Planning Work Group Meeting Summary, May 26, 2021, On-line Meeting Prepared by Megan Layhee, CHIPS (meganl.chips@gmail.com)

Meeting Brief

- Presentation by Emily Graham with Motherlode Job Training about workforce training and career development needs for the region's Natural Resources industry, how MLJT can help, and seeking input from ACCG on how MLJT can optimize partnerships.
- The group had a discussion around Herbicides: Lessons Learned led by the Amador Ranger District (Rick Hopson, Matt Brown, Jesse Plummer) and also heard from John Buckley described the Yosemite Stanislaus Solutions and the Rim Fire Reforestation Project.
- The group continued their conversations on large landscape projects, increasing pace and scale and the ACCG role in this (Option C- taking a more active, supporting role in increasing pace and scale), including a focus on how to incorporate pyrosilviculture for integrating silvicultural thinning, managed wildfire and prescribed fire at larger scales to get toward landscape resilience. A key to this is identifying anchors, managed wildfire zones, and assets, explained in the North et al. 2021 paper.
- ➤ Briefly updates on projects, Rx Fire Ad Hoc next meeting (June 28th), the ACCG facilitation and administration needs survey (closes June 2nd), and upcoming general meeting and Planning WG meeting speakers and topics.
- Next WG meeting is Wednesday, June 23rd, 9am-12pm.

Action Items

Actions	Point Person(s)
Send out Emily's contact information to the full ACCG.	Layhee
Continue developing and revising the pyrosilviculture shared vision statement.	Rx Fire Ad Hoc
Follow up with districts about if there are forest policy documents	Layhee
that states where managed wildfire are allowed on the specific	
forests.	
Ensure there is time set aside on upcoming WG meeting agendas	Layhee
to continue the pyrosilviculture and increasing pace and scale of	
large landscape projects discussion.	
Communicate with CHIPS that hand crews are in need over on the	Layhee
STF and to reach out to YSS (John Buckley).	
Send reminder email about the ACCG Survey Future Facilitation &	Layhee
Administration Needs.	
Continue outreach for a third panelist for the herbicide	Layhee
alternatives panel during the July 21st general meeting.	

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Summary

Agenda Review and May Meeting Summary Approval

The Planning Work Group (WG) met via Zoom video-conference. The WG confirmed the agenda and April meeting summary without revision.

Motherlode Job Training Presentation & Discussion

Emily Graham (egraham@mljt.org, 209-536-4702) gave an overview on her role at MLJT, noted that she has presented at past ACCG meetings. Emily is now the Planning Manager with MLJT, which includes writing grants, securing funding and creating projects that identify with MLJT five main industry areas, including the Natural Resources.

She began her ppt presentation describing the goal of her presentation including:

- 1) Information: workforce, employment needs for the Natural Resources industry.
- 2) Development: discuss ways MLJT can help invest in developing jobs and training opportunities in the region.
- 3) Input: seeking input from the partners in ACCG on how we can optimize partnerships. The presentation then went on to show a graph depicting the number of jobs (as of March 2021) by industry for the Middle Sierra. The following slide showed stats related to 2020 job and earnings profile (based on EMSI Industry Snapshot report), including 1,603 jobs, 23.3% 10-year projected growth rate, and \$78,765 average earnings.

Emily also went on to talk about some recently awarded grants and grant applications in process. Firstly, the MLJT secured a \$350K grant from the Disability Employment Accelerator with the goal of 12 trained, 7 work-based learning, and 55 served. Second, MLJT is collaborating with Calaveras CTE and the Forest Service for summer youth employment opportunities, formerly call "Summer of Success" (out of Tuolumne County). Lastly, MLJT is going to apply to a Forestry Corps Grant with Columbia College and Fresno Regional Workforce Development Board (taking the lead).

Emily then went on to discuss changes over time and projections for the next 10 years in terms of the number of jobs, earnings and locations. She noted the relatively high increase in percent change in number of jobs by county and across the state, which she speculates is related to the Butte Fire. She the went on to show stats and a graph depicting the number of unique job postings versus number of hires (49 to 47, between Feb 2020-Apr 2021). Then showed a graph of the frequency of job postings by industry and the frequency of workforce profiles that match specific industries, based on EMSI Program Snapshot, which Emily explained that profiles are not describing education and experience, and highlighting their skills.

Emily then went on to describe MLJT services including tuition and supportive services, supplemented employment, soft skills and occupational training. Emily also had a slide listing MLJT business services:

Hiring events, job fairs, and other recruitment assistance

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- On the job training- wage supplement for new full-time employees first 1000 hours
- Incumbent worker training- formal training for existing employees to upskill, learn new technology or increasing capacity
- Human resources consultation and referrals
- Economic impact planning layoff aversion and rapid response

John Buckley mentioned Columbia College's forestry workforce development and training, and asked if Emily had anything to report on that. Emily mentioned Steve Amador, dean for career and technical education, and that MLJT is working and having ongoing communications with Columbia College to get to that end goal, and the DEA grant application that she described early was designed to help students get into those programs. Goal is to have 4 students to go into natural resources program. John followed up with mentioning the Feinstein bill for millions of dollars for workforce training, that he mentioned that the YSS sent in a LOS for, because it also has funding for pilot project large-scale treatments done by stakeholder groups, but he added that this seems like the largest pot of funding for forestry-related workforce development. Emily mentioned that they have their eye out on that bill, and also added that young people also need exposure to industries, like natural resources.

Rich Farrington mentioned that he has heard from CAL FIRE personnel that they are having issues finding firefighters, and that he recommended that MLJT and CAL FIRE network. He also asked Emily how MLJT assists people who may want to get into firefighting. Emily explained that Columbia College has a fire academy, and that MLJT can help people with tuition assistance, support services (e.g., child care, transportation), and potentially with on-the-job training (caveat- need to be full-time employed). Rich asked what is the service footprint: Mariposa, Tuolumne, Calaveras and Amador Counties. Rich then added that there is a state bill moving through the legislature for building a training center in Northern or Southern CA.

Next steps:

- Planning WG participants recommended that MFJT connect with CAL FIRE and other entities that hire firefighters to see how that workforce can be developed more.
- Megan Layhee will send out Emily's contact information to the full ACCG.

Herbicide: Lessons Learned

Rick Hopson, Matt Brown, and Jesse Plummer gave an overview of the Amador RD's vegetation management programs that includes an herbicide treatment component, and also reviewed some lessons learned from this work. They went over the:

• Invasive plant program, including the Invasive Plant EA (singed in 2013), which includes integrated plant management (e.g., herbicides, hand treatment, mechanical removal, and tarping). Noted that much of the focus is on rapid response and early detection, and that most of the areas they are working in are disturbed areas (e.g., landings, plantation, roadside). It was also noted that in a good year ~150 acres are treated (about 50 acres

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- herbicide applications). Target species include yellow star thistle, medusa head, barbed goat grass, spotted knapweed. In addition to FS crew treatments, PG&E also does invasive plant treatments on FS lands in the Mokelumne, which includes treating incompatible vegetation around dams and canals (10-15 acres per year).
- Panther EA (signed in 2017) for fuels reduction, forest health and timber sale, and also a fuelbreak maintenance component through Rx fire, goat or sheep grazing, mechanical and hand tools and herbicide application. The FB herbicide treatments were limited down to 250 ft strips along major ridgeline and 75 ft along roads, and in plantations. And the species targeted and the herbicides used were described. Only backpack targeted spraying of species, generally brush species. ~ 150 acres have been treated with herbicides, and up to 500 acres anticipated to be sprayed by the end of this year. Noted that this treatment type is new for the district. Also noted that FS staff have also been spraying, to supplement what the contractors are doing, and to get ahead of mechanical and hand thinning and chipping that will occur soon by folks, like CHIPS.
- Power Fire Reforestation EIS (signed in 2017). It was noted that this EIS included a lot of negotiation with ACCG, and noted that there was not full consensus from ACCG. But the final end result was the planting densities and arrangements and how herbicide treatments would be used, including for 1) site prep component through a combination of mechanical and herbicides treatments. For deerbrush, cut the brush before spraying, to reduce herbicide use, and also for 2) release component- 3,500 acres of herbicide use (once or twice) after plantings to target competing species and release from competition, including both targeted and broad scale applications, including a 5-ft radial application for white thorn, deerbrush, trickier for species like bear clover.
- Lessons learned: Matt Brown shared that herbicides are an important tool in the toolbox, but not the only tool. He added that if noxious weeds can be treated aggressively with herbicides for a few seasons, then the infestation can be then subsequently treated with non-chemical controls. Jesse Plummer added that firefighters take unnecessary risks on the fireline, and that herbicide treatments for fuel reduction is a highly effective tool to help minimize that risk to fire personnel. Jesse added that there is a need for wider fuelbreaks and wider herbicide treatment buffers, including across the district but also along roadsides to help potentially help reduce the number of roadside ignitions. Jesse also restated fuels reduction-related herbicides treatments are targeting shrubs, like manzanita, whitethorn and deer brush, not low growing species, like bear clover. Jesse also added that another lessons learned is that the district sees value in being able to use Triclopyr (pre-emergent) and not just glyphosate for fuels reduction related herbicide treatments. Rick Hopson added that herbicide treatments increase the treatment window for fuels reduction implementation.

John Buckley provided an overview and synopsis of the key take-aways from the March general meeting herbicide panel, and also described the Stanislaus TF Rim Fire reforestation strategies (proposed and adopted), which the YSS worked closely with the STF to develop.

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- Restated some of the key take-aways from the ACCG Herbicide Panel, including that
 many believe herbicides are essential for reforestation and FB maintenance, and that
 some argued that there are no risks or threats to the environment. But he also
 reminded the group of what he shared during the panel, in that it's important to think
 about whether herbicide use is the best choice. For example, for something like
 targeting noxious weeds, he added most can get behind the benefit is greater than the
 risk. He also noted the idea of balancing the risk versus the reward.
- John added that he looked over STF treatments areas in the Rim Fire footprint that were sprayed almost a year ago, and that he observed a lot of regrowth by mostly grass species, and noted that there is already 15-20% tree seedling mortality (from those that were planted in March-April below 5,000 ft). He added that CSERC has concerns about herbicides but seedling survival rate is going to be reduced for plantings if competitive vegetation is not treated.
- John went on to describe the YSS approach to developing a reforestation implementation plan proposal to the FS for the Rim Fire reforestation project. This included a committee that met for months and a proposal with four different proposed actions:
 - FS proposed action: multi-herbicide treatments for site prep, 1-3 release treatments and heavy stocking of 300+ trees/acre.
 - o Industry type: up to 4-5 herbicide treatments and heavier stocking (400+ trees/acre).
 - Founder strategy (SFL): planting clumps, scattered grouped seedlings and patches, and leaving gaps, and only using moderately-low level of herbicides were deemed necessary.
 - No herbicide treatment: but primarily hand grubbing/scalping of brush during planting, (CSERC, TRT's proposal allowed for only herbicide spraying for bear clover).
- John B. added that according to the FS, due to numerous constraints in terms of staff, drought, etc., the FS ended up implementing treatments under the FS proposed action and the industry type for the first few years. He added that the founder strategy has only been applied minimally, and that there has been almost no use of the no herbicide treatment alternative. John also noted that there was no requirement for a monitoring component for this work, only recommended.
- He also suggested that if there is a goal of densely stocked trees, you'll need herbicides, but that if reforestation is not looking for high stand stocking and rather a goal to recreate ICO, then look to a different approach (e.g., hand clearing). And in terms of FBs, he reiterated the middle ground approach- priority to treat resprouting brush after it was cut and then treat new regeneration.
- John added that even within the YSS, some entities don't believe chemical treatments on public lands is right, so wherever FS can use alternatives to herbicide treatments on FBs would get consensus support. He adds that his personal observation is that there is

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small-scale impact to plant communities for several years after herbicide application, especially native species (e.g., ferns, soaproot and other wildflower species).

John Buckley noted that the comment about the district wanting to use a pre-emergent herbicide, like Triclopyr, is a non-targeted application and can lead to more non-targeted species impacts. And added that, CSERC agrees that herbicides are a tool in the toolbox, but that CSERC thinks that finding consensus on herbicide treatments will most likely have to be project-specific, and not an over-arching policy on herbicide use.

Rick added that he wondered if it would be better to separate out herbicide components from projects that are brought before the ACCG, so that districts don't have to ask the ACCG for a LOS with an herbicide component. He added that this can be a and how do we frame up future projects that may never get agreement on.

CSERC are willing to compromise and support some herbicide use, but that discussions and the attempt to finding middle ground and look for consensus

Next steps:

 The group will continue to have discussions into the future about finding consensus on best treatments for fuelbreak maintenance and other fuels reduction-related vegetation treatments, and what are herbicide-related treatment scenarios that may be able to get broad consensus support.

Large Landscape Projects, ACCG's Potential Role & Pyrosilviculture

Megan Layhee gave an overview of the ongoing work group topic of large landscape projects, ACCG and partner roles, and also today's subtopic of pyrosilviculture. The North et al. (2021) paper published in the Journal of Forestry titled, *Pyrosilviculture Needed for Landscape Resilience of Dry Western United States Forests,* was a discussed in detail during this meeting agenda item.

Rich Farrington gave an overview of the concept of pyrosilviculture, the conversations in the Rx Fire ad hoc meetings, and the recent in-press North et al. (2021) paper. He added that the Rx Fire ad hoc group had a discussion with the fire staff from FS, and the prescribed fire treatments going on in Yosemite NP (John Milligan was referenced) and the question of reducing fire or timber outputs, and the concept of whether to put wildfires out or let them do. Rich asked, what all of these conversations mean? Rich added that he thought it was worth some focus on the North et al. (2021) paper, and the concept of a management paradigm shift in fire use is needed to restore western forest's landscape resilience, and propose pyrosilviculture approach to directly increase prescribed fire, managed wildfire and modifying

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thinning treatments to optimize for managed fire. Rich mentioned that at that the May Rx Fire Ad Hoc meeting that he had proposed that the group develop a shared vision based on the North et al. (2021) paper to guide discussions and use these concepts as a tool to guide future work. He added that once a shared vision statement then he proposed that the next step would be to develop an action plan to help guide future implementation.

John Buckley noted that they were supportive of a shared vision statement. He also suggested that it would be good to get Dr. North (during his presentation at the August 18th general meeting) specific ideas for first steps to do to implement, from a scientific perspective.

Greg Suba gave his own summary and added that he agreed with everything that Rich and John already said, including that we all know what the problem is-forests that are starved for fire and dense with surface and ladder fuels. He added that only 15% of SN forests is experiencing some kind of treatment or wildfire/managed fire each year. He added that land management agencies don't have the resources (e.g., staff, equipment) to go out and treat to make resilience, also don't have social/political will and direction from the agency, the state and from the public. He added that this new way of thinking is in motion at the Washington DC level, regional level, and collaborative level. He mentioned that the SOFAR collaborative submitted a CCI grant (\$5M) – 5 years of work on several projects that NEPA included prescribed fire as a maintenance tool, but are lacking fire as an implementation tool. He added that the North et al. (2021) paper is a solution to this issue—integrating thinning treatments and intentionally designing those treatments so that prescribed fire can be implemented. He also added that ACCG has already completed some of the initial steps, including the assets analysis (SLAWG Tools -wildfire risk assessment). The next step then would be to compartmentalize the landscape into strategic fire management zones – like the PODs work that is being applied in the Southwest. He added that this concept may reduce our alliance on herbicide treatments for fuels reduction. His recommendation is to take the SLAWG risk assessment and expand to PODs; then build silvicultural assessments from that. And also added that it will take everyone that's engaged in the ACCG that know the land, coupled with moving forward with the landscape-scale planning effort.

Rick Hopson asked the group how do we get to the next step (and agreed with Greg that planning is where it is at), and asked where do we go next with limited resources and capacity (e.g., staff, equipment), and is looking to the collaborative to put something on the table to help us all move forward. But keeping in mind the capacity issues, and also public and agency perceptions to fire (e.g., don't want to lose a fire, like Caples). Added that Dr. North's presentation will help this group continue and develop this idea.

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Ray Cablayan added that on the local and forest level there is support for more managed fire, but their hands are tied, and a lot of factors to consider- conditions, resources, perception of risk in the agency, proximity and risk to communities and lives.

John Buckley added that one specific thing that can be done now, is what areas on each district are managed wildfire allowed? Are there areas identified in a forest plan? What forest policy document states where managed wildfire allowed on the forest? Rick said he would look into it.

Greg added that there needs a balance between wood production and increasing prescribed/managed wildfire, and a commitment to increase managed wildfire and prescribed fire. He also added that the North et al. (2021) paper talks about where thinning treatments and prescribed/managed wildfire would do the most strategic good, and that can be prioritized right now in areas that have recently burned at low-moderately severity (RAVG data), like the Creek Fire or the North Fire Complex footprint as an initial, first treatment leading to reestablish of a more natural fire regime in those areas.

Rich Farrington closed the discussion by asking the group if they support to developing a pyrosilviculture shared vision statement and asked if it's worth pursuing.

- Ray responded and said that he could get behind developing the shared vision statement, but there's a lot of processes internally in the agency that have to be followed. Rick added that it's a good idea to develop the shared vision statement, and that this idea on paper would be helpful for not only the collaborative but also for the FS to see (believe that the ACCG did a similar process for GTR-220), but that the FS cannot make commitments to fire.
- John Buckley wanted to make a clarification to Ray that he is not asking the FS to commit to large-scale managed wildfires, but that managed wildfires would be done in strategic locations, in conjunction with prescribed fire and thinning treatments to create anchors, in a timely manner, as explained in the North et al. (2021).
- Greg agreed with what John mentioned that the key is integrating managed wildfires, in conjunction with prescribed fire and thinning treatments to prep the land and then apply fire. He also added that part of all of this is changing hearts and minds about applying fire more broadly on the landscape, and developing this shared vision statement is one step toward that.

Rich reiterated that he has sent around a draft of the shared vision statement and is looking for feedback.

Next steps:

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- Rich Farrington and other participants of the Rx Fire Ad Hoc group will continue developing and revising the pyrosilviculture shared vision statement.
- Megan Layhee will follow up with Rick and Ray about if there are forest policy documents that states where managed wildfire are allowed on the specific forests.
- Megan Layhee will ensure there is time set aside on upcoming WG meeting agendas to continue this discussion.

Prescribed Fire Ad Hoc Meeting Update

Next meeting is June 28th from 2-3:30pm. There the group will continue discussions on a pyrosilviculture shared vision statement.

Meeting Participant Updates, Project Updates & Other Meeting Updates

ACCG Survey Future Facilitation & Administration Needs: Megan Layhee gave a brief

Project Updates

Calaveras RD – The Arnold-Avery project is picking back up. Also, activity is starting up at Cabbage timber sale. No work yet on Thompson. Most crews are already on. Ray also noted that he had a conversation with the timber industry about low bidding, and that there is too many logs out there for contractors to bid on, and salvage sales are priority.

Amador RD – CHIPS crews working on WCB project and work under the FS-CHIPS agreement. There are still a lot of road issues due to the large winter wind event. Implementing Power Fire contract (including ~500 acres of fuelbreak maintenance) for the next week. Not much timber sale activity, some hauling of decks, just going to be in burned areas (Panther timber sale not done yet). Owl surveys getting under way. Upper Cole project timber sale will be up next for the ACCG. Scottiago timber sale is almost done, with the exception of marking roadside fuelbreak commercial harvest. Rick said he would like to have a future ACCG field trip.

Rich Farrington - Amador RCD is in the field currently and the contractor is getting ready to mobilize and begin work for the Three Meadows project.

Next steps:

- Megan Layhee will communicate to CHIPS that hand treatments are in need over on the STF and to reach out to YSS (John Buckley).
- Megan Layhee will be sending out a reminder email about the ACCG Survey Future Facilitation & Administration Needs.

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General Meeting Speaker Series

Herbicide Alternatives Panel Presentation Planning

Date: July 21, 2021 general meeting

Suggested duration: 90-minutes

Objectives:

- Define and discuss alternatives to herbicides.
- Conditions where alternatives to herbicides would apply.
- Discussion on some of the shortcomings of herbicide alternatives.
- Can project objectives be adjusted to avoid the proposed use of herbicide treatments?

Prospective Speakers: The WG recommended no more than 3-4 speakers for the panel.

List of Possible Panelists identified in by Planning Work Group Members:

- Dan Macon, UCCE in Placer Co. use of goats and sheep for veg management (confirmed for July 21st Panel as of COB 3/24)
- Sean Kriletich, Agricultural Consultant and Producer/Owner of Paloma Pollinators) (confirmed for July 21st Panel as of COB 3/24)
- Dr. Robert York, UCCE Specialist, UCB-CNR Research Stations Advisor, Adjunct Associate Professor of Forestry (Note: Dr. York was confirmed after the May 26th Planning WG meeting.)

Related Confirmed/Potential Future Presentations:

- June 16th general meeting: Jeff Marsolais and Jason Kuiken, "Forest Resilience Initiative", and USFS FS Shared Stewardship Advisor Program, Mike Vollmer (Central Sierra Advisor) & Jason Smith (Southern Sierra Advisor).
- **July 21**st **general meeting:** Herbicide Alternatives Panel and presentation by Alissa Fogg (Point Blue), on indirect effects of herbicides on birds.
- August 18th general meeting: Dr. Malcom North (by video conference), Pyrosilviculture Needed for Landscape Resilience of Dry Western U.S. Forests.
- **September 15**th **general meeting:** Dr. Janice Coen, Weather, Fire Behavior and Trends in the Central Sierra.

Next steps:

 Megan Layhee will continue outreach for a third panelist for the herbicide alternatives panel during the July 21st general meeting.

Next Steps

➤ The next Planning Work Group meeting will be on Wednesday, June 23rd, 2021. The meeting will take place on-line via Zoom.

Meeting Participants

#	Name	Affiliation	Miles (N/A- online)	Hours
1	Caitlyn Rich	CSERC		3
2	Emily Graham	Motherlode Job Training		0.5
3	Greg Suba	SFL		3

Amador Calaveras Consensus Group (ACCG) Planning Work Group Meeting Summary, May 26, 2021, On-line Meeting

#	Name	Affiliation	Miles (N/A- online)	Hours
4	Jesse Plummer	ENF, Amador RD		1.5
5	John Buckley	CSERC		3
6	Matt Brown	ENF		1.5
7	Megan Layhee	CHIPS (facilitator)		3
8	Ray Cablayan	STF, Calaveras RD		2
9	Rich Farrington	UMRWA		3
10	Rick Hopson	ENF, Amador RD		3
11	Sandy Anderson	Central Sierra Economic		1.5
		Development District		
12	Sara Husby	CSERC		3