Creating Climate Resilience for Sonoma County's Forested Lands

With North Bay Climate Adaptation Initiative

Forestry Working Group

December 8, 2015

Presentors:

Caitlin Cornwall, Sonoma Ecology Center & Genevieve Taylor, Ag Innovations

Attendees: (19 total) "people who are out working in the woods"

Dave Koehler, Sonoma Land Trust (SLT), Wendy Eliot (SLT), Marian Vernon (SLT), Amy Chesnut (SLT), Ariel Patashnik (SLT), Bob Neale (SLT)	Kim Batchelder, SCAPOSD Steve Swain	Zach Anaya
	Camille Swain (Student at Leadership Institute for Ecology & the Economy)	Dee, Greenbelt Alliance
		Penny Sirota, Friends of the Mark West Creek Watershed Alliance
Judy Rosales, Coast Ridge Community Forest	Ellen McKnight Drew Logenbill, NRCS	Brooke Edwards, The Wildlands Conservancy at Jenner Headlands
Earle Cummings		
Arthur Dawson		
Fred Euphrat		

Meeting Highlights
- Forests can greatly benefit the climate and community if they are managed using ecological practices; however, as we saw with the Valley Fire, they can also do great harm if not managed properly.   - There are three major barriers to ecological forest management.   - A permitting process that takes years, and is more burdensome on smaller properties.   - Skill: Landowners and managers need education and skill to put into practice   - Innovative funding: Reducing fuel loads can create both public and monetary benefit, but needs support to do it well.   - By using permitting processes to incentivize good ecological forest management, and encouraging collaboration between public and private landowners, we may be able to create a win-win-win.   - The county would benefit from a countywide managed fire plan and program that relates to emergency planning, and includes as well as funds the reduction of fuel loads.

Part 1: What are you doing about climate adaptation right now?

1. Wendy Eliot: Protecting large connecting landscapes, especially with diversity of topography, biology, water, etc
2. Marian, SLT: Previously, with Yellowstone to Yukon to prioritize conservation for resilience
3. Judy: Managing a coast ridge community forest. Working on changing people's behaviors. e.g. using grazing.
4. Earle Cummings, retired from every possible agency: alert to emergency issues, on board of Sonoma RCD
5. Arthur Dawson: Looks at historical hydrology and vegetation to guide restoration or mimicry of past patterns to increase resilience. Concerned about trend toward less of a mosaic in forests here, now we are losing chaparral and grass, and getting too much forest.
6. Fred Euphrat: I see Doug fir die, or out-compete other species, SOD slowing down, streams at historic lows, a lot of concern about aquatic and subaquatic life, concern about water quality and erosion when we get strong storms
7. Kim Batchelder: appreciate transition from "global warming" to "climate change", as it is truer to the actual impact, which is weather flashiness & variability. Sonoma County Ag Preservation & Open Space District works on baseline conditions, like vegetation mapping, to see how change will happen. Funders ask us now to look at climate aspects of their work.
8. Steve Swain: Seeing lots of new pests, expecting more. want to measure stress leading to forest problems, not sure how.
9. Amy Chestnut: We are not going to conserve or sequester ourselves out of this situation, want to see big behavior change like consumption reduction, keeping it local
10. Ellen McKnight: lost lots of her trees to SOD, drainage problems, irascible neighbors, wants to do the right thing
11. Bob Neill, SLT: behavior change by landowners he has to deal with. Retaining or restoring ecosystem functionality to our lands. how can we manage our lands to be resilient and health?
12. Drew NRCS: main thing is working with landowners on resilient practices.
13. Zach, Wildlands Conservancy: Vegetation management in forests to reduce fuels (small diameter trees), public outreach and hikes to teach people, all at Jenner.
14. Dee, Greenbelt: drawing lines around built environment is a key tool. also partnering, outside the lines. need to save half the planet. connectivity.
15. Penny, Friends of the Mark West Watershed: organize landowners to act collaboratively. understand hydrology and how to keep water on the land. reduce fire risk

16. Brooke Wildlands Conservancy at Jenner Headlands: forestry restoration from commercially harvested forest to diverse forest with redwoods and bigger trees, shaded fuel breaks on ridgelines
17. Ariel, SLT: Thinking about the Justice aspects of climate change. SoCo has the resources to actually do something.

Part 2: What specific actions can forest managers take support climate adaptation goals?

<u>Identifying Actions for Adaptation:</u> Groups of 2-3 people worked on 7 of 9 goals. They were asked to provide and prioritize 1-3 actions for each Climate Adaptation Goal that forest managers, government, NGOs, or individuals can do to support climate adaptation in forested lands.

Goal 1: Promote healthy, safe communities	● (1) Provide incentives for forest management for small landowners
	   ○ Grants (Cal Fire, NRCS)
	   ○ Reduced permitting fees (DFW, Board of Forestry)
	   ○ Support Community collaboration for permitting with forest management practices.
	● Address illegal pot farms in forests
	   ○ Increase enforcement (county sheriff)

Goal 2: Protect water resources	● (1) Provide Grants to support forest landowners to thin forest vegetation
	   ○ Cal Fire, NRCS, RCD, OSD
	● (2) Redesign regulations to encourage recharge and incentivise streamline permitting
	   ○ DFW water agencies, recharge ponds
	● (3) Reduce runoff of water and encourage infiltration
	   ○ Landowners (homes, forest) and county (roads)

Goal 4: Mainstream the use of climate projections (not just past patterns) in plans, designs, and budgets	● (1) Learn what the best carbon sinks are (tree species) and teach decision makers what that species is.
	   ○ Actors: researchers, action: teach others
	   ○ Actors: government decision makers, action: work toward implementation
	● (2) Action: Incentivize through permitting for good forest management activities
	   ○ Actors: Local government, state government
	   ○ Leverage: Private financial dollars for better

	forest management
	○ Streamline permitting!
	● (3) Action: Year of service in the forest (similar to WPA)
	    ○ Actors: students, seniors
	    ○ Actor: government program
	    ○ Actor: Student Conservation Association (NGO)

Goal 3 & 4:	Not addressed

Goal 5: Protect inland, coastal, and riparian buffer zones	● Reduce impervious surface
	    ○ Government
	● Higher resolution wetland maps
	    ○ Government
	● Grazing properly, perennial grasses, no ripping
	    ○ Government
	● Land Trust Baylands - 1000 acre marsh restoration
	    ○ NGO
	● Connectivity
	    ○ Wildlife
	    ○ Hydrological
	● Action: Reduce cost to individual landowners
	    ○ Actors: Government, NGOs, regional PTEIRs

Goal 6:	Not addressed

Goal 7: Protect infrastructure	● Increase opportunity for managed fire, reduces risk of wildlife
	    ○ Forest mosaic encouraged - forest, grassland, chaparral
	    ○ Countywide fire management plan or by air pollution control district
	        ■ Government
	● Action: Change burn restrictions to allow more controlled burns (landscape), including emissions compared to wildfire
	    ○ Actor: Government
	● Hep show carbon benefits - CalFire carbon calculator
	● Streamline and design permitting
	● Near-term
	    ○ Mike McGuire
	    ○ PTEIR to help ranches (county-wide)

	- Apparently, CalFire is not settled about the carbon benefits of forest management, this needs to change if state money will flow - Bring together disparate groups, don't promote the silo-izxn
Goal 8: Increase emergency preparedness in anticipation of extreme events	(1) Reduce fuel load and risk of wildland fires ○ Landowners and government agencies (2) Create Defensible space ○ Landowners, government, and community organizations (3) Educate and outreach to landowners through Workshops facilitated by community organizations (4) Increase water storage and rainwater catchment ○ Landowners and government agencies for funding (5) Outreach about and/or development of emergency services related to flood, fire and heat risks ○ Government and NGO
Goal 9: Monitor the changing climate and its biophysical effects in real time	Not addressed

In conclusion:

There are four major areas of potential high-leverage action from the conversation:

1. We need to increase emergency prep, specifically reducing fuel load in forest management and increasing notification capacity of the government before and during fires and floods. However, that needs funding.
2. We need to increase opportunities for managed fire, and create a countywide fire management plan
3. Permitting can be used to incentivize good practices.
    - ○ Permitting needs to be streamlined; particularly difficult for smaller properties.
    - ○ The major goal is to keep forests healthy. It is very difficult to do controlled burns, and we specifically need to loosen ARB rules about when you can do control burns. One idea is to use PTEIR for multiple properties - perhaps even a county-wide one.
4. More research and then outreach needs to be done on forestry practices that sequester carbon.