

# Climate Change and the Economic and Health Impacts of Wildfire in New Mexico

Presentation to the  
Water and Natural Resources  
Committee, July 22, 2024

Laura McCarthy  
State Forester  
Forestry Division Director  
Energy, Minerals and Natural Resources  
Department



# New Mexico Wildfire Statistics

Fiscal Year	# Wildfires (all lands)	Acres of State & Private Burned	All Acres Burned	State Fire Suppression Expenditures	Watershed Mitigation Expenditures (Federal \$)	Watershed Mitigation Expenditures (State \$)
2020	633	46,187	91,367	\$6,186,116	\$2,043,283	\$1,801,959
2021	560	15,654	160,140	\$10,670,679	\$1,864,643	\$5,326,008
2022	532	377,089	930,543	\$46,098,334	\$2,529,177	\$3,784,714
2023	510	25,093	91,077	\$8,486,071	\$3,362,857	\$5,313,224
2024	620	26,751	79,658	\$22,934,893	\$3,253,944	\$8,850,802

- All Acres Burned included state, private, federal, tribal and municipal lands.
- State fire suppression does not include pre-positioning of resources and state-level coordination resources which average \$3-5 million annually.

903 total structures lost in 2022 Hermits Peak Calf Canyon Fire (630-800 homes)  
 1,400 total structures lost in 2024 South Fork Fire (730 homes); 242 more homes destroyed by post-fire flooding

# New Mexico Wildfire Fund

Pew Charitable Trust study of state readiness to address wildfire cost escalation. They found that increased spending on suppression threatens fiscal stability and impedes cost-saving mitigation efforts.

## Key issues in New Mexico

- The total cost of wildfire suppression is not included in the annual appropriations process.
- Our current process does not proactively plan for wildfire suppression costs.
- The current process is administratively inefficient.

## Creation of a wildfire-specific emergency fund would:

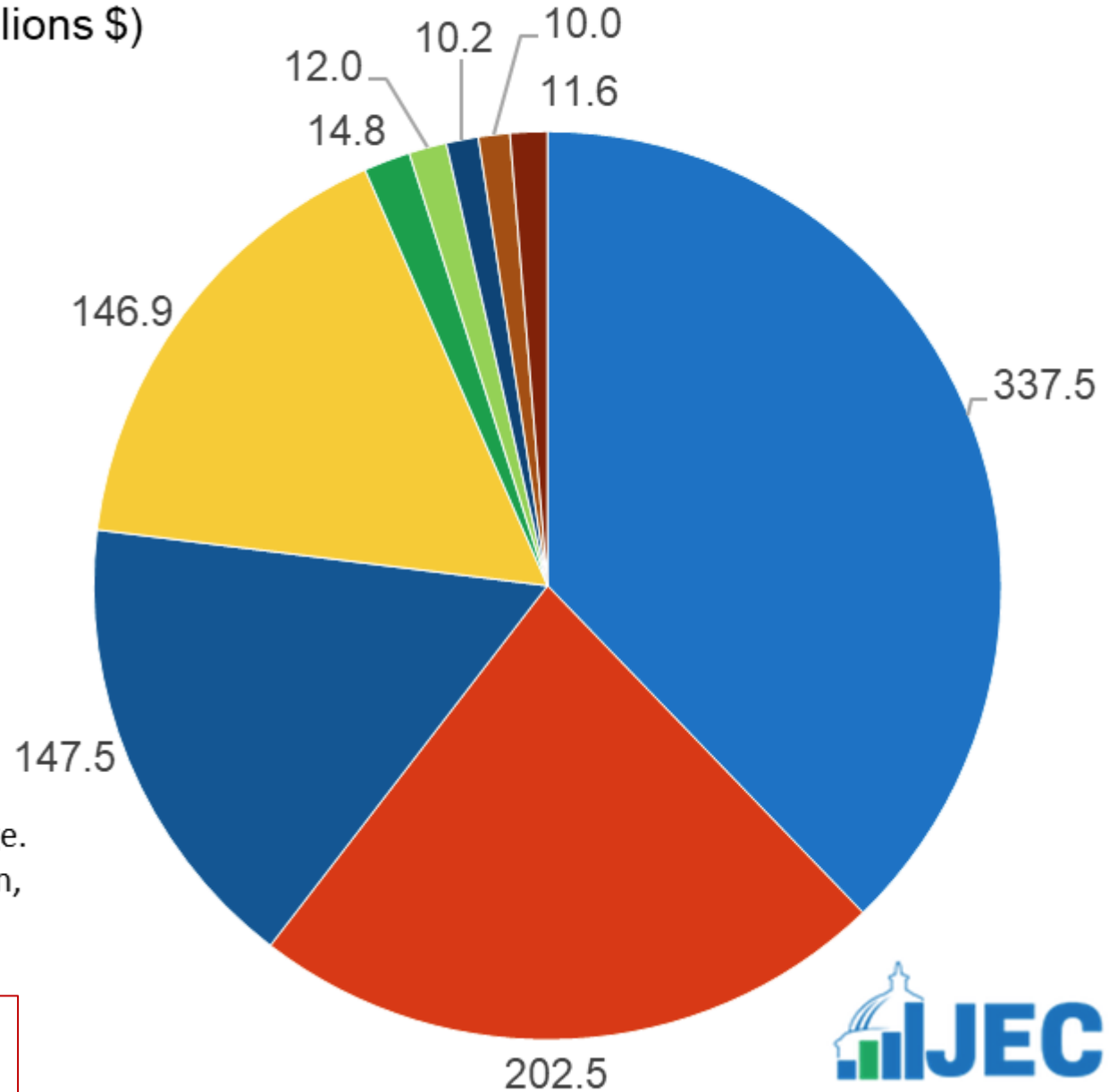
- Reduce reliance on funding through Executive Orders.
- Ensure predictable, immediate availability funding for wildfire suppression when needed.
- Reduce the year-to-year volatility of wildfire funding needs.
- Improve transparency about the total cost of wildfire suppression.



# Climate-Exacerbated Wildfires Cost As Much as \$893 Billion Per Year

Top-end Annual Total Costs and Losses (Billions \$)

- Diminished Real Estate Value
- Exposure to Wildfire Smoke
- Income Loss From Wildfires
- Watershed Costs
- Insurance Payouts
- Timber Loss
- Property Damage
- Electricity Costs
- Other Costs



Note: Chart shows the higher end of the estimated range. Other Costs include evacuation costs, wildfire suppression, direct death and injuries, insurance premium increases, learning loss, tourism loss, and psychological costs.

Source:  
<https://www.jec.senate.gov/public/index.cfm/democrats/2023/10/climate-exacerbated-wildfires-cost-the-u-s-between-394-to-893-billion-each-year-in-economic-costs-and-damages>

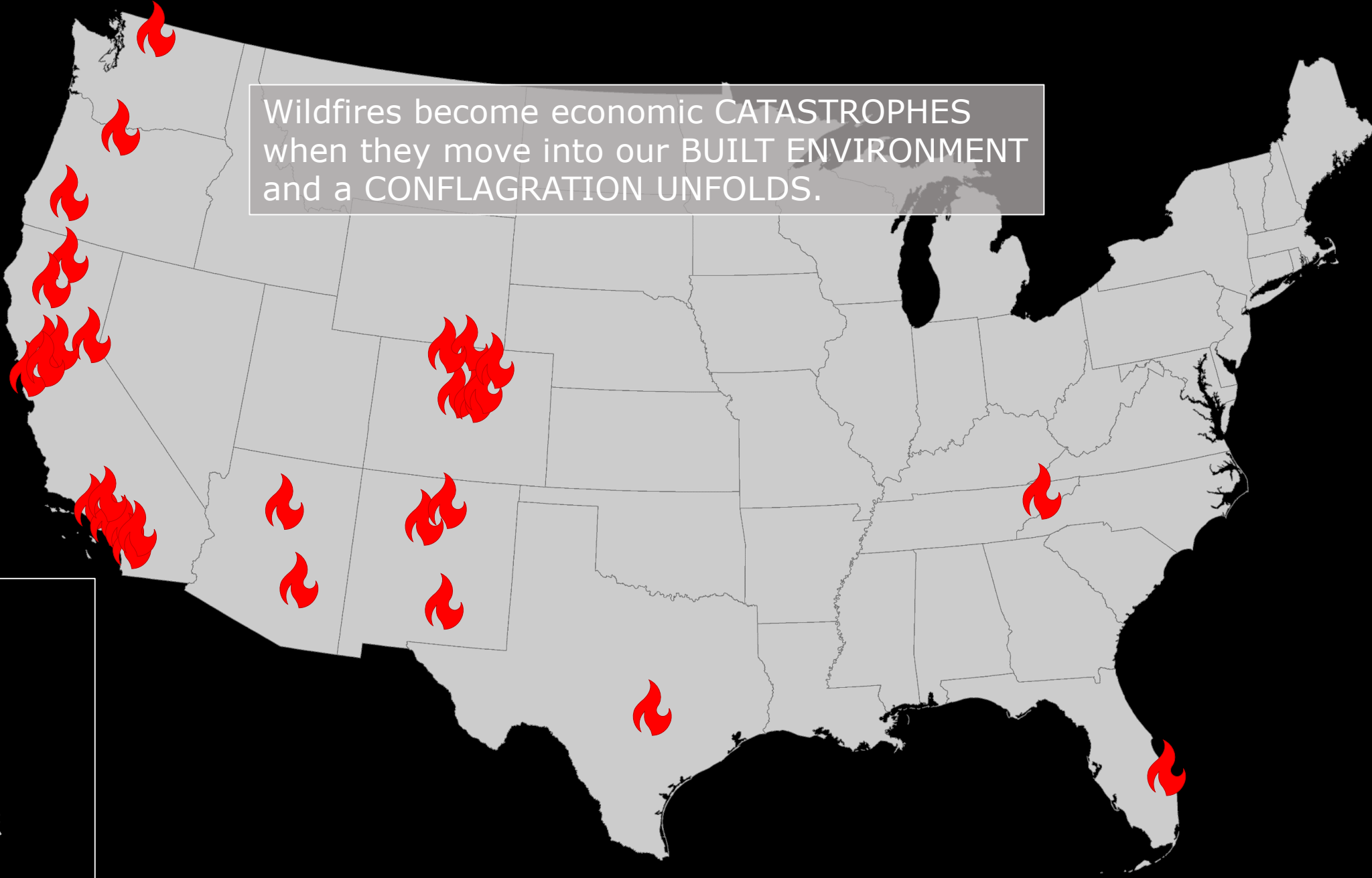




# Wildfire to Built-Environment Conflagrations: 1990-present



Wildfires become economic CATASTROPHES when they move into our BUILT ENVIRONMENT and a CONFLAGRATION UNFOLDS.



➔ [ibhs.org](http://ibhs.org)



[ibhs.org](http://ibhs.org)

- 1. Embers***
- 2. Flames***
- 3. Radiant Heat***







# CRITICAL ACTIONS

**DEFENSIBLE SPACE**  
✓ Replace combustible fencing

**DEFENSIBLE SPACE**  
✓ Maintain yard clear of debris

**DEFENSIBLE SPACE**  
✓ Maintain underdeck

**DEFENSIBLE SPACE**  
✓ Enclose underdecks

**BUILDING FEATURES**  
✓ Ember resistant vents

**BUILDING FEATURES**  
✓ 6-inch vertical noncombustible clearance at base of wall

**ROOF**  
✓ Class A fire-rated roof

**DEFENSIBLE SPACE**  
✓ Maintain home ignition zone (0-5 ft) of the "zero zone"

**DEFENSIBLE SPACE**  
✓ Maintain trimmed trees and removal of branches overhanging home ignition zone and roof

**DEFENSIBLE SPACE**  
✓ No outbuildings near home





# Existing Authority: Fire Planning Task Force

## 68-2-34 NMSA 1978

- (1) identify those areas within the state that, because of the interface between forests and urban buildings, are the most vulnerable to danger from forest fires;
- (2) develop standards for building codes and ordinances that will reduce the threat of forest fires. In developing the standards, the task force shall:
  - a. recognize the distinction between altering existing situations and establishing standards for new construction;
  - b. consider the benefits of thinning overgrown forests, conducting controlled burns, clearing spaces around homes and other structures, using noncombustible roofing materials and double-pane windows and taking other fire suppression or prevention measures;
  - c. consider the impact of fire mitigation measures on wildlife; and
  - d. solicit comments from affected landowners, land users and local governments;
- (3) work with communities in the affected areas in adopting and implementing the building codes and ordinances; and
- (4) report its progress and any recommendations for legislation to the governor and the legislature by December 15 of each year.



# Existing Federal Mitigation Programs for States

- 1. Community Wildfire Defense Grants (CWDG)**
  - \$11 million to NM in 2023; \$28 million to NM in 2024
- 2. Wildfire Risk Reduction Grant Program (NM Counties, BLM)**
  - \$514,000 awarded in 2023/24
- 3. Non-Federal Lands (NFL) Grants (Forest Service)**
  - \$1.4 million awarded in 2024
- 4. Wildland Urban Interface (WUI) Grants (Forest Service)**
  - \$600,000 awarded in 2024
- 5. Landscape Scale Restoration (LSR) Grants (Forest Service)**
  - \$300,000 awarded in 2024
- 6. Volunteer Fire Assistance (VFA) Grants (Forest Service)**
  - \$632,773 awarded in 2024
- 7. Congressionally Directed Spending**
  - \$1.3 million to Cimarron Range in FY22; \$1.2 million to Upper Chama in FY23; \$1.2 million to Cimarron Range requested FY24



# Existing State Mitigation & Related Programs



## **Forest and Watershed Restoration Act (FAWRA)**

\$2 million recurring in authorization [68-4 NMSA 1978]

\$1.4 million recurring, Land of Enchantment Legacy Fund [75-12 NMSA 1978]

## **Capital outlay for forest and watershed restoration**

\$5 million FY25; \$10 million FY24; \$10 million FY23

## **Building Codes (Construction Industries Division)**

## **Fire Protection Grants (State Fire Marshal)**

\$70.6 million distributed in FY24 to county and city fire departments

## **F.A.I.R. Plan (Superintendent of Insurance)**

Fair Access to Insurance Requirements (F.A.I.R.) Plan available to insure New Mexicans up to \$350,000 for dwellings and up to \$1M for commercial property



**NMRLD**  
NEW MEXICO  
REGULATION &  
LICENSING DEPARTMENT

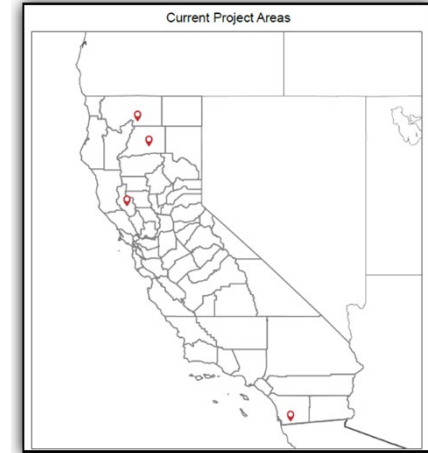


NEW MEXICO | OFFICE OF  
SUPERINTENDENT  
OF INSURANCE



# Ideas from Other States Programs

1. Public education campaigns to reduce wildfire occurrence (Utah)
2. Home and property assessment and certification program (Colorado, California)
3. Retrofit grant program to support homeowners (Alabama, California)
4. Wildfire hazard and Wildland Urban Interface map (Oregon)



# Options of a Comprehensive Approach

1. EMNRD Forestry Division could develop a wildfire risk map by November 2024 with existing funding and publish it with the 2024 Communities at Risk Report that is required under 68-2-34 NMSA 1978. Forestry could make the map interactive to the property level by the 2025 report deadline.
2. Agencies could request funding to procure a public education campaign that addresses (1) human caused wildfires and (2) home survival strategies.
3. RLD Construction Industries Division could develop building codes that apply to new construction in the high-risk areas identified in the 2024 Communities at Risk Report Map. These codes would need to incorporate the 2024 International Wildland Urban Interface Code and the Institute for Business and Home Safety Wildfire Prepared Home qualifications.
4. A “Wildfire Ready Certification Program” could be created to provide grants to counties, municipalities and political subdivisions of the state to assist land and homeowners to assess, mitigate and certify their buildings and property are prepared for wildfire and to provide local government with resources for enforcement. The program could also include grants to moderate and low-income households to offset the cost of retrofitting dwellings in high-risk areas, so they have a better chance to survive wildfire.
5. The Fire Planning Task Force statute [68-2-34 NMSA 1978] could be updated to include new members: the Superintendent of Insurance and public members with expertise in property and casualty insurance; homebuilding; and real estate. In addition, the duties of the Task Force could be updated to reflect the above actions.
6. The F.A.I.R. Plan could be updated to raise the coverage amount for dwellings and commercial property.

