



**Report to the
Colorado General Assembly**

**Wildfire Matters
Review Committee**

Prepared by

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Wildfire Matters Review Committee

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December 2016

To Members of the Seventy-first General Assembly:

Submitted herewith is the final report of the Wildfire Matters Review Committee. This committee was created pursuant to Senate Bill 13-082. The purpose of this committee is to oversee and review the prevention, mitigation, and financing of wildfire matters in Colorado.

At its meeting on October 14, 2016, the Legislative Council reviewed the report of this committee. A motion to forward this report and the bills therein for consideration in the 2017 session was approved.

Sincerely,

/s/ Representative Dickey Lee Hullinghorst
Chairman

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This report is also available on line at:

<http://leg.colorado.gov/committees/wildfire-matters-review-committee/2016-regular-session>

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Committee Charge

Pursuant to Senate Bill 13-082, the Wildfire Matters Review Committee is charged with reviewing and proposing legislation or other policy changes related to wildfire prevention, mitigation, and related matters, including public safety and forest health issues. In addition, the bill transferred to the committee any remaining powers, duties, and responsibilities delegated to the Lower North Fork Wildfire Commission by House Bill 12-1352. In passing SB 13-082, the General Assembly intended for the Wildfire Matters Review Committee to be a permanent interim committee through which the General Assembly reviews state policies and resources addressing wildfire prevention and mitigation and the successful implementation and execution of such policies; the committee sunsets on July 1, 2018.

Committee Activities

The committee took two tours and met twice during the 2016 interim. At the two meetings, the committee heard presentations from, and engaged in discussion with, representatives of various entities involved in wildfire prevention, mitigation, and response. These presentations and discussions covered a wide range of topics associated with wildfires, including efforts undertaken by the General Assembly to address wildfire issues in recent years; forest health; air quality; funding needs for various wildfire mitigation and response initiatives, including federal funding; the status of the timber and biomass industries; prescribed burning; wildfire behavior predictability; forest and watershed restoration; auxiliary emergency communications; and wildfire preparedness efforts undertaken by local governments. Entities that presented to the committee included:

- the Division of Fire Prevention and Control;
- Colorado State Fire Chiefs;
- the Colorado Department of Public Health and Environment;
- the Colorado Department of Natural Resources;
- the U.S. Forest Service;
- the Colorado State Forest Service;
- representatives of the forest utilization and biomass industries;
- forest and watershed health experts;
- the Colorado Municipal League;
- Colorado Counties, Inc.; and
- local governments.

The committee heard public testimony at both meetings, and spent time during the meetings undertaking organizational activities and considering draft legislation. Two bills and two resolutions were drafted at the request of the committee. One bill was withdrawn by the members during the drafting process. The committee ultimately approved one bill, one resolution, and one joint memorial.

The following sections discuss the committee's activities during the 2016 interim.

Local Wildfire Issues

Impact to local governments and private property due to natural disaster. The committee discussed forest health and wildfire mitigation at the local level and heard from representatives of local governments throughout the state. Specifically, the committee addressed issues regarding forest management in low-elevation areas and the need to mitigate wildfire risks in the wildland-urban interface (WUI) areas, including programs for homeowners, building codes, and prevention plans. Representatives from local governments discussed additional programs to support WUI areas impacted by recent wildfire events. The committee also discussed issues with private land owners in the WUI areas and the financial impact of natural disasters, including wildfires and flooding.

Committee recommendations. As a result of its discussions, the committee recommends Bill A, which adds an exception to the principal residence requirements for reverse mortgage borrowers who are unable to live in their home for at least 60 days and fewer than five years due to a natural disaster or incident beyond the borrower's control making the home uninhabitable.

Colorado Forest Health and Timber Products

Forest health and environmental impacts. The committee heard from the Colorado State Forest Service (CSFS), timber and biomass industry experts, and forest researchers regarding the health of Colorado's forests. Specifically, the density of forests due to the lack of naturally occurring wildfires and lack of proper fire mitigation has increased the severity and dangers associated with wildfires in some areas. The committee discussed the wildfire risk reduction programs administered by the state. In addition, the committee heard from forest researchers on the projected climate and environmental impact on forest health in Colorado.

Forest utilization industries and biomass products. The committee discussed and heard from representatives of forest utilization industries. Specifically, the committee discussed the use of forest biomass products for energy production and agricultural purposes, also known as biochar. Representatives of the industries spoke about the practice of mitigating forest fires by removing beetle kill and other biomass products from dense forests and challenges associated with it.

Committee recommendations. As a result of its discussions, the committee recommends Resolution A, which requests that state and federal agencies support the continued use of biochar from Colorado forest biomass products.

Federal Wildfire Issues

Federal support for wildfire suppression. The committee heard from representatives of the U.S. Forest Service regarding the federal government's role in wildfire suppression. The committee discussed the current federal funding for wildfire suppression and mitigation.

Committee recommendations. As a result of its discussions, the committee recommends Joint Memorial A, which asks Congress to fund the costs for catastrophic wildfire response outside the normal budgets for federal forest management agencies.

Committee Tours

Committee tour of Teller, El Paso, and Pueblo Counties. The committee took two tours during the 2016 interim. The first tour focused on areas in Teller, El Paso, and Pueblo Counties. Specifically, the committee visited the Pike National Forest to understand mitigation efforts near the Woodland Park WUI and the ongoing impacts to the forest environment of past wildfires. The committee also toured an El Paso Office of Emergency Management facility to understand the local response to wildfires.

In addition, the committee visited Pueblo Wood Products, which is a facility that produces biochar and other wood products. Discussions included the commercial uses of biochar and the accessibility of biomass products in Colorado's forests, including on state, federal, and private lands.

Committee tour of Summit and Eagle Counties. The second tour of the 2016 interim focused on areas in Summit and Eagle Counties. Specifically, the committee visited federal mitigation programs near the White River National Forest and Dillon Reservoir to understand efforts to protect watershed health. One federal mitigation program showed the clearing process in the WUI area. The committee also visited a mitigation program outside Vail that is being funded by a local government. In addition, the committee toured Eagle Valley Clean Energy, a biomass power plant in Gypsum, Colorado, where biomass cleared from forests through mitigation programs is being converted into energy.

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Summary of Recommendations

As a result of committee discussion and deliberation, the Wildfire Matters Review Committee recommends the following bill, resolution, and joint memorial for consideration in the 2017 legislative session:

Bill A — Reverse Mortgage Repayment When Home Uninhabitable

Under current law, the borrower in a reverse mortgage is relieved of the obligation to occupy the subject property as a principal residence if the borrower is temporarily absent for up to 60 days or, if the property is adequately secured, up to one year. The bill adds an additional exception to the principal residence requirement for borrowers who are unable to live in their home for at least 60 days and fewer than five years due to a natural disaster or incident beyond the borrower's control making the home uninhabitable. The bill applies to reverse mortgages for homes that are rendered uninhabitable by a natural disaster occurring on or after the effective date of the bill.

Resolution A — Support for Use of Biochar

The resolution requests that state and federal agencies support the continued use of biochar from Colorado forest biomass products.

Joint Memorial A — End Practice of Fire Borrowing

The joint memorial requests that Congress fund the costs for catastrophic wildfire response outside the normal budgets for federal forest management agencies.

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Resource Materials

Meeting summaries are prepared for each meeting of the committee and contain all handouts provided to the committee. The summaries of meetings and attachments are available at the Division of Archives, 1313 Sherman Street, Denver (303-866-2055). The listing below contains the dates of committee meetings and the topics discussed at those meetings. Meeting summaries are also available on our website at:

<http://leg.colorado.gov/committees/wildfire-matters-review-committee/2016-regular-session>

Meeting Date and Topics Discussed

South I-25 Corridor Tour (June 30 – July 1, 2016)

- ◆ Woodland Park site visit
- ◆ El Paso Office of Emergency Management
- ◆ R and D Equipment Fabrication Shop

West I-70 Corridor Tour (August 4 – August 5, 2016)

- ◆ Mesa Cortina Wildland-Urban Interface
- ◆ Dillon Dam
- ◆ Heaton Bay Campground
- ◆ Highlands Wildland-Urban Interface
- ◆ Mitigation efforts in Vail
- ◆ Eagle Valley Clean Energy Facility

August 15, 2016

- ◆ Presentation by Colorado State Forest Service
- ◆ Presentation by Colorado State Fire Chiefs
- ◆ Wildfire management successes in Boulder County
- ◆ Presentation by Colorado Association of Realtors
- ◆ Summary of 2016 legislation and staff research
- ◆ Interim committee process
- ◆ Request for drafting of committee legislation

September 19, 2016

- ◆ U.S. Forest Service
- ◆ Biochar and fuel from forest products
- ◆ Wildfire mitigation successes in Boulder County
- ◆ Local government matters related to wildfires
- ◆ Division of Fire Prevention and Control
- ◆ Air quality control related to wildfires
- ◆ Weather forecasting and forest health
- ◆ Public testimony
- ◆ Discussion of draft legislation

First Regular Session
Seventy-first General Assembly
STATE OF COLORADO

BILL A

LLS NO. 17-0117.01 Kate Meyer x4348

HOUSE BILL

HOUSE SPONSORSHIP

Singer,

SENATE SPONSORSHIP

Jones,

House Committees

Senate Committees

A BILL FOR AN ACT

101 CONCERNING THE SUSPENSION OF A BORROWER'S OBLIGATION TO
102 REPAY A REVERSE MORTGAGE WHEN A FORCE MAJEURE
103 RENDERS THE SUBJECT PROPERTY UNINHABITABLE AS A
104 PRINCIPAL RESIDENCE.

Bill Summary

(Note: This summary applies to this bill as introduced and does not reflect any amendments that may be subsequently adopted. If this bill passes third reading in the house of introduction, a bill summary that applies to the reengrossed version of this bill will be available at <http://www.leg.state.co.us/billsummaries>.)

Wildfire Matters Review Committee. Under current law, the borrower in a reverse mortgage transaction is relieved of the obligation to occupy the subject property as a principal residence if the borrower is

Shading denotes HOUSE amendment. Double underlining denotes SENATE amendment.
Capital letters indicate new material to be added to existing statute.
Dashes through the words indicate deletions from existing statute.

temporarily absent for up to 60 days or, if the property is adequately secured, up to one year. The bill adds a third exception to the principal-residence requirement to cover situations in which a natural disaster or other serious incident beyond the borrower's control renders the property uninhabitable. The maximum time allowable for a temporary absence under these circumstances is 5 years.

1 *Be it enacted by the General Assembly of the State of Colorado:*

2 **SECTION 1.** In Colorado Revised Statutes, 11-38-107, **add**
3 (2)(b.5) as follows:

4 **11-38-107. Repayment.** (2) The repayment requirement
5 described in subsection (1) of this section is also expressly subject to the
6 following additional conditions:

7 (b.5) A TEMPORARY ABSENCE FROM THE HOME EXCEEDING SIXTY
8 CONSECUTIVE DAYS BUT NOT EXCEEDING FIVE YEARS, WHICH ABSENCE
9 RESULTS FROM A NATURAL DISASTER OR OTHER FORCE MAJEURE
10 RENDERING THE HOME TEMPORARILY UNINHABITABLE, DOES NOT CAUSE
11 THE REVERSE MORTGAGE TO BECOME DUE AND PAYABLE.

12 **SECTION 2. Applicability.** This act applies to reverse mortgages
13 for a home rendered uninhabitable by a natural disaster or other force
14 majeure that occurs on or after the effective date of this act.

15 **SECTION 3. Safety clause.** The general assembly hereby finds,
16 determines, and declares that this act is necessary for the immediate
17 preservation of the public peace, health, and safety.

**First Regular Session
Seventy-first General Assembly
STATE OF COLORADO**

RESOLUTION A

LLS NO. R17-0114.01 Ashley Zimmerman x2291

SENATE Joint Resolution

SENATE SPONSORSHIP

Baumgardner and Merrifield, Cooke, Jones

HOUSE SPONSORSHIP

Singer and Thurlow, Hamner

Senate Committees

House Committees

COMMITTEE JOINT RESOLUTION

101 **CONCERNING THE COLORADO GENERAL ASSEMBLY'S SUPPORT FOR**
102 **THE CONTINUED RESEARCH, DEVELOPMENT, AND APPLICATION**
103 **OF BIOCHAR FROM OUR FORESTS.**

1 WHEREAS, Biochar is a solid material obtained when organic
2 matter is heated in an oxygen-limited environment; and

3 WHEREAS, Biochar production is modeled after "terra preta",
4 Portuguese for "dark earth", a process used thousands of years ago in
5 Brazil's Amazon basin, where indigenous people created islands of rich,
6 fertile soils that continue to hold carbon today and remain nutrient rich;
7 and

8 WHEREAS, Biochar has been used as a reforestation tool by the
9 United States Forest Service (USFS) in our national forests; and

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1 WHEREAS, Treatments to thin forests, decrease fuel loads, and
2 clear out insect- and disease-killed trees can be expensive because there
3 are currently few markets for small roundwood and virtually no markets
4 for residual material, such as tops and limbs, and many timber sales are
5 judged by potential bidders to be economically infeasible; and

6 WHEREAS, Biochar provides a potential economic use of woody
7 biomass that can help offset fuel reduction project costs, which means
8 more acres can be treated; and

9 WHEREAS, Removing excess forest biomass for use as a resource
10 for biochar can minimize the number and severity of wildfires and
11 thereby save both dollars and lives; and

12 WHEREAS, Biochar stores carbon in the ground that may
13 otherwise be released into the atmosphere from wildfires; and

14 WHEREAS, Biochar can be produced from whole trees, such as
15 the lodgepole and ponderosa pine found in Colorado forests, and can also
16 be made from residual materials and insect- and disease-killed trees; and

17 WHEREAS, The USFS has been researching the use of biochar as
18 a soil amendment, including ongoing research on soil test plots by station
19 scientists at the Rocky Mountain Research Station in Fort Collins,
20 Colorado, and has found that several potential applications and markets
21 exist for biochar, including use for reforestation treatments; and

22 WHEREAS, The Agricultural Research Service of the United
23 States Department of Agriculture (ARS) also conducts research on the use
24 and application of biochar as a soil amendment; and

25 WHEREAS, USFS studies have found that biochar in soils attracts
26 and holds water, increases ion exchange capacity, makes soil more
27 porous, and enhances absorption of organic compounds, all of which
28 enhance soil productivity and facilitate plant growth to reduce erosion and
29 restore compacted, oxidized, and degraded soils, such as those that exist
30 after devastating wildfires; and

31 WHEREAS, The ARS has found that the addition of biochar to
32 soils may increase soil carbon, soil nutrient content, and plant
33 productivity and that the quality of biochar is important to achieve these

1 results; and

2 WHEREAS, Biochar also can be used in filters, such as those used
3 in water treatment facilities, and well-established markets exist for
4 activated carbon; and

5 WHEREAS, Energy, in electrical, thermal, and liquid fuel forms,
6 can be an important co-product of biochar production from forest
7 residues; and

8 WHEREAS, Biochar as a raw material can be further processed
9 into an engineered biocarbon that will be valuable in production
10 agriculture and forestry as well as in turf, nursery, and environmental
11 applications; and

12 WHEREAS, Biochar can reduce the cost and increase the
13 nutritional value of food; and

14 WHEREAS, Colorado is a national leader in the advancement of
15 biochar research and development; and

16 WHEREAS, Biochar can increase the economic value and
17 productivity of Colorado soils and benefit Colorado farmers by reducing
18 expenditures for fertilizer and irrigation; and

19 WHEREAS, Biochar can enhance rural economic development
20 and employment, in both the production and placement of biochar (i.e.
21 "Forests to Farms" programs); now, therefore,

22 *Be It Resolved by the Senate of the Seventy-first General Assembly*
23 *of the State of Colorado, the House of Representatives concurring herein:*

24 That we, the members of the Colorado general assembly, support
25 the United States Forest Service, the Agricultural Research Service of the
26 United States Department of Agriculture, and other research into the
27 removal of fuel loads on the forest floor for the creation of biochar and
28 the use of biochar as a soil amendment for reforestation, the continued
29 creation of biochar from woody biomass found in our forests, and the use
30 of biochar as a soil amendment within our forests and farms, towns, and
31 cities to assist with reforestation treatments.

32 *Be It Further Resolved, That copies of this Joint Resolution be sent*

1 to Governor John Hickenlooper, the Rocky Mountain Research Station
2 of the United States Forest Service, State Forester Mike Lester, Action
3 Region 2 Regional Forester Jacque Buchanan, United States Forest
4 Service Deputy Chief for State and Private Forestry Jim Hubbard,
5 Commissioner of Agriculture Don Brown, Agricultural Research Service
6 Plains Area Director Laurence Chandler, and each member of Colorado's
7 Congressional Delegation.

**First Regular Session
Seventy-first General Assembly
STATE OF COLORADO**

MEMORIAL A

LLS NO. R17-0115.01 Cara Meeker x2044

SENATE Joint Memorial

SENATE SPONSORSHIP

Jones and Merrifield,

HOUSE SPONSORSHIP

Hamner and Thurlow,

Senate Committees

House Committees

SENATE JOINT MEMORIAL

101 **CONCERNING THE NEED FOR CONGRESS TO FUND CATASTROPHIC**
102 **WILDFIRE RESPONSE COSTS OUTSIDE OF FEDERAL FOREST**
103 **MANAGEMENT AGENCIES' NORMAL BUDGETS.**

1 WHEREAS, There are about 24 million acres of forests and
2 woodlands in Colorado, of which more than two-thirds are managed by
3 the federal government; and

4 WHEREAS, Colorado's forests are increasingly susceptible to
5 forest fires, with an average of about 40,000 acres burned per year from
6 2004 through 2007 but an average of more than 140,000 acres burned per
7 year from 2008 through 2014; and

8 WHEREAS, According to the Insurance Information Institute,
9 Colorado has the second highest percentage of households that are at high

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1 or extreme risk from wildfires of any state in the nation; and

2 WHEREAS, Under current federal law, money that was originally
3 budgeted to mitigate fire risk, protect and restore watersheds, increase
4 forest health, promote recreational opportunities, and conduct necessary
5 forest planning is diverted to fight fires once the amount budgeted for fire
6 fighting has been depleted; and

7 WHEREAS, The United States Forest Service spent only 16% of
8 its annual budget on fire suppression and response in 1995, but recently
9 announced that in 2015, for the first time, it will spend more than half its
10 budget to fight wildfires, and by 2025 it expects to spend 67% of its
11 budget on that task; and

12 WHEREAS, A 2013 study by Headwaters Economics showed that
13 in the 1990s, average federal spending to suppress wildfires was less than
14 \$1 billion annually, but, since 2002, federal spending has risen to over \$3
15 billion annually and costs are still rising; and

16 WHEREAS, Paying for catastrophic wildfire response should not
17 come at the expense of programs that reduce the risk of wildfires because
18 doing so plainly creates a feedback loop that increases the frequency and
19 severity of catastrophic wildfires; and

20 WHEREAS, Congress is currently considering several measures
21 that would create alternative ways to pay for catastrophic wildfire
22 response costs; now, therefore,

23 *Be It Resolved by the Senate of the Seventy-first General Assembly*
24 *of the State of Colorado, the House concurring herein:*

25 That Congress should enact laws necessary to protect federal land
26 management agencies' ability to mitigate the risk of catastrophic wildfires
27 and manage the lands within their jurisdiction by funding catastrophic
28 wildfire response in a manner analogous to that used for natural disasters.

29 *Be It Further Resolved*, That copies of this Joint Memorial be sent
30 to Governor John Hickenlooper, each member of Colorado's
31 congressional delegation, the Western Governor's Association, Secretary
32 of Agriculture Tom Vilsack, and Secretary of the Interior Sally Jewell.