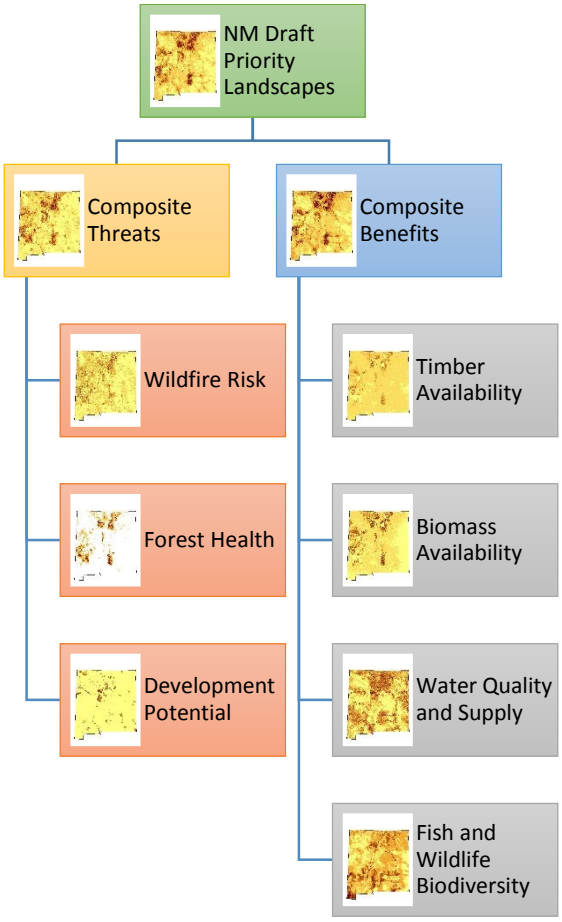
New Mexico State Forestry Draft Priority Landscapes:

Overview of Data and Methods utilized

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. This dataset does not, and cannot predict where other opportunities for partner cooperation, or special funding may steer projects outside of these areas.

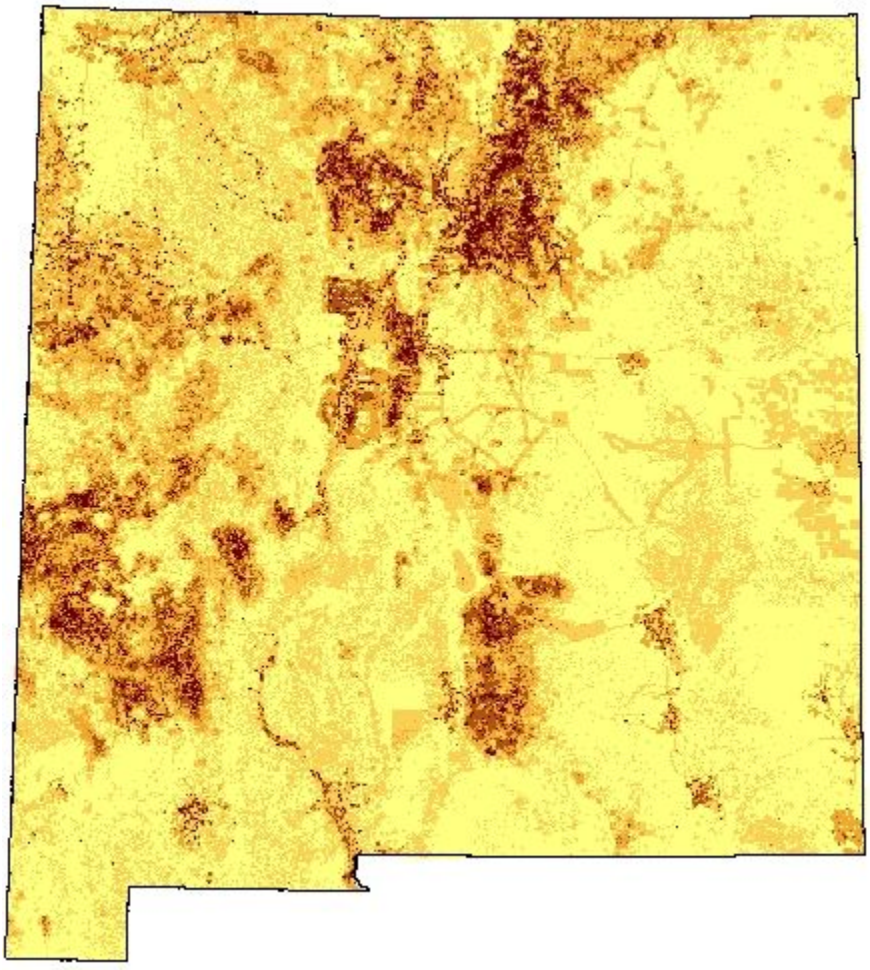
This analysis is modeled after the Idaho Forest Action Plan Priority Areas Analysis. We utilized existing datasets from the New Mexico Statewide Natural Resources Assessment & Strategy and Response Plan, and an equal weight sum analysis of 7 models split into categories based on whether they were resource threats or opportunities to secure future benefits. 3 models were compiled for the Composite Threats model, and 4 models were compiled for the Composite Benefits model. Those two composite models were then overlaid at equal weights to produce the NM Draft Priority Landscapes.



The Composite Threats model shows locations of opportunity to mitigate threats to natural resources and possible threats to life and property based on predicted development locations, forest health, and Wildfire Risk.

All of the constituent models for the Composite Threats model are available at: http://www.emnrd.state.nm.us/SFD/documents/New_Mexico_Natural_Resource_Assesment_DataAtlases.pdf

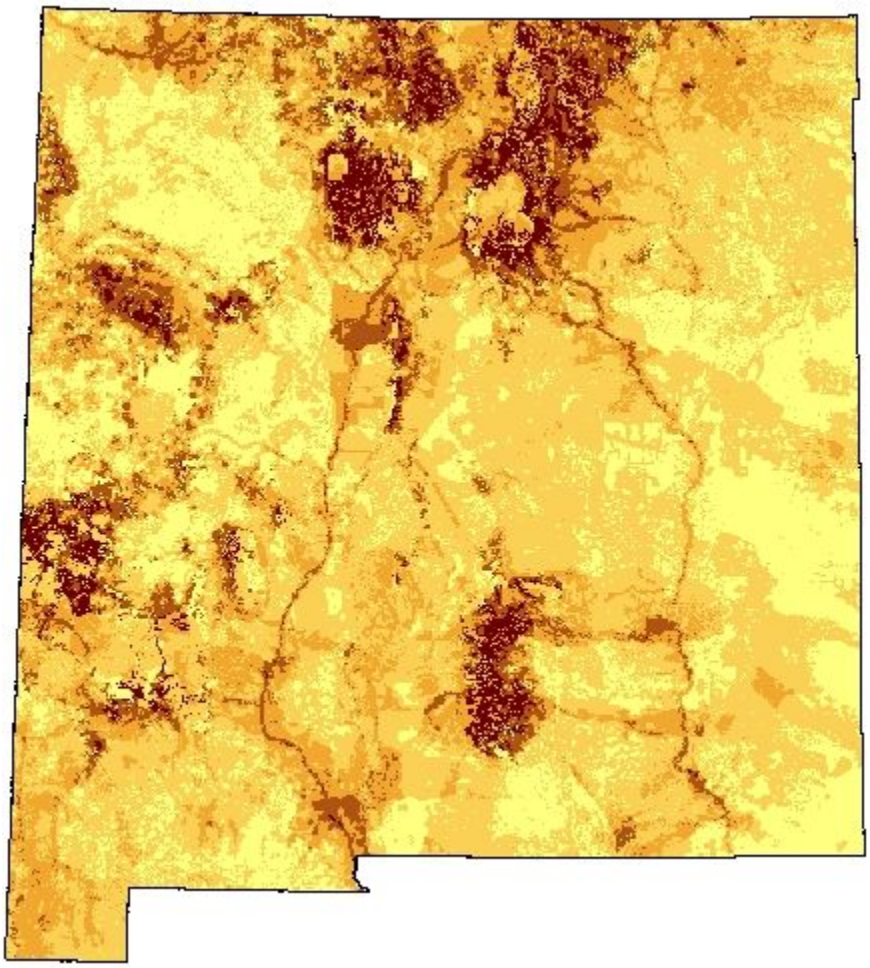
Composite Threats



The Composite Benefits model shows locations of opportunity to secure benefits for the forestry products and biomass industry in New Mexico, improve water quality and supply by improving forest and watershed health, and increasing and improving existing fish and wildlife habitat biodiversity.

All of the constituent models for the Composite Benefits model are available at: http://www.emnrd.state.nm.us/SFD/documents/New_Mexico_Natural_Resource_Assesment_DataAtlases.pdf

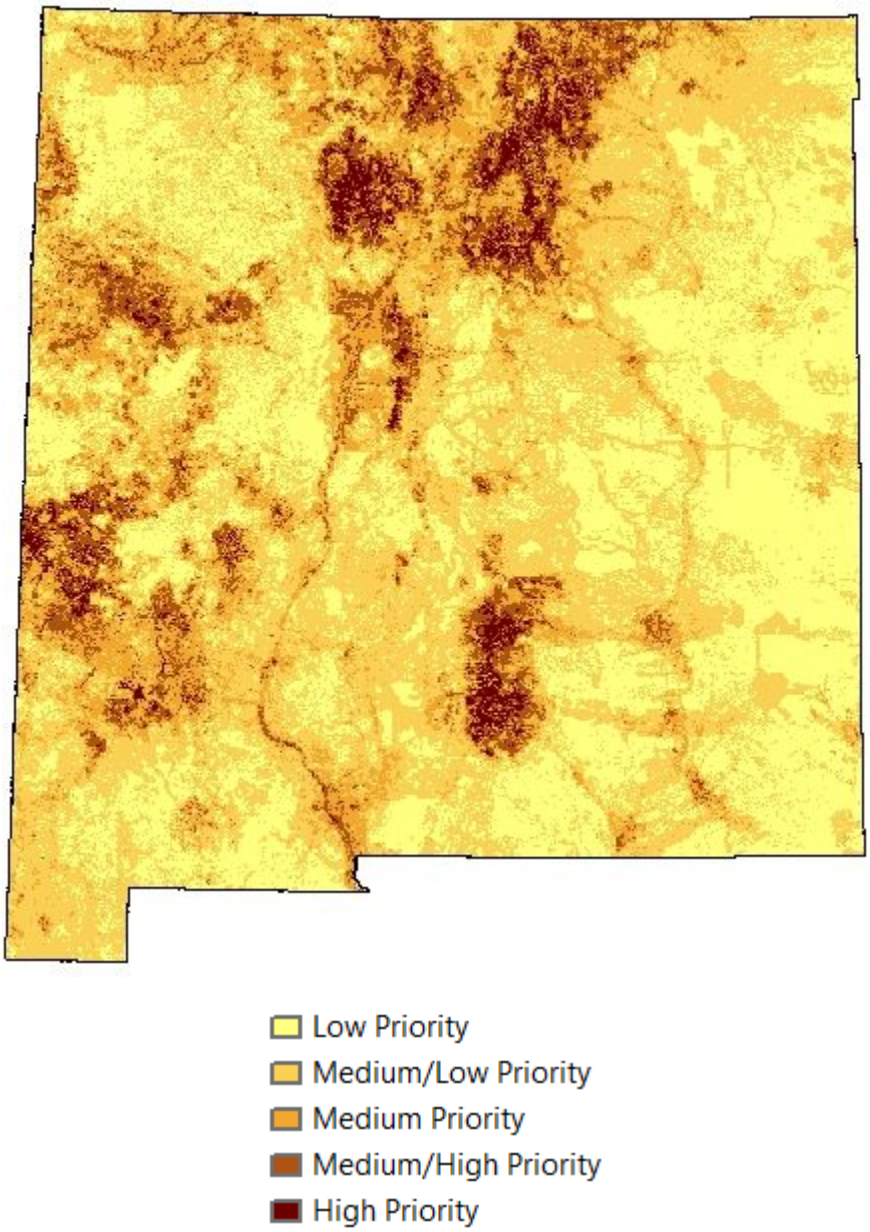
Composite Benefits



- Low Priority
- Medium/Low Priority
- Medium Priority
- Medium/High Priority
- High Priority

The NM Draft Priority Landscapes map is the reclassified map of the sum overlay analysis of the benefits and threats. The reclassification was based on Jenk's Natural Breaks classification method, and was set to 5 classes just like all the original constituent datasets. This model is used to produce the final polygon output for NM Draft Priority Landscapes for New Mexico State Forestry.

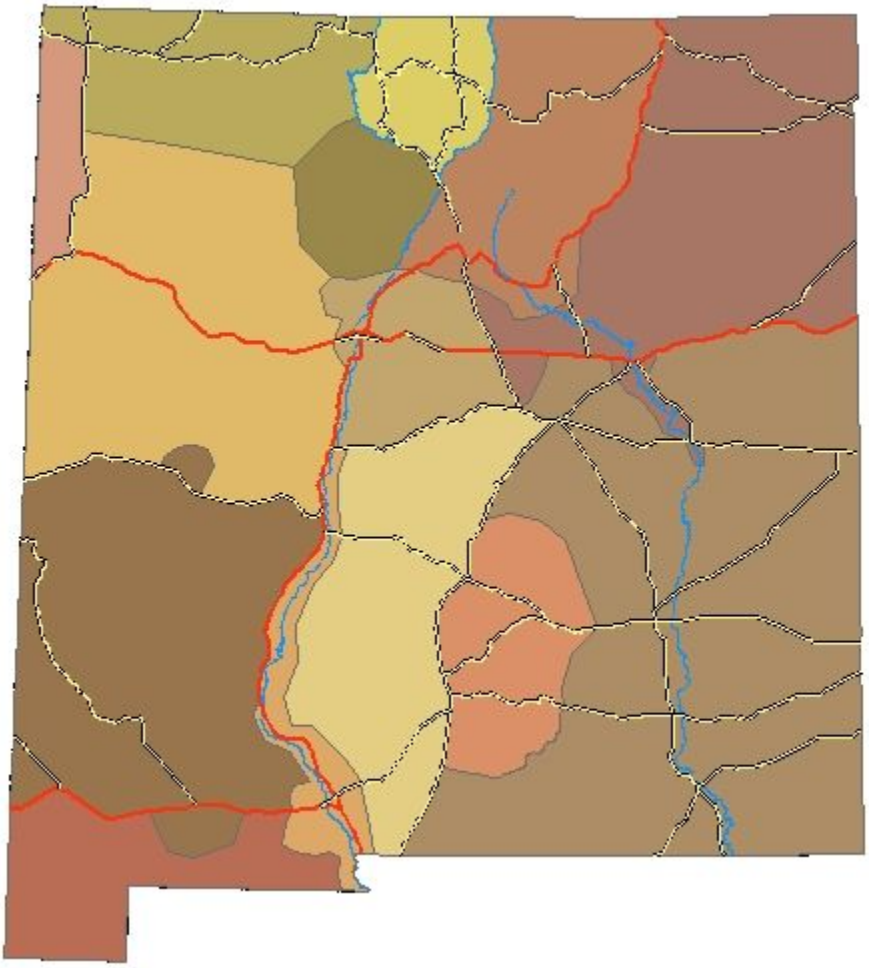
NM Draft Priority Landscapes



The 3, 4, and 5 Priority areas from this model were exported into a new polygon file which is used as the Priority Landscapes final product as it allows us more ability to produce spatial analysis and overlay with other vector data (Points, Lines, and Polygons). It also makes the process of splitting the state up into landscape scale areas based on the draft priority landscape areas/physiographic regions easier.

The NM Draft Priority Landscapes boundaries were delineated to give a degree of separation based on physiographic region around the state and to be able to break the dataset down into smaller chunks from its original statewide scale. This was done by drawing boundaries based on roads and rivers, separating out chunks of the analysis output based on their regional areas.

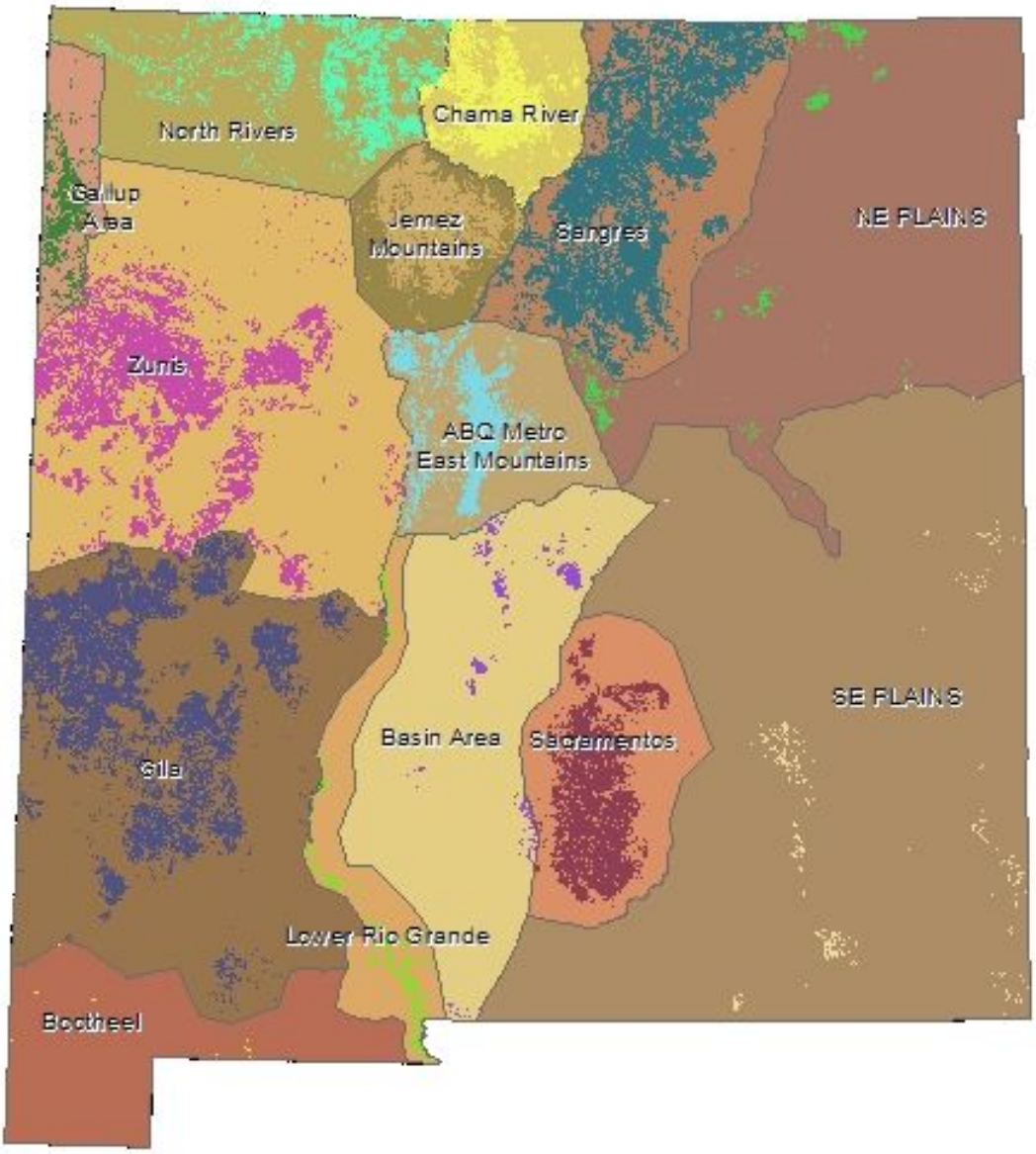
Priority Landscape Area Boundaries



There are some edits to be made to these regional areas for the landscape priority boundaries as well as agreement on the naming convention of these areas.

The final output from this analysis is the NM Draft Priority Landscapes polygon file. This file gives people the ability to query the location of projects with spatial selections to determine their location in or out of a Priority Area.

NM Draft Priority Landscapes



This draft of the NM Priority Landscapes analysis currently coincides with ~80% of NMSF and FS projects in the last 3 years. This analysis also fits very closely with Map 2 from the statewide assessment "Stakeholder Weighting of 8 Core Data Models from November Meeting". We feel this is a great starting point for addition of additional datasets and discussion of what should be taken into account to better capture or further refine the goals and opportunities for forestry work in the State of New Mexico moving forward.

NMSF/FS 2013-2015 Project Locations