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Resilient Leadership:

Tools for Elected Officials & Executive Leaders



COLORADO
Department of Local Affairs

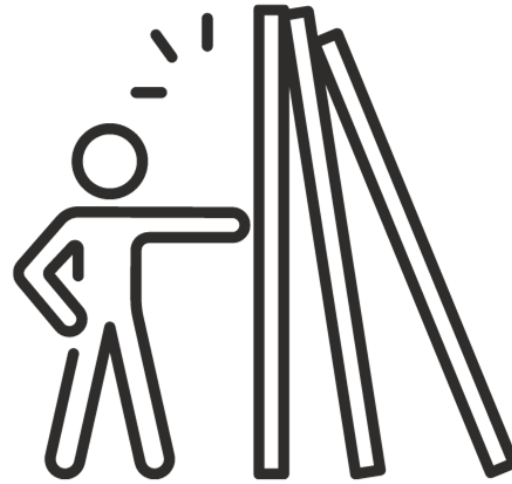


COLORADO COUNTIES, INC.
Educate · Advocate · Empower



COLORADO
MUNICIPAL
LEAGUE

Resilient Leadership Series



Welcome

CCI & CML in partnership with the CRO & FEMA are so glad to have you join us for this webinar series



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CO State Resilience & Disaster Preparedness

Why is this important?

- Colorado continues to see impacts from major disasters
 - The largest and most destructive fires in our state's history have happened in the last 2 years alone.
 - Current projects predict this could be another historical year for wildfire destruction - if not the worst yet due to conditions
- Colorado continues to see increased stressors (water impacts, population growth & density, supply chain disruptions, etc)
- Additionally, our changing environment is conducive to increased frequency and intensity of natural disasters



You don't have to go through recovery alone.

- Successful recovery is a proactive process.
- The Role of the Colorado Resiliency Office (CRO)
 - Support long-term community recovery efforts & resource navigation after a disaster
 - Institutionalize resilience - CO Resiliency Framework
 - Housed in DOLA
 - Partner with Regional Managers and more to provide support to local governments
- Resiliency Tools
 - Pre-Disaster and Resiliency Tools
 - Peer to Peer Support
 - Planning for Hazards: Land Use Solutions for CO
 - Recovery Toolkit





Mike Willis, CO OEM Director

**Jim Raymond, State Recovery
Officer**



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The Role of DHSEM in Preparedness

Mike Willis, State OEM Director

*Colorado Department of Public Safety
Division of Homeland Security Management*

- Plans - Hazard Mitigation Plan, State Emergency Operations Plan, CEPA
- Roles - Field Operations, Mitigation, Recovery, Integrated Preparedness, Response, Plans
- Resources and tools - CEPA, POETE, Elected officials guide, State/FEMA Joint Field Office



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**Division of Homeland Security
& Emergency Management**

Department of Public Safety

The Role of DHSEM in Recovery

*Mike Willis, State OEM Director
Jim Raymond, State Recovery Officer*

Colorado Dept. of Public Safety / DHSEM

Plans - Hazard Mitigation Plan, State Emergency Operations Plan, CEPA

- Damage assessments, Coordination with FEMA programs, State department coordination, authorities, Unified Coordination Group support to the Governor's Office

State Emergency Operations Center

- Since 2018 managed 30 State Emergencies + numerous extended emergencies
- Set conditions for recovery

State Recovery Task Force

- Organized by Recovery Support Function (RSF)



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**Division of Homeland Security
& Emergency Management**

Department of Public Safety



Lori Hodges, Larimer County OEM Director



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Lessons in Recovery

Lori R. Hodges

Director of Emergency
Management

Larimer County

Top Five Recommendations

Establish legal basis for emergency management

Clear lines of authority

Agreements between jurisdictions

Disaster Policy with emergency policy changes

Procurement Rules



What can we do?

Establishing the Legal Basis for Emergency Management

Clear Lines of Authority



Disaster Policy

- Probably the best thing you can do for your jurisdiction.
- Outlines any deviation from day-to-day policies that might be needed for a disaster
- Increase Purchase Thresholds
- Authorities outside of normal operations
- Payment to employees for deployments or overtime policy changes



Agreements & Contracts

Agreements

- Sharing and Ordering Resources
- EOC Authorities
- Sharing Personnel

Contracts

- Zero dollar on-call contracts
 - Debris Operations
 - Overall Recovery

Procurement Rules

- Multiple requirements for various federal programs



Dale Case, Boulder County



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Resilient Leadership Webinar - Disaster Preparedness

June 8, 2022

A few disasters and their impact on planning and land use in Boulder County: program, policies and dreams.

Dale Case, AICP

dcase@bouldercounty.org

Community Planning & Permitting

Boulder County



“Floods are acts of Nature; but flood losses are largely acts of man.”

-- Dr. Gilbert White



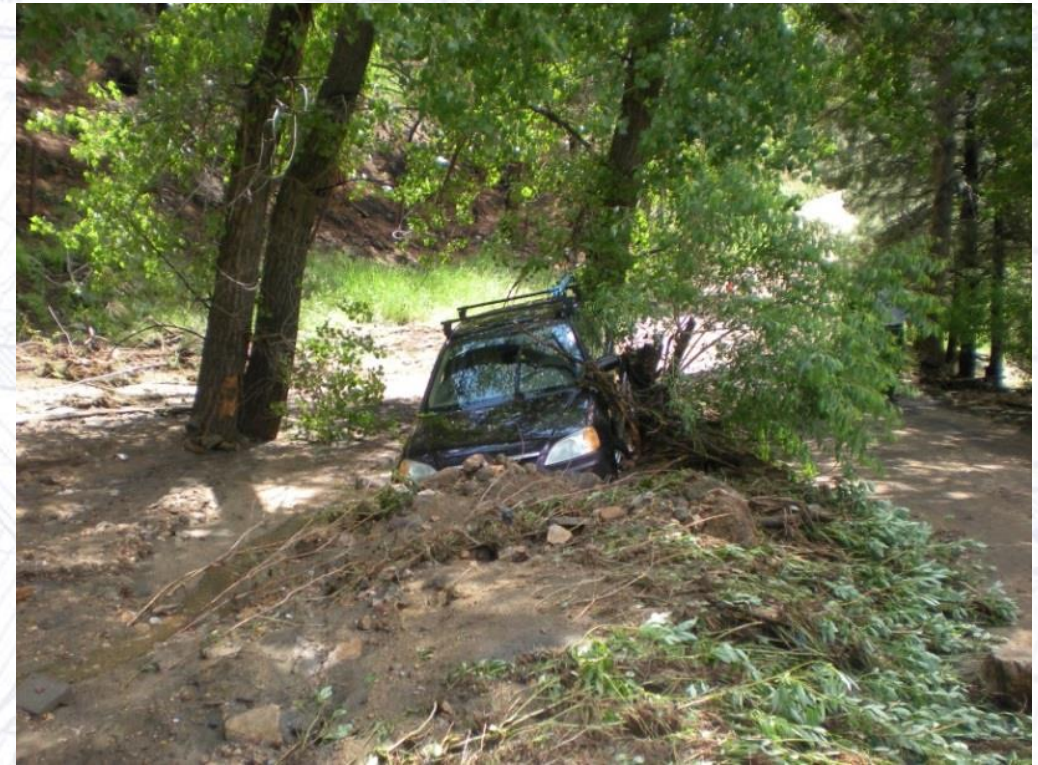
The principal waterway in Boulder is Boulder Creek and its principal function, from which there is no escaping, is to carry off the storm-water which runs into it from the territory which it drains. If, lulled by the security of a few seasons of small storms, the community permits the channel to be encroached upon, it will inevitably pay the price in destructive floods. Again and again, this little piece of history has repeated itself on stream after stream, in town after town.



Frederick Law Olmstead
Harvard Regional Planner in
The Improvement of Boulder,
Colorado, 1910

Boulder County





Boulder County



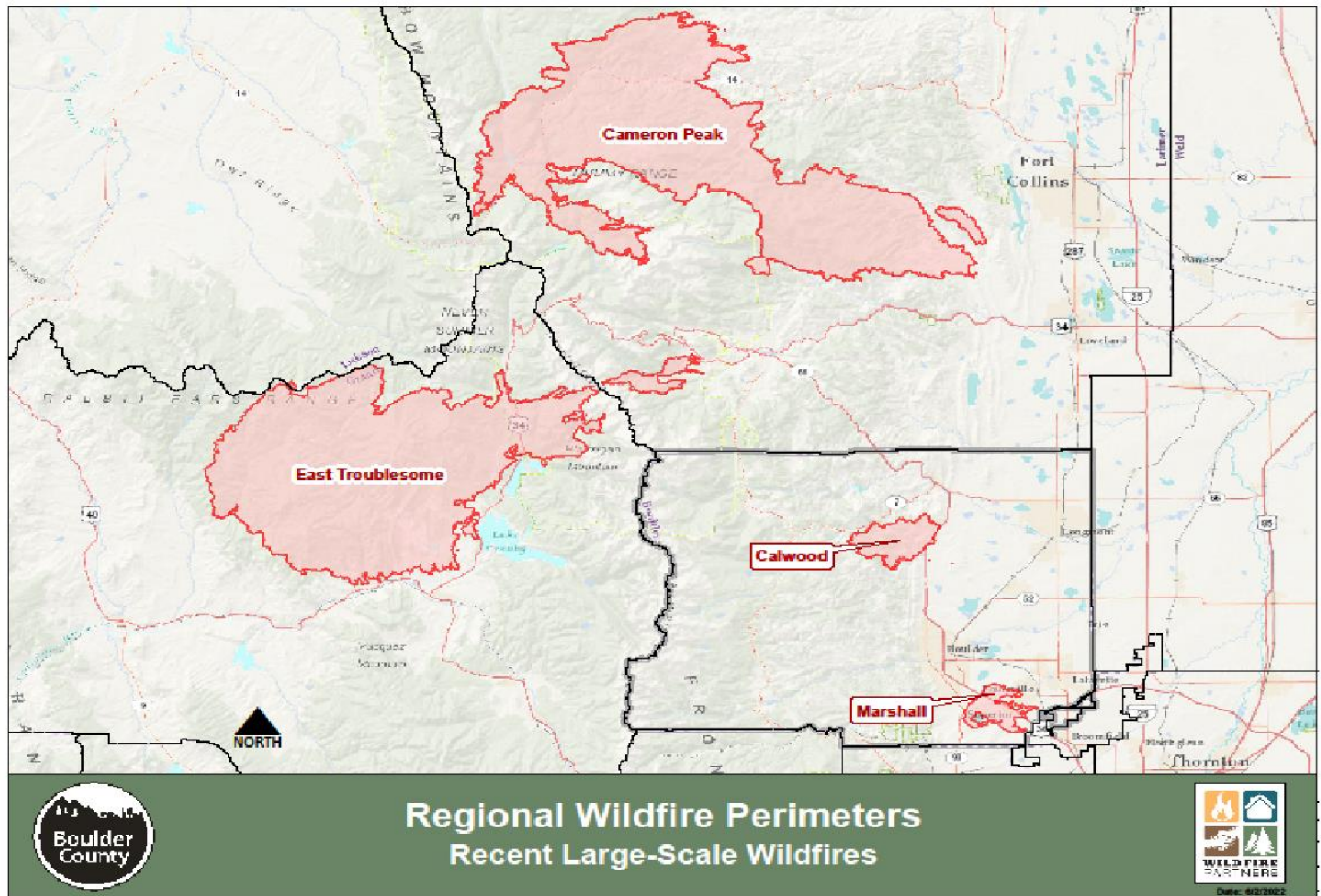
“Bought home eight years ago...Looking back now Boulder County should have never let anyone build there.”

Phil Gatt testimony
to Boulder County
Planning
Commission
10/16/2013



Boulder County





Boulder County



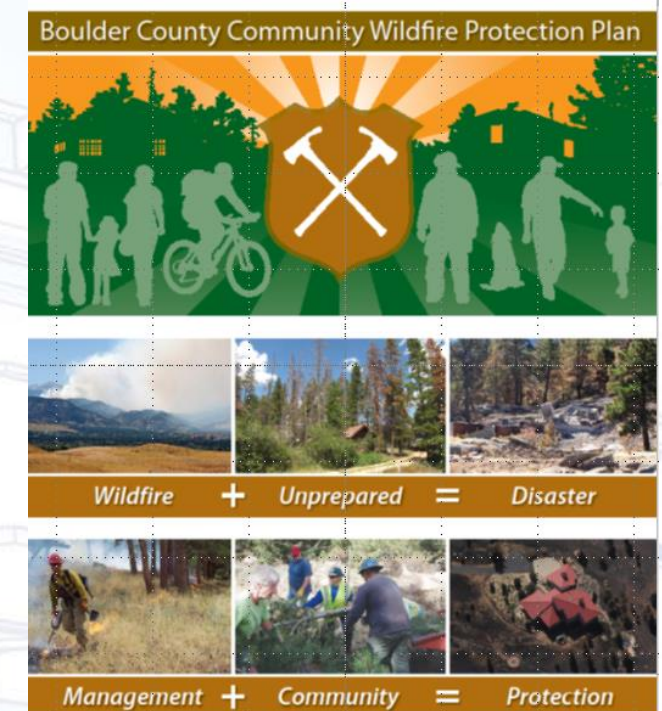
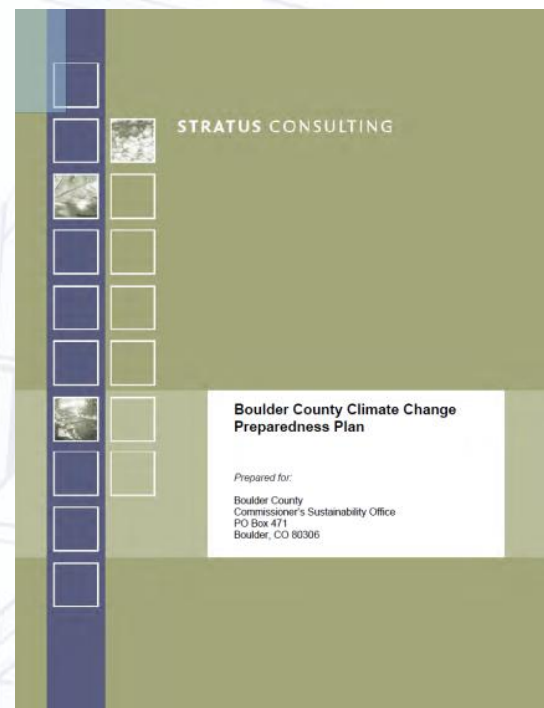
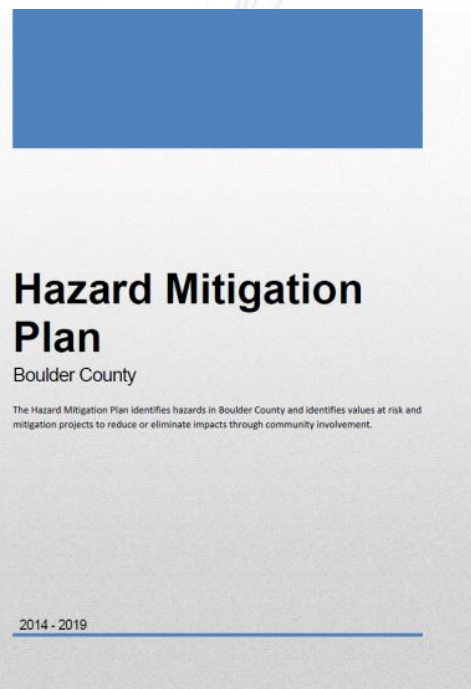
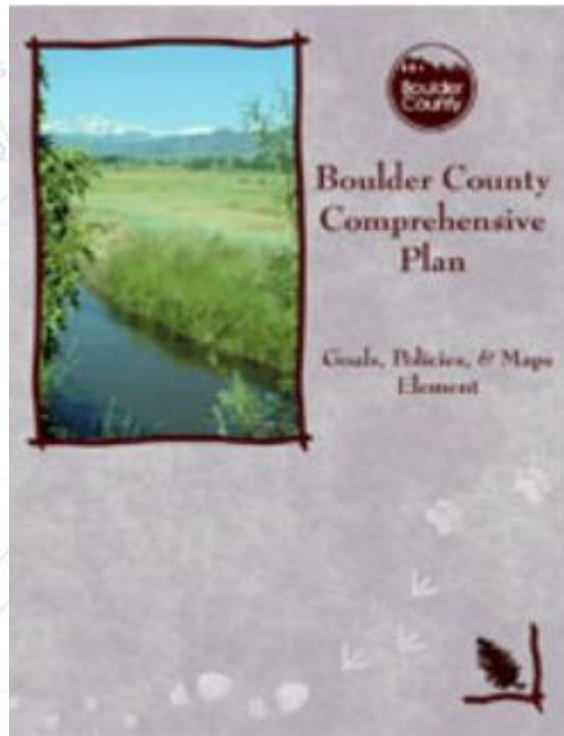
Utilize Planning to.....

- 1. Avoid**
- 2. Mitigate and protect**
- 3. Prepare/train for response and recovery**
- 4. Form relationships and build understanding**

Boulder County

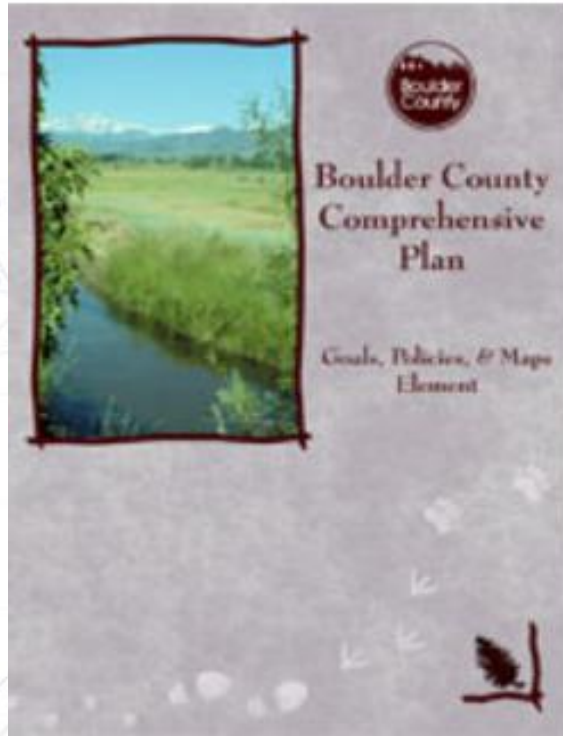


It takes coordination



Boulder County



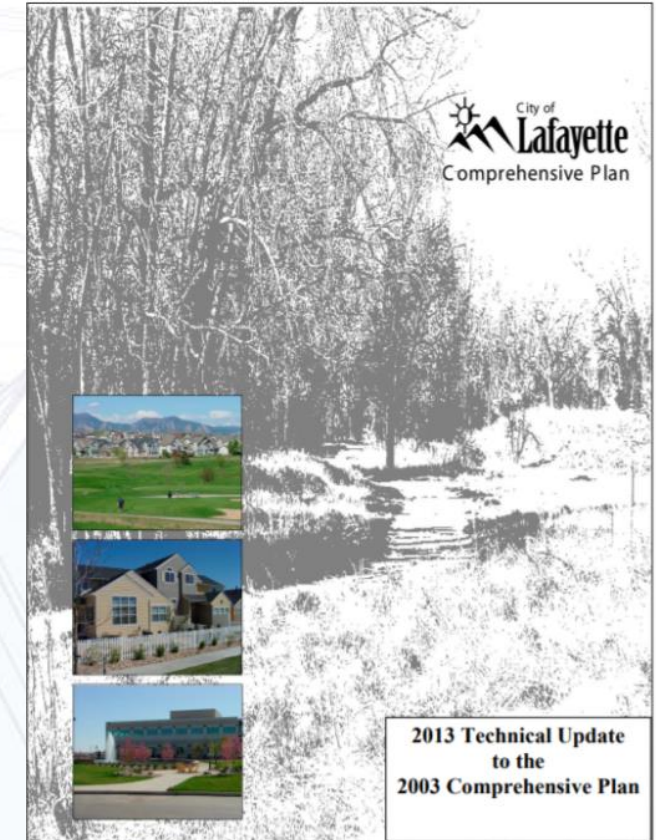


Hazard Mitigation Plan

Boulder County

The Hazard Mitigation Plan identifies hazards in Boulder County and identifies values at risk and mitigation projects to reduce or eliminate impacts through community involvement.

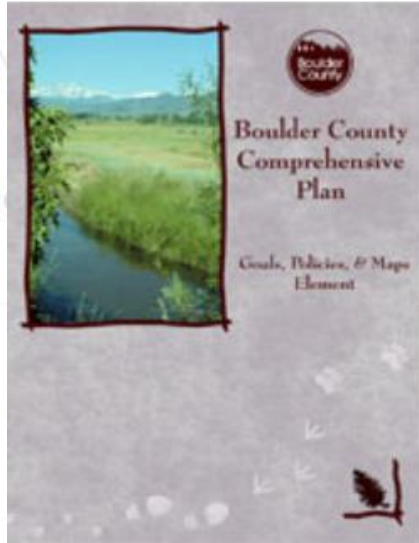
2014 - 2019



Boulder County



Boulder County Comprehensive Plan



Goals – Natural Hazards

L.1 Inappropriate development in natural hazard areas should be reduced as much as possible or eliminated in order to minimize potential harm to life, health and property.



L.2 Efforts to mitigate existing areas at risk to the impacts of natural hazards and disasters should be made to minimize the potential for harm to life, health, and property.

Boulder County



BCCP – A couple of general policies

NH 1.03 The county should ensure to the extent possible that land use activities do not aggravate, accelerate, or increase the level of risk from natural hazards.

NH 1.04 The level of risk from natural hazards should be reduced through positive county action such as guiding development away from areas prone to natural disturbances, mitigating existing development from hazards, and considering the impact on ability to provide emergency services.



Plans – Hazard Specific Land Use Policies

- Erosion
- Flooding
- Wildfire
- Radiation
- Seismicity
- Extreme Weather Conditions

Erosion

- NH 3.01 Erosion from development and other land use activities should be minimized, and disturbed or exposed areas should be promptly restored to a stable, natural, and/or vegetated condition using native plants and natural materials.
- NH 3.02 Drainage from development or any alterations to historic drainage patterns shall not increase erosion either on site or on adjacent properties.

Flooding

- NH 4.01 The county should strongly discourage and strictly control land use development from locating in designated floodplains, as identified in the *Boulder County Zoning Maps*.
- NH 4.02 The county should strongly discourage and strictly control land use development from locating in areas below dams, spillways, and levees that would require the State Engineer to upgrade the classification of these structures.

- NH 4.05 The county should continue to develop and refine the county-wide Pre-Disaster Flood Mitigation Plan.

- NH 4.06 The county will continue to participate and implement the Community Rating System program as part of the National Flood Insurance Program (NFIP).

Wildfire

- NH 5.01 The county recognizes the wildland urban interface as an area particularly at risk to wildland fires or wildfires.
- NH 5.02 Fire should be recognized as a natural and/or human-caused occurrence with certain benefits to the ecosystem. The county should strive towards balancing the natural processes of the ecosystem with development concerns so that residents may co-exist in a fire-dependent ecosystem.
- NH 5.03 Development/site plan reviews in areas identified to be at risk of wildfires should address site location, building construction and design, landscaping/defensible space/fuel management, access and water availability.

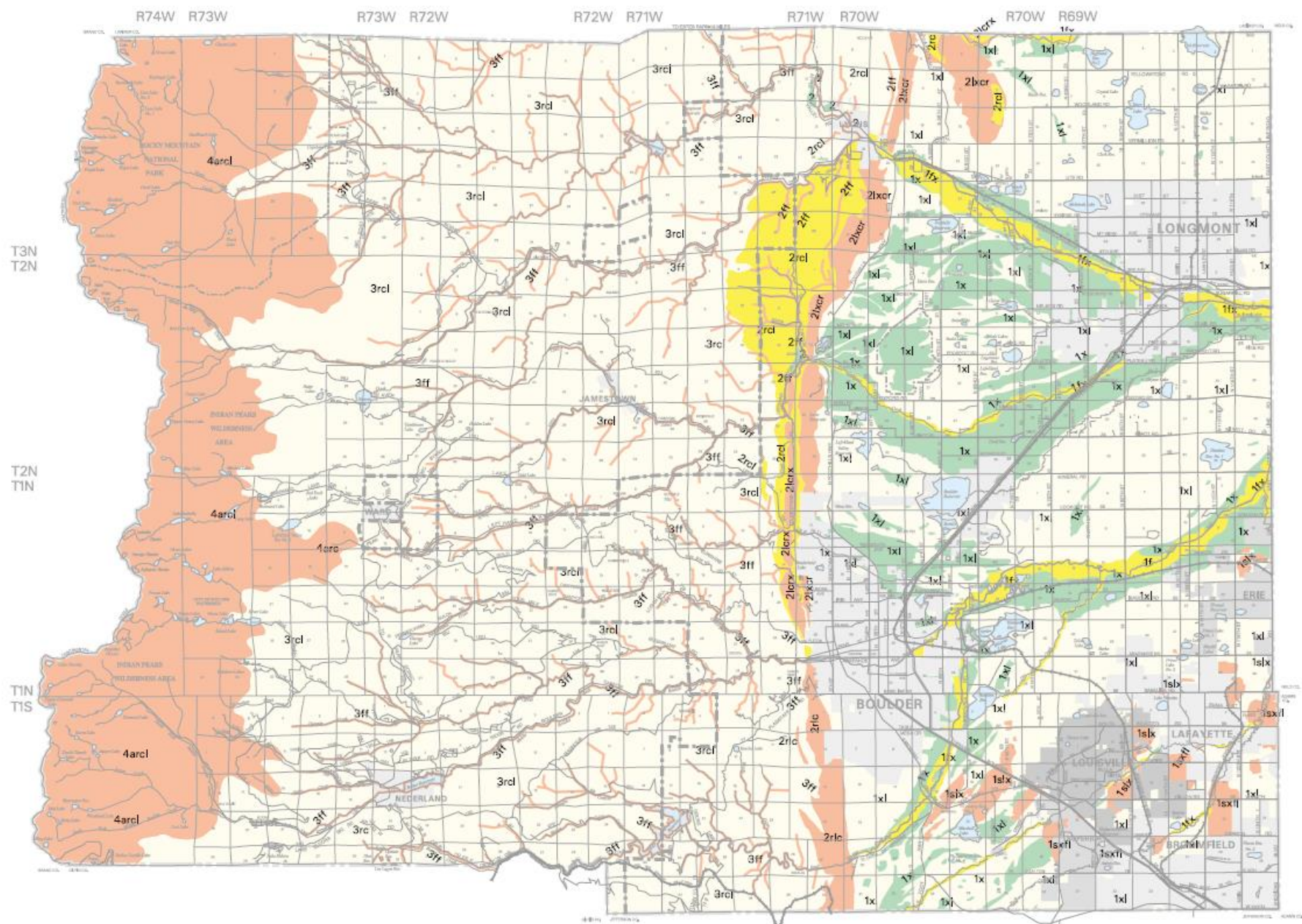
County policies & regulations strongly discourage development in designated floodplains.



BCCP Goals – indirect but just as important to outcome.

- Unique or critical environmental resources identified pursuant to Goals B.1, B.3, B.4 and B.5 shall be conserved and preserved in a manner which assures their protection from adverse impacts, with the private sector, non-county agencies and other governmental jurisdictions being encouraged to participate.
- Environmental Conservation Areas (ECAs) should be conserved and preserved in order to perpetuate those species, biological communities, and ecological processes that function over large geographic areas and require a high degree of naturalness.
- Riparian ecosystems, which are important plant communities, wildlife habitat and movement corridors, shall be protected.
- Future urban development should be located within or adjacent to existing urban areas in order to eliminate sprawl and strip development, to assure the provision of adequate urban services, to preserve agriculture, forestry and open space land uses, and to maximize the utility of funds invested in public facilities and services.





Geologic Hazard & Constraint Areas Geology

Legend

RELATIVE GEOTECHNICAL RATING: GEOLOGIC HAZARD AREAS

- Major**
Extensive Problems
High Risk
- Moderate**
Significant Problems
Provisional Risk

GEOLOGIC CONSTRAINT AREAS

- Moderate**
Significant Problems
Provisional Risk
- Minor**
Few Problems
Nominal Risk
- Incorporated Areas**
(As of April 20, 1999)

MAP SYMBOL DEFINITIONS

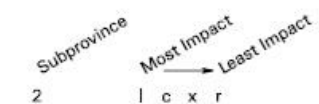
First Number Indicates Subprovince

- 1 Piedmont
- 2 Foothills
- 3 Montane
- 4 Alpine

Subsequent Placed Letters Indicate Geologic Hazard or Constraint In Order of Impact
(See Example Given)

- a Snow Avalanche
- c Soil Creep
- f Flooding
- ff Flash Flooding Corridors and Associated alluvial (Debris) Fans
- l Landslides, Mudslides, Mudfalls, Debris Fans
- r Rockfalls, Rock Avalanches
- s Subsidence (Abandoned Coal Mines)
- x Expansive Soil or Claystone

EXAMPLE:



Notes

Refer to the Colorado Inactive Mine Reclamation Plan completed in February, 1982 by the State of Colorado Department of Natural Resources, Mined Land Reclamation Division, for additional information on sites of environmental hazards resulting from past metal and coal mining activity. (Planning Commission - November 10, 1982; Board of County Commissioners - December 20, 1982).

Map scale and reproduction method (1:1) provided in physical features and boundary locations.
PRINTED - APRIL 22, 1999

Revisions

Adopted - Planning Commission - March 22, 1978

Approved - County Commissioners - April 6, 1978



**COMPREHENSIVE
PLAN MAP**



Geologic Hazard & Constraint Areas

Boulder County



Tools and Integration

- Plans - Comprehensive Plan, Hazard Mitigation Plan, Watershed Master Plans, CIP, etc.....
- Regulations – Applies to new and upgrades/changes to existing
 - Zoning
 - Subdivision
 - Floodplain
 - Building Code
- Programmatic – Can apply retrospectively to existing development
 - **Wildfire Partners**
 - BOCO Strong
 - **Acquisition Program – Room For the River**
 - Housing
 - Data – Floodplain, debris flow, erosion hazard area
 - Form relationships/ identify grants – State Agencies, FEMA, CDBG-DR, etc.



Plan Implementation – **Regulations** (AKA Hammer)



- Flood Plain Regulations and remapping
- Site Plan Review
- Building Code
- Transfer of Development Credits
- “Article 19” - Post Disaster Regulations



Specific Code Criteria-

“The use will not result in unreasonable risk of harm to people or property – both onsite and in the surrounding area – from natural hazards.

Development or activity associated with the use must avoid natural hazards, including those on the subject property and those originating off-site with a reasonable likelihood of affecting the subject property.....



Site Plan Review



1993 – Site Plan Review created. Review & approval of wildfire mitigation plans & inspection of defensible space became part of daily plan review and inspection routine.

Pre Disaster for Post Disaster/ Plan your disaster/ be ready

Article 19



■ ■ ■ Procedures Following Disasters

<https://assets.bouldercounty.org/wp-content/uploads/2017/02/land-use-code-article-19.pdf>

- Moratorium – time to make decisions/enact specific rebuilding regulations
- Temporary Emergency Uses – debris yards, temporary housing, critical response facilities
- Temporary Emergency Repairs temporary emergency repairs” includes temporary roof repairs to prevent further water damage, temporary stabilization to shore up structures, temporary stabilization involving earthwork to avoid imminent collapse of structures or property, and temporary restoration of public recreational facilities such as trails and trailhead parking areas.
- Deconstruction/Demolition – may take immediate action but still need a permit
- Hazard Mitigation Review

Boulder County



Building Code -

1989 – Amended building code to require Class A roofs in Fire Zone 1

2015 – Amended code using portions of the International Wildland-Urban Interface Code (IWUIC), mostly in the area of ignition-resistant construction, without actually adopting the IWUIC- Fire Zone 1

2022 – Amended code to include ignition resistant construction, three feet non-combustible around structures in Fire Zone 2 (the plains portion of unincorporated county)

Long term impacts –

- Green /Sustainable Building Code –
- Impacts of Climate Change
- How to be more resilient



Boulder County





Providing Value to Homeowners

- Comprehensive home assessment
- Customized report & “To Do List”
- Phone Advising
- Financial Assistance
- Transferrable Certificate & Recognition



Boulder County





A Public-Private Partnership

- 40+ organizations
- Individual home certification insurers and realtors need
- Local, state and federal government funding
- Spreading in Colorado



Boulder County





News & Information

MAY 23, 2022

Contact [Jim Webster](#), Wildfire Partners,
Community Planning & Permitting
720-564-2600

Wildfire Partners launches pilot project for eastern Boulder County

Boulder County's wildfire mitigation and homeowner preparedness program expands to the plains

Boulder County, Colo. - Boulder County is launching a new pilot project to help residents in eastern unincorporated Boulder County prepare for wildfire.

The western United States has entered into a new era of climate-driven wildfires. Following the Marshall Fire, the most destructive in Colorado history, wildfire mitigation and homeowner preparedness have become important priorities for many individuals and communities. Homeowners on the plains, not just those in the foothills and mountains, should prepare for wildfires.

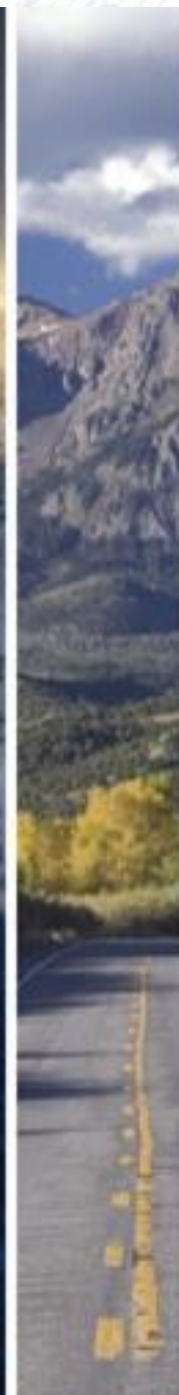
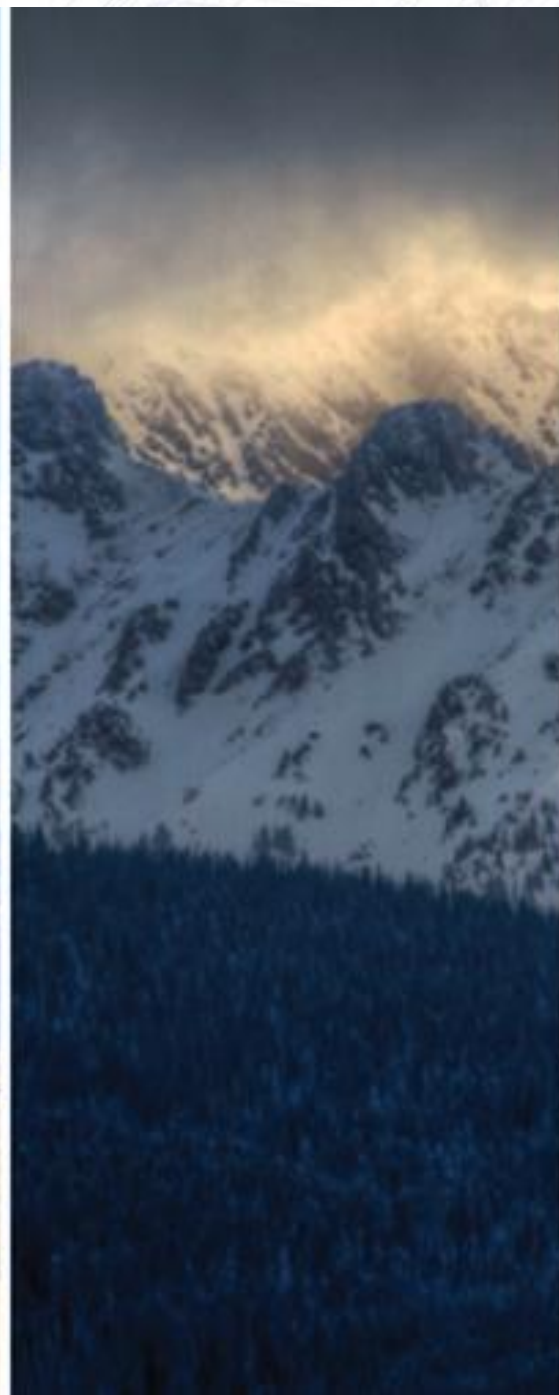
[Wildfire Partners](#), the county's wildfire mitigation and homeowner preparedness program, is currently assisting 3,000 residents in western Boulder County. With the new Wildfire Partners Plains Pilot Project, residents in eastern Boulder County will also be able to receive critical technical assistance.

"Boulder County has been actively engaged in wildfire mitigation efforts since the 1989 Black Tiger Fire," says Jim Webster, Boulder County's Wildfire Partners Program Coordinator. "However, our efforts have been focused in the foothills and mountains. The Wildfire Partners Plains Pilot Project allows us to assess the interest in mitigation among residents on the plains and adjust our program for new partners. Following the Marshall Fire, we think there is a large demand from plains homeowners who want to learn how to best prepare for future wildfires."

100 pilot program participants will receive a free, on-site, home assessment with a Wildfire Mitigation Specialist. They will learn how to harden their structures and create defensible space to reduce the ignition potential of their homes. They will receive a customized report that includes a check list of items to mitigate, annotated photos of their vulnerabilities, and important information on wildfire mitigation and preparedness.

Boulder County





PLANNING FOR HAZARDS

Land Use Solutions for Colorado

Boulder County

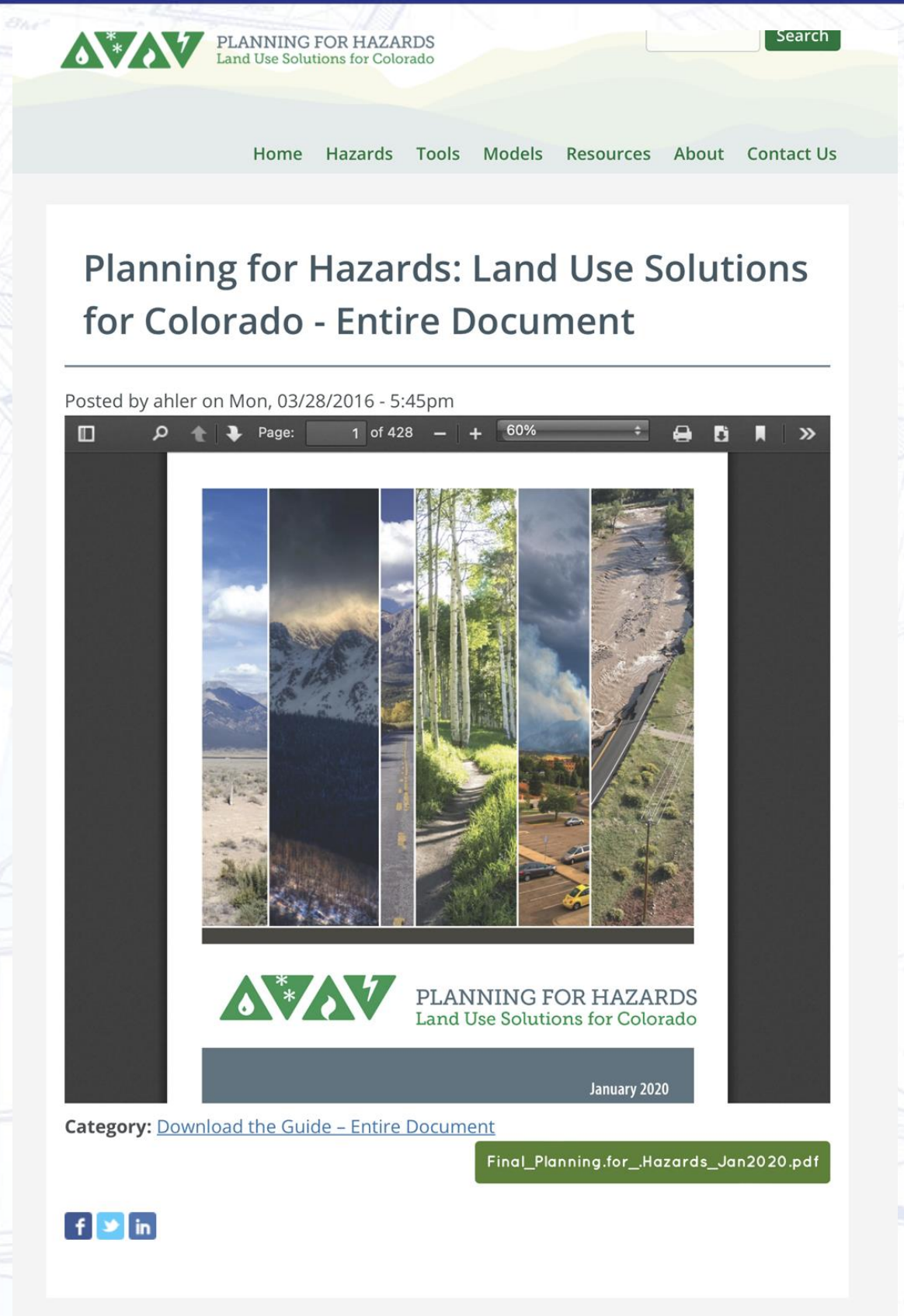


CONTENT:

- Introduction and Summary
- Planning Framework
- Hazard Identification and Risk Assessment
- Planning Tools and Strategies
 - **Model Code Language**
- Moving Forward
- Appendix – Hazards in Colorado

<https://planningforhazards.com/home>

<https://planningforhazards.com/home>



The screenshot shows the website for 'PLANNING FOR HAZARDS Land Use Solutions for Colorado'. The navigation bar includes links for Home, Hazards, Tools, Models, Resources, About, and Contact Us. The main heading is 'Planning for Hazards: Land Use Solutions for Colorado - Entire Document'. Below this, it says 'Posted by ahler on Mon, 03/28/2016 - 5:45pm'. A PDF viewer interface is visible, showing 'Page: 1 of 428' and a zoom level of '60%'. The PDF content features a collage of six images: a desert landscape, a snowy mountain peak, a forest path, a cloudy sky, a residential street with a car, and a road with a landslide. The website logo and name are repeated at the bottom of the PDF preview. A date stamp 'January 2020' is visible. The category is listed as 'Download the Guide - Entire Document', and the file name is 'Final_Planning.for_Hazards_Jan2020.pdf'. Social media icons for Facebook, Twitter, and LinkedIn are at the bottom.

Boulder County



Take aways

- Pre-plan the disaster but expect something new and unexpected –
- Engage before and after –
 - Officials need to know what to expect and not overpromise.
 - You need to know what the public's needs are. Don't assume and don't wait until you have all the answers.... Because you realize you don't even know the questions until you hear from the community.
 - Have your response roles determined and staff trained.
 - Learn from the event – improve/develop process, regulations, and programs.
 - Keep moving forward and learn from mistakes.
 - Rest



With the history of disasters this should all be easy?

Human nature says no...

It's a fantastic place to be in a storm...You hear a sound like castanets— boulders clicking together. They're not pebbles. And there is a scent which is absolutely heavenly, of the crushed chaparral plants. It's so fragrant and beautiful it's eerie to have it associated with something so terrifying. And, God knows it is terrifying." -- so why do you live here?

"Freedom"

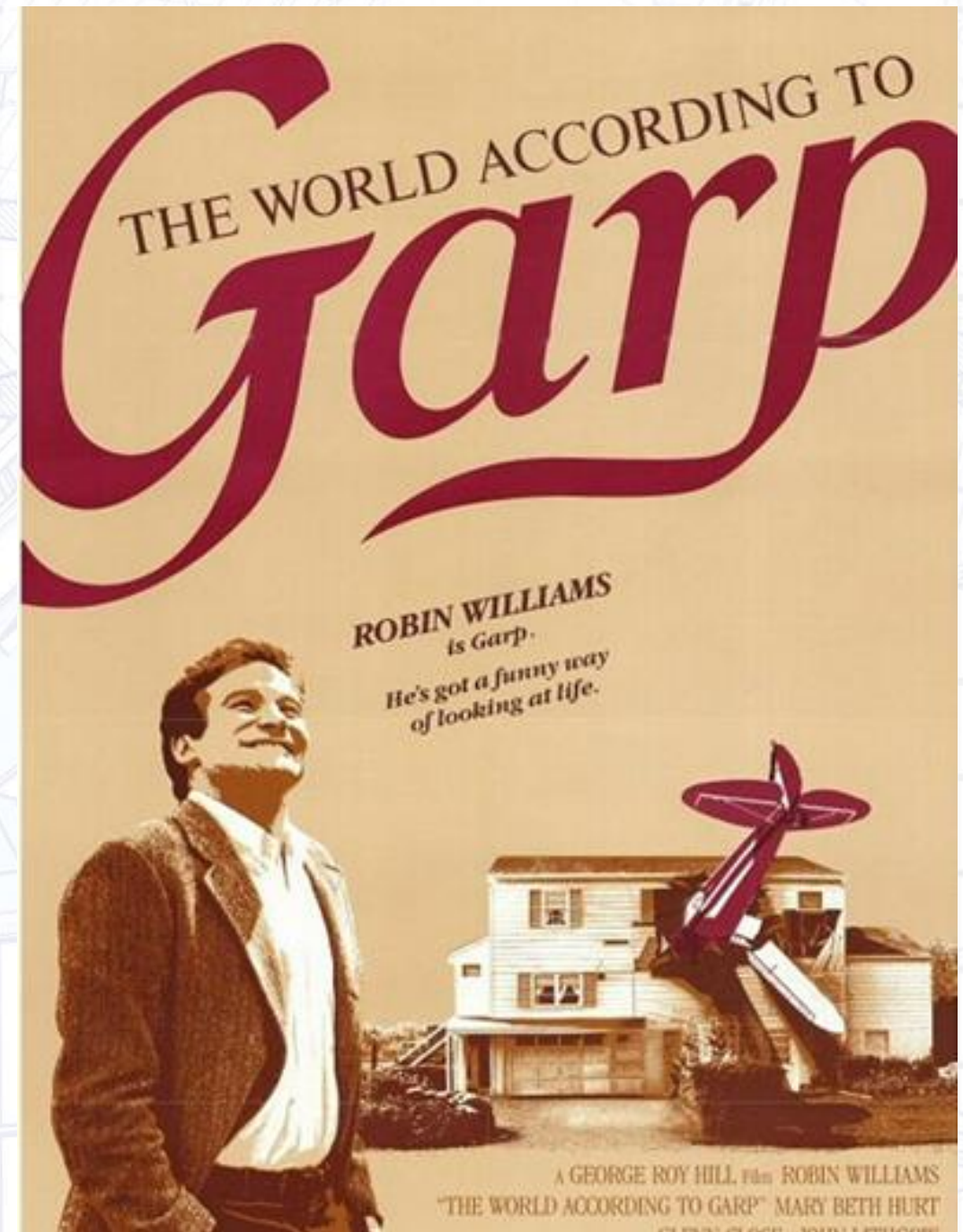
p. 237 The Control of Nature by John McPhee, 1989

Boulder County



Garp Mentality

“will take it.... The odds of this happening again are astronomical. She’s been pre-disastered, we will be safe here”



Boulder County





Question & Answer



COLORADO
Department of Local Affairs

Resilient Leadership Series

Thank you!

Thank you for joining us! Hope to see you on June 15th for the second part of this series!

Today's Speakers:

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