

# Wildfire Suppression and Mitigation

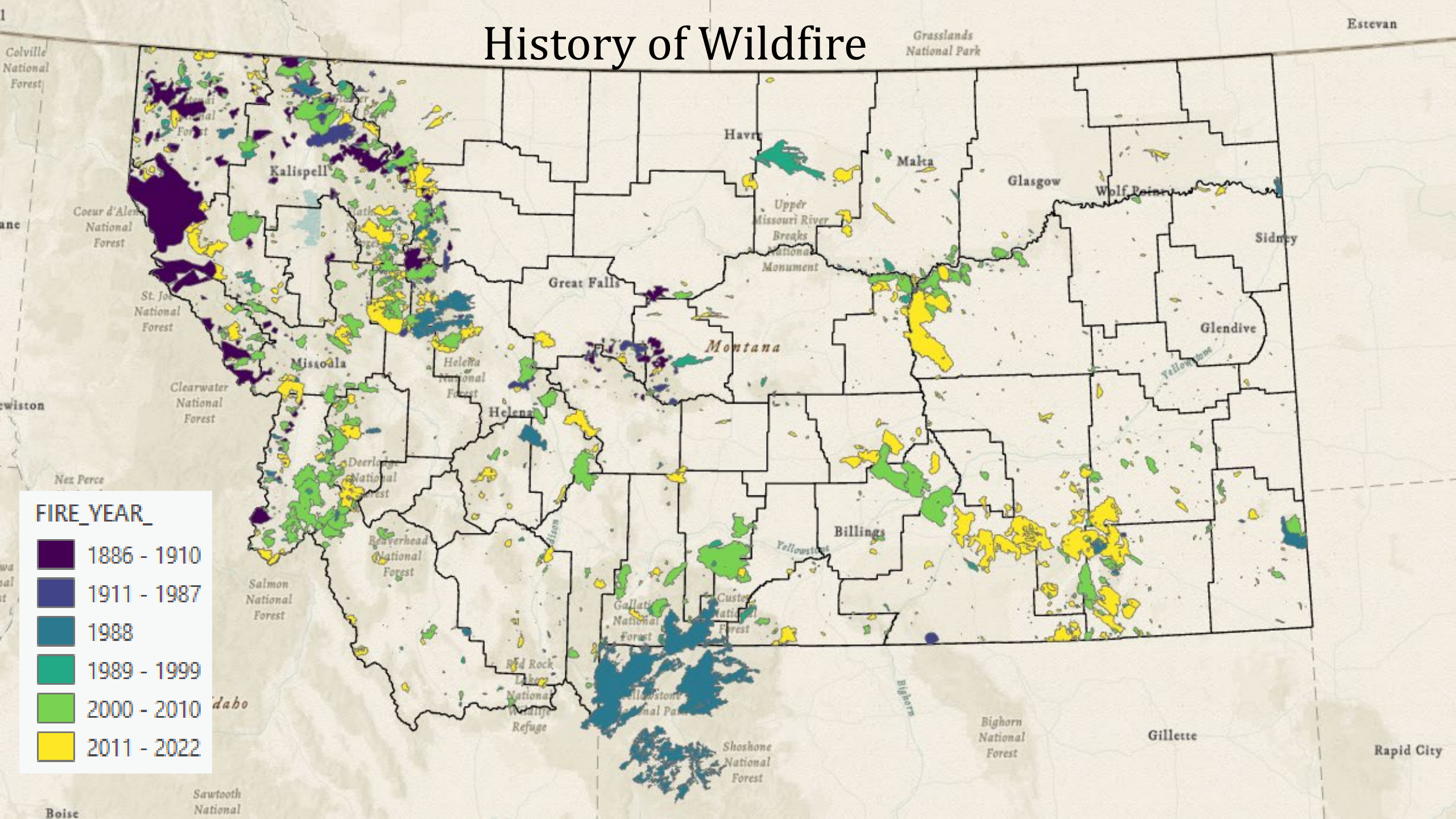
Assessing and Planning for Costs to the State of Montana

# Key Points



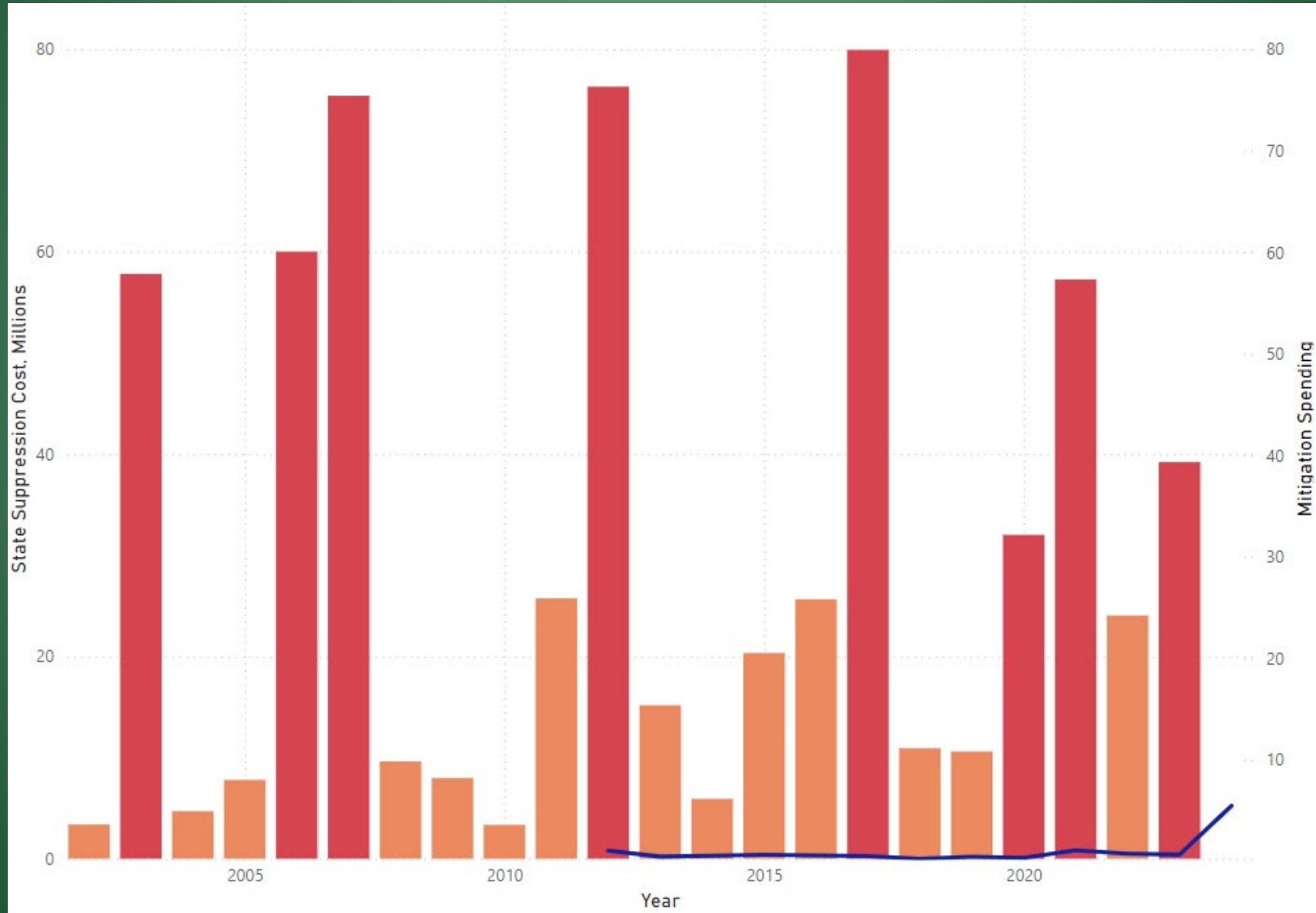
1. Wildfires are a significant, variable, and hard-to-predict cost to the state and its partners
2. Regardless of policy or funding changes, wildfires will continue to impose risk on the state and its residents, and that risk may be increasing over time
3. Much of the state's newly taxable value is in areas that have high wildfire risk

# History of Wildfire





# Wildfire **Suppression Cost** and **Mitigation Spending**

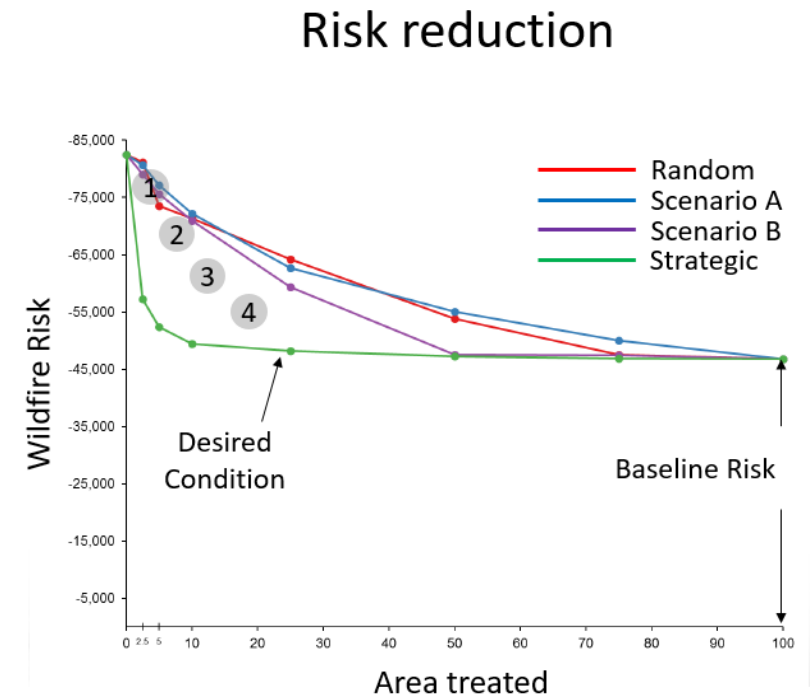


# Suppression vs. Mitigation

- **Suppression:** Putting out the wildfires
- **Mitigation:** Practices that reduce the severity/frequency of wildfires
- Mitigation is cheaper than suppression but impossible to quantify events that don't happen
- Reduce burnable fuels with more planned burns off-season and letting wildfires burn if not a risk to structures
- Changes to zoning and building codes seems to be a promising mitigation strategy

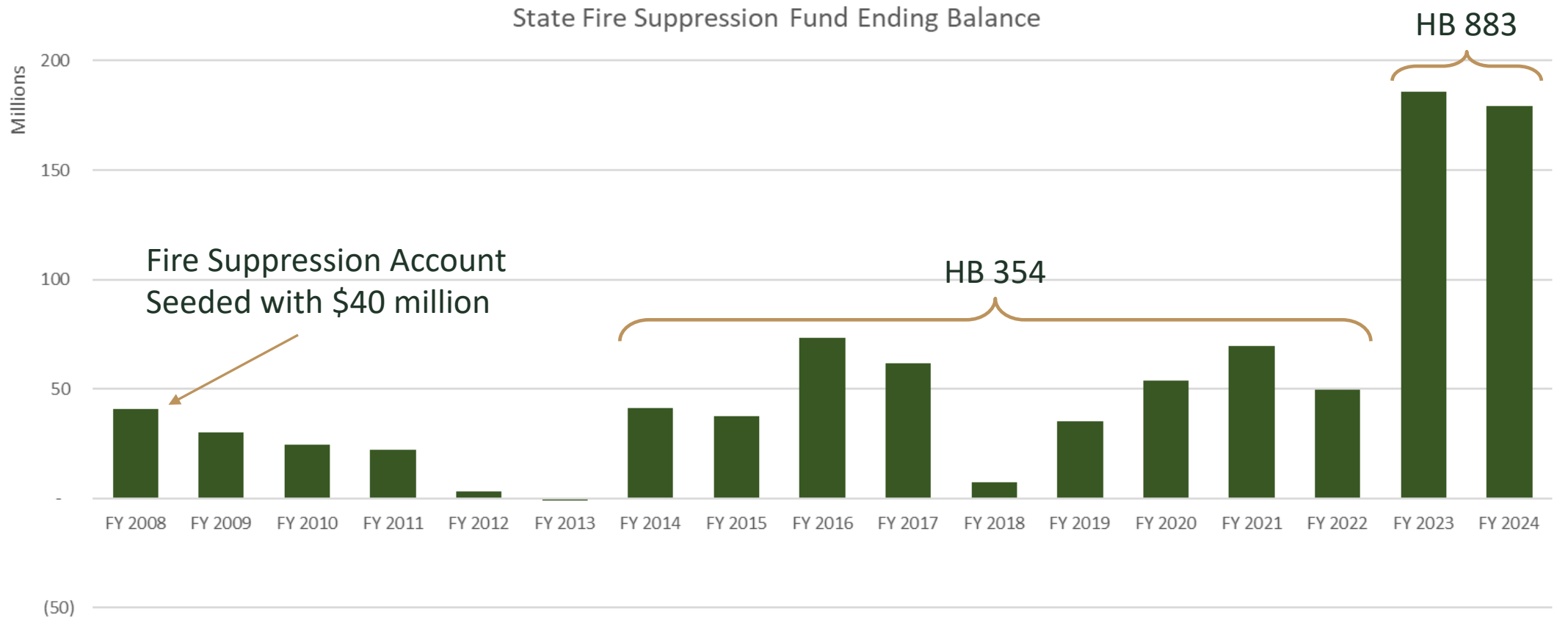
## Measuring Risk Reduction and Desired Condition

- **Measure** effectiveness of treatment program (reduced risk, improved condition)
- **Track** accomplishments over time and amount of treatment
- **Compare** different spatial treatment scenarios
- **Identify** baseline risk



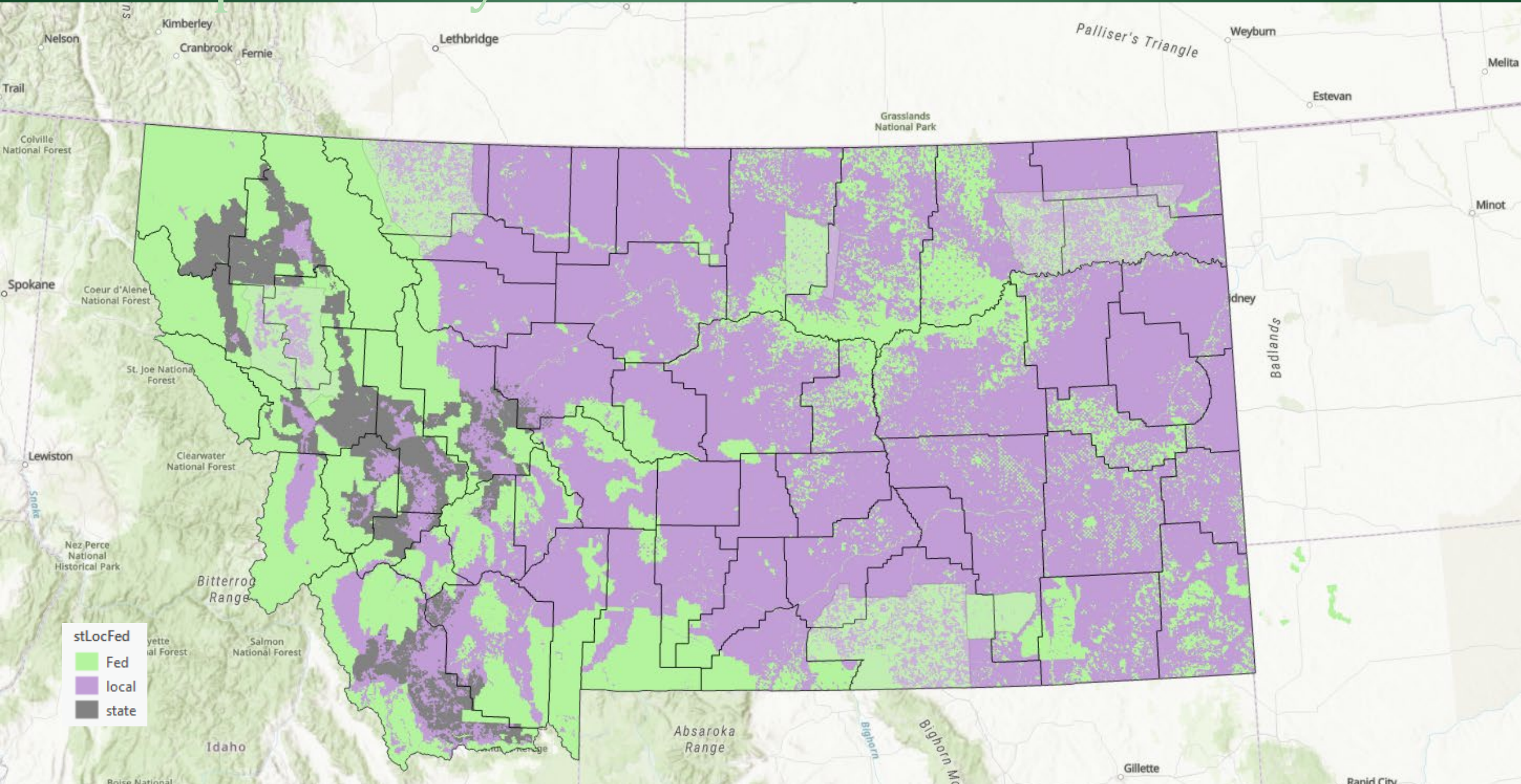
Scott et al. 2019

# Montana Wildfire State Special Revenue Fire Suppression Account



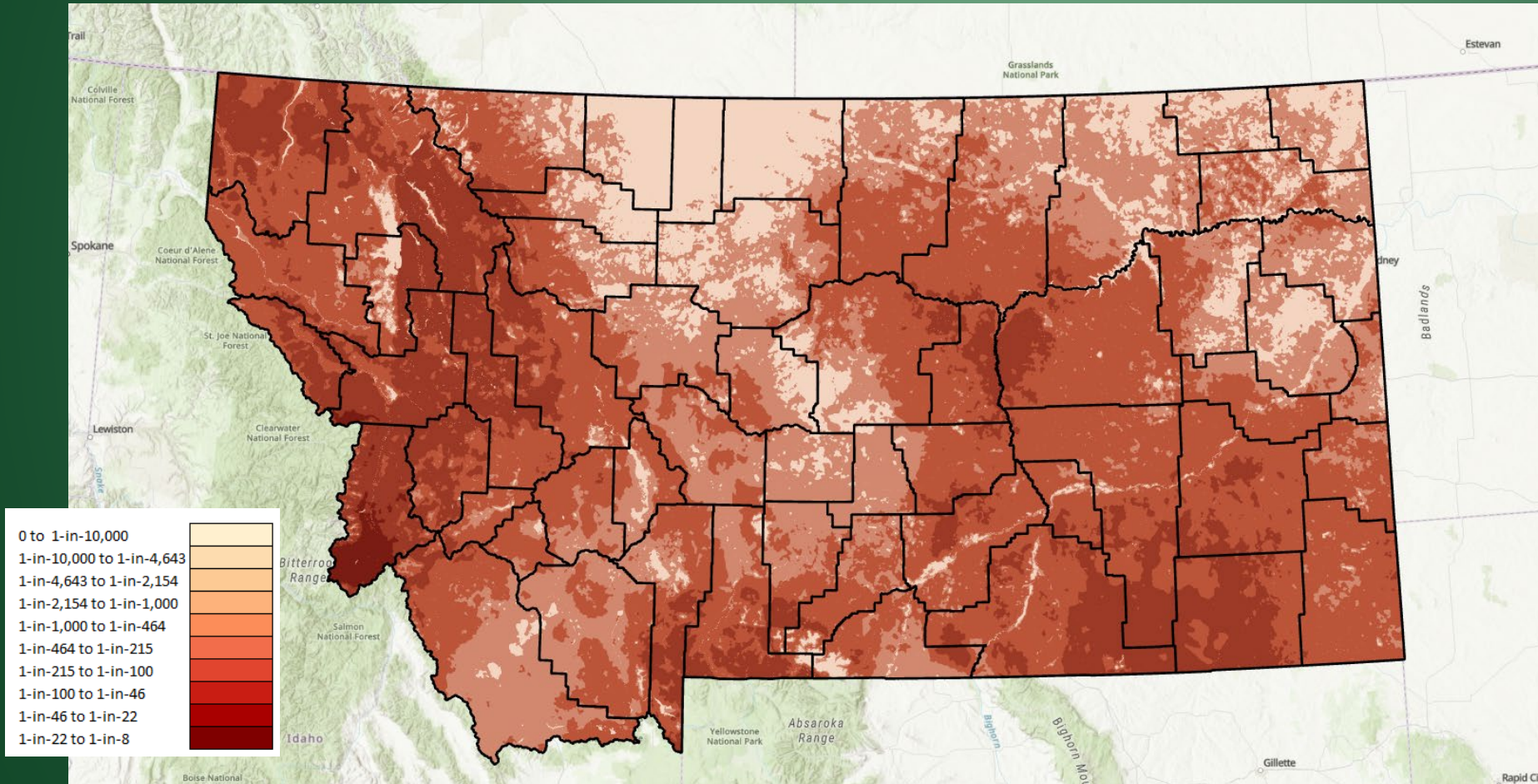


# Responsibility





# Burn Probability

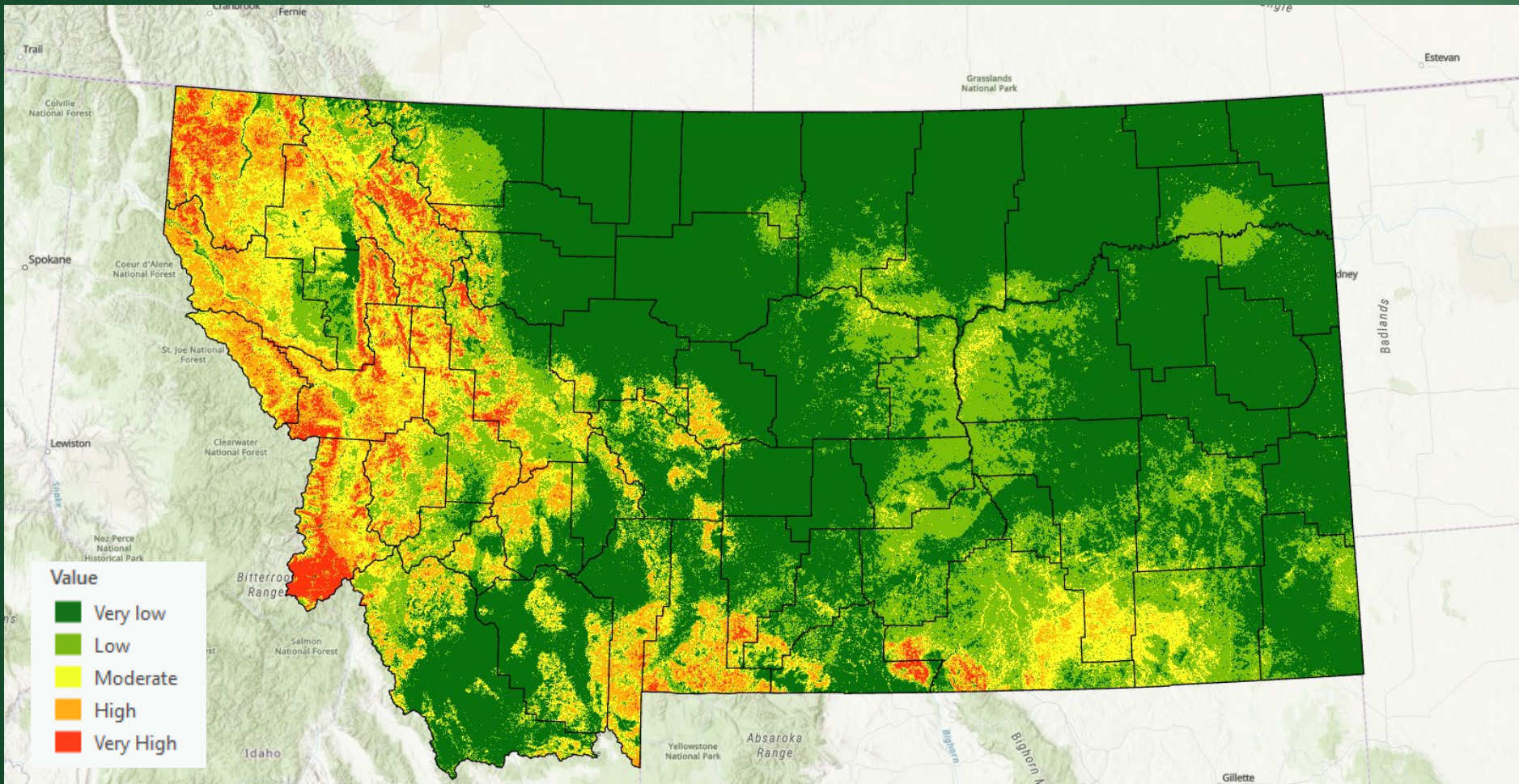


Annual Likelihood that fire will occur in a given location (currently based on 2015 fuel conditions, update about to be released.)

[https://wildfirerisk.org/wp-content/uploads/2022/12/WildfireRiskToCommunities\\_Methods\\_Revised\\_Nov2020.pdf](https://wildfirerisk.org/wp-content/uploads/2022/12/WildfireRiskToCommunities_Methods_Revised_Nov2020.pdf)



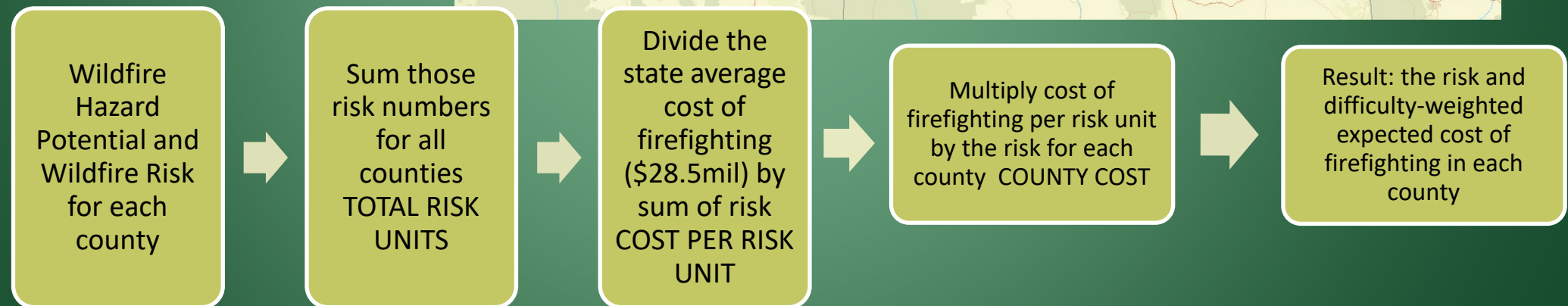
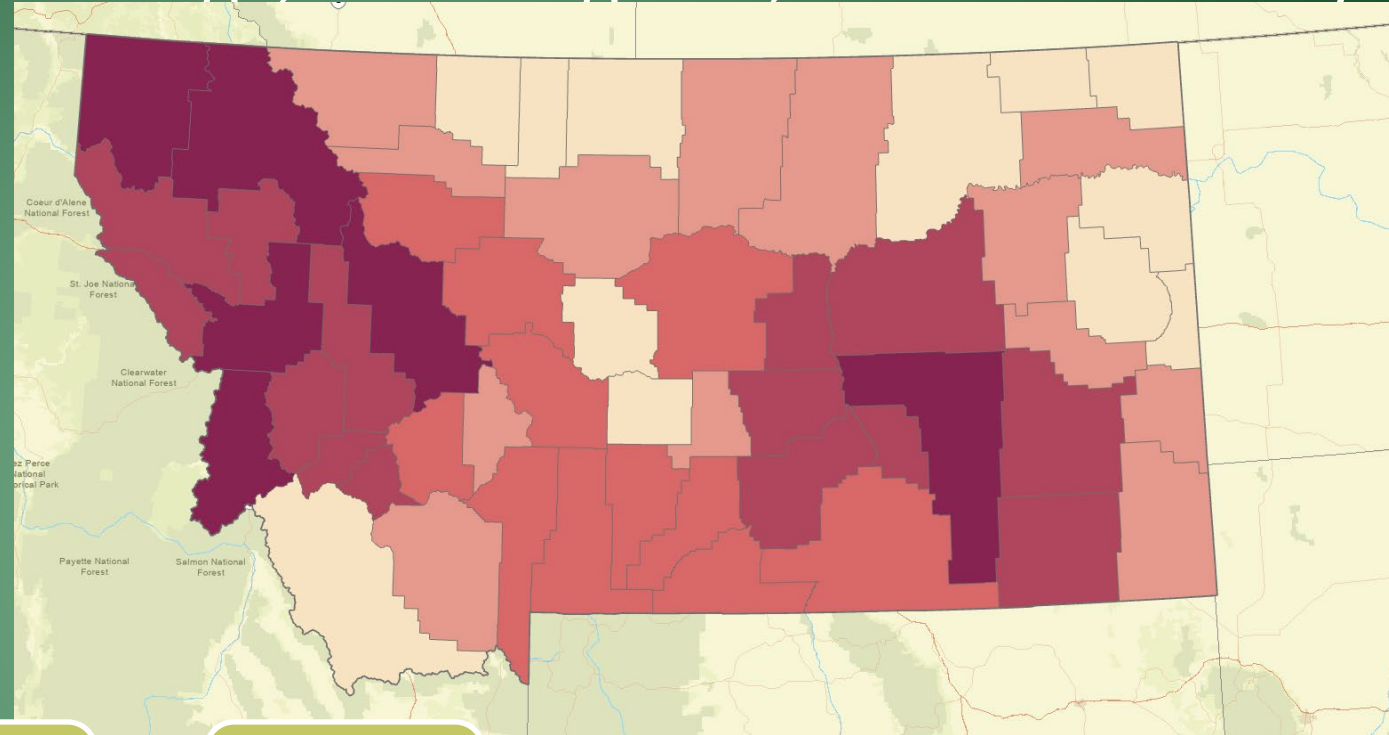
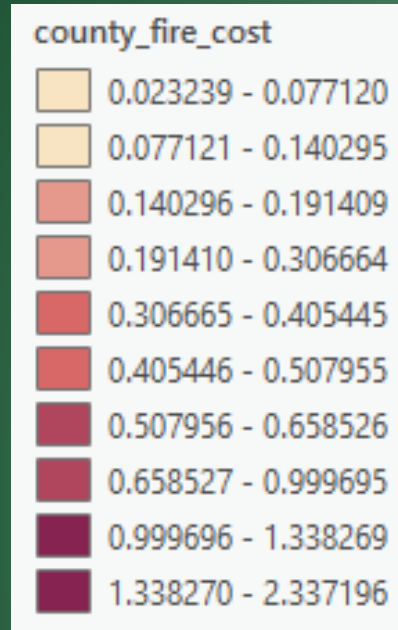
# Wildfire hazard potential



Relative potential for a fire that may be difficult to control

<https://wildfirerisk.org/wp-content/uploads/2022/12/WildfireRiskToCommunities-Methods-Revised-Nov2020.pdf>

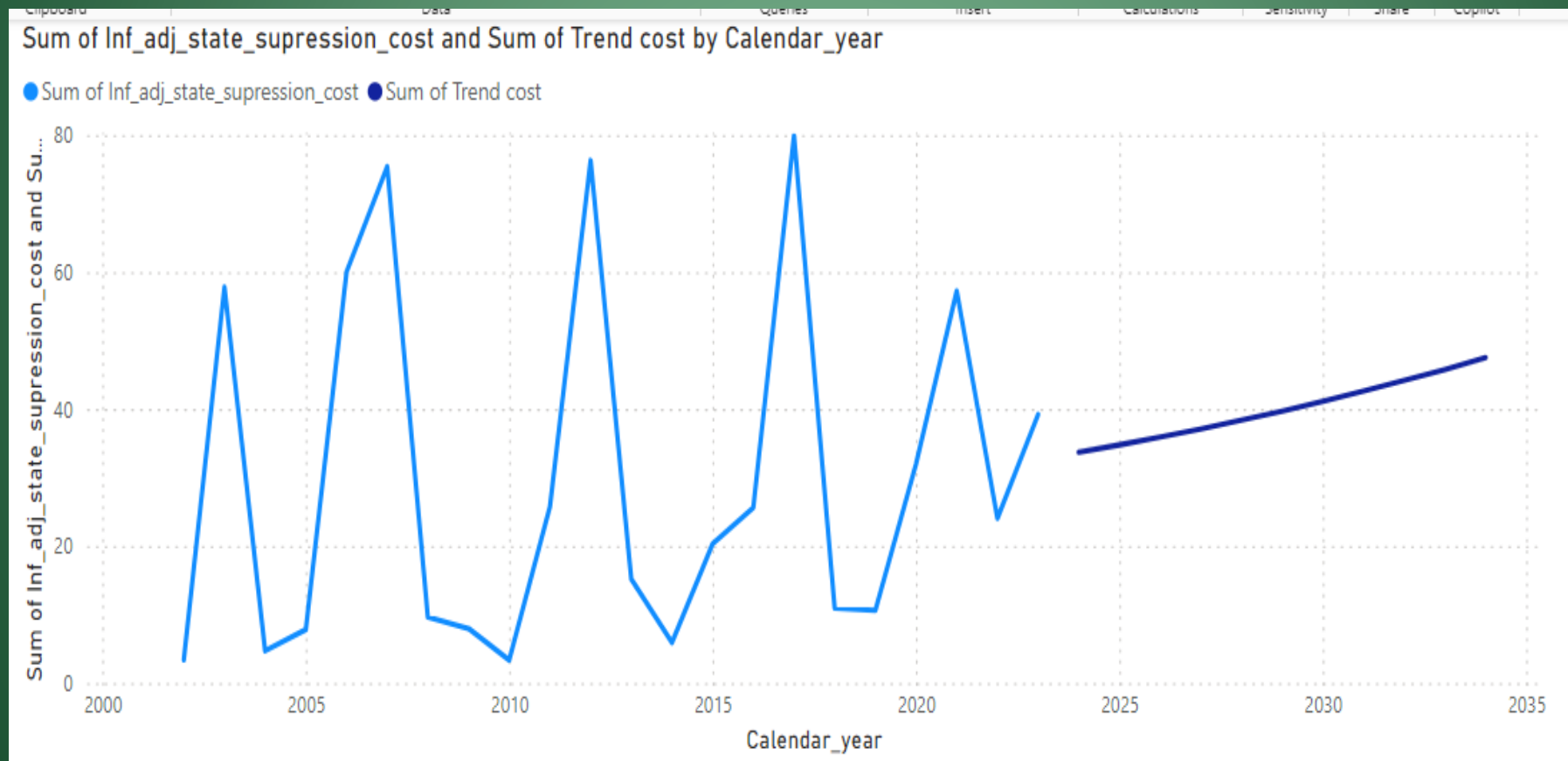
# State Fire Cost by County from MARA Model, in Millions of Dollars (Projected Annual Average, risk-weighted, will be inflated?)





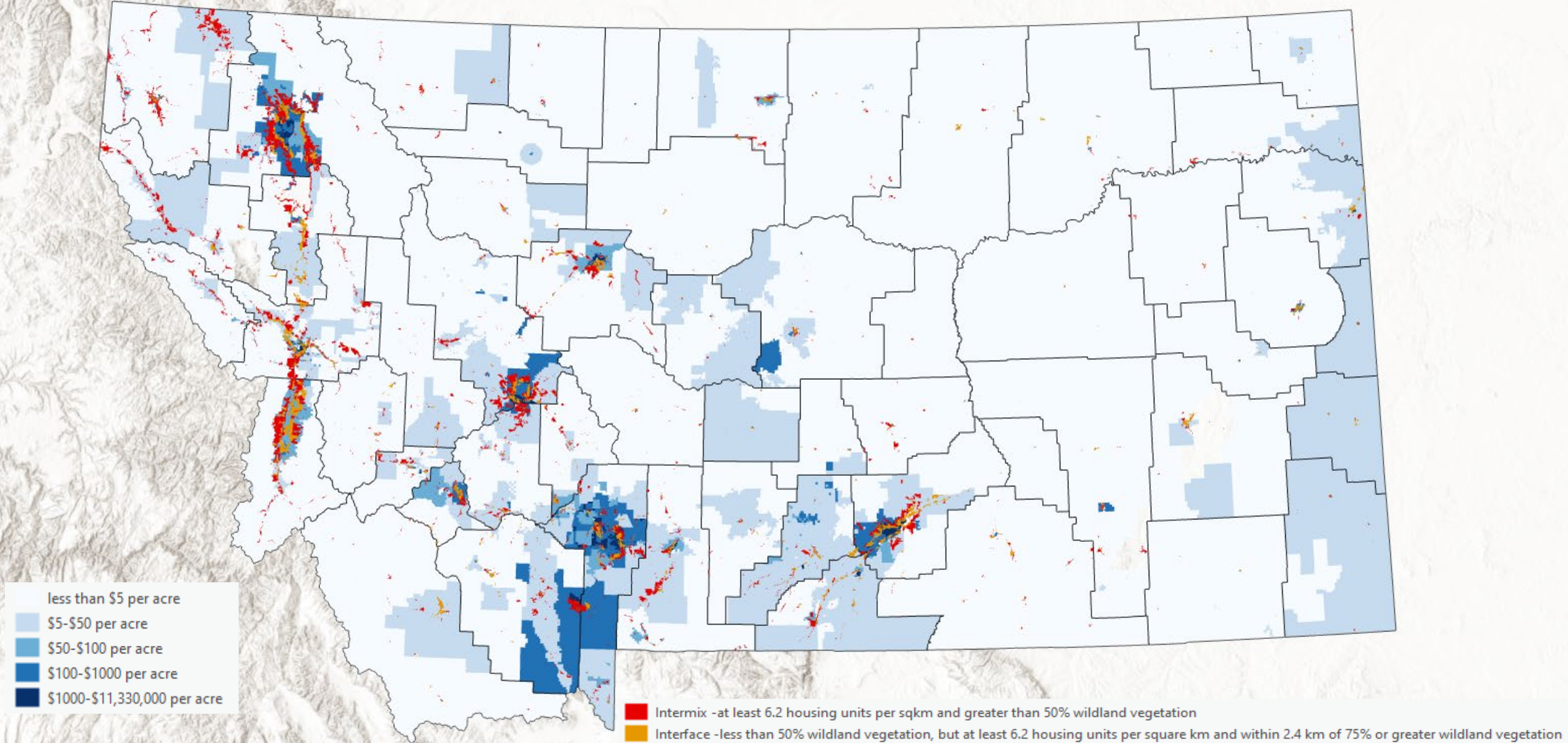
# Mara Model Trendline

- 5-year average, CPI adjusted forward





# Newly taxable value and the Wildland Urban Interface (WUI) 2014-2023





# Newly taxable value and Burn Probability

