

Paradise Nature-Based Fire Resilience Project



Conservation Biology Institute
In partnership with TNC and Paradise Recreation & Parks District

Appendix C: Paradise TAC Notes and Feedback
Appendix D: Land Management Tools for Fire Risk Reduction

June, 2020

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Paradise TAC Meeting #2

April 30, 2020, 1-3pm

Notes by Ryan Luster with additions by Deanne DiPietro

[Meeting Recording](#)

Attending: Zeke Lunder, Max Moritz, Susan Hartman, Holly Jorgensen, Dave Brillenz, Wolfy Rougle (Butte Co RCS), Ryan Luster, Dan Efseaff, Deanne DiPietro, Kai Foster, Sarah Newkirk, Elizabeth Hiroyasu, Jim Broshears, Eli Goodsell, Jim Houtman, Don Henkins, Amy 34 North, Kristy Sweeney, Heather Romsos, others joined mid-call.

Agenda:

1. Questions about the project or April 23 presentation -- Dan facilitated, Deanne and Kai answered technical questions, Ryan took notes (30 mins)

Wind

- Max Moritz: are there other wind conditions, other than the Diablo, down canyon winds, that should be considered? Dan response: we looked at the worst case wind scenario (Diablo winds). Jim Broshears: most fire winds come from Butte Creek Canyon, 90% of fires are generated from SE winds.
- Zeke: if we are planning from the worst case scenario, there is nothing we can do to prepare for that. What type of fire should we practically plan for?
- Wolfy: hears in the community that there is a perception that after the 2008 fire, the winds became more intense b/c of the loss of those trees. Is there a way we can address the intensity of wind? Jim: we now have a new short-term, post-Camp Fire, fire regime. We need to model new post-Camp Fire fire regime and expected long-term fire regime.



Fuels management

- Deanne: do folks in Paradise talk with other fire prone communities to learn what they are doing? Jason Morris: Cal Fire coordinates with other Cal Fire units on veg management.
- Zeke: fuels breaks will need constant veg management, who will pay for that? HWY 32 fuels management is an example of repeated (every 2-3 yrs) needed management. Jim Morris: shaded fuel breaks are key, shade keeps understory from growing which is main fire carrier. Reiterated that shade is our long-term tool for maintaining undergrowth-free fuel breaks.
- Eli Goodsell: consider training 'brushy' trees to create a single leader, otherwise you create resprouting bushes that are fire prone.
- Jim Broshears: fuels management too expensive and labor intensive. Paradise had focused on structural hardening, and forest health management.
- Don Hankins: contain patches of brushy areas, selectively thin brush in areas to allow for canopy to develop, use fire to manage understory. Jim: seconds what Don is saying, and incorporate recreation into these management areas. Eli: foot trails can do double duty as a fire line for understory management with fire.

2. Feedback: Do you think this is useful? If so, how? -- Deanne facilitated, Dan contributed to discussion, Ryan took notes (40 mins)

- Zeke: it is useful though it will be difficult to implement b/c as we speak the town is issuing building permits for some of the most vulnerable lots (e.g., tops of ridges).
- Deanne: do these maps/scenarios we did, are they helpful? Jim: yes, very much. There are great possibilities of working with landowners to do veg management, we don't necessarily need to buy the properties.
- Eli: Jim and I can sit down with you to give you intel on many properties regarding whether or not they are willing to sell, they could be educated re: alternative land management.
- Kai explained how Data Basin works.
- Jim: yes, this tool helps us see a vision for where we should be going. These are assessment tools that help
- Jason Morris: this is a good tool. We can use the tool to see where we should prioritize our work. We prepare for the 99 percentile fire. We built a fire break around Magalia years ago, it was difficult. Must include every property that is needed to have a connected fuel break, can't have gaps. It was a lot of work to get each individual property to participate.
- Eli: your multi-benefit approach will make your project more attractive for funding. Jim Houtman: layering outcomes is important.
- Max: nested set of buffers (buffers within town, not just around the town). Internal urban fire shelters/refuges would be a good idea. Jim Morris: we call those temporary refuge areas (TRAs), we don't like to advertise those to the community otherwise people would prefer to shelter in refuges rather than evacuate.
- Zeke: can use this info to help show where parks and evacuation routes are important and can be used for dual purposes. Lots of deadend roads should be converted to urban park areas for this purpose of multi-benefit risk reduction work. Our highest priority right now should be to buy any and all properties as possible. We can then subdivide later. The longer we wait the more restrictions there will be to create these protected areas as building permits



continue to be issued.

3. Discussion: Next steps and opportunities -- Ryan facilitated and Dan contributed to discussion, Deanne took notes (40 mins)
 - Rebuild Paradise Foundation is currently working on a password protected map that will have a layer for standing structures and properties that have an active building permit. I'm wondering if that information would be valuable for your purposes?
 - Holly Jorgensen: Sac River Watershed and 43North currently working together, should talk with CBI about collaboration.
 - Collaborators who are working on other planning processes:
 - FireSafe Council
 - Butte County RCD
 - Sac River Watershed Program
 - Town of Paradise: look at adopted recovery plan to see where there is overlap between what is in recovery plan and what PRPD is proposing.
 - Jim Broshears: 5 years ago we started thinking about multi-benefit landscape scale work. First collaborative meeting was scheduled for Nov 9, 2018.

Deanne's notes:

- Jason - shaded fuel breaks are better because the fuels don't regrow as much. They worked on the Magalia shaded fuel break and had a challenging time convincing land-owners. One parcel left untreated just acts like a fuze to bring the fire into the community.
- Jim H. asked Zeke if there are multiple models to inform wildland fuels management. Jim is working on CEQA to facilitate fuels treatments; has that data to share.
- Holly Jorgensen mentioned that they are working with a lot of data, including LiDAR to plan treatments
- Fire history maps are useful for predicting where the next fire will be.
- Eli talked about "unique overlapping objectives" of the different agencies
- Jim- PG&E is planning thinning around their lines and he wants to partner with them to get more work done while they're out there.
- Evacuation pinch-points have been identified, could plan refuge sites to help relieve that evacuation flow. Dead-end roads and fencing cause hazardous conditions for fleeing residents.
- Zeke Lunder - Could use these maps to ID opportunities for funding from deer and turkey hunting and oak restoration groups, other potential collaborators; bring proposals together and get resources. Buying parcels whenever possible is key.
- FEMA can have contradictory guidelines and frustrating restrictions. Need to be convincing about what the community thinks needs to happen.
- Susan Hartman - The Rebuild Paradise Recovery Plan has many similar concepts. Waiting for about 10 grants to pay for the priorities identified for open space, parks, and safety. There could be a way to connect to this work to support it.

Next Steps:



Near-term--

- We invited the TAC to provide comments by next Friday. Sunny or Christy will send out a thank-you and reminder Monday-ish, with links to the report.
- Document the meeting in the report: an appendix with TAC members, meeting dates, process for feedback, summary of meeting outcomes and TAC comments.

Next steps for the TAC--

- Encourage the strategic, neighborhood approach.
- More focused conversations about roles and direction before convening TAC again.
- Consider roll-out of these materials to the larger community- meet first with town officials about messaging.

Comments from the Zoom commenting box:

- Jmorris: Has anyone thought about a paced bike path from Chico to Paradise, along Skyway, maybe 1 down Clark and 1 down Pentz, which would be a huge rec draw and an additional roadway if built wide enough, and then we would have to “widen” the roads... just thinking
- Kristi Sweeney: Jason, Dan has been in talk with biking clubs about gaining access to the PG&E underground in place adjacent to Skyway to utilize as a bike path. It’s a great idea and something the community would love.
- Jim Houtman: There was a discussion as well to use parks as pathways between roads that don’t initially connect, ie. additional exit routes
- Trailhead Adventures: Good discussion
- Dan Efseaff: We can share access to Data Basin and feel free to share other ideas and suggestions to me deyseaff@paradise.prpd.com
- Jim Houtman: Is this report available to everyone? Dan replied: TAC members soon, and then will finalize it for the public

Below are the written inputs we received from the review of the materials.

Dan Efseaff: I do think that it supports the idea of strategic park planning as having benefits. We should note the importance of management of these areas and the fact that the initial results may inspire other scenarios or point to the importance of certain areas for management (I look at the area in-between Magalia and Paradise for example, that may be interested to explore if that could help reduce the spotting of fire along that steep Butte Creek slope.

Wolfgang Rougle:

In response to this statement in the report: “Public-agency and public-private partnerships to designate land for habitat-sensitive fuels management, especially on large parcels in clusters, is an approach worth considering for this buffer, as well as the possibility of changing timber management practices in



dense conifer forest to allow for the vegetation to convert to hardwood forest or woodland with a more frequent, less intense fire regime." -- This is basically what we are trying to do through the USFS' "Concow Resilience Project" and associated efforts. It would be great to reference this report as a rationale for our restoration philosophy in the Concow Basin. When do you think it will be finished enough that people can cite it?

Wolfgang Rougle, in response to this statement in the report:

"Small privately-owned parcels may be more difficult or costly to acquire or establish easements, but the parcels on the perimeters of the communities, especially the eastern edges, are clearly at high risk of ignitions even with fuels management treatments in the outer wildlands. Because they are adjacent to the town, are relatively level, and have good road access, these are the parcels that present the "greenbelt" land conversion opportunities." -- I like that the opportunities presented by smaller parcels aren't being ignored. And I'd like to echo what Zeke Lunder said during the second TAC meeting: Virtually any and every parcel that is conserved, regardless of its priority ranking, is very likely to be a win for public safety. Is there anything preventing PRPD from bidding on tax-defaulted parcels at auction? (Deanne responded "Wonderful! This report will be completed and delivered to TNC by the end of May.")

Wolfgang Rougle, in response to the Limitations of the Models section of the report:

This is a good section. It would probably be a good place to explain how you chose to emphasize the east wind scenario (rare, but catastrophic) although most fires that have ever menaced Paradise have in fact come from the southwest. It would be a good opportunity to acknowledge the philosophical issue of "do we try to plan for the most severe events possible or the ones we have the best shot of controlling and we know are more likely". It would also be interesting if you could explain how/whether users can replay the simulation using a southwestern wind assumption. (responses to this and Wolfgang's requests for clarifications in the report were incorporated into the report).



Response to Literature Review for Paradise Nature –based Fire Resilience Project Jim Broshears Comments – May 15, 2020

General Comments

I am very excited about the concepts discussed in the project’s literature review, the accompanying maps and the interest in putting these concepts to work in the Paradise/Magalia area.

This document provides an initial analysis of the theories and practices concerning land management as a tool to create both natural and human resilience during wildfires. I believe the concepts have great merit and should be initiated as soon as possible. The window of opportunity will be closing to achieve the landscape level opportunities identified in the plan as landowners in Paradise and Magalia return and build on their properties. The sooner that strategic contiguous lands can be acquired or put into some form of conservation easement, the more likely this project can be successful.

There are some concerns about short term treatment and long term maintenance that need to be addressed but when the window closes, managing those lands for resilience and community fire safety will be exponentially harder.

As the former Fire Chief of Paradise I inherited a hodgepodge of streets and housing known by planners as loops and lollipops. Long, narrow dead end roads, poor water mains for firefighting and homes in steep dangerous locations. One of our training assignments for the Station Captains was to identify the most difficult and dangerous firefighting locations in the Town. We would evaluate the nine different submissions and rank them, then do training scenarios based on them.

The universal #1 scenario was Feather River Place just south of Feather River Hospital east of Pentz Rd. Built on the steep mid-slope with heavy fuels below in alignment with the Jarbo Gap winds and Griffin Gulch, it posed a nearly impossible scenario for safe fire attack.

The purpose of bringing this up is that we have a small window in time to undo many poor planning choices that were made long before the Town of Paradise formed. The strategic parcels you have identified are a great start in providing a reset for at least some of the inherited issues.

They also take into account that there are other values at risk than humans and structures.

Here are some key areas identified that should be high priority for this project.

- West Branch
- Hanford Property and adjoining parcels upper Pentz Rd (already in Conservation Easement)
- Land of the end of Drayer Dr.
- Noble’s Orchard



- Properties at the end of Merrell Rd that connect all the way to Feather River Hospital (McNally, Anderson, Gross, Ingolia, Feather Canyon Retirement, Adventist West and Feather River Place.
- Little Butte Creek
- Paradise Pines Property Owners Assn (Easement)
- PID
- Large owners behind Lofty Ln south to Montna Dr.
- Southeast Paradise
- Property near Cunkle Reservoir
- Properties in Dry Creek Canyon from below Town to Bille Rd
- Horning Property off of South Edgewood and South Sawmill Rd
- Large Parcel (Possible Horning) off of South Libby Rd.

The fire modeling maps are generally correct based on my local knowledge. There are opportunities for fine tuning but overall they identify many opportunities to improve wildland fire safety and natural resilience.

One area I would like to explore further are the models for southwest Paradise. We have historically experienced most of our fire activity in the southern areas of the Town. Fires in those areas that have posed a significant risk include the Valley View Fire (1977), Hamlin Canyon (1983) Humboldt Fire (2008), Honey Run Fires (Numerous), Honey Fire (2017) to name a few.

The Southeast portion of Paradise has experienced the Dry Fire (1992), Saddle Fire (2016) and a very close call during Butte Lighting Complex of 1999 in the Morgan Fire on Morgan Ridge.

The rest of the fires that have threatened SW Paradise came from Concow and Yankee Hill and were generally burning in alignment with the Lime Saddle area below Paradise, i.e the Concow Fire (1990), Poe Fire (1991). Not until 2008 and 2018 did the alignment so directly impact the Town of Paradise.

Based on this information I would like to see more modeling in the southern portion of Paradise. IF I am reading the maps correctly, it shows much of that area in a lower risk model.

I have attached the RFP for the Town of Paradise Forest Management Plan. The plan will provide environmental review for 8,000 acres in the Paradise area and is compatible with the concepts identified in the NBFPR. It is important for these plans to work in concert in order to achieve the large scale goals they have identified.

I have also included a link below to the Town of Paradise Long Term Recovery Plan project list. This project clearly helps achieve many of the projects identified in the plan.

Paradise will likely never have another opportunity to reset some of the poor planning from the past and become a model for other communities moving forward.



Thank you for taking this concept this far! I look forward to working with you in the future to achieve the many benefits this plan could deliver.

Jim

https://issuu.com/makeitparadise/docs/2350rptbook_final190624?fr=xKAE9_zU1NQ



Appendix D: Land Management Tools for Fire Risk Reduction

Below is a partial list of the tools available for taking steps toward fire risk reduction that we learned of during this project.

Tools for gaining influence when you don't own the land:

- Direct acquisition
- Easements
- Informal agreement with private landowner
- Partnership with private or public landowner
- Transfer of development rights
- Re-Zoning or other change of designation of appropriate land uses (see above regarding Areas of Critical Environmental Concern)
- Policies, such as requiring private landowners to maintain defensible space
- Permit requirements

Tools for changing and maintaining land cover for low flammability:

- Create irrigated parkland
- Planting orchards, vineyards, or row crops
- Thinning and limbing trees
- Removal of flammable non-native trees such as eucalyptus and Italian cypress
- Invasive species control
- Allowing or promoting succession from conifer to hardwood forest
- Grazing
- Prescribed burning
- Employ a combination of strategically-arranged areas with different types of cover to reduce the effects of wind and ember-throw.