting, and asked about public education efforts. Chief Krakauer stated that the department has promoted the tool in all its events and mail materials, and encouraged residents to share these tools with others.

Pres. Molesworth stated that the department employs multiple evacuation tools intended to work together, and the District should ensure that additional evacuation tools are evaluated for how they improve the notification system. She agreed that the District should always do more to provide public education and outreach.

Chief Krakauer responded to a question about whether personnel deploying mobile sirens would decrease suppression capabilities during an evacuation emergency, stating that all available emergency resources and personnel are typically dedicated to evacuation in

such an emergency. Chief Krakauer answered a question about potential road blockages limiting the deployment of sirens, stating that it is always a possibility. Dir. Martinelli added that all systems have gaps and vulnerabilities, and that extreme fire behavior can be destructive to infrastructure. Isaac Taylor shared that the department also has a UTV all-terrain vehicle capable of deploying the siren. Chief Krakauer clarified that the District's LRAD has the same technology as the fixed systems, and he remains open to exploring all available tools including these fixed systems.

Vice Pres. Torrey shared the example of a recent fire on Hawthorne, at which firefighters determined evacuation was not warranted, and instead focused their efforts on extinguishing the fire. Dir. Martinelli stated that fire behavior depends on many variables in addition to wind. Chief Krakauer emphasized that Bolinas is not exempt from wildfire or any other disasters, which can and do affect all communities, but stressed that firefighters have the tools to evacuate people quickly and want to share those tools widely in the community.

Pres. Molesworth assured attendees that cost is not the factor keeping the District from considering a fixed LRAD system, and the Board and staff will continue to evaluate emerging technologies relevant to the District's mission. Pres. Molesworth and Chief Krakauer thanked Judith Shaw for her advocacy and engagement on this subject.

Discussion Item #2 – Draft Board Policies and Procedures Manual

Pres. Molesworth reported that the Board is still reviewing a preliminary Policies and Procedures Manual drafted by Isaac Taylor earlier this year. She stated that she would share some edits with staff before bringing this item for a Board vote at a later date.

Discussion Item #3 – Wildfire Preparedness and Response

Chief Krakauer reported that the District observed its first Red Flag Day of the year last week, and fortunately the winds were calmer than forecast. However, there was a serious fire in Oakland.

Chief Krakauer reported the MWPA West Marin Zone Evacuation Route Project will be resuming in November and December, expanding work from County-maintained roads to secondary roads identified as key evacuation routes. Fuel reduction will go up to 10 feet from road edges and 14 feet vertically. The District is working with MWPA to prepare notifications for residents on affected roads.

Chief Krakauer reported the District's annual Chipper Days are now complete, and all five dates were full. The final MWPA Chipper event is concluding today. The District continues to receive positive feedback on these programs.

CONSENT CALENDAR

MSC Dunne/Martinelli (unan.) to approve the Consent Calendar.

BOARD MEMBER REPORT

No update.

COMMITTEE REPORTS

Human Resources Advisory Committee – No update.

Finance Advisory Committee – No update.

Operations Working Group – No update.

PERSONNEL MATTERS

None.

ANNOUNCEMENTS

None.

GOOD OF THE ORDER

Pres. Molesworth thanked members of the Board for their continuing engagement in important community discussions.

Vice Pres. Torrey shared Dir. Pierce’s thanks to the Board for their support during his absence for medical reasons.

ADJOURNMENT

Vice Pres. Torrey asked for unanimous consent to adjourn the meeting. Seeing no objections, the meeting adjourned at 8:51 P.M.

Respectfully submitted,

Isaac Taylor
Administrative Manager

Note: Minutes of all Board meetings are available for review on the District’s website.