

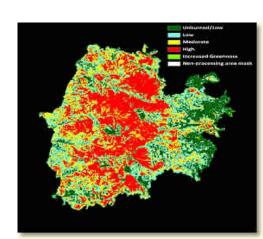
TFRSAC SPRING UPDATE:

US GEOLOGICAL SURVEY & WILDLAND FIRE LEADERSHIP COUNCIL

Paul Steblein, USGS Fire Science Coordinator psteblein@usgs.gov



- $\square > 8,000$ scientists & staff, > 100 on fire science
- Main areas of fire science work
 - DOI lands, shrubland, grassland, desert, tundra
 - Wildland Fire Behavior, Reduction of Risks Before Fires
 - □ Fire Effects & Restoration
 - □ Risk Assessment & Reduction During & After Fires
 - Debris flow, flooding, water quality & quantity
 - Remote Sensing/Geospatial Tools & Data
 - Satellite imagery, maps, Lidar
 - Fire related data and tools
 - Technology research
 - Sensors, UAVs, data archives & tools



Improving Wildland Fire Data Based on User Feedback

Overall Goal:

- Explore the future needs of different users of data, information products and services relevant to wildfire management
- Engage with a broad spectrum of data consumers to solicit input on data needs to support future wildfire management and decision making
- Use this input to guide future development of USGS fire science data, products and services

End user input is essential to data producers to ensure the utility and quality of the products they generate. This link between user and producer ensures that data products are useful to those who rely on them.

What are your current data needs? How do you see those needs changing in the future?

Example Improvement Based on User Feedback

LANDFIRE

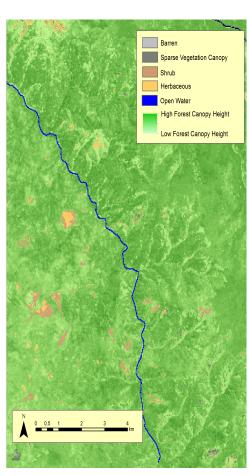
Height Mapping

- LANDFIRE users reported limited utility of the existing vegetation height layers because of the broad range of height values classified.
- LANDFIRE is currently re-mapping existing vegetation height layers utilizing lidar height information to train models of forest height.
- Resulting vegetation height maps will be better suited for wildland fire management applications.
- EROS Fire Science Pl's
 - Birgit Peterson, bpeterson@usgs.gov
 - Kurtis Nelson, knelson@usgs.gov

Old Product

Sparse Vegetation Height Herbaceous Forest Height 5 to 10 meters orest Height 25 to 50 meters orest Height > 50 meters

New Product





WFLC

- Federal, state, tribal, county, & municipal government officials
- Convened Secretaries of the Interior, Agriculture,
 Defense, and Homeland Security
- Consistent implementation of wildland fire policies, goals, & management activities
- Charted development of National Cohesive
 Wildland Management Strategy



Wildland Fire Leadership Council

Current areas of emphasis relevant to TFRSAC – March taskings

- Propose methodologies to better coordinate federal, tribal, state and local organizations in reducing fuels and risk through the use of active management including consideration of a national risk management "tool," coordination of activities across boundaries and support for each organization's actions.
 - Inventory of existing tools and identification of potential gaps/ needs (science, data and tools piece)
- Finalize the Forest Service/Department of Interior Joint UAS
 Operational Guide / MOU
- □ Fire, flood & mud mitigating post-fire impacts
- Emerging technologies to help with fire management