



Water Resources Review Committee The Forest Health Advisory Council (FHAC)

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The Forest Health Advisory Council

- **The Forest Health Advisory Council was created by HB16-1255**
- **The FHAC is currently a 21-Member Council (appointed by the Governor and other legislators) that consists of a wide range of experts consisting of experts from industries including the following stakeholder representatives:**
 - **Environmental organizations**
 - **Wood products businesses**
 - **Wildlife organization**
 - **Scientific research position**
 - **County Commissioners**
 - **Public utilities**
 - **Ranch owner**
 - **Conservation organization**
 - **The Governor's office**
 - **Economic employment organization**
 - **Sportsman's organization**
 - **Motorized recreation**
 - **Non-motorized recreation**
 - **Municipal drinking water supplier**
 - **Irrigation water supplier**

FHAC Task Defined in HB16-1255

Advising the State Forester on a broad range of issues, opportunities, and threats with regard to Colorado's forests

****The recommendations being discussed today are recommendations made by the FHAC to the State Forester****

FHAC Progress Made to Date

- **Creation of an “Opportunities/Barriers” Document regarding forest health in Colorado to strategically guide the work of the FHAC**
- **Tribute to forest health and active management of forests passed by the House during 2018 legislative session**
- **Creation of “A Call to Action” document**
- **Working with the legislature to introduce a bill in 2019 legislative session restoring governmental immunity for prescribed fire for State agencies**
- **Working in cooperation with the Colorado Water Congress on the creation of a Colorado Forest Health and Watershed Advocacy group to broaden the reach of the importance of forest health and active management of forestlands**

Colorado's Forest Crisis

Annual growth exceeds annual mortality in Colorado's National Forests by a factor of two to one: 266.133 million cubic feet die for every 119.857 million cubic feet that grow.

The causes are well known: insect infestations, root diseases and prolonged climate-driven drought.

More than one billion dead trees stand in Colorado National Forests. They are fueling the largest and most destructive wildfires in the state's history.

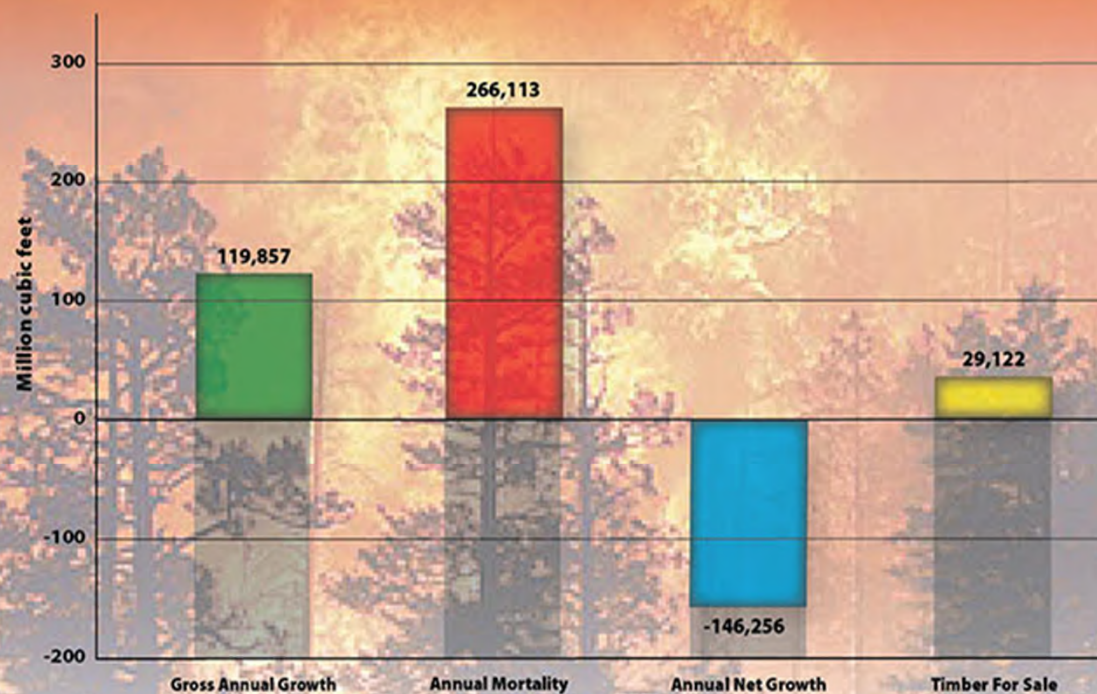
There are too many trees in these forests for the carrying capacity of the land. Thinning can restore resiliency, enabling healthy trees to grow again. Soil and water quality are protected, as is the state's famed outdoor recreation industry.

Imagine a solid block of wood the dimensions of Mile High Stadium stretching 5,544 feet into smoke-filled skies. This is Colorado's annual loss.

Congress is providing tools the U.S. Forest Service can use to restore lost resiliency in Colorado's National Forests. Good Neighbor Authority – pioneered in Colorado – permits the Colorado Department of Natural Resources to help the understaffed Forest Service significantly increase restoration capacity. But moving forward will be challenging because so little wood processing capacity remains in the state.



COLORADO'S FOREST CRISIS



FHAC Identified Challenge

Challenge: Water Quality

- **Forest health and watershed health are directly related to water quality**
- **Clean water connects all Colorado residents to the state's forests**
- **Surface water supplied from Colorado's forests supports a variety of needs, including use as public drinking water, agriculture/irrigation supply, industrial uses (i.e., for mining or manufacturing), recreation opportunities, and habitat for aquatic life**
- **Colorado's main drinking water supplies originate as snow that falls on forests in the high country and flows down the state's four major river systems (the Arkansas, Colorado, Platte, and Rio Grande)**

Water Resource Setting

- **24.4 Million Acres of Forest Lands**
- **80 percent of Colorado's water comes from national forests**
- **Receive an average of 15-25 inches of precipitation annually**
 - **Averages 13.7 million acre-feet per year**
 - **Approximately two-thirds of this flows downstream to other states**
 - **Colorado owns approximately 40 percent of the water that falls as precipitation**
 - **5.3 million acre-feet**

Opportunities Identified for the Challenge of Water Quality

- **The FHAC promotes a regional approach to project implementation through the use of the Basin Roundtables and their partners**
- **Incentivize and fund forest management activities that are necessary to alter landscape-level forest health improvement in valuable headwaters and watersheds of Colorado**
- **Apply existing watershed protection best management practices to implement sound forest health and restoration projects.**
- **Increase public awareness of the important link between forest health and water quality and quantity**

FHAC Identified Challenge

Challenge: Wildfire

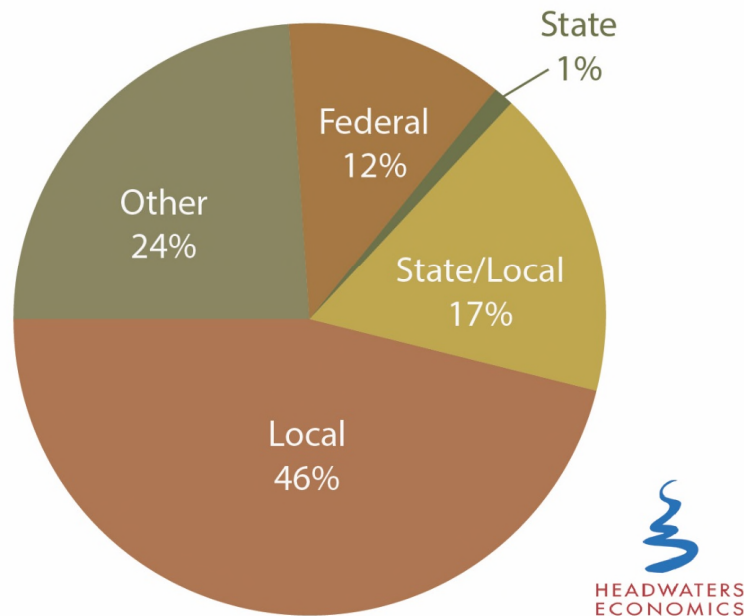
- **Wildfires pose a growing risk to people, property, and infrastructure – many of these costs are borne by local communities**
- **Increasing temperatures have extended the length of Colorado's fire season in recent decades, and a century of fire suppression has created a backlog of woody fuels.**
 - **These conditions have resulted in larger and more frequent wildfires in Colorado**
- **Wildfire suppression costs continue to increase and affect Federal agencies, State Agencies, and local communities**
 - **Over \$55 million has been spent on wildfire suppression in Colorado in 2018 already (444,373 acres burned)**

Resource Challenges – Forest Health

- **Colorado Statewide Forest Resource Assessment (CSFS)**
 - **642 Watershed** susceptible to damaging wild fire
 - **371 watershed** with high to very high risk of post-fire erosion
 - **12.6 million @ moderate to high risk of wildfire (CSFS)**
 - **Wildland Fire Intensity Index**
 - **5.7 Million acres** with high to very high rating
 - **Richter Scale** of wildland fire
 - **Higher the rating , higher the impacts**

The Costs of Wildfire to Local Communities

Proportion of wildfire costs paid for at the local, state, and federal level



According to a study completed by Headwaters Economics in 2018, using 15 wildfires that occurred in the Western United States:

- **Almost half of the full community costs of wildfire are paid for at the local level, including homeowners, businesses, and government agencies.**

Investments in Wildfire Mitigation Decrease the Costs of Suppression

According to the National Institute of Building Sciences 2017 report entitled “Natural Hazard Mitigation Saves”:

- **Investing in hazard mitigation measures to exceed select requirements of the 2015 International Codes, the model building codes developed by the International Code Council (ICC), can save the nation \$4 for every \$1 spent.**
- **Just implementing mitigation strategies would prevent 600 deaths, 1 million nonfatal injuries and 4,000 cases of post-traumatic stress disorder (PTSD) in the long term.**

FHAC Identified Challenge

Challenge: Prescribed Fire

- **Since 2012 when governmental immunity for prescribed fires was removed, fuel levels have continued to build up.**
- **The public is often not aware of the unhealthy state of Colorado's forests, and they misunderstand the necessary tools that must be utilized by land management agencies manage forests.**
- **Air-quality and other permitting processes and the associated limited burn windows discourage the use of prescribed fire.**

Opportunities Identified for the Challenge of Wildfire and Prescribed Fire

- **Use Governmental policy to mandate forest management treatments in the WUI prior to development**
- **Work with local governments to develop local codes based on resiliency models**
- **The FHAC supports governmental immunity for State agencies to facilitate the use of prescribed fire on State and private lands**
- **Increase the use of prescribed fire as a matter of risk management when compared to wildfire**

Effects of Removing Governmental Immunity for Prescribed Wildfires to State Agencies

- **State Agencies have no way to assist private landowners with pile burns**
 - **After CSFS staff remove trees and other wildfire fuels for private landowners, they are not able to complete pile burns to remove the debris from the landscape**
 - **Number of slash piles built up on private lands in Colorado: 2,587 piles**
- **CSFS and its employees are no longer able to assist other agencies with broadcast burns.**
 - **CSFS personnel have unique qualifications to help reduce fuels in the State through prescribed burns**

Prescribed Fire as a Tool for Land Managers

- The FHAC supports the use of prescribed fire for State Agencies as a tool for land management
- Colorado forests evolved with wildfires that periodically cleared out dead and diseased trees, reducing fuels for large wildfires
- Due to a build up of fuels and insect and disease activity, some of Colorado's forests are now crowded with thick trees and dense under growths, increasing the risk of large wildfires
- Prescribed fire is an effective way to reduce dangerous accumulation of combustible fuels.
- Wildfires that burn in areas where fuels have been reduced by prescribed fire cause less damage and are easier to control.

FHAC Recommendations

- **Support bill for State Agencies to receive Governmental Immunity for prescribed burns**
- **Expand funding available for prescribed burns**
- **Expand funding opportunities for active forest management treatments and projects that are consistent, repeatable, and ongoing such as a voluntary tax on certain goods that benefit from healthy forests and clean water**
- **Expand public outreach on the importance of forest health to Colorado's citizens to include**
 - **Intricate tie to water resource quality and quantity**
 - **Public health, environment, economics, recreation, and insurance**
- **Creation of a Colorado Forest Plan that includes information on the true cost of wildfire and to whom that cost accrues**

Thank You/Questions

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FHAC WEBPAGE:

www.csfs.colostate.edu/forest-health-advisory-council/