# Meeting Brief

* Dr. LeRoy Westerling, University of California, Merced, gave a presentation and engaged the ACCG in discussion on the “Forest Fire Research and Simulations for the Fifth California Climate Assessment.”
* Megan Layhee presented an update on the development of the ACCG’s project inventory database and prioritization tools and informed the ACCG of the next steps to refine tools and on trainings for the use and maintenance of the tools.

Action Items

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| **Actions** | **Responsible Parties** |
| Remove DRAFT watermark from the revised September and draft October general meeting summary, then post as final on website. | Regine Miller |
| Distribute the University of California Agriculture Resources Program publication on reforestation practices for conifers in California. | Regine Miller |
| Consider if the ACCG wants to provide their perspective on Dr. LeRoy Westerling’s 5th assessment working group to feed into a project showing present and near future fire risk at a fine scale.  | All  |

# Summary

## Modification and/or approval of agenda and August 2020 Meeting Summary.

## The group had no suggested changes or questions to the August 19th or September 16th general meeting summaries which were adopted as final and will be posted on the website.

## There were no changes to the agenda.

**PRESENTATION AND DISCUSSIONS**

**Presentation and Discussion:** [**Forest Fire Research and Simulations for the Fifth California Climate Assessment**](https://acconsensus.org/wp-content/uploads/2019/11/04-Forest-Fire-Research-and-Simulations-for-the-Fifth-California-Climate-Assessment.pdf)**.**

Dr. LeRoy Westerling introduced himself as the lead Primary Investigator on the first four climate assessments for State wildfire in the Pyregence group. He leads the long-term impact assessment modelling group that is delivering the State’s fifth (5th) assessment for wildfire. He has served as a Professor of Management of Complex Systems at the University of California Merced since 2006.

Dr. Westerling stated there are many ecosystem services that depend on climate, such as water supply. He described how we manage risks for these services that return to long term averages or central tendencies. Dr. Westerling illustrated this concept by showing a graph of the average climate index over an extended term, stating that when we manage risk around a system, it is prohibitively expensive to eliminate all risk. Instead, we consider the range of possible outcomes and accept a small probability of high risk.

Dr. Westerling explained that after the year 2050, the coldest year in the future is always hotter that the hottest year in history, as shown in climate modeling data for the greater Yellowstone area. This underlines the challenge we face when projecting fire risk in the future. Fire risk can respond to the temperature in ways that are not linear. He posed the question, what do we do when we are outside the range of historic variability? Do we have confidence that what we are projecting into the future can really happen?

Dr. Westerling showed a slide of the number of fires greater than 1,000 acres in size on national forests against the average spring and summer temperatures. He described how the data show that modest increases in temperature, correspond with large increase in wildfire. He asked the group, what happens to fire, when temperatures are outside of the range of variability?

Warmer temperatures create more evaporation which leads to more water in the atmosphere and more intense downpours. As the planet warms, higher latitudes warm more quickly than the equator because there are more ice and snow feedbacks at the higher latitudes. This change causes the jet stream to slow and weather patterns to become more persistent resulting in large areas that are set up for extended drier or warmer conditions. During the fall of the 2018 when Camp Fire occurred, the fuel moisture, under historical conditions would usually have begun to recover from fall precipitation and cooler temperatures, leading to recovery of moisture. However, warm temperatures and wind created record dry conditions and fanned the Camp Fire flames. In the State’s first four climate assessments, climate scenarios showed where federal agencies or CAL FIRE were leading the fire response and did not include areas where local jurisdictions led. The 5th fire assessment now considers areas vulnerable to wildfires including local jurisdictions.

Fire season in California has expanded. The average annual number of burned acres has been shifting over time. Historically, there was a strong peak in August, followed by a quick taper. In recent decades, there are more fires overall, especially early and late in the season. This has exacerbated the management challenge faced by state and federal agencies. It is a challenge to model fire, because the processes that come into play later in the fire season are different from those earlier in the fire season.

To look at how fire is changing, one can examine the maximum annual fire size burned each year. The year 2020 is significant because of the North Complex fire. We know the reason we need to project fire risk into the future is because the system is no longer stationary as the system responds to climate outside the historical range of variability.

The 4th climate assessment was published in 2018 and included individual simulated fire models. Researchers took a given scenario (model) and ran a number of probabilities conditional on the climate and fuels at that time, to observe what would happen. Researchers ran thousands of simulations then aggregated them over a 30 year period to generate an average heat map which shows where most of the burning would occur in a given scenario and projected the future fire risk. Most of the increases are projected to occur in forested areas of the state, especially in northern and central California.

How we manage fuels is an important part of how vulnerable the forest is to climate change in the future. Dr. Westerling described how under current conditions, land use changes suppress small fires and large fires occur due to excess fuels as compared to more open, managed canopy conditions. Dr. Westerling and his team incorporated fuels management into the 4th assessment. The model shows that fuels treatments have a large impact on a system’s vulnerability to climate change.

 As we get later into the 21st century and climate changes becomes more extreme, the area burned is less because the changes in fuels lead to less severe fires and smaller maximum fire sizes as a result of more and more of the forest being burned and climate limits how much of the vegetation can return. Dr. Westerling added that the carbon storage effect is much less significant because there are less extreme fires later in the century because of the lack of vegetation. He explained that fuels management over a period of time can affect the stability of the carbon stock. Carbon in the Sierra Nevada continues to increase even with major increases in fire in 21st century, because the growing season is extended at higher elevations. Carbon storage is much more stable on the landscape if there are no large fires, blowing out parts of the watershed. Dr. Westerling stated that a couple models show a shift toward drought tolerant species and less biodiversity.

Another important aspect is looking at the sustainability of nesting sites for California spotted owl (CASPO). Many nest sites were lost from within the footprint of the King Fire due to high severity burn. Data shows that fuel management treatments in and around nest sites was advantageous to nest survival.

The 4th climate assessment shows how communities can use fire simulations for fire vulnerability assessment and planning. Dr. Westerling showed examples from three San Mateo County simulations and described his work with the region’s fire managers and emergency management staff to conduct a vulnerability assessment and adaption plan. Together, they identified the likely sources of ignition and determined the fire sizes using simulations. The 2020 CZU Lightning Fire Complex was not quite as large as the modeled scenario, but it had a similar footprint.

The Pyregence consortium includes many partners and institutions, and is focused on four major task areas:

1. Extreme weather analysis. What are the drivers on a moment by moment spatial scale?
2. Fire behavior. What is the impact of the dead trees from beetle kill and drought?
3. Forecast tools. Evaluate the tools for fire management operations.
4. Scenario analysis. What are the long term projections? (Dr. Westerling)

Dr. Westerling explained the group’s funding is from the California Energy Commission (CEC) and is focused on evaluating the impact on energy infrastructure in the State. The consortium aims to establish a pathway from science to impact which will result in a more resilient energy grid. The 5th assessment takes different sources of data and inputs them into models that interact with one another to create a fire risk simulation model that generates products such as wildfire presence, severity, and number, smoke emissions, and vegetation characteristics (carbon storage, species prevalence) and tools the public can utilize to run the models and assess fire risk themselves.

Dr. Westerling explained how the model was used to evaluate the PM2.5 emissions resulting from fire. He showed how most fires burned within forested landscapes and explained that the largest 15 wildfires produced 22% of the total emissions. He stated that particulate pollution is increasing from fires over time, and that there is an extension of the fire and particulate pollution seasons. He noted that the data shown is only through 2016, so the broader extent of particulate pollution is going to be more noticeable once the models are updated to include more recent fires. The 5th climate assessment is working at many different spatial scales. A series of models have been developed to look at burn severity and examine vegetation at a fine spatial scale, generating fires at 30 meter resolution. This scale allows one to generate more accurate estimates of particulate emissions.

Dr. Westerling summarized by explaining the 5th assessment is a large effort; the project’s core costs about $5M plus matching funds and overlapping and complementary projects leveraged for different applications. He stated that the models will be a service to the state to provide information in a way that makes the model and predictions available for planning and management. Dr. Westerling has recently hired a team of people to work on mapping and outreach tools. The team will curate examples and create an app that allows for individuals to drive the scenarios themselves to try to make information more accessible and useful to management applications.

The facilitator noted that the ACCG has been focusing on relationship between climate changes, fire, fire severity, and how the relationships inform treatments on the ground. The group has had a recent presentation on the Caples Fire and also presentations by Dr. Paul Ullrich, Dr. Malcolm North, and Dr. Scott Stephens.

* John Buckley: About one-third of the year 2070-2099 scenarios showed a consistently higher intensity of burning in the northern Sierra. Since the Southern Sierras has lower relative humidity and fuel moisture, how would modelling end up predicting a higher amount of fire intensity in the northern Sierra versus the southern Sierra? Is that vegetation-driven?

Dr. Westerling replied the relative changes in climate going forward are going to push areas that are at a lower elevation above the threshold where fire risk increases dramatically.

* Randy Hanvelt: What were the assumptions for the CASPO and is the old or new strategy being used in the Pyregence work?

Dr. Westerling replied that he works with ecologists who specialize in owl habitat who were working from published literature and an owl habitat suitability model that looks at the types of land cover owls prefer. The model reflects all the habitat the owls are using currently in the Sierra. The model is coarse but can be used to evaluate changes associated with high severity burn with large patch sizes and cover in areas where the owls are present. If fuel treatments are performed in the vicinity of nesting sites, high severity burns could be decreased prompting the need confront tradeoffs.

* Rich Farrington: The ACCG is working on a mapping tool to identify priority areas for fire fuel reduction. Dr. Westerling mentioned developing a user-friendly tool; when will that become available? Is there anything available now?

Dr. Westerling replied that the Cal Adapt website is currently available for use but that it represents averages over years and scenarios. The current offering does not have the ability to provide simulations on individual extreme events. He expects the team will extend the tools allowing people to look at individual extreme events and upload the values of risk they care about. In terms of timeline, he has hired people to develop the tool over the next year with a possible beta version of something between the 4th and 5th assessments being available by the end of the year. The 5th assessment will not be available until 2024. Dr. Westerling is commencing a working group to define the fuels management scenarios for the 5th assessment. Dr. Westerling invited the ACCG to contribute perspectives. It will feed into a more immediate product showing present and near future of fire risk at a fine scale.

* Greg Suba: What are the 5th assessment products? The flow chart on slide 31 shows what is going into the Pyregence tool assessment and what comes out of it. A lot of the data we have now looks at the extent of fire (e.g. total acres burned). Greg wonders if the outputs will be able to discriminate types and patterns of fire broken into low, moderate and high severity as this can be more informative for management.

Dr. Westerling stated the 4th assessment included fire extent of the entire state. There were 90 patches with baseload 90% kill. The 5th assessment input data are changing and now include hourly wind, temperature, and precipitation data, not just climate. The outputs are 3km, not 6km. Fires are going to be downscaled to 30 meters. The model will look at the likelihood of fires less than 1,000 acres; how many ignitions were there; for each ignition of 1,000 acres, how big the fires get; what fraction is low, moderate and high severity or other at the 30 m scale? Dr. Westerling cannot guarantee every scenario will be downscaled but many will be.

The dynamic Lucas model will take large fire perimeters into the model. The fires and other disturbance observed historically up to 2020 will be the baseline. The vegetation is modelled vegetation but is driven by historical climate and fires. The other working group is working on impact of beetle kill and drought that will appear in Landis model. As they project into the future, the vegetation baseline includes drought and beetle kill. The vegetation changes that will be modeled are based on fire, beetle, climate, and fuels treatment.

Greg Suba: Will the RCP 4.5 be used or will they use RCP 8.5?

Dr. Westerling replied the 5th assessment will use a different framework, other than the RCP 4.5 or 8.5. The earlier climate assessments were plotted on the global carbon concentrations in the atmosphere normalizing scenarios. When you superimpose them on top of each other, they look the same.

* John Heissenbuttel: The model shows extensive fuel reduction reduces the severity and extent of wildfires.

Dr. Westerling replied yes, in the Sierra Nevada but not everywhere. There are mixed severity fire regimes at mid-elevations, and a lot of the vulnerability to climate changes is driven by the state of the fuels. Simple models show statistically significant relationships between how dry it is and fire severity. The Rim Fire had high severity area burned. A large fraction of area where fire ignited and burned were areas where fire conditions had departed. What does the fire size distribution look like? If climate is Armageddon and we treat all of the fuels, then the fire risk would have been quite less. We can make a huge difference in Sierra Nevada forest with fuel treatments.

**Presentation and Discussion: Update on the SLAWG mapping tool.**

Megan Layhee introduced herself as a consultant to Landmark Environmental and the Upper Mokelumne River Watershed Authority (UMRWA) to develop the ACCG’s [project inventory and prioritization tool](https://meganlayhee.maps.arcgis.com/apps/mapviewer/index.html?webmap=2b45834259ba44b9a9cd78a33cfe826e). The intent of the tool is to build capacity to identify and prioritize areas on the landscape where surface and ladder fuel reduction or stand structure alteration projects should be focused. The areas evaluated by the SLAWG and included in the tool are those within the CFLR boundary and Amador and Calaveras Counties.

The project inventory database (aka the project mapper) visually displays where projects have occurred or are underway within the ACCG focus area. The database will help generate a list of priority areas for treatment. Both the project inventory and prioritization list will need to be maintained and updated into the future to help inform the ACCG of potential treatment areas. The work flow is designed to automate the project database as much as possible but there is back-end work required to gather and format data from different sources.

Megan stated the project mapper is a stand-alone map that is largely completed. Three components were utilized for the database: multiple data formats, visible data attributes, and notable data filters. A significant component of the visible data attribute was defining the treatment and treatment outcome. The project inventory database is multijurisdictional and has interactive capabilities through ARC GIS Online. The mapper allows one to easily click to see where projects have occurred, where projects are in need of maintenance, and where projects are still needed. Megan explained that the user can make queries on the project mapper and filter the data. For instance, the user can filter by treatment type to focus on certain types of projects.

The next component, the landscape prioritize tool, builds upon the inventory database. Megan worked closely with the SLAWG to develop the landscape prioritization, taking into account GTR-315, to evaluate wildfire risk and hazard in terms of likelihood and intensity, identifying, locating and ranking high value resources and assets. She stated that the SLAWG worked to understand the vulnerability of High Value Resources and Assets (HVRAs) within the ACCG area, using the Forest Service Region 5 FSim outputs for the [Southern Sierra Nevada Wildfire Risk Assessment](https://www.fs.usda.gov/nfs/11558/www/nepa/3403_FSPLT3_3083905.pdf). The SLAWG examined relevant fuel-related indices on the landscape topography to come up with likelihood and intensity of future fire in terms of burn probability and flame length probability.

The SLAWG’s prioritization process took into account wildfire risk and ranking of HVRAs. The SLAWG broke HVRAs into five categories, within which there are sub-HVRAs which are spatially represented data sets defined as important to the ACCG’s triple bottom line. These include:

1. **Communities**. Comprised of the Wildland Urban Interface (WUI) as identified by CAL FIRE and Forest Service data sets and census populated areas. Communities is the number one asset and priority for the SLAWG’s prioritization process.
2. **Major infrastructure.** There were five components.
3. **Wildlife and Ecosystems.**
4. **Economic Assets.** Comprised of timber resources based on the timber type and diameter at breast height (dbh) with slope and road constraints.
5. **Watershed.** Comprised of erosion potential taking into account soil types, vegetation types, precipitation, and drinking water.
6. **Wildfire Risk.**

The SLAWG took several other quantitative risk assessments into account to help determine where on the landscape the HVRAs are most at risk and where the priority areas are located. They generated the expected net value changes (eNVC) between where HVRAS are threatened by wildfire and where HVRAs could benefit from wildfire to decide which HVRAs were negatively impacted or positively benefitted from wildfire intensity. The 25th and 50th percentile eNVC threat areas show where the ACCG should focus its efforts. Megan shared she will soon work with the SLAWG to perform additional fine tuning to refine the priority areas to take into account slope, WUI, distance to road, etc. She will also solicit feedback from the larger ACCG and conduct training for those interested in using the tool.

* John Heissenbuttel: The map of priority areas looks like it’s mainly in the upcountry and doesn’t identify any of the Butte Fire area as a high probability for burning. As it relates to the HVRA for wildlife, how did the SLAWG determine the list of the particular species to use? The U.S. Fish and Wildlife Service list of species does not include California spotted owl (CASPO).

Megan replied that SLAWG did not include any areas specific to CASPO but did include mature and immature forest wildlife habitat as a criteria which suggest it is suitable habitat for CASPO, goshawk, and pine martin. John continued that the areas to protect seem more focused on wildfire and ecosystem protection, not communities. Megan continued that the HVRA she was displaying does not include communities, and that there is a separate Communities HVRA.

The facilitator added that when one looks at the 25th and 50th percentile eNVC, it includes all of the HVRAs, of which Communities is the most heavily weighted HVRA.

* Richard Sykes: Was slope considered for the HVRA for erosion?

Megan replied yes, slope is integrated into the soil survey geographic database (SURRGO).

* John Buckley: CSERC is grateful to the quality of what Megan has produced and her ability to balance the range of perspectives. John acknowledged John Heissenbuttel’s concerns that modelling produces a wide range of outputs. John stated that the tool is especially valuable because one can go view the Communities HVRA layer, focus in on a specific community or areas of interest to figure out where to focus efforts and to justify to funders why a given project may be important.
* David Griffith: Can a user change the relative weighting between the HVRAs or is that hard wired into the project? Megan replied that the weighting is hard wired into the tool, and that it is not easy to adjust the input values for the HVRAs. The weighting is part of the work flow in ARC GIS; changes can be made in the future when the tool is maintained and updated if desired.
* Greg Suba: This work allows one to focus on work in and around communities. Greg added that when one is doing that, let’s not forget the first part of the presentation (the project mapper). One should add the project mapper to the HVRA risk to wildfire to see opportunities to leverage recent, current and/or anticipated projects.
* Megan stated she will make a final presentation to the ACCG in January, following the e-workshops later this fall.

## UPDATES

## Administrative Work Group Update

Regine Miller reported that the Administrative Work Group discussed the upcoming speaker schedule including the format for the pending prescribed fire panel. The group also revised the draft Outreach, Communication, and Engagement Plan, specifically drafting key messages and the Stakeholder Engagement Table based on ACCG input.

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| Robin Wall reported the work group discussed the ACCG’s future facilitation and conflict resolution needs. The group will evaluate different options for desired facilitation support, ranging from no facilitation to full facilitation, and establish facilitation priorities for the Consensus Building Institute for FY 2021 and desired “products” (e.g., finalize zones of agreement; facilitation trainings if the group will be moving toward self-facilitation). The Admin WG expects to make a recommendation to the full ACCG for future facilitation needs at the February meeting.  |

**Planning Work Group Update**

The facilitator shared that the Planning WG worked to identify the future speakers and format for the prescribed fire panel. The WG debriefed the Hemlock project area field trip sharing their perspectives. They expressed a desire to hold a follow up field trip that more broadly explores how the Hemlock project area is implementing GTR 220 to achieve structural heterogeneity and the role that Designation by Prescription (DxP) could play in achieving desired conditions.

The facilitator noted that the Forest Service usually provides project updates to the Planning WG, and that others are welcome to also make updates. The Amador Ranger District is working on surveys for the Cole Creek project, which is expected to soon come before the Planning WG. Tania stated that Megan Layhee also gave an update to the Planning WG on the project inventory database and prioritization tool.

Randy Hanvelt stated that, in the future, the ACCG should fully inform the Forest Service of the goals and objectives of a given field trip in advance of the trip. Randy spoke with Mike Albrecht of TuCARE following the field trip who stated DxP works, but it can be challenging because feller buncher operators cannot go out early in the morning to remove marked trees but instead have to wait until daylight to begin work.

**Monitoring Work Group Update**

Gwen Starrett shared that the Monitoring Work Group is composed of people who often don’t attend general meeting and stated that the WG now has a strong nucleus. The Monitoring WG is interested in making sure the website has easily accessible links to ongoing scientific papers and reports. The WG discussed how they might organize the information and potentially include a schedule for monitoring on the website. Alissa Fogg is taking the lead on this effort and will develop a one pager to provide to the Admin WG.

**Socio-economic monitoring.** The Sierra Institute for Community and Environment (SI) completed their report for the ACCG but there was concern about the training aspect of their work. Gwen stated that the SI believes training is not needed, but the Monitoring WG thinks it could be valuable to help train ACCG members to learn how to collect particularly important data. Robin Wall plans to reach out to the SI to discuss.

Lastly, Gwen shared that the WG is working toward integrating monitoring into future grant proposals and projects, and trying to determine how that might dovetail with the ACCG’s [2016 Monitoring Strategy](https://acconsensus.org/wp-content/uploads/2015/08/01_Cornerstone_Monitoring_Strategy_Final.pdf). The group wants to review the strategy to see what questions have not been answered and if there are additional questions.

**FY 2020 Cornerstone Project Reporting.** Robin Wall stated that the annual report is due to the Washington Office at the end of December, and that it requires a long process to gather the information from ACCG members to help formulate the report. Robin has reached out to most participants but not all. She invited anyone to present the work they have done in writing or photos to her for inclusion in the report. Robin stated that the report is a great opportunity to highlight the work being done in the region and that the report will include the work the SLAWG has completed.

**Funding Coordination Work Group Update**

Regine Miller reported that the group met in late September to review their charge, discuss priority projects as preliminarily identified by the SLAWG, and potential upcoming sources of funding. The work group has requested the Planning WG provide a list of category 1 (non-controversial) projects that are in need of funding. The next meeting is scheduled for Tuesday, November 10 at 3pm. Email Regine if you would like to be added to the email distribution list.

## Roundtable

## Randy Hanvelt: The TuCARE Natural Resources Summit is set for October 30th and is available virtually. Mike Albrecht will moderate the meeting which includes Greg Norton from Rural County Representatives of California (RCRC), Jason Kuiken of the Stanislaus National Forest, Jessica Morse Deputy Secretary for Forest Resource Management at California Natural Resources Agency, and Jim Hubbard Undersecretary of the U.S. Department of Agriculture.

Carinna Robertson: A request for proposal (RFP) was recently advertised for the Arnold Avery project which is a partnership between the Calaveras Ranger District and the Mule Deer Foundation. The contract close date is July 2021, with 800 acres to be treated in the immediate vicinity of Arnold and Avery. The Black Springs Integrated Resource Timber Contract (IRTC) RFP was recently advertised and the District expects to soon advertise the Fore Project RFP, both of which are the final components of the Hemlock Project. The UMRWA is still working on their projects in the Prussian Hill area. Carinna offered for more field trip opportunities in the Hemlock area in the future.

Ray Cablayan: Currently, there are no fires on the Calaveras District but the staff is still supporting their zone (Sequoia and Sierra National Forests). Ray reminded people that fire season is not yet over, and fire activity may begin to pick up in southern California. The Forest has dropped to Preparedness Level 3. The Forest Service is discussing the next phase for opening to the public amid the COVID-19 pandemic, but Ray does not expect to fully open before the end of the year.

David Griffith: Alpine Biomass Collaborative has not been especially active because they initially cancelled their Zoom meetings. The group resumed meeting last month with a presentation by Dan Macon on sheep and goat grazing to reduce understory fuels.

Liz Myer-Shields: The Bureau of Land management BLM) is wrapping up the Sierra Nevada Conservancy (SNC) grant for the Lily Gap project. They are continuing to work on different projects in the region with the Cal Am Team. Liz shared that Josh Sjostrom has accepted a position of District Ranger in New Hampshire and will be leaving in early November.

Gerald Schwartz: East Bay Municipal Utilities District completed their pipeline project, connecting Camanche Reservoir south shore to the north shore underneath the lake.

Gwen Starrett: The Three Meadows pre-bid tour is set for this Wednesday. UMRWA completed the road work in Onion Valley. Gwen stated she has completed the vegetation transects at Upper Onion to look at the effect of conifer removal on hydrology. She visited Foster Meadow restoration project with the Plumas Corporation and believes they are finishing work.

John Heissenbuttel: The Amador Fire Safe Council issued contracts for the Mitchell Mine Fuel Break and the Tiger Creek Fuel Break, both mastication projects about 100+ acres a piece. John expects for work to begin as soon as the fire danger passes. John shared he received notice that the CAL FIRE CCI grants are not going to be funded this year. He also shared that the University of California Agriculture Resources Program issued a publication on reforestation practices for conifers in California which Regine will distribute to the group. John suggests the ACCG ask Bill Stewart, who organized the publication, to present to the group.

Regine Miller: CHIPS work on all of its grants and agreements has been significantly disrupted by National Forest closures and wildfire project activity levels. CHIPS’ Midpines crew, together with the support of the Washoe crew, helped construct a fuel break on the Creek Fire. CHIPS has added a new crew from the Chico-area comprised of members of the Mechoopda and Maidu tribal communities. CHIPS is looking ahead to beginning work under a SNC-funded work force development grant to replicate the CHIPS model across the Sierras.

Thurman Roberts: CHIPS has secured the private land owner Right of Entries (ROE) for the private lands under the CAL FIRE Arnold Avery Butte Fire Dozer Line Fuel Break project. The WCB-funded Upper Mokelumne Forest Restoration project is continuing, including quarterly reporting and invoicing. Thurman shared he is assisting Robin Wall on the Cornerstone Reporting as it relates to CHIPS and the ACCG.

Richard Sykes: UMRWA’s forest healthy projects on the Calaveras Ranger District are wrapping up for the season. The culvert repair/replacement project on the Amador Ranger District is underway. UMRWA will conduct their Board meeting Friday, during which they will consider signing onto the ACCG MOA and approving a grant agreement with the Department of Water Resources for the West Point water supply reliability project.

Rich Farrington: UMRWA has signed onto 7,500 acres of forest projects which are nearly completed. Rich expressed concern there are not any further NEPA-ready projects UMRWA can seek funding for.

Robin Wall: The Eldorado National Forest is in fire restriction meaning there is no dispersed camping or camp fires permitted. Camp stoves are allowed in a campground with a host only. There was a fire on the Barney Ridge which the Armstrong Hill fire cameras spotted. Fire suppression resources kept the fire to three acres.

Shane Dante: The Foothill Conservancy’s annual river clean up along the Electra run of the Mokelumne River is forthcoming. Check out the website to sign up.

# Meeting Participants

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| **Name** | **Affiliation** | **Time Committed to Meeting** |
| John Heissenbuttel | Cal Am, Amador FSC | 3.0 |
| Gwen Starrett | ACCG Member, Citizens Climate Lobby | 3.0 |
| Michael Pickard | Sierra Nevada Conservancy | 3.0 |
| Regine Miller | Calaveras Healthy Impact Product Solutions | 3.0 |
| Rich Farrington | Upper Mokelumne River Watershed Authority | 3.0 |
| Greg Suba | Sierra Forest Legacy | 3.0 |
| John Buckley | Central Sierra Environmental Resource Center | 1.0 |
| Gerald Schwartz | East Bay Municipal Utility District | 3.0 |
| Megan Layhee | Consultant to Landmark Environmental and UMRWA | 3.0 |
| Shane Dante | Foothill Conservancy | 3.0 |
| Sue Holper | ACCG Member | 3.0 |
| Carinna Robertson | Calaveras Ranger District | 3.0 |
| Thurman Roberts | Sierra Nevada Alliance, Calaveras Healthy Impact Product Solutions | 2.0 |
| Sara Husby | Central Sierra Environmental Resource Center | 3.0 |
| David Griffith  | Alpine Biomass Collaborative | 3.0 |
| Randy Hanvelt | Association of California Loggers | 3.0 |
| Caitlynn Rich | Central Sierra Environmental Resource Center | 3.0 |
| Robin Wall | Amador Ranger District | 3.0 |
| Liz Myer-Shields | BLM | 3.0 |
| Tania Carlone | Consensus Building Institute | 3.0 |
| Kellin Brown | Calaveras Ranger District | 0.75 |
| Ray Cablayan | Calaveras Ranger District | 3.0 |
| LeRoy Westerling | University of California, Merced | 2.0 |
| Shane Romsos | Spatial Informatics Group | 3.0 |
| Michelle Workman | East Bay Municipal Utilities District | 3.0 |
| Richard Sykes | Upper Mokelumne River Watershed Authority | 3.0 |
| Jose Setka | East Bay Municipal Utilities District | 3.0 |
| Joe Sherlock | US Forest Service, Region 5 | 3.0 |

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