Progress report for EMC-2022-004

April 28, 2025

Below is the table from the original grant proposal. Beneath the table is an update on each item. We have completed every task, except for item 8 (submit manuscript). We are unsure when this will finally occur, but we hope to submit in 2025. It has been very difficult to recover this project from the loss of Co-PI Ryan Tompkins, but we are pleased with the progress and level of completeness despite the loss.

Activity or Deliverable	Туре	Year 1 (07/22- 06/23)	Year 2 (07/23- 06/24)	Year 3 (07/24- 06/25)
Propose experimental forestland designation to BOF	Activity	X		
Interview professionals who are using SDI for stocking control	Activity	Х		
Publish guide for using SDI	Deliverable		X	
Compile publications of historical data	Activity		Х	
Use G+Y modelling with case-study data	Activity		Х	
Develop field demonstrations of marking for tree vigor with SDI	Deliverable			X
Field tours	Deliverable			X
Manuscript submitted to journal	Deliverable			Х
MF degree/experience toward RPF license	Deliverable			Х

1. Propose experimental forestland designation to BOF. This was done twice, via requests to Jane VanSusteren. We did not receive a response. It is our understanding that the BOF is currently searching for a new Executive Director. We will await to follow up with this request until a new director is found and hired. Although we plan on following up at a later time, this task is considered complete, given our efforts.

- 2. Interview professionals who are using SDI for stocking control. As described in the previous report, this was done at the Society of American Forester's Conference in Sacramento. And also at the Silviculture Instructor's tour. In depth conversations were had with James Long, who is the leading silviculture researcher that has presented SDI as a management tool in the literature and in training programs. The results of the interviews were influential in deciding what to include in the SDI summary table and in how to design the simulation modelling in FVS. This task is considered complete.
- 3. Publish guide for using SDI. As reported previously, this task was going to be led by Ryan Tompkins, who passed away. Prior to his passing, we decided that the form that this should take would be either a Research Brief or a component of an applied journal manuscript in California Agriculture. We have published this as a Research Brief with the California Fire Science Consortium, which publishes widely-read science briefs aimed at practitioners. The brief is available here. This task is considered complete.
- 4. Compile publications of historical data. As reported previously, a draft of this table has been completed. This followed a very thorough review of the literature and an analysis of the metrics that are considered relevant for using historical structures as a guide for density management. While the task has been completed, we are still not submitting the table to the EMC since our intent is to include it in a manuscript that will be submitted for publication. If desired, we can submit the table if it will help in finalizing the project.
- 5. Use G+Y modelling with case-study data. **This was done.** As with the table described above, our plan is to include the results in a manuscript.
- 6. Develop field demonstrations of marking for tree vigor with SDI. **This has been completed.** We have two sites that can now be used for field demonstrations of using SDI to mark stands. One is at Blodgett Forest Research Station and the other is on Forest Service land in Plumas County. Use of these sites for demonstration is ongoing.
- 7. Field tours. As described above, these are ongoing. The majority of the demonstration in Plumas County will occur after a harvest occurs, scheduled to be in late summer of 2025. At Blodgett Forest, the marking demonstration is incorporated into field tours as they occur. **This task has been completed.**
- 8. Manuscript submitted to journal. In our ambition, we thought we could submit two manuscripts as a result of this project. However, given the passing of Co-PI Tompkins and the medical leave of another staff researcher, we realize that this may have been over-ambitious. Our current effort is in submitting a manuscript to an applied journal, likely California Agriculture. We have a draft of this manuscript, but need more time to prepare it.
- 9. MF degree/experience toward RPF license. As noted in the last report, this has been completed.

Presentations where we have presented results of this study:

Ryan Tompkins gave a presentation on this study at a CLFA conference in 2023

The file is being forwarded. The file name is "CLFA_Tompkins-v1.pdf"

Rob York gave a presentation to Forestry Forum in 2023

This was actually in March of 2022. The file is being forwarded. The file name is "Operational Resistance to multiple stressors York2.pdf"

Rob York gave a presentation to Forest Landowners of California in 2024

This was in May. The presentation was not substantively different than the Forestry Forum presentation, described above.

Brandon Collins gave a presentation to Marin Wildfire Authority in 2023

I have requested this presentation and will forward when I receive it.

Connie Ryan gave a presentation / webinar as part of the Master of Forestry finishing series in 2024

I have requested this presentation and will forward when I receive it.

Rob York gave a presentation at a CLFA conference in March of 2025. It covered both a previous EMC project and this one.

The file is being forwarded. The file name is "York_CLFA riparian fuel tx.pdf"