My name is Brittany Dyer and I serve as the District Chief of Staff for Supervisor Tom Wheeler representing District 5 of Madera County – widely referred to as ground zero of the tree mortality event. Thank you for inviting me here to testify today. I have the pleasure of serving as the Madera County representative on the Governors’ Tree Mortality Task Force (TMTF) and was part of a team that helped initiate conversations with the Governor’s Office to pursue an Executive Order declaring a state-wide emergency around tree mortality in October 2015. Before working for local government, I was the Program Development Manager for a regional natural resource non-profit organization working in Sierra Nevada communities to find opportunities to strike a balance between economic and ecological interests – much like the situation we are in today. The final hat I wear is that of a master’s student in the College of Forestry at Oregon State University. I will graduate in December with a Masters in Natural Resources through the Department of Forest Ecosystems and Society.

I would like to start by noting that I am truly honored to be part of these difficult discussions and we, the high hazard (HHZ) counties in the Sierra Nevada region, are extremely pleased that you, as Commissioners, have decided to pursue the imperative and challenging topic of tree mortality throughout the Sierra Nevada region. Both the immediate threat to public safety and the long-term impacts to all forest health beneficiaries (that’s all of us) warrant a thorough bipartisan investigation that looks beyond simply compliance and sets out to consider creative legislative and administrative tactics that support both efficient strategies and common sense solutions. Simply put – we are in a time of great ecological and social change and we must adapt our institutional systems to reflect these changes for future generations.

My goal is to (1) provide you an overview of tree mortality impacts in Madera County and what actions we are taking in response; (2) to discuss the challenges that Madera County and other like-counties face in response to this crisis; (3) to assess a variety of state actions and goals while providing recommendations for long-term forest objectives and; (4) to demonstrate how forest health issues in Madera County are important state wide; (5) Lastly, I hope to provide a series of straight forward recommendations that we believe are worth exploring further.

Madera County: Tree mortality conditions and response

Madera County, which is over 2,000 square miles and serves approximately 150,000 residents (2010 Census), consists of two incorporated areas and half a dozen rural, foothill and mountain communities in unincorporated areas – many of which are located in the Wildland Urban Interface (WUI). Eastern Madera County (EMC) is considered a gateway community to Yosemite National Park.
bringing an additional 1.5 million
visitors to the area last year alone
(Madera County Visitors Bureau).
The southern portion of the county
depends greatly on agriculture,
whereas the eastern portion of the
county relies on the tourism
industry. Visitor spending has
doubled from $59 million to over
$120 million from 2000 to 2015,
while industry earnings generated
by travel have increased by over $36
million (Madera County Travel
impacts from Dean Runyan
Associates). Other large employers in EMC consist of the United States Forest Services (USFS), local tribal
governments and utility companies.

As the map above demonstrates, approximately half of the county is represented by four
districts (Districts 1, 2, 3 & 4) while the remaining half of the county, EMC is one district – District 5.

Welcome to ground zero of the tree mortality event. Past forest management decisions, such as fire
suppression and the lack of thinning techniques, made the forests of EMC a prime target for disturbance
events such as pest outbreaks and wildfire. Historic drought conditions further exacerbated the issue
resulting in millions of dead and dying trees. Currently, the estimated cumulative number of dead trees
in Madera County from 2010 to 2016 is over 10 million and covers approximately 355,000 acres, most
of which are state or federal responsibility areas (TMTF, Tree Mortality: Facts and Figures, April 2017).

It is important to note that while you are hearing from 3 of the 10 identified high-hazard
counties today – there are 7 other counties (and likely to be more) that share similar conditions. That
said, each county has distinctly different opportunities and challenges. Similarities include: having to
restructure limited county resources, the need to create funding mechanisms to help support key public
safety projects, extremely
limited opportunities for private
landowners, and home
insurance challenges.
Differences include political and
social will, transportation
challenges, and infrastructure
composition.

So where does Madera County
stand? For starters, only one of
Madera County’s districts

(District 5 – EMC) is fighting tree mortality, making the political situation different from some of our
neighboring counties where four or more of the districts’ Board of Supervisors are living with dead and dying trees on their property. It should be noted that the other districts in Madera County have also had a number of difficult decisions regarding the challenges associated with drought: fallowed land, the lack of groundwater basin recharge and subsidence. Meaning, a variety of public safety concerns have been prioritized and critical decisions have been made with limited resources. Additionally, key infrastructure was taken out of the area when logging was prohibited, leaving little to no options for processing. Lastly, a 100 mile round trip exists between the heart of the tree mortality event in EMC and processing facilities, making transportation of materials economically challenging at best.

**Do not lose hope.** There has been a huge shift towards collaborative models both on the local and state level to enhance productivity with limited resources. Immediately after the Governor declared a state-wide tree mortality emergency, Madera County formed a local Tree Mortality Leadership Committee (TMLC). This team is comprised of local and regional representatives from key partner organizations such as the Department of Forestry and Fire Protection (CALFIRE), CA Department of Transportation (CALTRANS), CA Office of Emergency Services (Cal OES), Madera County Office of Emergency Service, CA Highway Patrol (CHP), Pacific Gas & Electric (PG&E), local United States Forest Services (USFS), Natural Resources Conservation Services (NRCS), Madera County Roads Department, Madera County Planning Department and a variety of other community based organizations as appropriate. They meet on a monthly basis to discuss specific challenges and opportunities on the ground and work within their individual missions to share resources across the board to get the job done!

Below you will see a **summary of Madera County the efforts to date**. Please note that while a lot of time and resources have gone into these efforts, these projects do not begin to address the vast scale of the mortality in EMC.

- **Madera County Board of Supervisors**
  - Declared local emergency and asked for Governor to consider state-wide emergency in the name of watershed health
  - Support local OES and county road items as they come forward
  - Work with local non-profit organizations to bring in dollars for Madera communities

- **Madera County Office of Emergency Services**
  - Hired part-time extra help to administered CA Disaster Assistance Act (CDAA)
  - Applied for Hazard Mitigation Grant in which all HHZ counties were rejected
  - Spent approximately $65,000 in staff time and overtime
- Secured approximately $500,000 (25% total of Madera County reserve funds) to serve as the 25% match for CDAA

- Madera County Roads
  - Cut approximately 10,000 trees in the county right-of-way areas
  - $266,000 in grants for equipment rental and tipping fees
  - Conducted necessary training for road crews to become fallers
  - Proper identification and tracking of individual trees in county right-of-ways
  - Worked with key community organizations to establish a log-deck storage site
  - Partnered with CALFIRE and USFS to conduct much needed road projects

- Pacific Gas & Electric
  - 2016: 35,000 trees felled in Madera County; of those 2,700 were loaded and hauled
  - 2017: 1,700 trees listed to be felled, 625 felled and 2,200 dead trees loaded and hauled

- CALTRANS – Madera County
  - Project total spending to date on HWY 41 & HWY 49 is $8 million
  - 14,000 trees marked of which 7,000 have been removed
  - An additional $4 million has been requested to continue the much needed work in the fall of 2017

- USFS, Sierra National Forest, Bass Lake Ranger District
  - Completed approximately 10 miles of fuel breaks in and around WUI communities
  - A nation-wide competitive grant - Joints Chief Grant - was applied for in partnership with NRCS and awarded at approximately $2 million to work on key tree mortality issues in and around public safety
  - Approximately $1.1 million of project work has been completed in the Bass Lake Basin totaling in 2,000-3,000 trees felled
  - Approximately $700,000 secured for two main USFS roadways to have trees removed which includes critical fire routes and connections to these main roads

- Natural Resources Conservation Services – Madera County
  - Nearly $1.5 million in tree mortality contracts has been secured for 2016/2017

- CALFIRE – Madera County
  - The purchase, transportation, and utilization of 2 air curtain burners with 81 hours of burn time
  - Approximately $250,000 of State Responsibility Area grant funds were distributed in Madera communities
  - 284 engine days of tree mortality work
  - 159 crew days of tree mortality work
  - The use of 18 pieces of heavy equipment
  - 1806 chainsaw hours
  - 197 chipper hours
Madera County: Existing challenges in lieu of crisis

A number of internal and external challenges exist, many of which all the HHZ counties struggle with as well. Staff needs have skyrocketed while budgets remain the same. County road crews have had to put aside key maintenance projects, absorb additional cost, and conduct trainings to transform road crews into felling crews. The equipment to move and transport hazards from county right-of-ways is an additional set of expensive tools that are strictly needed due to the tree mortality event. Once obtained, finding locations for storage is limited and the likelihood of finding a cost-effective way to process materials are dim at best – mainly due to transportation and or set-up costs. Biomass continues to be a feasible option but is moving slower than desired and does not have the capacity, under current regulations, to meet the size demands associated with the tree mortality epidemic.

Additional challenges include but are not limited to:

- While the 2016/2017 winter provided much needed water, it has also increased the speed of root rot compromising structural integrity of the trees and making them increasingly unsafe to climb or fell
- As trees continue to die, the responsibility of counties will continue to increase yet the funding to do so will remain the same, making state and federal support key to public safety and infrastructure
- Erosion and increased risk of catastrophic wildfire will threaten water and air quality even after initial clean-up is conducted
- The Public Works department is suffering severe funding losses and slowed response times to repairing roadways, and increased deterioration of the roadways from additional trucks and equipment on the county roadways from both public and private entities trying to down the dead trees
- The lack of local processing capability and obstacles around transportation provide the justification need to continue to explore creative local processing options that support forest health in to the future
Madera County: A review of collaborative state efforts and recommendations

The work in and around tree mortality to date is impressive. The Governor’s Office, CALFIRE, CALTrans, Cal Recycle, CA OES, PG&E and many more have all had to take on an enormous responsibility overnight. Additionally, the high-hazard counties from Placer County in the north to Kern County in the south have collaborated in a meaningful way to build off ideas, create and evolve models, and share a united voice in the challenges that we all face. That said, there are gaps and opportunities to better perfect our models. There are financial and red tape challenges that make it difficult to get things done on the ground.

There are a number of proposed recommendations below that consider both short term response needs and long term forest health goals. Please note that this is an on-going process in that recommendations need to be explored and adapted regularly.

- Focus limited funds on strategically placed fuel breaks in WUI communities, simultaneously protecting the watershed
- Provide opportunities for local control and support creative infrastructure needs such as portable mills and biomass facilities
- Assist private land owners in the form of tax relief and/or zero interest loans especially in disadvantaged communities
- Encourage key partnerships among organizations with competing/complementary goals. Example: local air boards and land managers trying to incorporate fire
- Review the current carbon plan and assess if it provides the much needed tools to obtain our state carbon goals
- Remove or provide sunset exceptions for costly environmental constraints such as the National Environmental Protection Act, strictly during emergency circumstances that limits the USFS and others’ ability to get on-the-ground work completed
  - The USFS is dealing with 51 million confirmed dead trees on millions of acres (TMTF, Tree Mortality: Facts and Figures, April 2017).
- Allow limited funding support, such as CALFIRE grants and CDAA application, to include staff and/or equipment time – there is a huge capacity challenge which is many times not deemed as an allowable cost
- Find creative funding mechanisms to support local government and communities to actively take care of the natural resources that benefits residents state-wide
- Recognize the impacts that lifting the drought order in HHZ counties will have on tree mortality efforts and redirect drought emergency dollars into much needed tree mortality programs
- Funnel funds through CALFIRE for key communities in HHZ counties, such as the continued prioritization of SRA funds
• Consider pursuing federal support for key United States Department of Agriculture affiliates such as the United State Forest Service and Natural Resources Conservation Services
• Pursue federal reimbursement on key tree mortality CALTrans projects so that they can continue much needed on-the-ground work, ultimately impacting evacuation routes
• Reduce the 25% county match currently required to obtain CDAA funds so that local dollars can go further
• PG&E and other administratively-light grant opportunities need to continue to be available for low capacity organizations on-the-ground to compete for community grants and the use of local level non-profits such as Fire Safe Councils and Resource Conservation and Development Councils
• Review insurance challenges and work with the Department of Insurance to confirm all efforts on the ground such as community fuel breaks, firewise status and local Fire Safe Council participation and adjust rates accordingly

Madera County: A reflection of the State of California

Tree mortality is a unique issue in that it crosses over a variety of social, economic and natural resource concerns while opening up a larger dialog around the key ecosystem services such as water storage, carbon sinks and greenhouse gas concerns that the Sierra Nevada region has provided California residents. Today we are challenged to utilize this crisis as an opportunity to make intentional and proactive resiliency management decisions that help support the delicate systems that our local economic markets and public health interests have come to depend on. While it is safe to say that under current circumstances we will see a decline in ecosystem services, such as water and air quality benefits, we have an obligation to tweak current forest management goals and the associated funding tools and policy mechanisms to ensure the best possible outcome for all Californians for generations to come.

A number of positive entities and frameworks are already connecting the dots and linking our limited natural resources to overall public well-being with recommendations on how to move forward. We recommend that groups such as the Sierra Nevada Conservancy and Resource Conservation Districts continue to be funded to reflect both regional and local needs. Additionally, federal opportunities to support landscape level agreements, like the Chesapeake Bay agreements, are imperative to consider. As we enter a time where funding to the United States Department of Agriculture is unknown, it will be vital to consider the impacts that has on key partners such as the USFS and NRCS.

Important state-wide connections:

• Both upper and lower watershed users need to have a more cohesive identity in fighting for precious resources
• There is an opportunity for southern counties to become more involved with on-the-ground efforts in the Sierra Nevada region that directly impacts their constituency base
• As reforestation conversations occur, a collective approach to forest management must be looked at on a landscape level and with a variety of adaptive management tools to pull from
• If the State Responsibility Fee is to continue, it should consider including downstream users as well, ultimately creating additional dollars for forest health projects for years to come
• Increased likelihood of catastrophic wildfire will threaten both water quality and quantity, impacting much of the state’s water and storage supply

The good news is that much of the groundwork has been set. The Sierra Nevada Conservancy has a number of resources that can help steer us in a positive direction, and the Governor’s TMTF recently released a white paper, “Recommendations for Comprehensive Sierra Nevada Ecological Restoration,” highlighting key recommendations such as: reintroduction of fire on the landscape, mechanical thinning treatments, rebuilding California’s forest products industry, legislative and administrative reforms, biomass removal, pursuing and funding ecological restoration efforts, monitoring adaptive management and improving forest structure (April 2017).

Summary of Recommendations Reflecting High-Hazard County Needs

The County of Madera as well as its neighboring HHZ counties are fully committed to public safety efforts and long-term conversations around forest health and resiliency management into the future. However, there are both funding challenges and legislative barriers that keep counties from working at their best on a local level. We know tree mortality is not going away overnight however this event will be the catalyst that directs change, or not, in how we manage our forest moving forward. We are possible looking at a stand-replacement and will need to be open to what management tactics look like on the ground. We ask that you consider all of these factors in your report and that you keep the dialog going. Additionally, further inclusion of the southern counties will be critical to the forest users throughout the state for decades to come.

The 10 HHZ counties meet on a monthly basis to discuss a variety of opportunities and challenges that we face in light of the tree mortality event. The following list (below) was developed collaboratively between the 10 HHZ counties and is considered a living document as these items are constantly in shift. We ask that you consider the recommendations below and challenge us to explore other creative solutions as well. Thank you for your time today and your continued commitment to tree mortality moving forward. Please let me know if we can provide any additional information.
<table>
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<tr>
<th>CHALLENGES</th>
<th>OPPORTUNITIES</th>
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| State Support Needed to Cope with Disaster Conditions | • Advocate for Federal Emergency Management Agency support  
• Fight for greenhouse gas funds  
• Continue to support Sierra Nevada Conservancy programs  
• Continue to support CALFIRE programs                  |
| Local Government Funding Support                     | • Reduce match for tree mortality counties applying for California Disaster Assistance Act relief  
• Continue State Responsibility Area grant programs and others  
• Support Resource Conservation Districts for local projects  
• Support California Forest Improvement Program          |
| Federal Land Support                                 | • Remove regulatory hurdles impeding the removal and disposal of dead and dying trees in a timely manner |
| Support Current Infrastructure Needs                  | • Support the California Department of Transportation via Federal Highway Administration reimbursement opportunities |
| Tree/Wood Removal/Storage & Disposal                  | • Increase biomass opportunities and interconnectivity  
• Provide transportation support  
• Remove regulatory hurdles and encourage infrastructure development |
| Housing Market                                        | • Continue to ensure that basic rights around insurance availability are met                          |
| Air Quality                                           | • Work with Environmental Protection Agency standards to permit prescribed burning as a landscape tool |
| Water Quality                                         | • Prioritize watersheds that serve southern California and other major population centers           |
| Home Insurance Restrictions                           | • Work with the Department of Insurance to create fair plans that protect the public and reduce independent companies’ risk  
• Prioritize fuel breaks in and around communities  
• Support insurance discount for certified Firewise communities |
| Private Landowner Assistance                          | • Explore tax relief programs and zero interest loan programs  
• Financial relief or reimbursement programs for disadvantaged communities |
| Forest Resiliency                                     | • Support Resilient Federal Forests Act of 2015 (HR 2647) and other policy efforts to support long term resiliency management  
• Support other policy mechanisms that incorporate multiple use values  
• Pursue funding for reforestation/planting               |
| Tourism Industry                                      | • Secure funding to remove public hazards from key economic driver locations                          |
| Education & Outreach                                  | • Build allies; effectively communicate challenges throughout the Western States; highlight the issue at all conferences and meeting opportunities  
• Host subcommittee meetings at state and federal level |

*Additionally reference materials can be made available upon request. Brittany.Dyer@madera-county.com*