Meeting Highlights

1. The group affirmed that fire is a natural part of the California landscape and in order to create resiliency, we need to include fire in our management of the land.
2. We learned what healthy landscapes look like; gained strategies for making our homes defensible and managing vegetation on our property. The County discussed County Ordinance 13A, which will bring home defense inspections to Sonoma County. In the afternoon we visited a home site with fire experts who shared their top recommendations for home defense and forest management.
3. Key takeaways included: Focusing first on home defense, then property defense, then wider vegetation management. There was a clear difference between what public agencies could do to protect homes (during a disaster) and what homeowners and landowners should and need to do proactively. **Personal responsibility and pre-planning is key.** Vegetation management needs continuous maintenance. **Neighbors working together is crucial.** Work together to do land management, and take advantage of various cost share programs to help fund the work.
4. We talked about COPE (Citizens Organized to Prepare for Emergencies) as a potential model for organizing around fire preparedness. COPE will help build a network of neighbors helping neighbors around everything from creating maps to community chipper days. Contact Chief Marshall ([mturbeville@geyservillefire.com](mailto:mturbeville@geyservillefire.com), 707-292-3754) or Margie ([margiehanselman@aol.com](mailto:margiehanselman@aol.com); 415-601-8551) to get involved with a local group or start your own.
5. Major areas of group interest were: organizing around prescribed burns and grazing to reduce fuel load; home hardening; and creating and maintaining fire breaks collaboratively.
6. Major concerns were: Who the right points of contact are within multi-jurisdictions; how the public is notified if those contacts change; and enforcement around illegal campfires.

**Purpose:** To understand what the residents of the Lake Sonoma watershed want to do, and don’t want to do, in order to inform collective action on fire resiliency. A worksheet distributed with further resources can be found [here](#).
and home defense through a hands-on site visit, while gaining a better understanding of how fire works in the watershed.

and Chief Marshall Turbeville, Geyserville Fire Department

3. Closing Participant Discussion
4. Lunch and prep for Site Visit

NOTES
Team Welcome and Introductions
The FireSmart project team, Ag Innovations and Sonoma Water (SCWA), began by introducing the context for the project and key reasons why Sonoma Water joined the project.

Genevieve Taylor - Ag Innovations Executive Director and Senior Facilitator
Presented here are key highlights from Genevieve’s introduction:

● Ag Innovations facilitates collaboration around challenging issues at the intersection of agriculture and natural resources.
● A resilient watershed and healthy forest adapts to fire; a resilient community is also adapted to fire. We are partnering with Sonoma Water in order to support both people and land to work together to become resilient and fire adapted.
● Today’s workshop is designed to gather information to inform future planning.
● Our hope is that we can set a good foundation for collective action with our partners: SCWA, FireSafe Sonoma, CAL FIRE, and loCAL FIRE departments.

Anne Crealock - Sonoma Water (SCWA)
Senior Environmental Specialist
What follows is a summary of the highlights of Sonoma Water’s presentation. Please see the full slide presentation from Anne here.

Sonoma Water (formerly known as the Sonoma County Water Agency - SCWA) is a distinct legal entity that is committed to working together to protect our water supplies and help make our watersheds more resilient to wildfire.

● Sonoma Water supplies water to over 600,000 people. Most of the water we rely upon is stored in Lake Sonoma.
● The Lake Sonoma Watershed includes 83,000 acres, most of which are privately owned.
● With changing climate events, the probability of the Lake Sonoma region experiencing a catastrophic wildfire is two or more times higher than previously.
   ○ A catastrophic wildfire within the watershed region could result in a range of negative consequences including, more runoff, potential for landslides, impacts on water quality, impacts to habitat downstream of the dam, impacts to reservoir operations and impacts to water supply.
● As a water provider we need to think outside the box and experiment outside our traditional roles.
● Sonoma Water is now engaged in a number of initiatives and partnerships to create a more fire resilient Lake Sonoma Watershed and beyond.
  ○ FireSmart Lake Sonoma is one initiative centered on supporting residents and land managers in the watershed.

Dialogue Guidelines
Genevieve presented the following guidelines as the group entered into the discussions and presentations for the day.

1. We are all in this together
2. Suspend certainty
3. Be prepared for nuance
4. Listen openly
5. Share the floor generously
6. Take care of yourself

Living with Fire in the Lake Sonoma Watershed

Discussion: Local History of Fire in the Area and CAL FIRE and Sonoma County Fire Marshall’s Role - Chief Ben Nicholls, CAL FIRE Division Chief for the Napa/Sonoma Unit, leads the Vegetation Management Program; and Chief James Williams, Sonoma County Fire Marshall

Q&A with Chief Ben Nicholls

What is our risk of catastrophic wildfire in the Lake Sonoma Watershed?
● Wildland Urban Interface Problem – homes were the buffers when the fire came into the city
● 190 ignitions in 2008 – was Oak Woodland and now Bay with Doug Fir
● Fire will burn 101 corridor – San Rafael, Novato – i.e. not allow fire equipment in and people out and have much more loss of life than in Oct 2017
● A fire that burned over the top of Fountaingrove in a natural landscape wouldn’t have been the loss of life that it was in a natural landscape
● July and August – multiple major fires across the state. These days there are more big fires, and there is more possibility we have of small fires becoming large fires.
● The frequency of fire in the Lake Sonoma watershed is high. Most of those don’t turn into a big fire because we catch them.

What can we do to help Lake Sonoma make their area more resilient to the fires that are going to happen?
● The CAL FIRE priorities: 1.) Life 2.) Property 3.) Environment
Use your tools: Chainsaws, Weed-eaters, etc - - you need to create buffer around your property

What are the biggest risks in the Lake Sonoma Watershed?
- The greatest fire risk in the Lake Sonoma region is where there are no people - West-side of the Lake.
  - There hasn’t been a fire there in recent history
- We have an entire watershed that needs to be treated.
- We start by asking where are our fires starting? What hasn’t burned recently? Over time we treat the entire watershed.

What happens when there is a fire? How does CAL FIRE respond?
- The CAL FIRE mission is to contain 95% of our fires to 10 acres or less. During hard wind events, we are hard pressed just to get people out of harm’s way.
- In 2017, 172 wildland fires ignited in the North Sonoma region – we caught all but 15 – 90-98 percent of fires.
- Our tools: Fuel/fire Breaks, which require grader & dozers (may identify new or re-maintain breaks)
  - Fuel breaks give us ingress (entry) and egress (exit) for citizens and create control lines.
- Helicopter attack crews will fire a game trail – and keep the fire to one side if conditions are right

What can we do on the front-side to minimize the potential for these major fires?
- California is a fire prone environment. In CA, we burn. Every square inch of this state has burned. There is a misconception that if we manage fires that we will get back to a healthy forest.
  - The state is divided into the National, State, and local sections for treating fires. Sometimes the USFS lets land burn.
  - During favorable conditions, it doesn’t mean that we’re not going to bring fire to the landscape. There are times of the year when we don’t want fire, though, because it will spread.
  - There’s no one size fits all with how we deal with this load of vegetation.

What are ways the community can help reduce ignitions in the Watershed?
- After homeowners have done their defensible space, we can provide fuel breaks (roads or shaded ridge top fuel breaks), and then treat landscape level

challenges
- Hardening your homes costs money, but what costs more, losing your home?
CAL FIRE recommendations for homeowners:
1. Focus first on home defense
2. Then property defense. Originally we wanted 30 ft, now we want 100 ft vegetation break from your structure
3. Then vegetation management + fuel breaks (on multiple landowners land). The more you can do to reduce ladder fuel, the better firefighters can using existing control lines to keep the fire in check

How do you harden your home against fire?
- Nothing like seeing it live. Check out this 2 minute IBHS Research Center VIDEO -> Shows how a standard home with some variations succumbs to a firestorm.

Defensible Space
- Defensible Space can save homes
- Is the responsibility of the homeowner
- Requires continual maintenance
- Zone 1: 0’ - 30’ (5 foot non-combustible next to house walls)
- Zone 2: 30’ - 100’ Reduce vegetation

CAL FIRE Programs
- Prescribed burns: No CAL FIRe permit needed before May 1st to end of declared fire season for burn
  - Prescribed burn after May: Allows landowners assistance to get cost share (LE 7 permit required through CAL FIRE)
- Vegetation Management Program: cost share contract between landowner and CAL FIRE

What is CAL FIRE’S role in vegetation management, and how do we support meeting that goal proactively?
- Vegetation Management Program is working to treat timber fuel type and get the forest understory cleared.
  - We know there will be a fire, but with vegetation management is shouldn’t turn into a crown fire that has catastrophic risk.
- We will treat 20,000 through prescribed burning statewide, we will treat 20,000 acres through mechanical thinning, and you will undergo 20,000 defensible space inspections. It is a lot, but obviously CA is a lot bigger. (Note: there are 33 million acres of forested land in CA.)
- So, we have a multi-phased approach. It’s not only how are we going to treat the vegetation.
- 99% of our fires are caused by humans. Referring to a map showing fire starts here in the Watershed, in 2017 there were 0 fires caused by lightning. Fire frequency drops off when we go into the unincorporated areas of Stewart Pt/Dutcher Creek/Skaggs Creek/ Dam/Backside of Cloverdale/RockPile Road.
- Wherever there’s people, ignitions have ability to get across the valley and get to the watershed.
- CAL FIRE’s goal is to contain 95% of fires to 10 acres or less - on private land
- CAL FIRE is changing tact and treating fuels to reduce a catastrophic lens. We’re going to work with landowners as a service program.

Community Wildfire Protection Plan (CWPP)
- Intention: bring together all stakeholders in the Wild-Urban Interface (WUI) to collaboratively identify wildfire issues and prioritize strategies to reduce risk.
- Criteria of CWPP:
  1. Collaborative
Chief Nicholls walked us through a series of photos that showed a hardened home that survived the Tubbs fire in Mark West Springs.

6 priorities to look at when updating your home:
1. Roof/Edge: (i.e. birds and rodents in your roof – creating beds for embers)
2. Vents
   a. Vents and Roof: Exposure from embers that may have been blown a mile or more. Embers can also ignite near home vegetation and debris
3. Vegetation/Defensible Space
4. Windows
5. Decks
6. Siding
   a. Ember, radiant and/or flame impingement exposures from near home vegetation, other structures and wildfire

A few additional things:
- Mulch was like lava in Coffey Park. Coffey Park was taken out by embers.
- Vinyl window encasements melted and fell in.
- PVC pipe melts away (better be metal if you need it to remain intact during a fire event)
- TREX decking is basically plastic, and once heated up enough, it is a pool of gasoline burning behind your house -> even with TREX supported by wood -> for wood deck you have to get through

Q&A with James Williams, Sonoma County Fire Marshall:
What is the County doing around vegetation management?

13A County Ordinance
- Went out May 19th, 2018
- Allocated $500,000 for vegetation management; fire departments in Sonoma County coordinating with fire districts to do inspections on highest risk areas - for improved properties.
- We're looking at grants of possibly up to $5 million in dealing with this and looking at how to consolidate districts.
- With 13 A ordinance we are identifying the issue and giving landowners an opportunity to comply
  o Thinking about how to help people enforce and comply. There needs to be financial assistance for those who can't afford it (enforcement is only on 5 acres or less). For example, a 500 acres plot - family trust - no money - what do you do in this situation?
- 13A is working with trying to protect from ignition points. We did LE-100 inspections (form number for defensible space inspections). Inspections are expensive and take about 4 hours. Citizens of our county have to be willing to pay for it.
- This is a culture shift and will take 3-5 years for the community to understand that we're coming to inspect - about 85% of people comply.
How is the Ordinance going?

- We piloted the ordinance in Fitch Mountain, and ended up doing community education around it. 
- Through that process, 60% non-compliance > went up to 90% compliance. 
- Ordinance went countywide just recently. Working with the fire departments throughout Sonoma County 
- We are working with complaints first, and using ordinance next year to engage more proactively. Takes a 2-5 year time frame to get folks used to compliance. 
- Sonoma County’s Curbside Chipper Program: sonomacounty.ca.gov/fes/Chipper-program 
- Other programs we encourage residents to take advantage of (see Jason Well’s presentation below for more information):
  - EQIP (NRCS) & CBIP (Ca. Forest Improvement Program) can help you get the documentation for the state to help you on your land
  - VMP (Vegetation Management Program) is a cost-share program through CalFire -> firebreaks, fire roads, cost share
  - In some places, CEQA might apply, which requires you to address a sensitive area -> and to get Environmental Impact Assessment.

A Brief History of Fire in California, from a Native perspective: Chuck Striplen, Environmental Scientist, North Coast Regional Water Quality Control Board, and Amah Mutsun Tribal Band (Monterey Bay Region of CA)

- Originally ranch and land managers looking to improve forage for grazing or game - Used controlled burn; the grass is back next year -> brush grew back in 5-10 years
- There are recent studies that document the quantity and frequency of fire. We don’t have a sense now of how colonization has shaped the landscape locally. 99% of valley oaks in valley in Napa were cut down before WWII. We have forgotten that when the El Diablo winds come through, there is no defensible space.
- In histories of fire, CA Indians and their environments - > documents Spanish observations of fire – many instances of fires and had a hard time finding grasses for their fires – in Monterrey, a high percentage burned even on annual basis.
- We have a notion of an untrammeled wilderness -> humans need to take much more ownership over creating a resilient landscape.
- Today 99% of wildfires in the state are caused by humans.

Presentation: Tools to Work with Fire - Jason Wells, Registered Professional Forester, Sonoma Resource Conservation District (RCD)

What follows are highlights from Jason’s presentation. You can view the full slide presentation from Jason Wells here.

Forest health and management in a fire adapted landscape

- What is a healthy forest?
  - No single definition - often described in terms of ability to fulfil multiple uses over long time periods.
- Impediments to Forest Heath
  - Pests - Mountain Pine Beetle
  - Disease - Pine Pitch Canker, Root Rot
  - Wildfire
- Encroaching species - In absence of fire Douglas Firs have greatly encroached on Oak woodlands in California

- Forest Succession: Naturally occurring processes by which forests transition composition and structure over time

- Managing for Forest Health
  - Landscape Diversity (heterogeneity): in tree ages/sizes, density, species, understory, habitat
  - Shaded fuel-break - remove understory so that if fire came through it wouldn’t climb to the crown and be a stand-replacing fire

- Fire as a Tool
  - Burns unevenly - creates heterogeneity
  - Reduces competition
  - Creates habitat
  - Favors fire-adapted species

- Returning Fire to the Landscape
  - Often requires pre-treatment (thinning, chipping etc) to reduce fire intensity and increase decomposition
  - Conflicts with priorities of populated areas - as it’s a liability and for smoke management
  - Ultimately fire must be returned to the landscape

Management Resources for Landowners

Cost Share Programs:
- EQIP - Feds - Environmental Quality Incentives Program (NRCS) - aimed at covering 50% of a project. Flat dollar rate per acre for the type of work you are implementing.
  - See this EQIP brochure for general information about range of services they fund
- CFIP - California Forest Improvement Program (CAL FIRE) - for forest management - RPF required
  - See this CFIP fact sheet for more information
- Both require a management plan or a technical service provider through NRCS.
- These cost share programs will reimburse you for a portion of the cost of land management projects such as thinning or chipping. They’ll come and check that you did the work to their specifications and send a check.

Rx Burn Help - all need air quality management permits:
- VMP - Vegetation Management program (CAL FIRE) - for multiple properties
  - See this VMP fact sheet for more information
- PBA - Prescribed Burn Association - great approach to fire management through collaboration with 20-30 of your neighbors.
  - See this article on the value of forming a PBA for further information
  - Cooperative led by Lenya Quinn Davidson from Humboldt County is doing a pilot and there is real interest in creating PBAs elsewhere in California.
- Organize with your neighbors and look at the landscape level when thinking about prescribed burning and land management.

Technical Assistance:
- Consulting Registered Professional Foresters (RPF)
  - Foresters have a multi-disciplinary education - fire ecology and systems - manage the landscapes for public and habitat objectives; we identify objectives and manage lands to meet them.
  - See CAL FIRE’s website for a list of Registered Professional Foresters and Certified Rangeland Managers
- Resource Conservation District (RCD)
  - Resource Conservation Districts are liaisons between landowners and best management practices - are up to date with soil quality and health for rangelands and vineyards. We help landowners meet their land management goals.

- Natural Resource Conservation Service (NRCS)
  - These entities have a sole mission of providing free technical assistance. They can all help you create a Forest Management Plan, which will help you manage your property based on your goals in a range of areas including managing for fire.

- What about grazing as a tool for vegetation management?
  - Grazing – Goats eat everything. There is discussion of a Prescribed herbivory association. Jared Childress comes from East Bay MUD, and is a new employee with Audubon Canyon Ranch. has joined the partners so am looking PBA – herbivory (will come to Neighbors Summit meeting).
  - Would be great if there was program to graze these lands because of cost.

- Participant question: There are many horses in the area, that need pasture in the winter; could they be part of the solution? Maybe… outside of Jason’s expertise.

**Additional Comments from Jason Wells:**
- **Our biggest barrier is a Lack of community - lack of conversation with between neighbors. You can’t wait for money or the government to step in.**
  - Many approaches like Prescribed Burn Associations (PBAs) require community buy-in. With a landscape level management issue we need communities to work together. There’s a cultural shift needed for this kind of community buy-in.
  - Working individually on 5-10 acre properties is much more expensive than the per acre cost of working with neighbors under one plan on a larger scale (ie 500 acres).
- Registered Professional Foresters are in high demand, but there are only 1000 RPF licenses. 30% work for CAL FIRE, 20% retired, 30% don’t live in CA

**Presentation: Home and Property Defense - Chief Marshall Turbeville, Geyserville Fire Department**
- Marshall Tuberville has worn two hats for Geyserville and for CAL FIRE.
- Very excited about COPE – Citizens Organized for Preparedness Emergencies in Geyserville.
- COPE will help build a network of neighbors helping neighbors.
- One of the big questions: How do we connect all the breaks and roads connect up? How do we get them all together? Our big push is to make a pre-attack maps and neighborhood map.

**What is your advice to this group?**
- Do you have a plan? A plan will help you move forward. Should cover both “in the event of a fire,” and how you plan to manage vegetation.
- Do vegetation management around your house – think about the unexpected and unpredicted events.
- Organize a Community Chipper Day
- engage with you Public Safety Areas in the areas - - Making our own local maps helps us update based on different non-synced entities
- Look at the map, Make sure your address is on there, or Call Marshall (707-292-3754)

Here's how to start COPE:
- **COPE - Citizens Organized to Prepare for Emergencies**: Margie Hanselman started the Geyserville COPE group.
- Contact Chief Marshall ([mturbeville@geyservillefire.com](mailto:mturbeville@geyservillefire.com), 707-292-3754) or Margie ([margiehanselman@aol.com](mailto:margiehanselman@aol.com); 415-601-8551) to get involved with a local group or start your own.
- More resources on COPE and starting your own group are also available on the [Santa Rosa Fire department COPE page](mailto:santa-rosa-fire-department-cope-page).

Closing Participant Discussion

**What are 1-3 things that are on your wishlist for the Lake Sonoma Watershed?**

**Participant Comments:**
- Controlled burn - increase native grass population
- Grazing - reduce vertical fuel
- Most of fires could have been avoided if PG&E turned off their lines; hope that they do so in the future.
- Reduce low lying veg i.e. piling
- Link permits to action for fire resiliency
- Home hardening + Structure Improvement
  - Roof and pre-water sprinkler
  - Floating pumps?
- Fire Breaks maintained collaboratively
- There is NO access between Rockpile Road and the lake except private lands -> needs to change
- HOA organizes and contracts a tractor
- Concern about illegal campfires and no enforcement
- Trail widened as a fire break and may also allow more patrolling

**What are the main challenges and opportunities in building fire resiliency?**

**Participant Comments:**
- Who are the right points of contact (within multi-jurisdictions)?
- How does the public get notified if it changes?
- No response to illegal campfires
  - Idea: Potentiality of trail with additional fire breaks → engineering solution
  - Sheriff's department
- Burn permit needs
  - Smoke management
  - Winter time permits
- Cell reception and 2 way radios
- Watershed Association → for creating resilient conditions
- [Sonoma County Chipper Program](http://sonoma-county-chipper-program)
INDIVIDUAL REFLECTION: WORKSHEETS

Participants took some time to reflect on what they had learned, and what they would recommend, and what they were interested in participating in.

NUMBER OF WORKSHEETS TALLIED: 11

LANDOWNER WISH LIST

1. Given what you are learning, what would you like to stop, start, continue around your property?
   - Encourage community conversations about preventative measures we can take as residents
   - Share information about [County Ordinance] 13 A
   - Raise awareness about 99 percent of fires being human caused
   - Host neighborhood get togethers about community prevention measures to take ownership
   - Create a map with monuments and info share with agencies
   - Remove, thin tree debris for chipping/burning
   - On grasslands, I would like to introduce practices like seasonal grazing and prescribed fire to increase and restore perennial bunch grasses that increase deep percolation and extend the late season runoff to benefit aquatic life and provide better nutrition for grazing animals and reduce surface erosion.
   - Help with paying for tree trimming and chipping in 100’ defensible space. Labor, too.
● Cell reception
● Forest Thinning
● Ban all fire around Lake Sonoma year round
● Manage full load
● Have neighbor contact list
● Chipping
● Develop better fire breaks
● Share contact info and access to gated private roads
● Clean the underbrush - take out some trees
● Metal roofs
● Controlled burn - agreement
● Neighbors that burn is okay. Burning is not scary
● Clear more vegetation
● Find/Explore Alternative evacuation
● More clearing

RESOURCES
2. What would you need in terms of resources - whether its extra hands, tools, funding, a plan - in order to make those things happen?
   ● Extra hands - 11
   ● Tools-1
   ● Funding - 11
   ● Help make a plan for my own land -1
   ● Help make a plan including neighbors - 1
   ● Help cutting maps to determine feasible areas to manage
   ● Better understand what a prescribed burn looks like after the fact
   ● A burn plan and permit assistance, and then staff support during the burn
   ● Power supply back-up in shutdowns
   ● Help and funding to upgrade 300 acre property to make it fire-ready
   ● VMP-fire
   ● Burn Days
   ● Long term planning
   ● Funding to keep fire access to lake open (annual)
   ● Extra hands
   ● Permit help - this process takes TOO long
   ● Not sure yet

“NO GO’s”
3. Are there any ideas you have heard today that are absolutely a no-go for you? Refer to the handout for reference.
   ● Lack of electricity that would prohibit water pumps operating for fire fighting
   ● Fire break access to public is a “NO”.

COLLABORATIONS
4. We are exploring interest in collaboration between residents or between residents and public partners. Are you interested in (please circle all that apply):

1. Prescribed Burn Association (PBA) - - 9
2. Community Wildfire Protection Plan (CWPP) - -7
3. A hyper local response to fire - fighting, response, evacuation - -6
4. Vegetation management funded by a group - -9
5. Drainage and runoff management and erosion control funded by a group - -4
6. Collaboration around more grazing in the area - -6
7. Talking with RCD about a forest management plan - -7
8. Response AFTER a fire -3

5. What other ideas for community collaboration are you interested in exploring?
   ● Need more neighbors at the table - incentivize people to participate
   ● Make presentation longer - so much info and expertise
   ● Exotic vegetation control with or without fire
   ● I keep an emergency page which I distribute to friends and family
   ● Everyone has different needs and size of property
   ● Contact list of all neighbors
   ● Annual meeting
   ● Creating emergency (on foot) exits using existing roads, animal trails or other connectivity points

6. What worked well about the workshop today? We are doing other water workshops - what would you recommend changing?
   ● Meet and chat with neighbors
   ● Very informative
   ● Very positive
   ● Thank you!
   ● More concern about property loss and not so much on watershed
   ● Annual meeting to discuss fire threats
   ● Really good to hear from and talk to my neighbors
   ● Glad to meet and hear from experts
     ○ CALFIRE, Geyserville Fire, RCD experts