

## Jennifer Blackman

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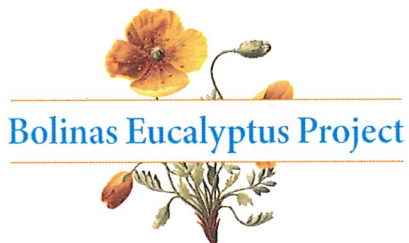
**From:** BEP <info@bolinaseucalyptusproject.org>  
**Sent:** Saturday, August 12, 2023 2:19 PM  
**To:** jsiedman@yahoo.com; Kevin McElroy; Jennifer Blackman; Jeffrey Manson  
**Subject:** Discussion of Ray Moritz Hazard Report  
**Attachments:** Discussion of the Ray Moritz Hazard Report.docx; Xerces letter Emma DA comments.pdf

Dear Jack, Kevin and Jennifer,

Attached are the comments on Ray's report that you requested. I have also included Dave Ainleys perspective on Emma Pellon's letter to the BPUD regarding the Monarchs and zone 5.

Best regards,  
Janice Tweedy

On behalf of the *Bolinas Eucalyptus Project*



Jon Cozzi  
Bolinus Eucalyptus Project  
8/11/23

## **BEP Commentary of Moritz Hazard Report**

Hello Jack, Kevin, and Jennifer

As you had requested, please see the following comments about Ray Mortiz's recent hazard report.

Its failure analysis and risk assessment are well organized and thorough as one would expect of Ray's professionalism. But it is also a bit troubling with some questionable elements. In the section on Zone 5, the Bolinas Eucalyptus Project area, Ray seems to downplay the risk level at every opportunity. While I understand and respect BCPUD asking Ray to survey for immediate hazards, I just can't see any good reason to minimize the danger and environmental compromise this stand of trees represents to our community.

It seemed petty and unbecoming that the report would criticize colleagues the way it does. I spoke with both Tom Gaman and Kent Julin after they had an opportunity to see this report. Neither was interested in squabbling over Ray's judgements of their work or quibbling about who had better credentials. But I find it necessary to address some specifics.

**1)** Though Ray's report criticized the work of Tom Gaman and Kent Julin, there is no mention of the previous report from Ben Anderson who is an associate of Ray's at Urban Forestry. Ben recommended in no uncertain terms that eucalyptus removal in the project area and conversion to native plant communities was the prudent treatment for this stand of blue gum. Ben's assessment was made before last winter's destruction and now seems prescient given what happened to this ailing and unpredictable grove.

**2)** Ray does not mention that mid-sized to small trees, well off the road (like the one that nearly killed Annabelle and Alias) would be left standing if we followed his methodology for hazard tree removals.

**3)** This assessment does not acknowledge that no other stands of Eucalyptus in or around Bolinas suffered the destruction seen in Zone 5 except the also thinned stand behind Resource Recovery where eight trees were blown down. Yet Ray's report recommends more thinning. 8 arborists that I have had on site including Ben Anderson, Tom Gaman, and Kent Julin, directly warn against this.

4) Ray's assessment does not mention that the pruning cuts he proposes on several trees are at best a short-term remedy, and at worst a repeat of the misguided work PG&E carried out in 1964. Just last week I split Eucalyptus from a large tree taken down last year on lower Marin way. I was amazed at the extent of decay in this large two-foot diameter limb wood, decay related in some cases to old pruning cuts and grove senescence. The Mesa Rd. and Terrace Ave. groves are the oldest in Bolinas. And now the most troublesome. Both are ailing as clearly seen on Terrace where the fallen lay in the gully of Canyon Creek.

So, when this assessment says that for decades starting in 1978 Pacific Slope tree company was safety-pruning, that should not make us feel any more confident with these trees along critical roads and evacuation routes. The simplest truth is that these groves—over the whole Bay Area, if not the State—are aging and becoming ever more unreliable and dangerous. That's why many communities are cutting them and replacing them with native vegetation.

Let's look at some other particulars in Ray's report:

**Next to last paragraph pg. 10** The 5 ft.+ dia. tree that fell across the road into BCPUD trees on the south side of Mesa was a county tree. Ray is incorrect when saying it grew on private property. That tree is inside the County Right of Way owing to a northerly jog in the survey line just downhill of the tree in question. Importantly, other problem trees are within County ROA, some on Olema-Bolinas Road. Ray doesn't mention this salient information that was surveyed by Marin DPW at BEP's request.

**Pg. 11 first paragraph** says, *"The majority if not all, BPUD trees in this failure zone were not blown down"*. Regardless of how the trees came down (wind, soil saturation, or a "domino effect") the fact remains that they did fall and are still on the ground 6 months later presenting a significant fire hazard. I was there to watch several trees blow down on Jan 4, and I heard and saw trees come down in February and March. This was not a one-day event. Climate science has found that unpredictable weather and heightened storms are becoming the norm. These trees came down over a three-month period. Here again Ray seems to downplay the risk this stand presents.

**Third paragraph** Ray discredits Tom Gaman because he is not ISA TRAQ qualified to assess tree risk. Gaman has spent most of his adult life as a practicing forester. It is a distraction and a diversion that we entertain nit-picking about this or that type of credential. All the credentials in the world are of little use if common sense and

deductive reasoning are not exercised by the credential holder. It is the expectation that they will apply their expertise and warnings most broadly.

**Bottom of page 11** Ray's report says Kent Julin misdiagnosed the impact of Tortoise shell beetle. This is soundly debunked on page one of the Ben Anderson report. During that time, almost every single fallen leaf was heavily notched by this insect. BEP walked the site with Dennis Rodoni, Jennifer Blackman, and Rosemarie Gaglione of Marin DPW. All saw and commented on this heavy beetle presence. Personal observation tells me that the insects, blown out last winter, are making a comeback.

**Also on page 11**, next to last paragraph, Ray challenges Kent's assertion that a strong earthquake could topple trees citing a lack of published studies. This is where deductive reasoning becomes important. We should be glad Kent brings up earthquakes, living as we do on California's San Andreas Fault. A strong quake could send Terrace Avenue onto the beach below and make Mesa Road our only way to high ground should a Tsunami strike our shores. And earthquakes often create fires that could double the traffic and evacuation problems. I'd expect Ray to be a bit more broadly protective of this town and its vulnerabilities.

### **Pg 13**

Kent did prioritize the 14 groves. He did not break down bits and pieces of Zone 5 because he was concerned that would leave a dangerous situation with the illusion of being made "safe." Under the heading East Mesa Grove Failure Analysis, the Moritz report makes several questionable statements:

**A)** It downplays the traffic on trails and does not acknowledge that those smaller trees can reach the road as did the one that nearly killed two of our community members. People are to be seen in all sorts of weather on these trails. Some of our residents do not drive and they must get to their destinations no matter the conditions.

We think it is inaccurate that Ray considers these trails low priority targets. Tell that to the mother of a school kid who uses the trails. And, with our much needed and improved path, bikes will travel downhill much faster. Even small broken limbs can lead to a serious accident. Blue gum is notorious for shedding branches, leaves, and deciduous bark, one of the facts that makes ongoing maintenance so onerous to BPUD and its ratepayers.

**B)** Ray's assessment says previously topped trees should be removed but then says; "*or inspected every three years.*" All agencies that set guidelines for tree risk assessment

refer to previously topped stumps with full tree regrowth as a significant structural deficiency. These previously topped trees are ticking time bombs, and expensive ones to deal with during an emergency or generalized maintenance.

**C)** Ray's assessment seems to assume that removal of all trees and native flora conversion is not feasible currently. Well, if not now, when? We believe Bolinas will answer the call to make our roads and lands safer, our natural environment more encouraging to a diverse range of plants and animals, and the maintenance of these communal lands far less burdensome.

What is not feasible is doing some tree pruning and removal which will cost a lot of money and at the same time increase the likelihood of more tree failures owing to the change in wind flow dynamics. BCPUD and its rate payers will be locked into an ongoing and cumulatively expensive maintenance and manicuring regime to clean up under these trees and to keep them pruned. Much of the interior work will entail climbing, adding difficulty and expense for our community.

\* \* \*

In closing, I would like to express my largest question about the Moritz assessment: Ray asks BCPUD to consider what their long-range goal is for the East Mesa Grove. Ben Anderson, Tom Gaman, and Kent Julin have used their professional judgment to recommend what they consider are the safest and best environmental goals for the Bolinas community. Is Ray opposed to full removal and native flora revegetation? If so, why?

The Bolinas community has shown itself ardent supporters of this project. To gain donations from our generous and caring residents, grants from various programs, and to encourage responsibility on the part of PGE and the County will require a united, strong, and committed populace to see this to fruition. We hope that Ray Moritz will be one of the many professionals—tree-workers, biologists, naturalists, ecologists, botanists, geologists, and all others who strongly support this necessary and visionary proposal.

Jack, Kevin, and Jennifer, we look forward to seeing you at the August 16th meeting, thanks for your attention to this important issue.

Jon Cozzi, Rudi Ferris, and the Bolinas Eucalyptus Project

From: Emma Pelton [mailto:[emma.pelton@xerces.org](mailto:emma.pelton@xerces.org)]  
Sent: Thursday, May 11, 2023 7:59 AM  
To: BCPUD <[bcpud@bcpud.org](mailto:bcpud@bcpud.org)>  
Cc: Mia Monroe <[muirmia@comcast.net](mailto:muirmia@comcast.net)>  
Subject: Fwd: [EXTERNAL] Thoughts on Butterfly Habitat in Zone 5 (2915)

To BCPUD staff, perhaps best directed to Jennifer Blackman,

My name is Emma Pelton and I am a conservation biologist with the Xerces Society, leading our western monarch efforts. I was recently alerted by Mia Monroe (cc-ed) to an effort by the Bolinas Eucalyptus Project to remove a eucalyptus grove known to host monarch butterflies: BPUD, site 2915 in our records ([westernmonarchcount.org](http://westernmonarchcount.org)). This site is regularly monitored as part of our Western Monarch Count project and thousands of butterflies have been reported in the past and over 400 were observed this season. This makes BPUD one of the most important overwintering sites in the Bolinas area and a significant site in the state.

A recent report by WRA commissioned by the Bolinas Eucalyptus Project rightly points out the site as falling in the coastal zone and qualifying as ESHA due to the use by overwintering monarchs. However, the BEP group responded with pushback (letter attached) including asserting "This site is not an Environmentally Sensitive Habitat Area (ESHA), at least in terms of Monarch Butterflies." BEP's assertion is at odds with the consultants' and Xerces' understanding of how [Marin LCP classifies monarch overwintering sites](#) (pg. relevant to Marin County include 34-38).

Thus, I wanted to alert you to the assertion by the group and perhaps we can find a way to clarify the status of this site and other monarch overwintering sites within Bolinas which may also be of interest/concern to the BEP group. Another point of clarification I hope we can make is that mitigation is very difficult for monarch overwintering sites as there are almost no examples of successful creation of overwintering habitat and the science behind why monarchs select the trees and groves they do is still evolving; thus, "alternative" sites for monarchs is not a biologically feasible replacement for the loss of existing, long-documented habitat.

**Commented [DA1]:** NO, the proposal is to remove that portion of the Eucalyptus grove that is a danger to Bolinas residents, as well as their electrical power supply. Two-thirds of the grove would remain, including a portion in which monarchs once used. In fact, your image shows that you circled this other portion of the grove.

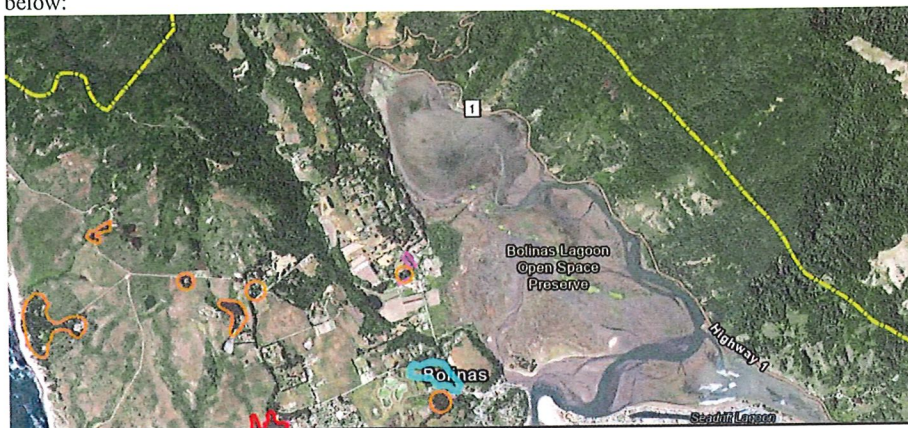
**Commented [DA2]:** This is not true. According to Xerces spread sheet, showing history of site 2915, beginning in 1997. No data 1997-99; 1500 MB in 2000; zero MB in 2001-02; 5 MB in 2003; 122 MB in 2004; zero or no count 2005-2014; 3 MB in 2015; zero MB in 2016; 410 MB in 2017; zero to <= 10 in 2018-2021; 432 MB in 2022.

**Commented [DA3]:** Not true. Site 2915 is the least-used of several portions of the Bolinas Peninsula meta-roost (5 currently-used sites, all within <1 km of one another, and not including Terrace Ave, which has had 1 MB in all the years since 1997). Since 2015 to 2022, here is site 2915 contribution to the Bolinas Peninsula roosting population (T-day count), in percent (%): 0.01, 0.0, 2.3, 0.0, 1.5, 7.5, 7.4, 11.1. It's average contribution during this period is 1.3%.

**Commented [DA4]:** Again, the BEP project is only in the part of the grove of great danger to humans, with MB known to use other portions of this grove.

**Commented [DA5]:** Yes!!!! And, how about a drone aerial survey of the many km of conifer forest edge that encircles the Bolinas Peninsula? Xerces website has images just of MB in conifers and not Eucalyptus. Why is that? The study by Griffiths & Villablanca (2015) shows that MB prefer conifers over Eucalyptus, especially during mid-winter, when they abandon earlier-used Euc. This behavior is hinted in Xerces spreadsheet for Bolinas Peninsula, with NY Day counts always far smaller than the earlier T-Day counts. Where do the MBs go? Would it be to places along the many km of conifer forest edge (shown in the image accompanying this letter), an equal distance from the ocean (heat source) as is the Euc meta-roost. By the way, this image does not show the Euc grove at the Palomarin PRNS trailhead, a grove as equally used by MB back in the 1990s when Terrace was a prime roost.

Screenshot of the coastal zone in relation to known monarch overwintering sites in Bolinas below:



We understand the importance of reducing catastrophic wildfire risk and community safety, but want to ensure the destruction of ever-dwindling monarch overwintering habitat is not an inadvertent casualty. There aren't always perfect solutions, but we have been helping other landowners think about fire risk reduction while also keeping groves standing and incorporating native trees and shrubs (which generally are additive, not a replacement to eucs) to the benefit monarchs and other wildlife and to achieve goals to restore a native plant component to sites. I think that sort of work can certainly be achieved at this site as well.

Also, the monarch butterfly is currently a candidate species under the federal ESA with an anticipated listing in FY 2024 which could impose legal constraints on removing or otherwise negatively impacting the species' overwintering habitat. CDFW already considers the species a Special Status Invertebrate and this site location should already be mapped in CNDDDB. We would be happy to provide more information if needed and we strongly encourage solutions to protect and restore this site which will involve the eucalyptus grove remaining at this location.

Apologies if any of this is "preaching to the choir" as I understand you all have been working with Mia Monroe and others on protecting and monitoring the habitat for some years. I just wanted to lay out a few points in writing which you are welcome to share as relevant with the BEP group or consultants if it's helpful.

I'm also more than happy to have a call or connect by email if we can be of assistance.

Thank you,  
Emma

----- Forwarded message -----  
From: Monroe, Mia <[Mia\\_Monroe@nps.gov](mailto:Mia_Monroe@nps.gov)>

**Commented [DA6]:** Why is this? Euc groves becoming to old, no longer providing much wind protection? The Xerces spreadsheet has Stern Grove in SF as a site (#3042) --- >100 Eucs fell in this grove during the 2022-23 winter.

**Commented [DA7]:** It's more than this for Bolinas. It's also repeated loss of power owing to falling Euc trees or just their branches. Moreover, the portion of 2915 being discussed here guards the ONLY route in/out of Bolinas.

The USFWS Monarch Species Status Assessment Report says that a primary concern is: "...senescence and incompatible management of overwintering sites in California..." Is Xerces Society telling Bolinas that they are responsible for maintaining all the Euc groves within the town confines?

The USFWS in its 2021 "**Western Monarch Butterfly Conservation Recommendations**" says: "Avoid the removal of trees or shrubs within 1/2 mile of overwintering groves, except for specific grove management purposes, and/or for human health and safety concerns. The maintenance of trees and shrubs within a 1/2 mile of these sites provides a buffer to preserve the microclimate conditions of the winter habitat."

Date: Wed, Mar 29, 2023 at 11:53 AM

Subject: Re: [EXTERNAL] Thoughts on Butterfly Habitat in Zone 5 (2915)

To: BEP <[info@bolinaseucalyptusproject.org](mailto:info@bolinaseucalyptusproject.org)>

Cc: muirmia <[muirmia@comcast.net](mailto:muirmia@comcast.net)>, [emma.pelton@xerces.org](mailto:emma.pelton@xerces.org) <[emma.pelton@xerces.org](mailto:emma.pelton@xerces.org)>

Thank you for your letter to me as well as your response to others. I appreciate your sense of urgency, the other compelling concerns for the safety of Bolinas human residents.

I will send you a response soon as i have a different interpretation of the data as well as site #2915's value to monarchs i'd like to share.

Which sites to the south do you feel could be suitable for monarchs?

mia