

Collaborative Forest Management Project in New Mexico

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Kent Reid moved to New Mexico in 1996, and worked here and internationally as a consulting forester before going to work for the NM Forest and Watershed Restoration Institute (FWRI) in 2007. He currently is Director of FWRI, located at Highlands University in Las Vegas. Kent has degrees from North Carolina State, Colorado State, and Clemson, and has worked for Weyerhaeuser, the Peace Corps, the University of Missouri, Auburn, Virginia Tech, and Cornell.



*New Mexico Landscape Assessment Tool
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What is the Landscape Assessment Tool?

- Displays and summarizes landscape characteristics from multiple geographic databases
- User friendly interface
- Curated “One-stop” for locating and viewing information
- A concept (based in reality)

Table 1. Criteria, Description, and Score.

Criteria	Description	Score
Watershed Condition Class Framework (USFS)	Watershed condition is the state of the physical and biological characteristics and processes within a watershed that affect the soil and hydrologic functions supporting aquatic ecosystems. http://www.fs.fed.us/sites/default/files/Watershed_Condition_Framework.pdf	<ul style="list-style-type: none"> Functioning Properly: 81% Functioning at Risk: 19% Impaired Function: 0%
Water Sources (NMED)	Location of drinking water sources. From NMED, Jan 2014, via The Nature Conservancy.	<ul style="list-style-type: none"> GU: 53 GW: 3 SW: 3
Priority Landscapes Composite (NMSF)	New Mexico State Forestry has created a draft of priority landscapes to show areas where we would like to focus future projects based on a spatial analysis of mitigated threats and benefits to be achieved from Forestry projects. This dataset is meant to be a guideline, and a starting point for deciding where to focus funds on the ground. http://allaboutwatersheds.org/groups/fvwhcg/public/new-mexico-state-forestry-draft-priority-landscapes-overview-of-data-and-methods-utilized	<ul style="list-style-type: none"> Low Priority: Medium Medium/Low Priority: Priority Medium Priority: Priority Medium/High Priority: Priority High Priority: Priority
http://www.emrld.state.nm.us/SFD/statewideassessment.html	Development Potential (Risk)	<p>This data layer emphasizes areas that are projected to experience increased housing development in the next 30 years. This layer will be used in the State Strategy and Response plan to help emphasize areas which will conserve working forests.</p> <ul style="list-style-type: none"> 0: 0 1: 0 3: 0 5: 0
	Forest Health	<p>Forest Health Risk: This data layer identifies areas that make a forest area more susceptible to insect and disease outbreaks. This layer will be used in the State Strategy and Response plan to help prioritize areas where management of threats to forest health is most needed.</p> <ul style="list-style-type: none"> Low: Medium Low/Medium: Priority Medium: Priority Medium/High: Priority High: Priority
	Water Quality and Supply	<p>This data layer identifies watersheds important for supplying sustainable water supply along with the potential risks to supplying clean water. This layer will be used in the State Strategy and Response Plan to help emphasize areas which will enhance public benefit from forested areas.</p> <ul style="list-style-type: none"> 1: 3 2: 3 3: 3 4: 3 5: 3
	Fire Risk	<p>This data layer identifies areas with a relatively high risk of destructive wildfire. The intent of this layer is to identify areas where forest management is most likely to reduce the risk of wildfire damage (or reduce the impact of wildfire on natural resources, and human infrastructure and development). This layer has been developed for the State Strategy and Response Plan to help prioritize areas which will minimize potential and reduce impact of wildfire.</p> <ul style="list-style-type: none"> Low: 3 Low/Medium: 3 Medium: 3 Medium/High: 3 High: 3
Debris Flow (TNC)	Combined classification of probability and volume of a post wildfire debris flow from the Nature Conservancy, 2016.	<ul style="list-style-type: none"> 0: 2.3 1: 2.3 2: 2.3 3: 2.3 4: 2.3 5: 2.3 6: 2.3 7: 2.3 8: 2.3
Wildfire Hazard Potential – 2014 (USFS)	Relative potential for wildfire that would be difficult for suppression to contain. Areas mapped with higher wildfire potential values represent fuels with a higher probability of experiencing torching, crowning, and other forms of extreme fire behavior under conducive weather conditions, based primarily	<ul style="list-style-type: none"> 1 Very Low: 4 2 Low: 4 3 Moderate: 4 4 High: 4

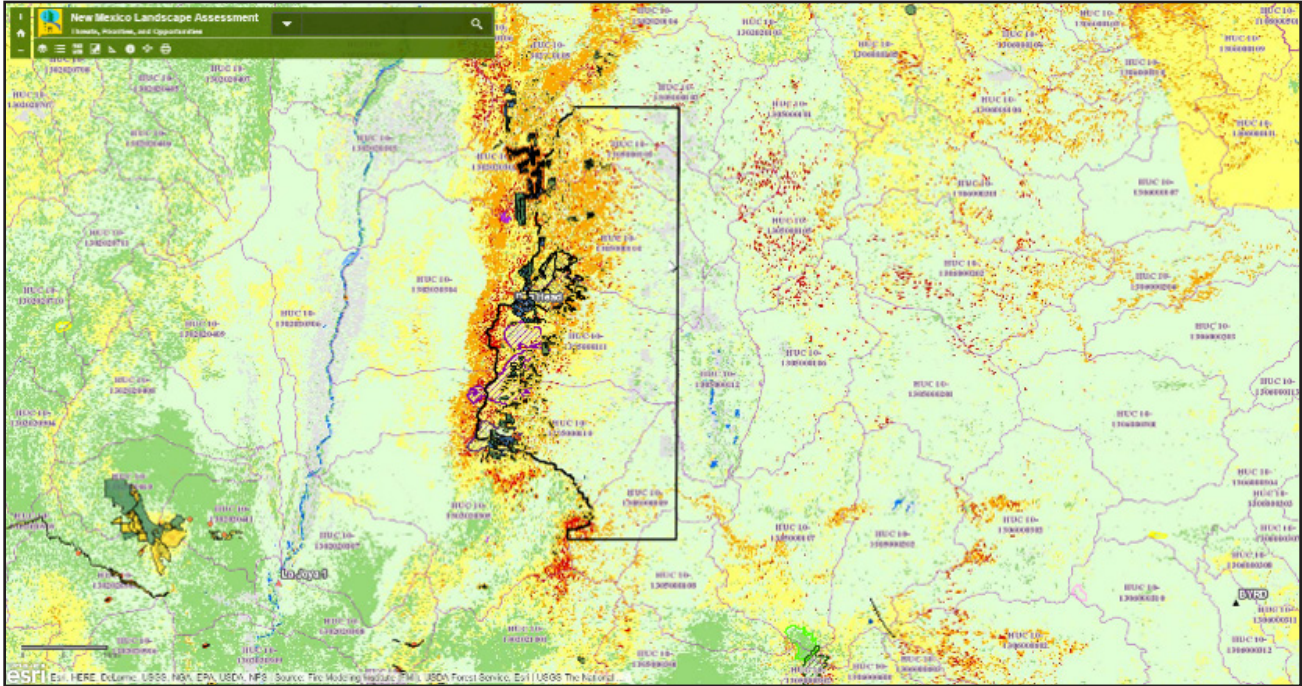


Figure 1. First draft of concept: <http://arcg.is/2dmkmiY>.

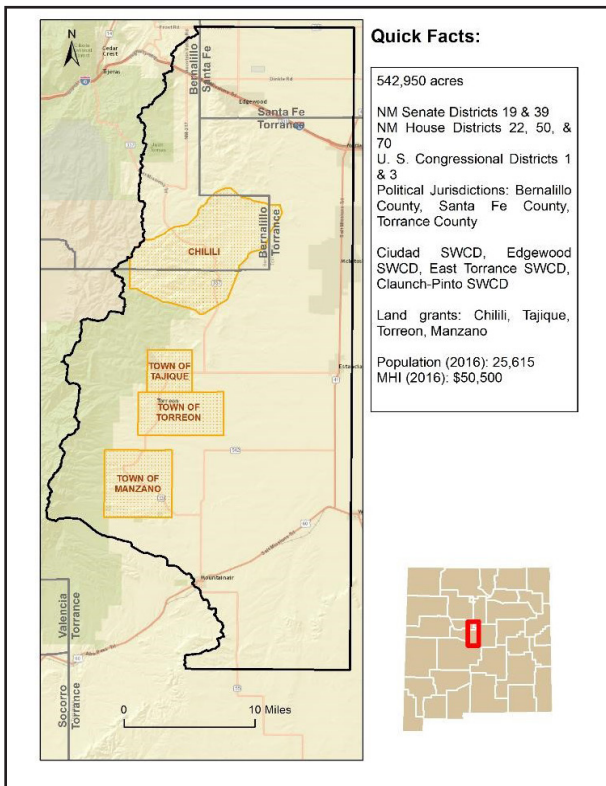


Figure 2. Western Estancia basin landscape.

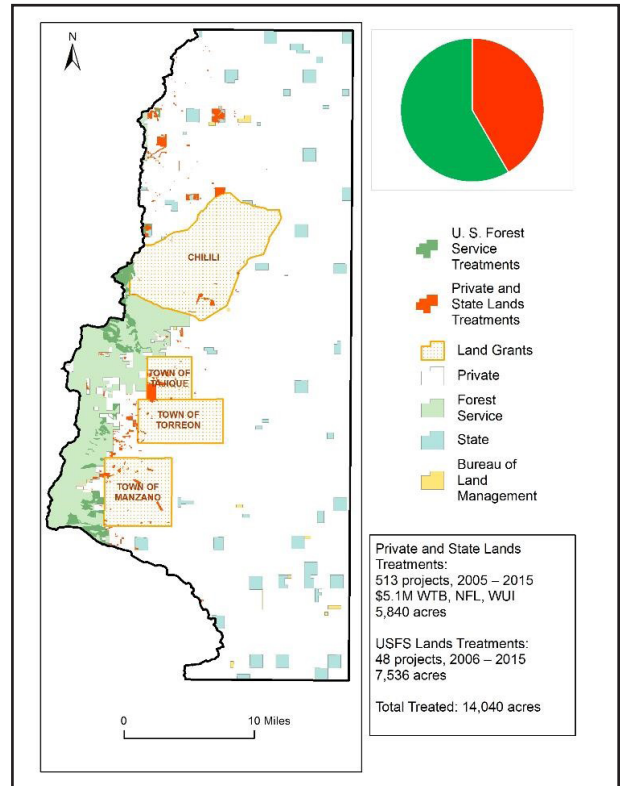


Figure 3. Treatments.

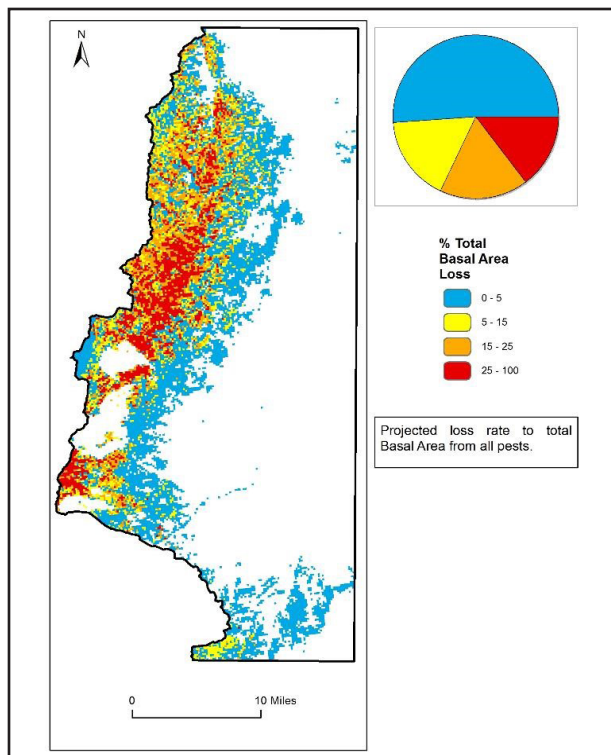


Figure 4. Fifteen year (2013-2017) projected risk from forest insect and diseases.

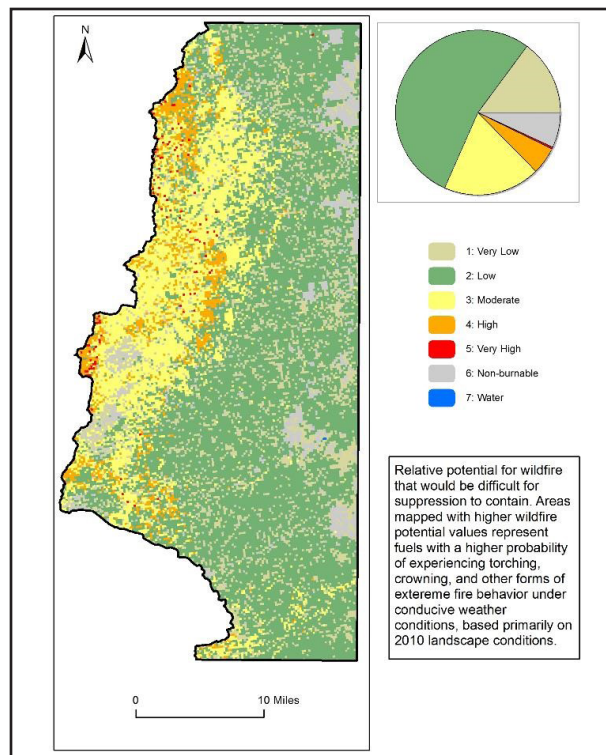


Figure 5. Wildfire hazard potential.

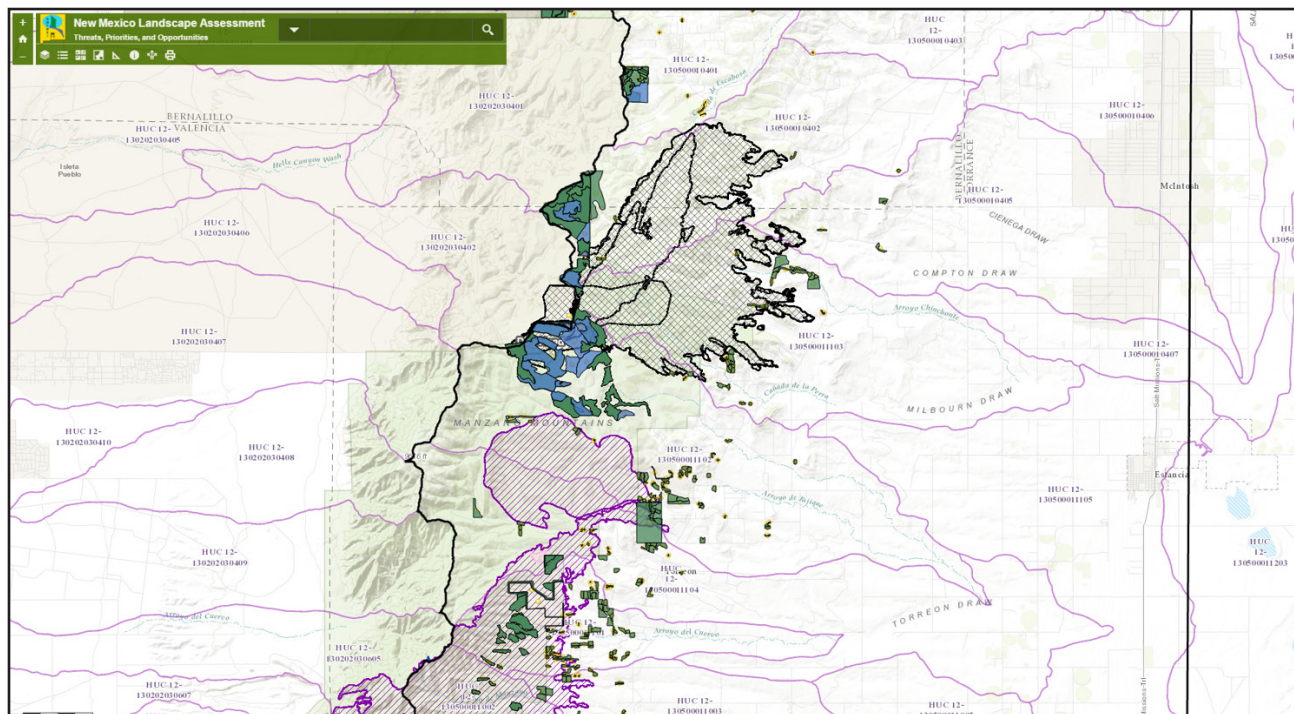


Figure 6. New Mexico landscape assessment - threats, priorities, and opportunities.

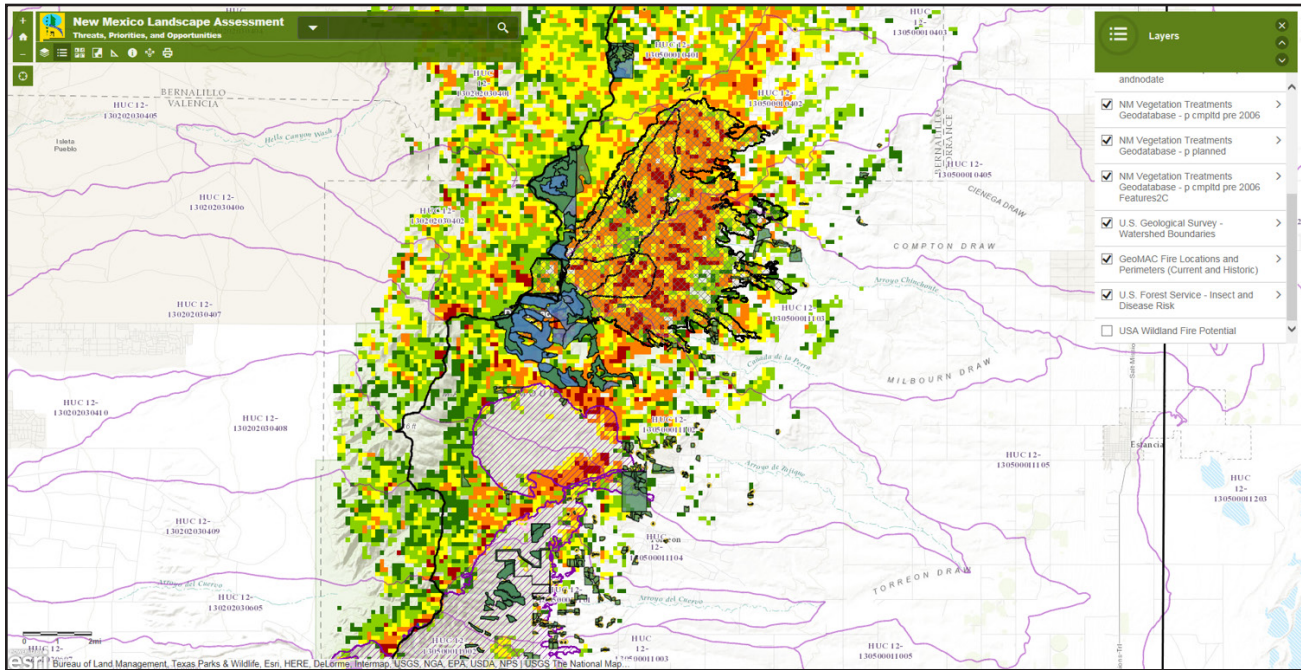


Figure 7. Bug and rot risk (USFS) with layers.

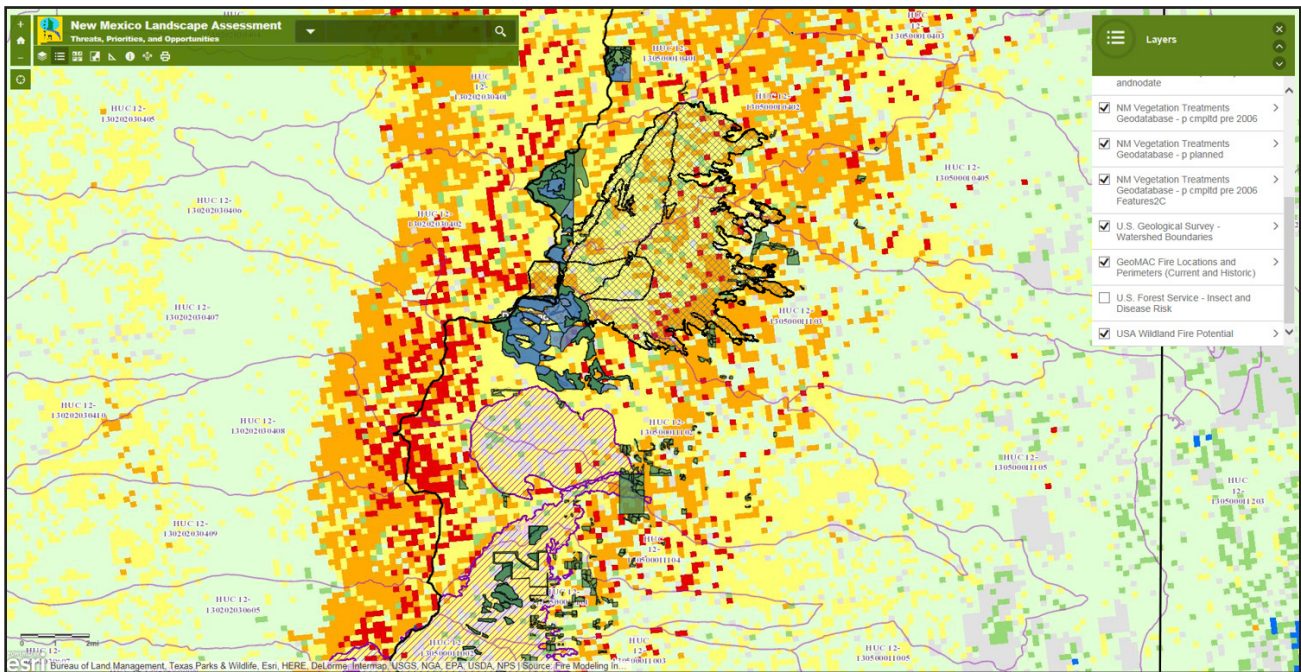


Figure 8. Wildland fire potential (USFS) with layers.

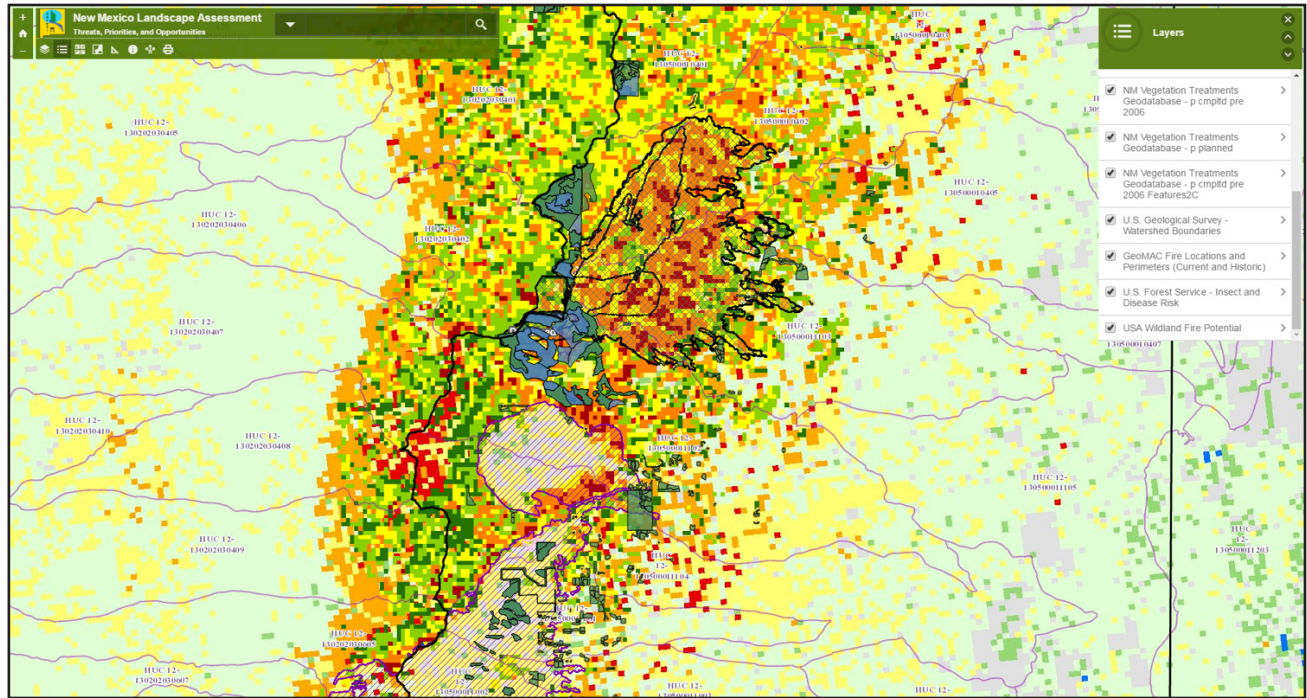


Figure 9. First draft of concept with layers.