5 January 2016

Board of Directors
The Sea Ranch Association

OPEN LETTER

Re: The Sea Ranch Central TPZ NTMP

Members of the Board,

For at least the past six years, you and previous members of the Sea Ranch Board have been approaching the brink of betraying one of the core principles of our community, that of "living lightly on the land." I refer to the plans for logging our central forest, which I oppose.

I address you, rather than the regulatory authorities reviewing the NTMP, because it is your task, not theirs, to maintain the unique character of the Sea Ranch. And I address you, rather than the NTMP Task Force, because my initial attempts to pursue dialogue with them have demonstrated that they have no interest in considering a change of course. Finally, I address you, rather than the community manager, because this is a matter of policy, not administration.

There is ample time for you to reconsider before approving any logging contracts.

Is logging necessary for the good of the forest?

The most pernicious idea circulating about this topic is the claim that, because our forest was damaged by previous logging, it now requires "management" (code for more logging) for its own good. Perhaps this is true of other kinds of forest in other places—say, Colorado.

But it is not true of forests, such as ours, dominated by coast redwoods.

I speak both from personal experience and from an examination of ecological literature. Because anecdotal evidence is easy to ignore, I will not dwell on my personal experience, save to point out that it is easy to find examples of new-growth forests of coast redwood that have prospered, rather than suffering, by being protected from "management."

This is a missed opportunity for due diligence. You have been shown examples of tree farms managed in a way similar to what is proposed for our forest. But were you shown the converse? Did anyone exhibit examples of coast-redwood forests that have suffered from being left alone, or did you seek out examples of such forests?

Fortunately, a recent empirical study (Russell et al. 2014, *Restoration of Coast Redwood (Sequoia sempervirens) Forests through Natural Recovery*) examines precisely this issue. The study investigated second-growth plots in five state parks in the Santa Cruz mountains, where the redwood forests have been protected from logging for periods ranging from 80 to 160 years. For reference, five old-growth reference sites were examined as well. Their conclusion:

> The results of this study indicate that natural recovery is an effective technique for the restoration of coast redwood forests. The overall density of trees declined over time in recovering stands reaching statistical equivalence with old-growth reference sites for most species. The dominance of S. Sempervirens also reached statistical equivalence with old-growth, as did canopy cover, understory cover, and species richness. Associated herbaceous species also trended toward recovery ...

High density of trees is one of the issues cited by forester Greene to allege that our forest needs management. Yet, he is clearly aware of the fact described above by Russell et al that this density decreases naturally—but presents that very fact in a negative way. In his appendix to the 2013 McBride report (p 114), Greene wrote,

> If forest management is not continued on the property, the growth rates will decline and the forest will eventually begin to stagnate. The amount of dead, dying, and diseased trees within the forest will continue to increase, as will the hazards associated with leaving them standing. The forest will develop a multi-age structure, but it will take much longer than if actively managed.

"Dead, dying, and diseased trees" are the natural thinning mechanism that leads to old-growth characteristics. Moreover, those "dead, dying, and diseased trees" are the very same snags that both the 2009 Tunheim report and the NTMP proposal acknowledge constitute valuable wildlife habitat, and are thus an important part of a healthy forest.

Greene's statement that our forest will take a long time to develop a multi-age structure is surprising, considering that only five pages before, in the same document (p108–109), Greene himself wrote that our central forest *already has that structure*. In Greene's words, "most of the property was harvested in 1990 and 91. This created two and on certain parts of the property three age classes. This multi-age structure much more closely resembles what the original forest would have looked like, pre-European settlement. The main differences

today are that the trees are smaller and there are many more per acre." The existing multi-age structure was also noted in the Tunheim report.

More information on this topic is online at http://sawranch.info/forhealth.html .

What about fuels management for fire safety?

Following the gloomy prediction quoted above about the fate of our forest if unmanaged, Greene adds "During this time period, which could last for many decades, the fuel load for fires will continue to build up." That prediction assumes the alternative to the logging plan is to do nothing. It also gives the impression ("*continue* to build up") that there is already a dangerous fuel load in our forest, consonant with Greene's assertion that the forest's density is too high.

Yet, the NTMP's discussion of wildlife evaluation in our forest (p79) states the following:

> On the ground visual searches for plant and animal species and their habitat was greatly aided by the composition of the understory and forest floor within the plan area in some parts. Many parts of the upper plan area are lacking understory vegetation as a result of a dense closed canopy. The forest floor is often a "carpet" of needles, branches, twigs and small branches. Because the visibility is good, the RPF has a high degree of confidence with respect to his on the ground searches.

This is not a description of a forest choked with fuels! Understory vegetation, described as "lacking" above, is precisely what might cause a fire hazard—if it were plentiful. Selective logging, by allowing more light to reach the forest floor, would increase this hazard by encouraging the growth of more underbrush. (For references and more discussion, see http://sawranch.info/firesafe.html.)

I do not claim that we should ignore fire hazard, only that it has been exaggerated. Moreover, this seems to be another missed opportunity for due diligence: I can find no record of any investigation of a fuel-management strategy independent of logging in our central forest, even though the original Rule that defined the forest as a preserve specified that fuel management was permitted there. An applicable strategy is well established: it is called "understory thinning." It should be possible to find people who can estimate its costs.

Erosion control

Erosion control is sometimes cited as another compelling reason to approve the logging plan. The NTMP describes eight locations where it proposes engineered solutions to existing erosion problems. These problems are all due to previous logging activity. Erosion problems

are inherent in logging. The NTMP acknowledges this by proposing many measures to mitigate new erosion hazards. "Mitigation" is the NTMP's term, not mine: and the word does not inspire confidence. To mitigate means to reduce the impact of a harm, not to avoid it. Thus, we can expect to be saddled with new erosion hazards ("mitigated" to some extent) if logging is carried out.

I suspect the severity of the existing erosion problems has been exaggerated as well, in any case. I've viewed several of these locations, and to my (admittedly inexpert) eye, there are far more severe erosion problems in other parts of the Sea Ranch.

By all means we should invite an appropriate expert—a geologist—to inspect these eight sites and report on them. This seems to be another missed opportunity for due diligence; apparently, the only professional opinion obtained on this subject is from the forester.

Might it even be better to deal with the erosion problems on old forest roads by removing those roads, i.e. re-contouring the land to its natural slope and encouraging vegetation?

See http://sawranch.info/erosion.html for some references.

Forest hazards

Hazards and liabilities due to falling snags are often cited in support of more "management" in our forest. Yes, snags can fall, and they might even fall on an unlucky hiker. But trail hazards are hardly unique to the forest in the Sea Ranch. Should we wall off the bluff trails so unlucky hikers won't slip and fall off them? Should we close off access to steep trails so people won't risk injury by slipping on them? There is no reason to focus more on trail hazards in the forest.

In fact, selective logging can itself introduce new falling-tree hazards: openings in the canopy could increase the risk of windthrow.

Revenue and costs

I am not blind to the fact that, absent a revenue source from logging, any efforts to control fuel loads or manage erosion will incur costs. These costs should be estimated and studied before they are used as scare tactics to commercialize our forest.

In examining the records of planning whose current result is the NTMP, there appears to be one constant: a preoccupation with revenue. But when the logging plan is stripped of its greenwash, it is apparent that such revenue is at the cost of our natural environment.

Conclusion

In summary:

- Logging is not necessary or beneficial for the forest
- Forest fuels can be managed in a simpler way
- Erosion issues have not been addressed by the appropriate specialists
- Forest trail hazards have been exaggerated
- Costs of less-intrusive alternatives have not been examined

Do you really want to be the Board responsible for reorienting the Sea Ranch from "living lightly on the land" to logging blithely on the land?

It is very difficult to recognize a mistake and change a decision accordingly. If anything, it is harder for a deliberative body, such as your Board, than for an individual. And it is particularly difficult to change a decision that was the result of a long process.

Nevertheless, when a decision really is not the best, recognizing the mistake and changing course is less damaging than plunging ahead. I hope a majority of you can bring yourselves to do just that, and cancel the plans for logging our central forest.

Cordially,

Roland Pesch, UBL 13–0–40

P.S. Much more discussion, with specific reference to published scientific literature (including links where possible) , can be found under `http://sawranch.info/background.html` .