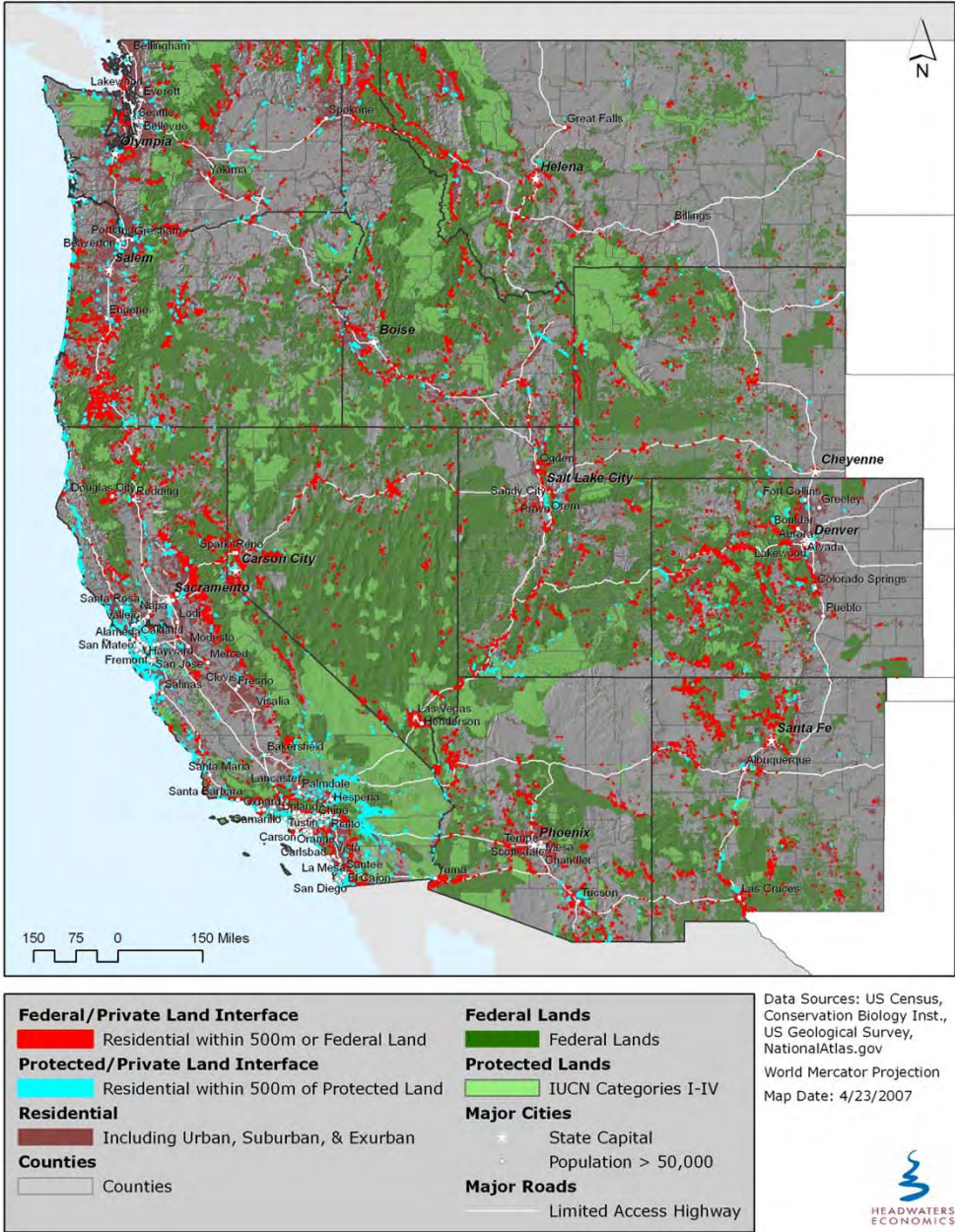


# **Solutions to the Rising Costs of Fighting Fires in the Wildland-Urban Interface**

## **10 Ideas**



Residential Development at the Public-Private Land Interface













## Wildland firefighting is dangerous, expensive, & costs are rising

Costs the federal government more than **\$3 billion** per year, **double** the amount from a decade ago

**50-95%** of the costs of wildland firefighting go to **protecting homes** (according to Forest Services' Office of Inspector General)

Only **14%** of the WUI the West has **homes** (86% open for development)

If **50%** were developed, the cost of protecting homes from wildfires could **exceed the Forest Service's annual budget**

## Why should we care?

Opportunity cost > **50% of the Forest Service budget**

### **Sprawl:**

Expensive (net loss to county budgets)

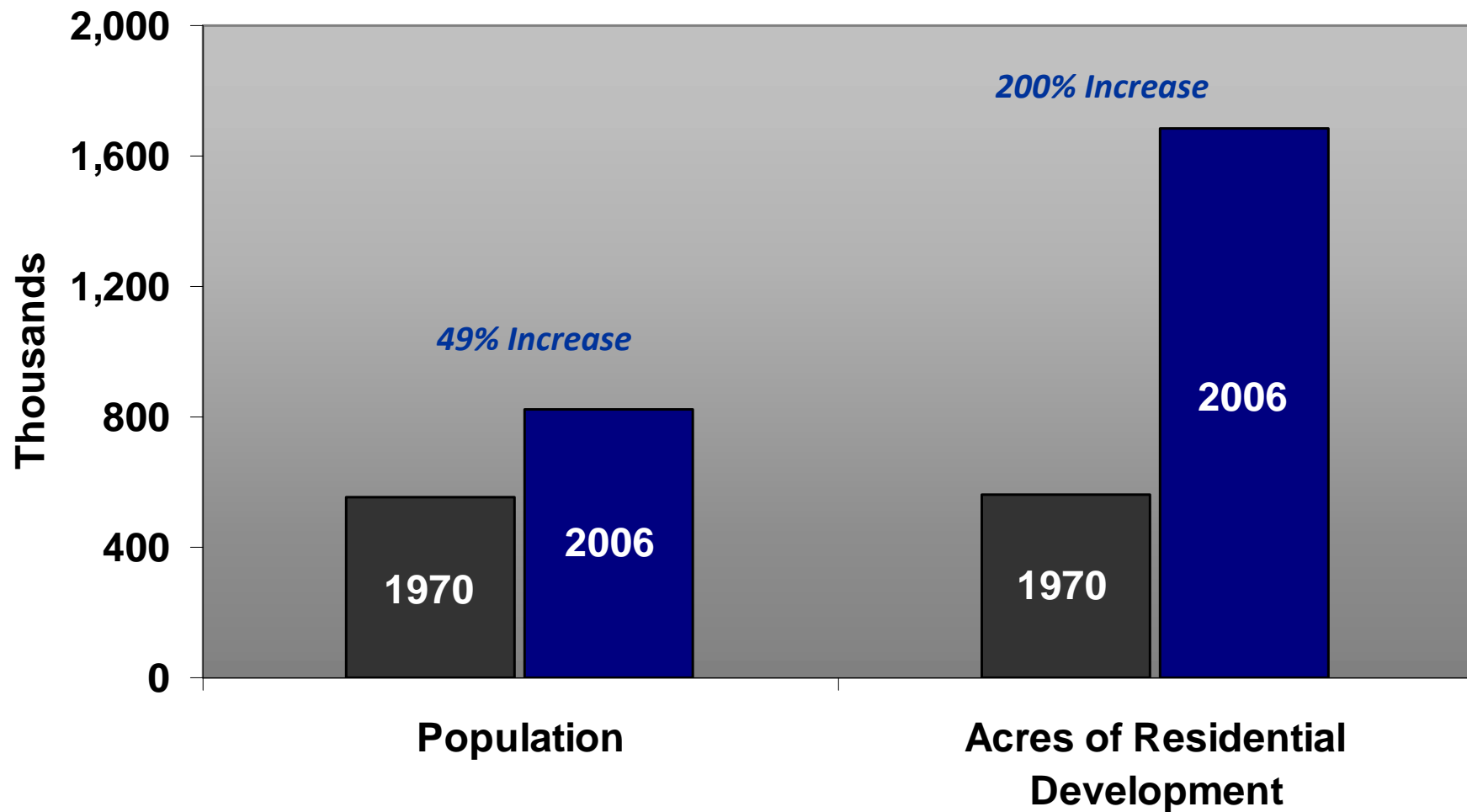
Wildlife habitat, water quality

### **Unfair to taxpayer:**

4% of homes in the West in wildland-urban interface

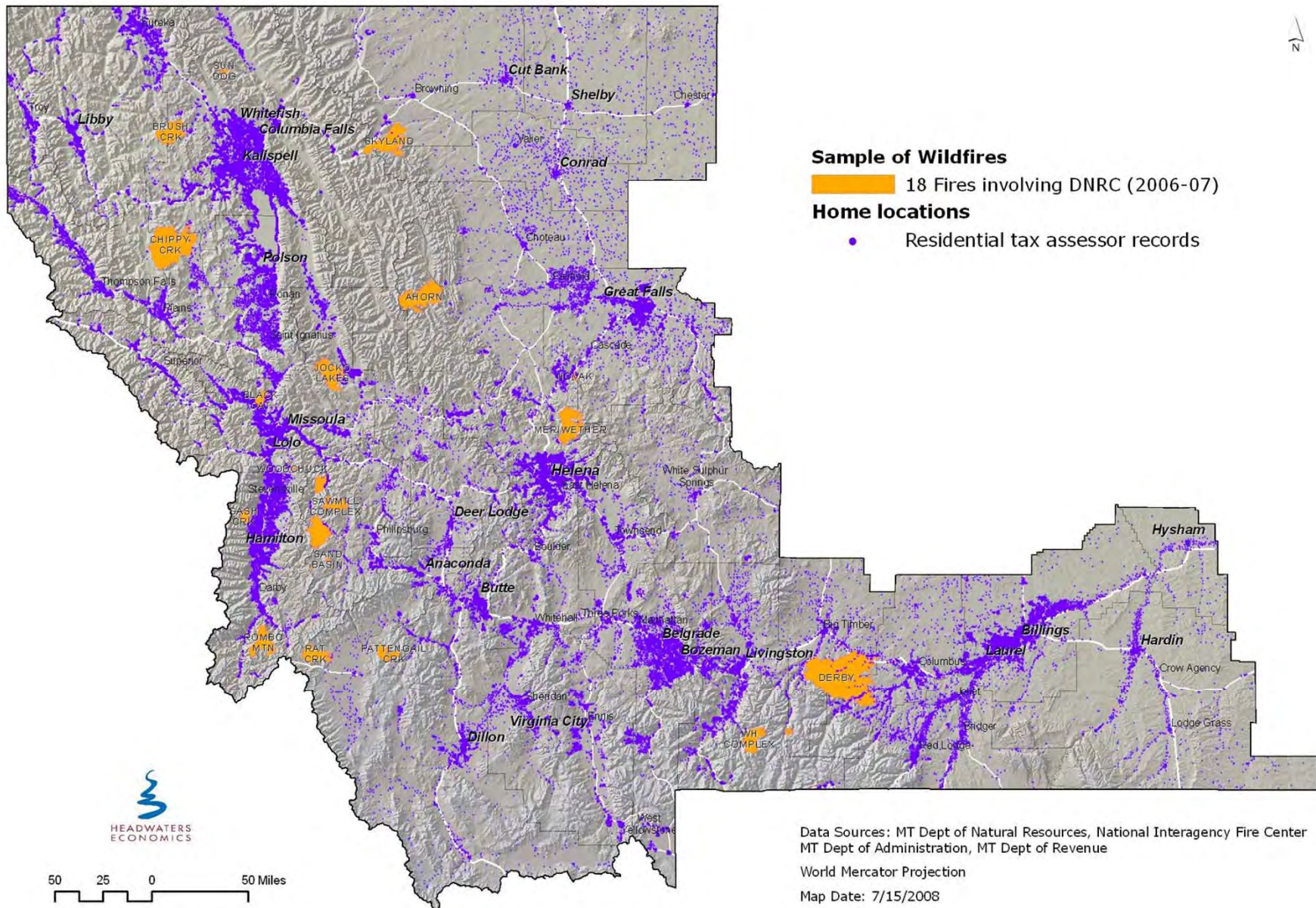
**What does it  
cost to protect  
homes from  
wildfire?**

## Montana example:



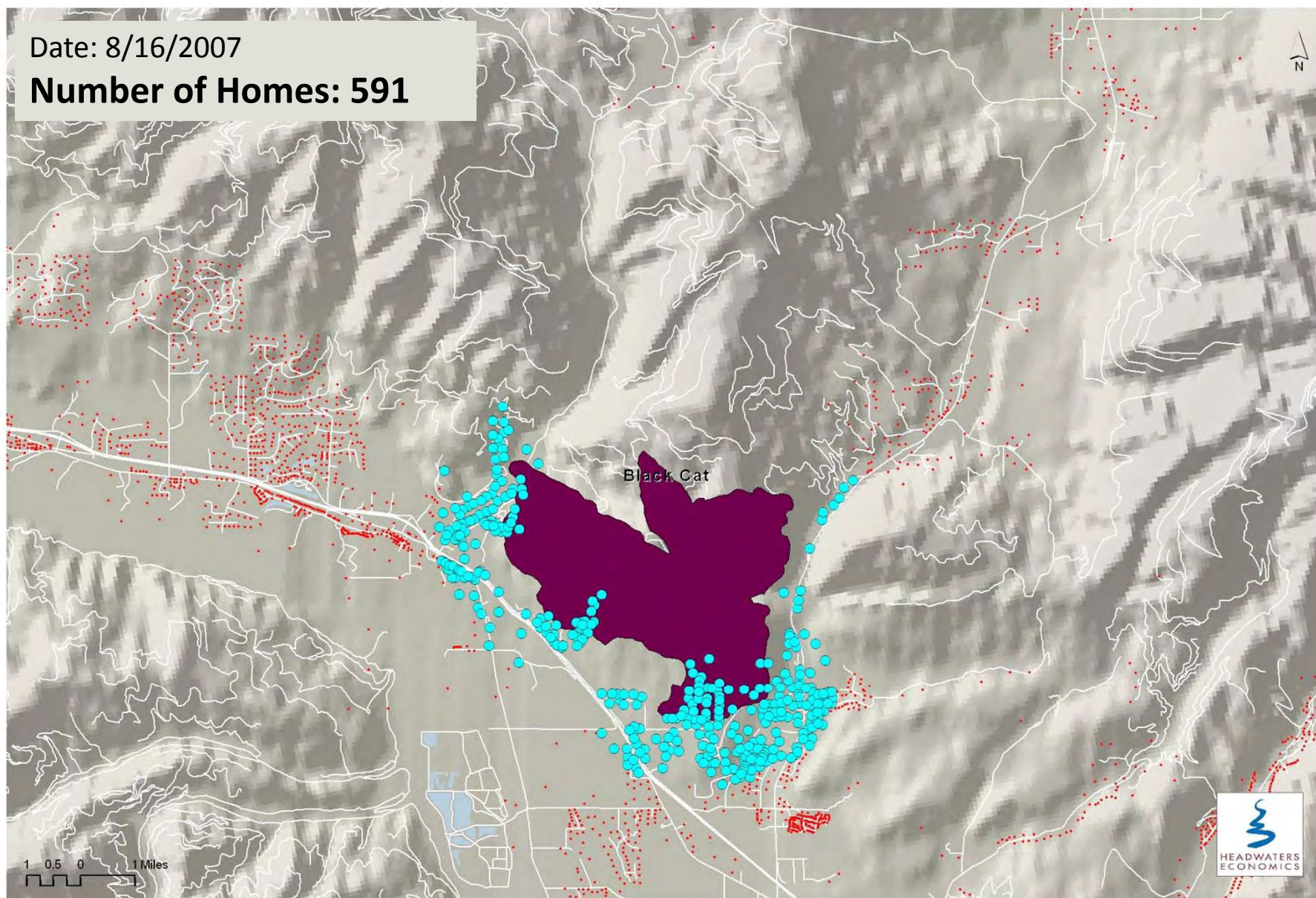


# How much is protecting homes from wildfires currently costing Montana?





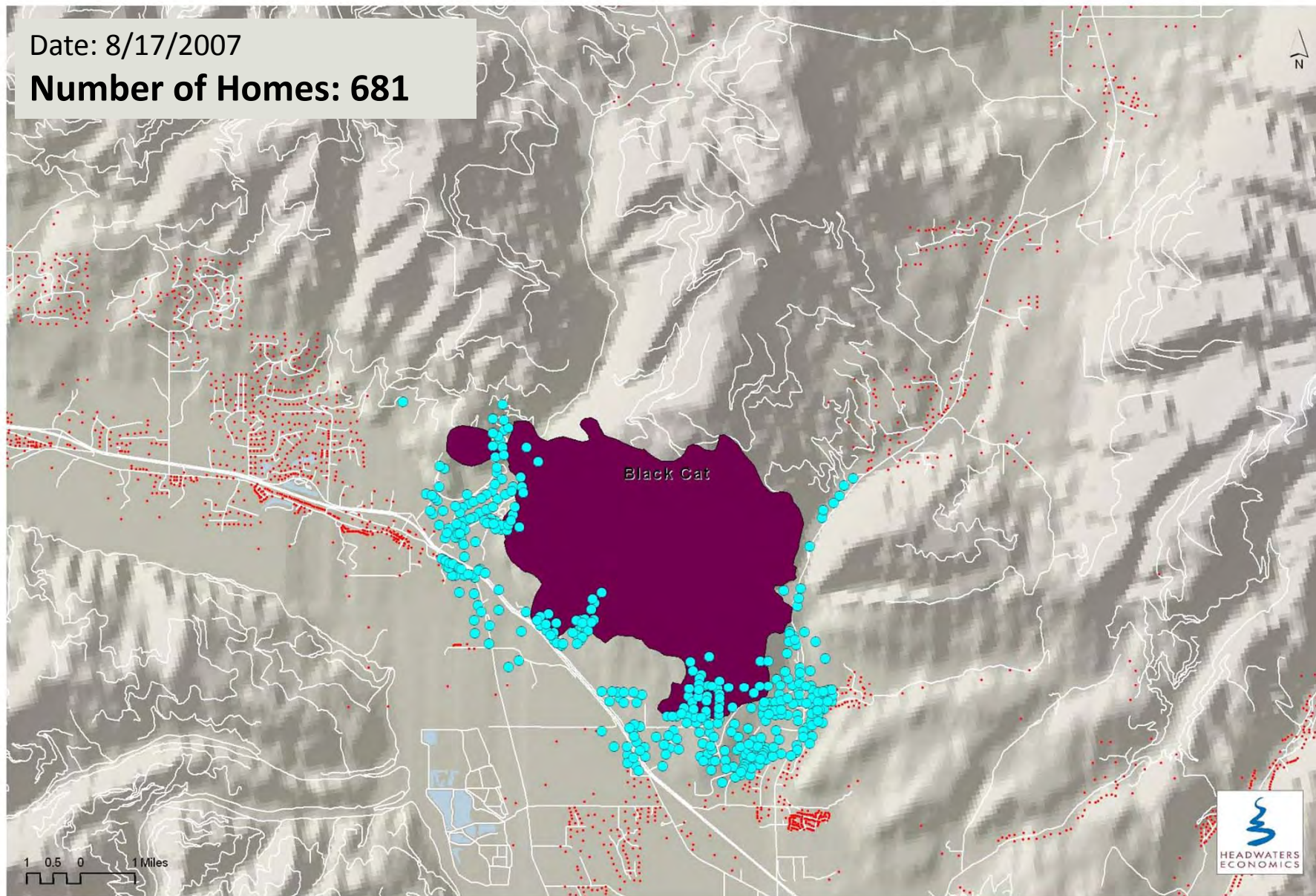
How much is protecting homes from wildfires currently costing Montana?





Date: 8/17/2007

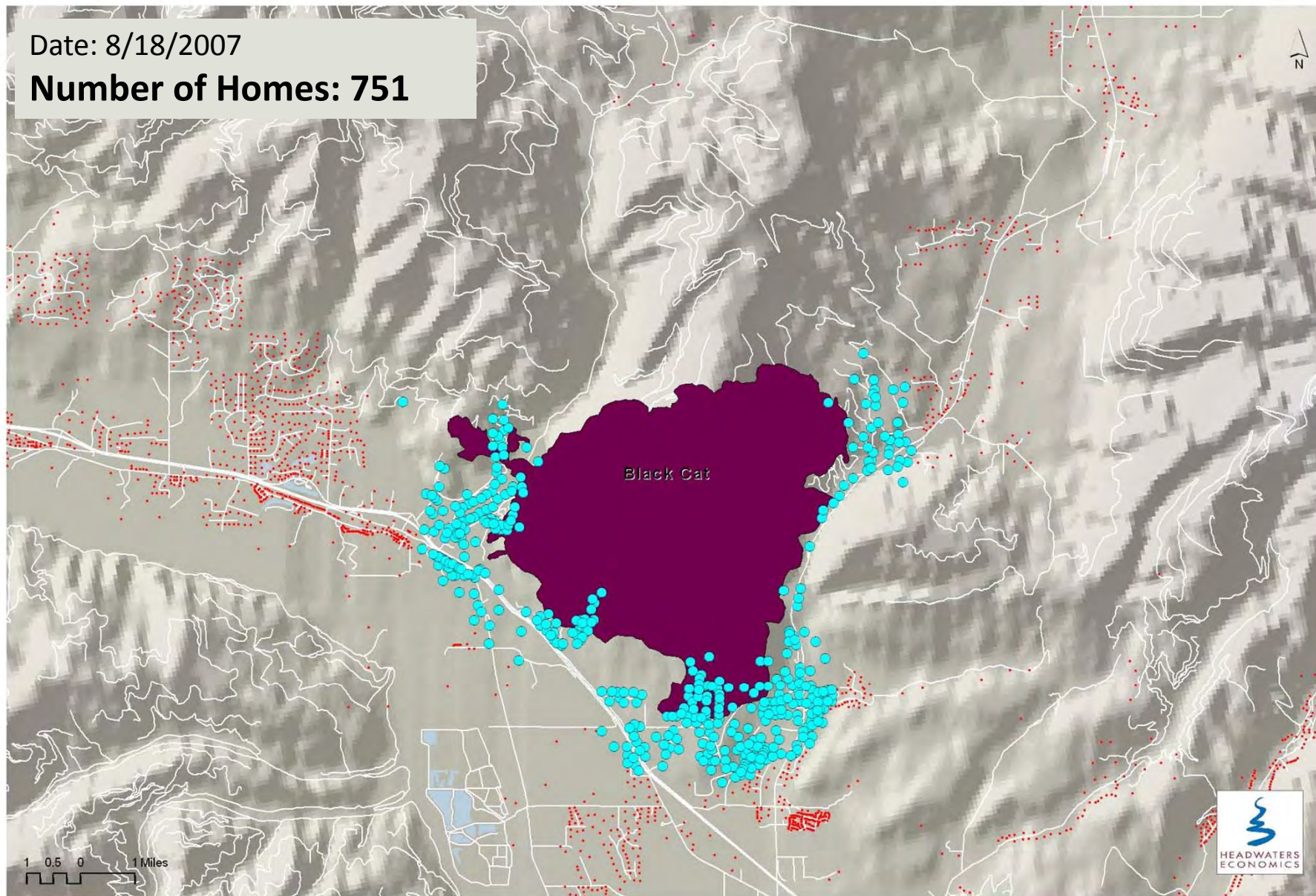
Number of Homes: 681





Date: 8/18/2007

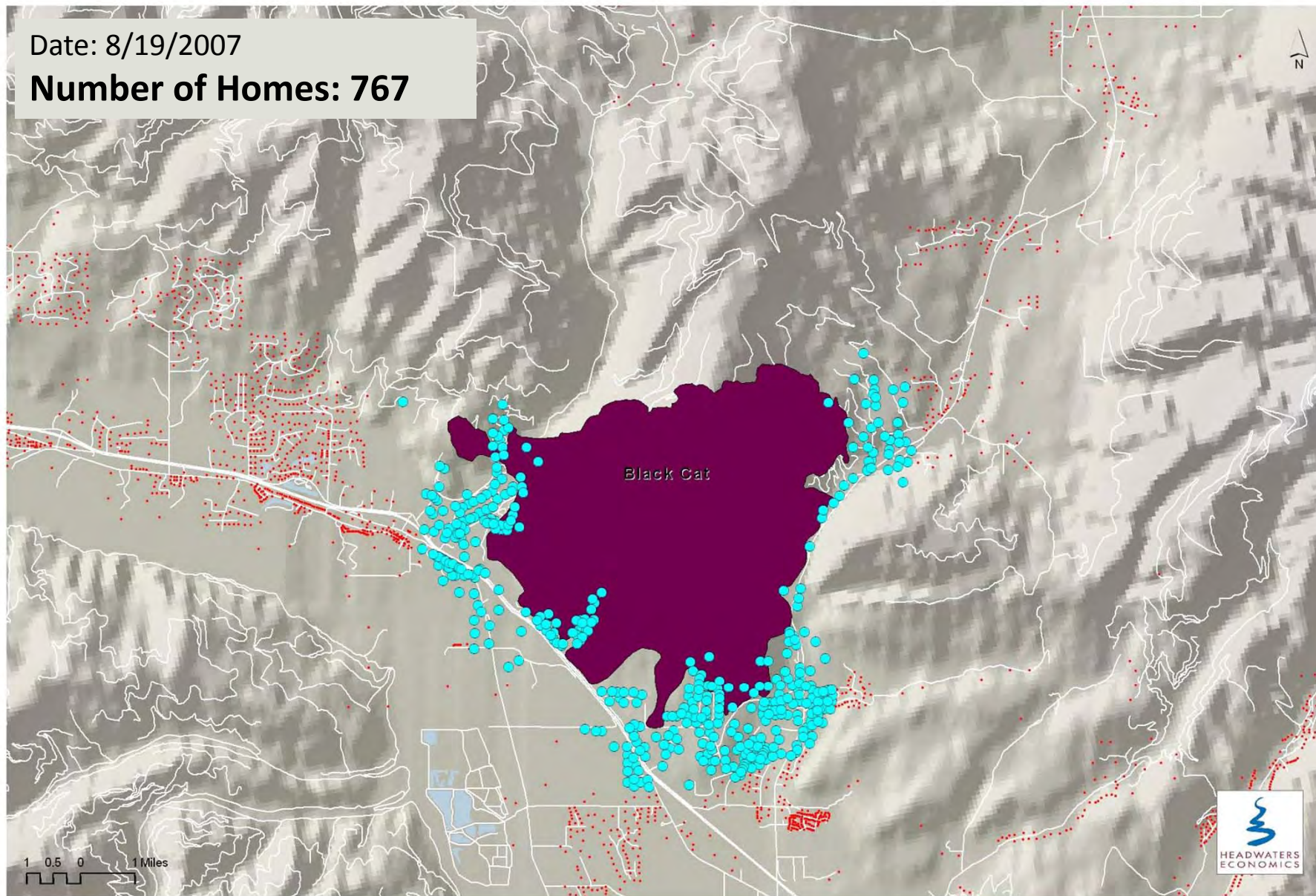
Number of Homes: 751





Date: 8/19/2007

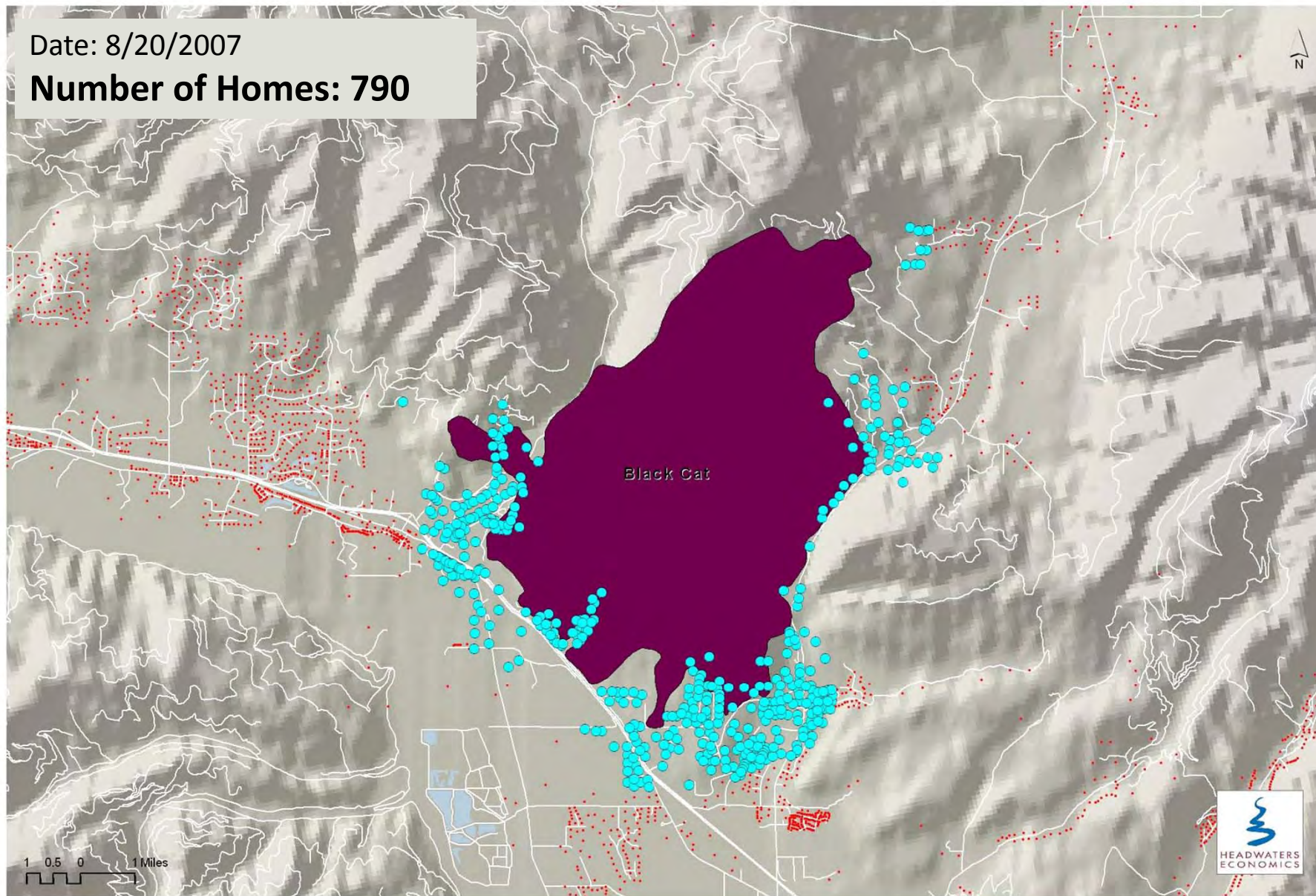
Number of Homes: 767





Date: 8/20/2007

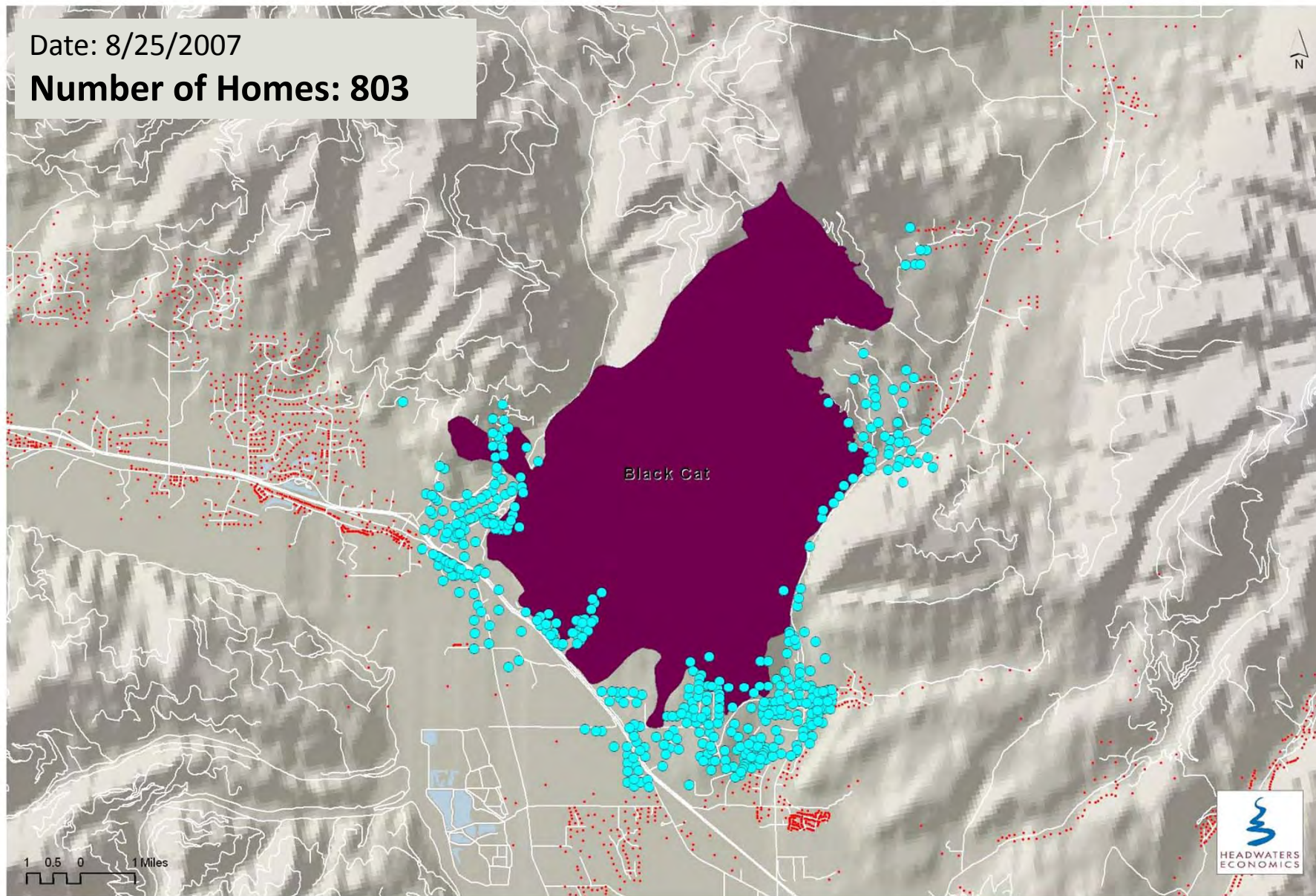
Number of Homes: 790



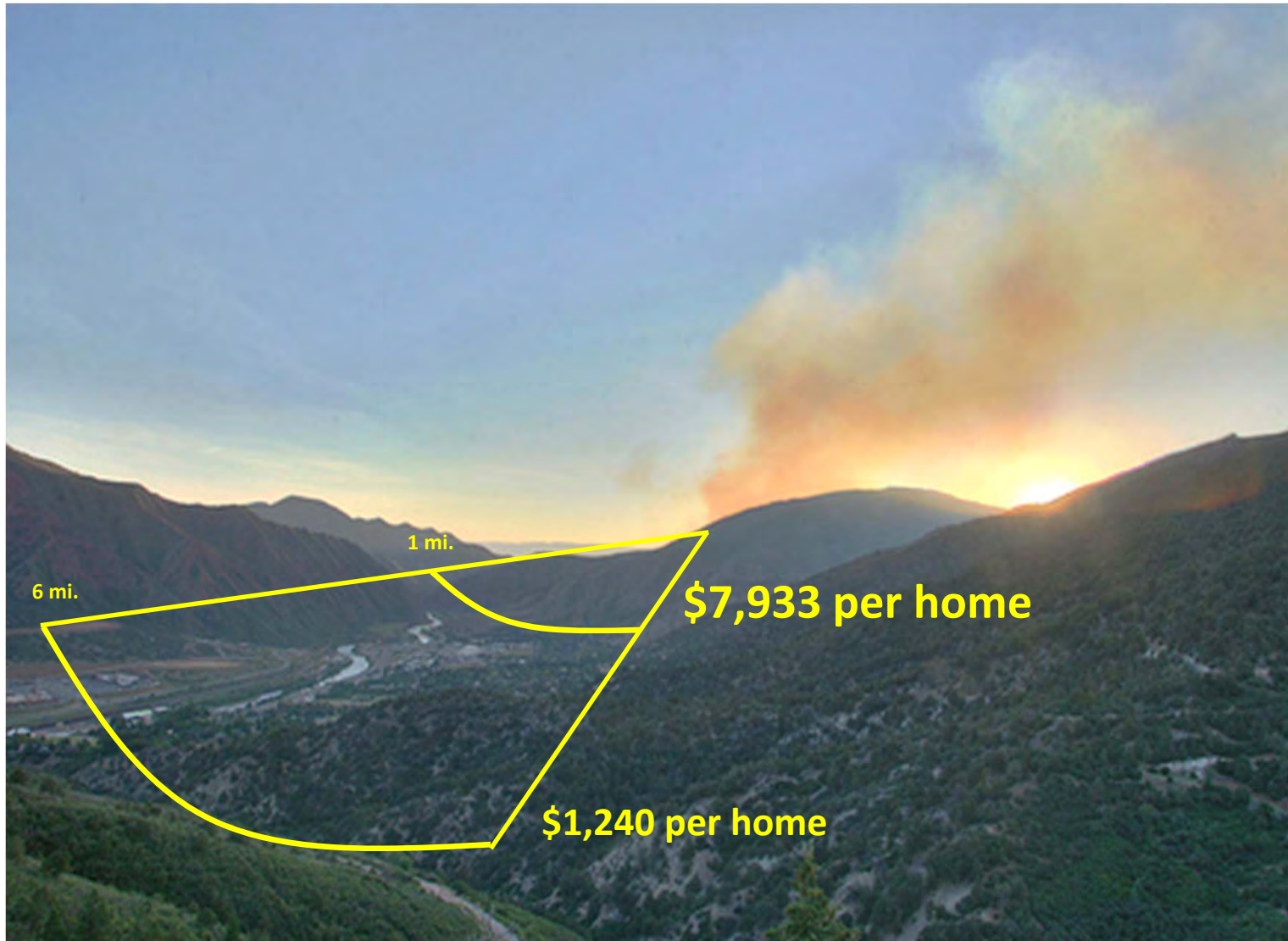


Date: 8/25/2007

Number of Homes: 803



How much is protecting homes from wildfires currently costing Montana?





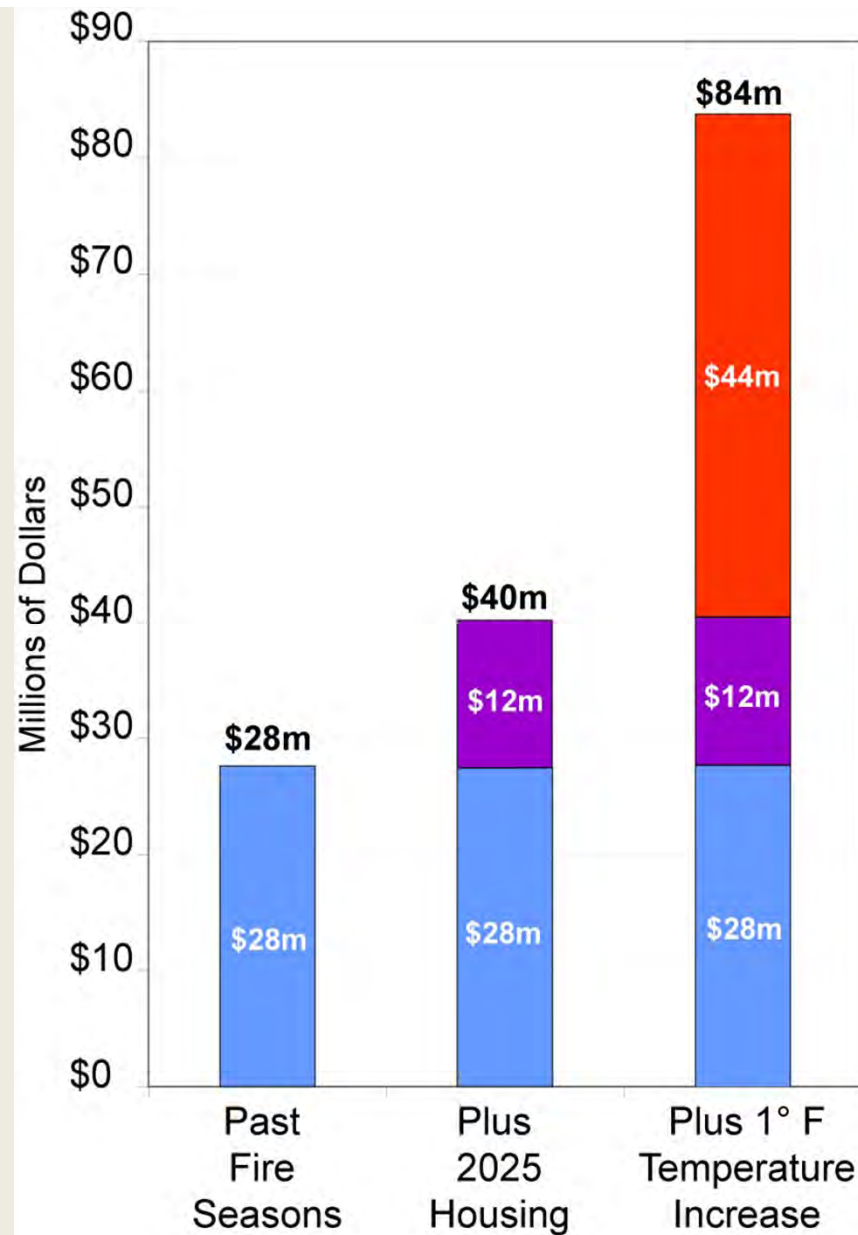
Acres developed is the most accurate predictor of costs:





## Average Annual Cost of Protecting Homes from Wildfires in Montana

**30%** of the  
cost is for  
home  
protection



**In other words .....**

This is just the tip of the iceberg

It is going to get a lot worse

Unless we control the **pace**, **scale** and **pattern** of **future residential development**

**What can be  
done to  
prevent costs  
from further  
going up?**



A White Paper by



## Solutions to the Rising Costs of Fighting Fires in the Wildland-Urban Interface

December 2009

Updated

**10 ideas  
with pros & cons**

**Control cost on  
the remaining  
un-built lands**

## Fundamental problem

Lack of cost accountability by  
**those who build homes** in the  
WUI and by **local governments**  
who authorize new  
developments on dangerous,  
fire-prone lands

# 1. MAPPING

**Publish maps identifying areas with high probability of wildland Fires**

The screenshot shows the Missoulian website with the article "Critics give Ravalli County officials earful on wildfire response plan". The article is by Jeff Schmerker for the Ravalli Republic, dated Friday, February 19, 2010. It reports on a meeting where critics expressed distrust of local mapping efforts for hazardous fire zones. A yellow highlight in the text reads: "distrustful of local efforts to map hazardous fire zones...". A speech bubble points from this highlighted text to a quote box on the right.

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## Critics give Ravalli County officials earful on wildfire response plan

Story Discussion Font Size: - +

By JEFF SCHMERKER Ravalli Republic | Posted: Friday, February 19, 2010 3:30 am | (4) Comments

2 retweet

HAMILTON - Critics of a proposed fire response plan packed a Ravalli County Commission meeting Wednesday to tell commissioners they are distrustful of local efforts to map hazardous fire zones...

After more than an hour of explanation and public comment, commissioners decided to table adoption of the community wildfire protection plan. Commissioners will take up the matter again on April 5 at 9 a.m.

The plan, mandated by the state Senate, must be adopted by 2012. If not, the state may write its own plan for the county.

The current draft plan, said Byron Bonney, a Bitter Root Resource Conservation and Development forester, who helped write it, is an update of the existing plan, which was written in 2003.

The new plan, Bonney said, was written using detailed imagery and on-the-ground reporting both with foresters and fire chiefs and describes in precise detail the boundary where urban development and wildlands meet.

"We felt like it was very important for us to establish that under our own terms," Bonney told commissioners, "rather than have someone come in and establish that line for us."

The vast majority of public funds spent fighting fires, Bonney said, are spent protecting structures, and the presence of homes - many not built to modern fire safety codes, on streets where access by fire trucks is

"... distrustful of local efforts to map hazardous fire zones."

# The New York Times

## California City Withheld Data on Fires, Report Says

By THE ASSOCIATED PRESS

October 17, 2010

**SAN MARCOS, Calif. (AP) —** San Marcos city officials kept secret a color-coded map showing the risk of wildfire danger to various neighborhoods for fear insurance companies would use the information to justify raising rates or dropping policies, according to a newspaper report.

Officials opted to circulate a version of the map that omitted the marking of Coronado Hills and neighboring Attebury as deep red, which signifies “extreme wildfire hazard,” city leaders told The North County Times. Shadings showing five other neighborhoods with “very high” risk were also left off the map.

The map that was released showed all wildfire areas in a uniform shade of green.

The maps were produced after a study commissioned by San Marcos in 2005 to assess wildfire risks for the city’s communities.

The newspaper obtained the color-coded map after it was briefly presented to planning commissioners at a meeting over the summer.

Chief Todd Newman of the Fire Department, City Manager Paul Malone and other city officials said that the color-coded map was intended for internal planning use. It was not made public out of concerns that insurance companies would increase rates or cancel policies for Coronado Hills and Attebury residents if they saw it, the officials said.

They did not explain why the map was shown at the summer meeting.

City leaders said that although they did not release the color-coded map, they provided residents with detailed information about fire risks.

“We develop specific fire threat assessments on a parcel-by-parcel basis,” Mr. Malone told the newspaper. “We make specific recommendations to homeowners in that area. The people that live in that area absolutely do know that they live in a wildfire threat zone.”

One elected official said there had been no reason to withhold the map in 2005.

“I don’t know why that wouldn’t have been released,” Councilman Mike Preston said. “Insurance companies would get hold of it and assessments might go up, and people would be unhappy, but I guess you have to balance that against people knowing about the risk.”

...

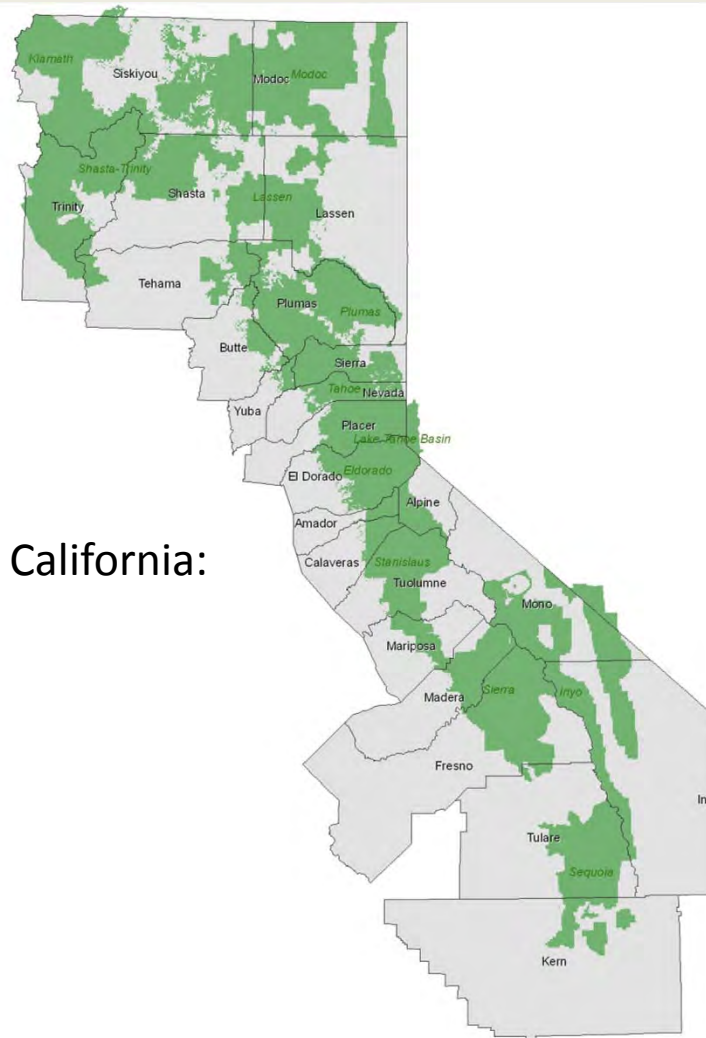


## 2. EDUCATION

Increase awareness of the financial consequences of home building in fire-prone areas



California:



### 3. REDIRECT FEDERAL AID TOWARD LAND USE PLANNING

**Provide technical assistance and financial incentives to help local governments direct future development away from the wildland-urban interface**

**State and Private Forestry** – not just *FireWise*, but also land use planning

**A new program within Forest Service or FEMA?** – dedicated to financial and technical assistance in land use planning



## 4. COST SHARE AGREEMENTS

**Add incentives for counties to sign agreements that share the costs of wildland firefighting between local and federal entities**

### Incentives:

Higher \$ incentives (e.g. State and Private Forestry assistance) to those that sign agreements

### Disincentives:

Lower \$ incentives if agreements not signed

Withhold reimbursement

Bill county governments

Withhold SRS, PILT and other federal revenues

### Administrative:

Integrate Master Agreements into planning process

Make signing a requirement for Cooperating Agency

## 5. LAND ACQUISITION

**Purchase lands or easements on lands that are conversion to development**

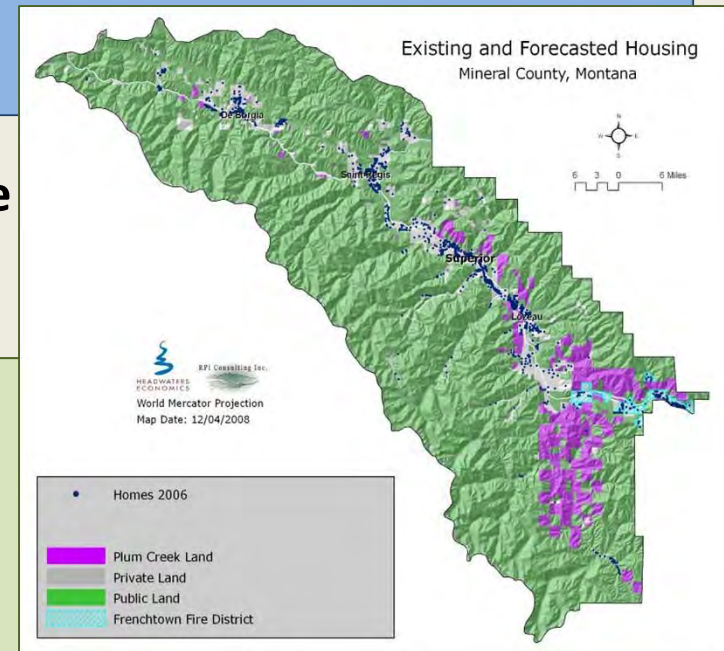
Montana example:

***Montana Working Forests Project***

Cost of fighting wildfires if 100% developed = \$74 million

if 50% developed = \$37 million

Cost to state to help buy land = \$21 million





## 6. NATIONAL FIRE INSURANCE & MORTGAGE PROGRAM

**Apply lessons learned from efforts to prevent development**



### **A National Wildland Fire Insurance Program?**

Federal responsibility to map fire-prone lands

Require communities adapt WUI management regulations and ordinances in order to qualify

Require mortgage lenders to make participation in program as condition for a loan

Anyone receiving fire-related disaster assistance has to purchase insurance as a condition

## 7. INSURANCE

### **Allow insurance companies to charge higher premium in fire-prone areas**

Adjust premium based on level of wildland fire risk for each property.

How?

Change state policies: e.g. FAIR Plan laws – make exception for WUI\*

Eliminate federal subsidies to reflect true risk?

\* There is some evidence in California that insurance costs were a deterrent to development. This was before the passage of FAIR Plan laws.

## 8. ZONING

**Limit development in the wildland-urban interface with local planning and zoning ordinances**



Examples:

Napa County, California

Skagit County, Washington



## 9. ELIMINATE MORTGAGE INTEREST DEDUCTIONS

**Eliminate home interest mortgage deductions for new homes in the wildland-urban interface**

For **new** homes – requires fair warning

In the **most dangerous** places – requires mapping

Only 4% of homes in the West in the WUI

1 in 5 homes is a second home

## 10. REDUCE FEDERAL FIREFIGHTING BUDGETS

**Induce federal land managers to shift more of the cost of wildland firefighting to local governments**

Under what conditions?

If a proposed new development is in a well-know, well-documented fire risk area

If the federal agency has given ample warning

In county commissioners know of the risk and permit development anyway



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**IN FOCUS**  
**Controlling Fire Suppression Costs**

The rising expense of wildland firefighting, which now costs the federal government more than \$3 billion annually and is likely to increase dramatically.

[Download the white paper](#)  
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**Socioeconomic Profiles**

Compare your region to the rest of the country. Includes socioeconomic data pulled from several sources.

[Explore the West](#)

### What We're Reading

[National Wildfire Coordinating Group](#)

[GAO: Agencies Must Do More for Wildland Fire Management](#)

### Featured Research



**Montana Wildfire Cost Study- Technical Report**

This report examines how residential development adds to the costs of fighting wildfires, using Montana as a case study.

[» More](#)



**Potential for Future Development on Fire-Prone Lands**

New data illustrates the potential for more home construction next to fire-prone public lands and the implications for future wildfire fighting costs.

[» More](#)

[» All Wildfire: News & Research](#)

### What's Coming

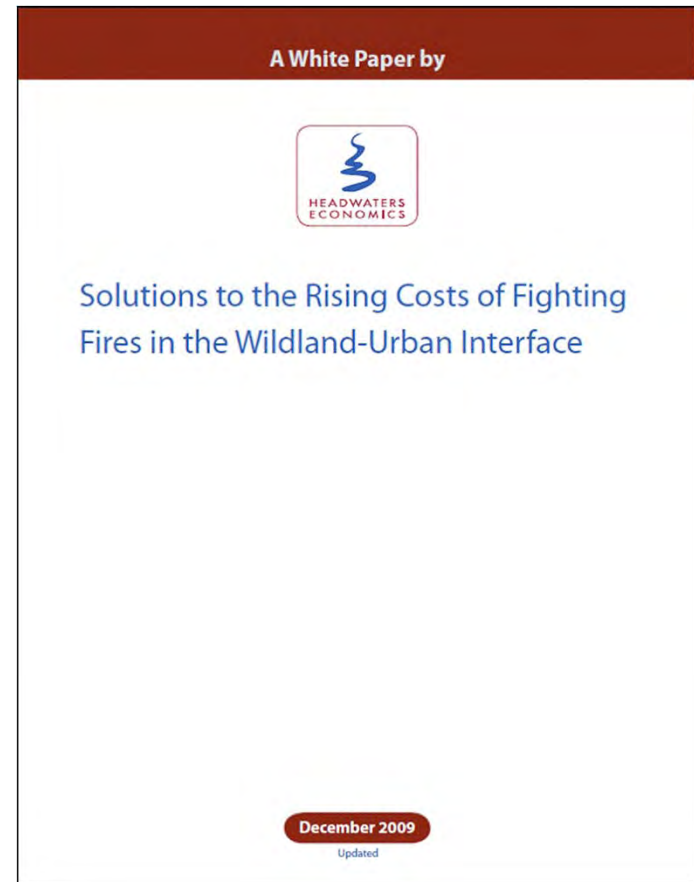


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