



- Cohesive Strategy Goals**
- Resilient Landscapes •
  - Safe & Effective Wildfire Response •
  - Fire Adapted Communities •

## Collaborative Group - Meeting Summary

Meeting held February 12, 2020  
 Prepared by the Consensus Building Institute

### Meeting in Brief

The Collaborative held its fourth Science Talk focused on resilient landscapes. Dr. Malcolm North, USFS PSW Research and UC Davis, presented recent research and insights on creating large-scale forest resilience while balancing multiple (and often competing) objectives within management constraints and an uncertain future. [[View presentation slides](#)]

El Dorado County staff presented an update on implementing the Vegetation Management and Defensible Space Ordinance, which includes amendments to facilitate implementation and enforcement and continued outreach and engagement. [Refer to [Item 26 of Feb 11 Board of Supervisor meeting](#) and [County vegetation management homepage](#).]

Ben Sher, LBS Ranch, and partners are coordinating a **March 11 field tour** of vegetation treatments on LBS Ranch.

The Landscape Vision Committee shared an update on its effort to develop a [red fir strategy](#) to establish guidelines for future project work. The committee recently developed a [draft white paper](#) and are working on visually depict conditions and considerations (e.g., red fir forest vegetation type, future climate conditions). The red fir strategy should be ready by mid-spring 2020.

**[Post-meeting note]:** The Collaborative will next meet on **May 13, 1:30-3:30, online**. There are no March 11 or April 8 Collaborative meetings.

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Have an announcement you would like to share via the SOFAR list-serve / website? Send information to Stephanie Horii, CBI ([shorii@cbi.org](mailto:shorii@cbi.org))

### Action Items

Who	What
Ben Sher, USFS, CBI	Coordinate and publicize LBS Ranch Tour
CBI	Coordinate speakers for the Caples Fire presentation, including time to go over volunteers' role and contributions.

## Meeting Summary

### Presentation | Science Talks

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#### Science Talk #4 | Resilient Landscapes, Dr. Malcolm North

[View [Slides](#)] Dr. Malcolm North, USFS PSW Research and UC Davis, presented insights for creating large-scale forest resilience based on recent research on reference conditions, reforestation, and owl habitat. He spoke to four themes: (1) creating a heterogeneous, resilient landscape using topography; (2) working with current conditions and also managing for future conditions; (3) increasing pace and scale of forest management activities; and (4) ecologist's definition for successful resilient forest landscapes.

**Creating landscape heterogeneity** – Using topography as a template to inform management decisions, it is possible to balance multiple objectives and create a more resilient landscape. A resilient landscape calls for forest structure heterogeneity, which is primarily driven by soil moisture (i.e., water availability) and the fire regime (i.e., what the fire does once it reaches that part of the forest). Topography serves as a good surrogate measure to understand the processes driving forest structure and inform management approaches:

- Determine conditions of a particular place to understand **what the landscape can support**: At large scales, identify which of the Sierra's ~20 climate classes apply to the management area. Then at the finer scale, consider the local topography (how steep, sunny, etc.).
- Identify and prioritize management in areas that are most **out of sync with current conditions** and what the landscape can support. For example: an area has high forest density, but the climate models and topography indicate it is too dry to support it.

**Planning for the Future** – In addition to working with current conditions, land managers must start developing a more sustainable landscape that's resilient to future stressors. Maintenance or course correction of past forest treatments often falls short (due to limited funds), which emphasizes the need to strategize management actions and effort with the future in mind. Dr. North provided two examples related to reforestation and spotted owl habitat:

- Reforestation. (1) Divide reforestation into **zones with different strategies** (e.g., supporting natural seedling-driven areas, regular planting in accessible areas where natural seedling can't reach, and creating founder stands in inaccessible areas); (2) build in more **spatial variability** in planting (both cluster and regular planting); and (3) get fire to work for us not against, particularly **controlled burning in young stands and plantations** (favors selection for more robust genetics).
- Owl Habitat. Recent research suggests CA spotted owls are associated with **cover in tall trees** (rather than high total canopy cover), which creates an opportunity to treat fuels in the understory without negatively impacting owls. However, the locations of current big trees are in areas where the trees are unlikely to persist in the future (e.g., susceptible to fire or drought). Landscape plans should consider transitioning owl habitat to locations that are best able to support tall trees.

**Increasing Pace and Scale** – Climate change and fire suppression are forcing changes in our management approach to substantially increasing pace and scale. Land managers should **leverage wildfire as the biggest change agent** on the landscape (e.g., focus treatments on low-to-moderate burn severity areas where vegetation's cleared and better conditions for restoration exist than high-severity areas). Suggested approaches include:

- Concentrate efforts to building **larger blocks of areas** that are resilient to disturbances. For example, divide areas into firesheds (~30-60,000 acres) and reduce fuels to moderate fire intensity, and use all the tools in our toolbox rather than focus on one approach (e.g., thinning vs. burning).
- Employ more adaptive approaches to burning. For example, Yosemite National Park uses a **“push-and-pull” burn method** to keep a controlled burn moving through the landscape, working more efficiently with windows of opportunity.
- Use mechanical treatments to also establish **“anchors” for expanding fire use** to areas where the mechanical treatments couldn't access.

**Defining “Forest Resiliency”** – from an ecologist's perspective, a resilient forest would have the following characteristics:

- When **regeneration and mortality** (cause, scale, and spatial pattern) align with how the forest systems historically behaved (e.g., fire is historically a major cause for mortality, not invasive species and disease).
- When **competition is no longer the main driver** for vegetation composition and structure as compared to disturbance (i.e., Sierra forests are better adapted to disturbances like fire, but not adapted to competing over water).

## Discussion

Key takeaways from discussion include:

- Recent research using more powerful tools (e.g., LIDAR) supports [GTR 220](#) concepts. GTR 220 offers a conceptual framework to guide management decisions rather than be prescriptive.
- One benefit from wildfires is they have contributed substantially to reducing vegetation given that controlled burns and mechanical treatments cannot keep pace with Sierra forest productivity.
- Due to how far embers can actually travel during a wildfire, property owners in the wildland-urban interface (WUI) areas not only need to reduce the fuels immediately around their homes/structures, but also think about treatments for the forest that's 0.5-1 mile away. Additionally, consider reducing surface and ladder fuels (keeping flame lengths low) to facilitate emergency crew access.
- USFS has been planning projects approximately 16,000-30,000 acres in scale – in general, USFS has the capacity and funding to treat 3,000 of those acres; therefore, USFS relies heavily on collaboration and partnerships to enable USFS to treat the remaining acres.
- Land managers should consider use multi-prong approaches with treatments to use all the tools in the toolbox. For example, use non-controversial methods (e.g., grazing) while overcoming the boundaries for controlled burning (for eventual application on the landscape). Fire needs to be part of the solution, but shouldn't stand in the way of getting work done out in the field.

- Increase hardwoods (e.g., oak and aspen) in the appropriate areas (e.g, riparian areas, dry sites for black oak, etc.) to help diversify habitat for plants and wildlife.
- Spotted owls have high nest and roosting site fidelity (associated with tall trees), but their foraging habitat can vary widely between years.
- Generally trees should be ~15 years old to survive fire conditions (and it's important to clear vegetation closer to the ground for these younger trees; mature trees are at lower risk).
- The time period for aiming to get fire back on the landscape (before vegetation regenerates too much) depends in part on the tree species. Mixed conifer on average can wait up to ~15 years; ponderosa pine: 5-7 years; and red fir: ~30-60 years.

## SOFAR Partners

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### Vegetation Management Ordinance | El Dorado County

[Refer to [Item 26 of Feb 11 Board of Supervisor meeting](#) and [County's vegetation management homepage.](#)]

El Dorado County staff presented an update on implementing the Vegetation Management and Defensible Space Ordinance. The Board of Supervisors recently approved amendments aimed to facilitate implementation and enforcement. The County has been focused on conducting outreach and engagement to help ensure property owners understand the ordinance's purpose and requirements and the resources available to support property owners.

## Planning and Projects

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### Landscape Vision Committee | Red Fir Strategy

[View committee's [Red Fir Strategy](#) statement; [White Paper](#)]

The Landscape Vision Committee has been developing a red fir strategy to establish guidelines for future project work. The committee recently developed a draft white paper and are working on visually depict conditions and considerations (e.g., red fir forest vegetation type, future climate conditions). The red fir strategy should be ready by mid-spring 2020.

### Focus Area | Chili Bar to Georgetown

Phase 1-Kelsey Fuels Reduction Project continues to advance. The project includes ingress and egress roadside treatments for emergency response and evacuation; 200' fuel break along Shoo Fly Ridge; and restoring the larger landscape. The project requires tremendous collaboration and partnerships (private landowners, fire safe councils, USFS, BLM, CAL FIRE, El Dorado and Georgetown RCD, County Dept of Transportation, etc.).

## SOFAR Organization

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### Charter

[View [Charter](#)] All SOFAR participants are invited to sign the charter as a demonstrable commitment to working toward the Cohesive Strategy. Signing the Charter strengthens

the SOFAR Collaborative and partner projects by demonstrating the diversity of stakeholder interests working together to advance the goals.

## Updates and Announcements

- Ben Sher, LBS Ranch, and partners are coordinating a **March 11 field tour** of [vegetation treatments on LBS Ranch](#).
- The Eldorado National Forest received NHI Wild Turkey Federation's Making Tracks [Habitat Management Project award](#) for the Tobacco Gulch project and Trestle Forest Health Project. Dana Walsh accepted the award on behalf of the ENF team.
- UC Davis continues to advance its biomass gasification technology and piloting different processing approaches (vegetation and other materials).

## Upcoming Meetings

Collaborative	Landscape Vision Committee
<ul style="list-style-type: none"> <li>• April 8 (Cancelled)</li> <li>• May 13 (Online)</li> </ul>	<ul style="list-style-type: none"> <li>• Feb 27 – Red Fir GIS meeting</li> <li>• Mar 26 (Online)</li> </ul>
<b>2020 Schedule:</b> Sept 16   Oct 14   Nov 18	
<b>Always check <a href="http://sofarcohesivestrategy.org">sofarcohesivestrategy.org</a> for meeting location and latest information.</b>	

## Meeting Participants (who signed in)

Randy	Hanvelt	Associated California Loggers (ACL)
Lester	Lubetkin	California Native Plant Society (CNPS); Oak Hill Area FSC
Sandy	Anderson	Central Sierra Economic Development District
Steve	Graydon	Deer Creek Resources
Sue	Hennike	El Dorado County
Brian	Veerkamp	El Dorado County - District 3 Supervisor
Lori	Parlin	El Dorado County District 4 Supervisor
Rick	L	El Dorado County Water Agency
Brian	Deason	El Dorado Irrigation District (EID)
Dale	Pierce	El Dorado Resource Conservation District (RCD)
Craig	Thomas	Fire Restoration Group, Georgetown FSC
Ben	Sher	LBS Ranch, Placerville
Marie	Davis	Placer County Water Agency
Heather	Campbell	Pollock Pines Camino FSC
Ethan	Koenigs	Sacramento Municipal Utility District (SMUD)
Barbara	Brydon	Sierra Club
David	Zelinsky	Sierra Club, Maidu Group, Placerville FSC
Greg	Suba	Sierra Forest Legacy

Jamie	Ervin	Sierra Forest Legacy
Mariana	Hernandez	Sierra Nevada Conservancy
Chris	Dallas	Sierra Nevada Conservancy
Rich	Wade	Sierra Pacific Industries (SPI)
Tim	Tate	Sierra Pacific Industries (SPI)
Monte	Kawahara	US Bureau of Land Management (BLM)
Dana	Walsh	USFS
Don	Errington	USFS
Liz	Berger	USFS
Jennifer	Chapman	USFS - ENF
Nancy	Nordensten	USFS - ENF
Traci	Allen	USFS - ENF
Jason	Sieg	USFS - ENF - Georgetown
Travis	Thane	USFS - ENF - Placerville
Malcolm	North	USFS - Pacific Southwest Research Station (PSW)
Pat	Manley	USFS - Pacific Southwest Research Station (PSW)
Bob	Smart	
Pat	Trimble	