NEW MEXICO GIS DATA RGIS CLEARINGHOUSE

Shawn L. Penman, PhD, CFM, GISP

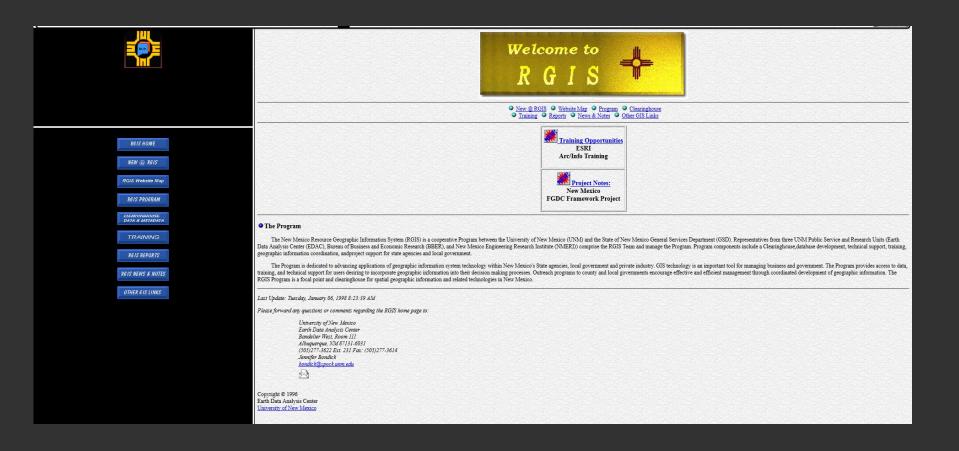




RGIS HISTORY

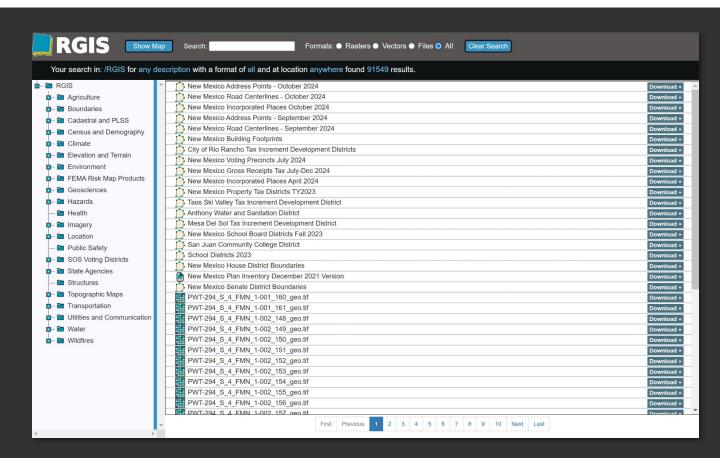
- 1988 New Mexico State agencies surveyed by four UNM units to assess the feasibility for developing a statewide computer mapping and geographic information system. (RGIS)
- 1996 RGIS website inaugurated. Provided information on the program and metadata. Data not available yet via the website. CD-ROM set of clearinghouse data released. Cost per CD was \$150.00.
- 2013 RGIS designated State Digital Geospatial Data Clearinghouse by the NM Legislature and Governor (2013, HB493)
- 2022 Statewide QL2 LidAR

RGIS 1.0



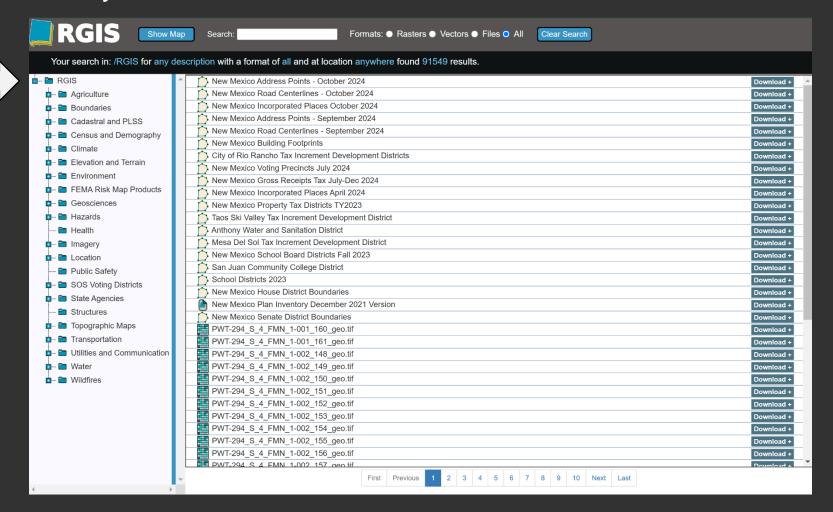
RGIS

- Browse
- Search
 - Keyword
 - Filters
 - Spatial
- Download
 - Formats
 - Metadata
 - Services



Browse Catalog

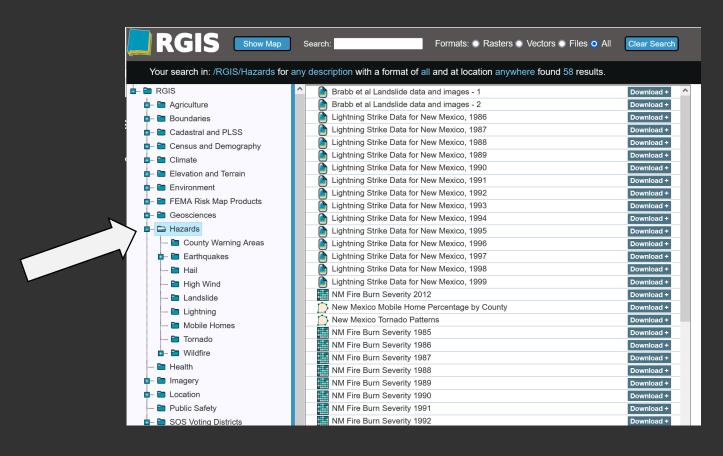
Click on Directory for data results



Results

Browse RGIS Catalog

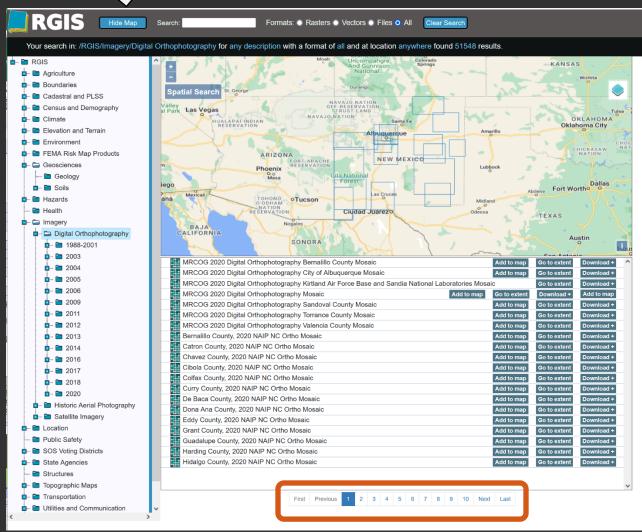
Expand Directories to find data set of interest



Browse Catalog



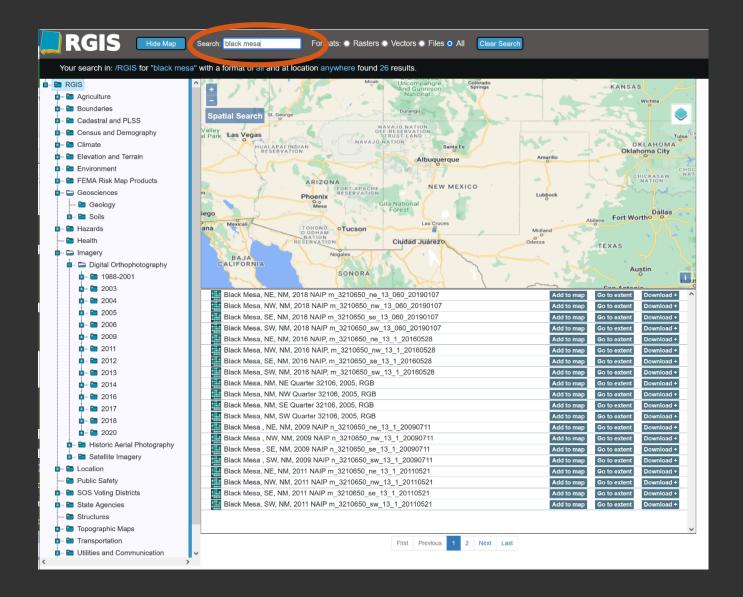
Show Map



Additional pages

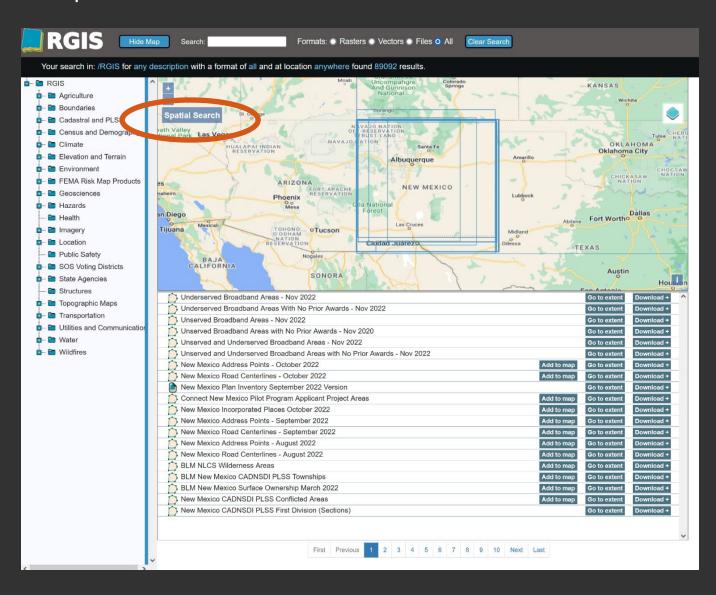
Search RGIS Catalog

Keywords



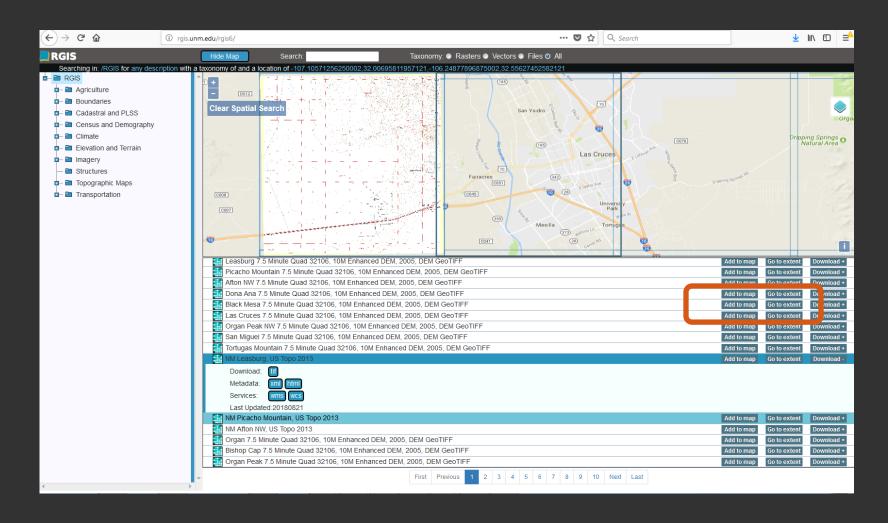
Spatial Search

Click on Spatial Search, draw box, list of data within area of interest



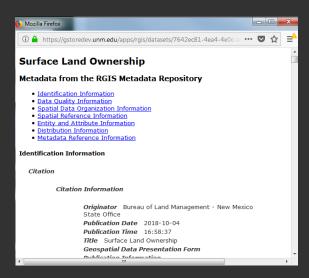
Spatial Search Results

Add to Map – Zoom to Extent

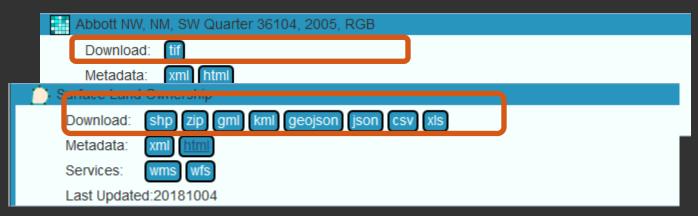


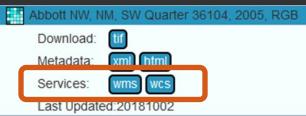
RGIS

Metadata



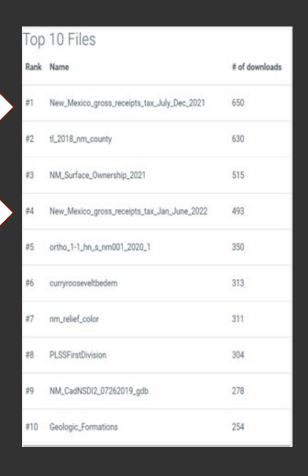
Download Files





Services

RGIS USERS



- RGIS Users
- Higher Education
- State & Federal Users
- Industry
- Non-Profits
- Regional & Local Governments
- Tribal Governments

DATA & IMAGERY

- Boundaries
 - Administrative
 - District Attorney Districts
 - Land Ownership
 - School Districts
 - Economic
 - Gross Receipts Tax
 - Incorporated Places
 - Property Tax Rate Districts
 - Recreation
 - Wilderness Areas
 - Roadless Areas

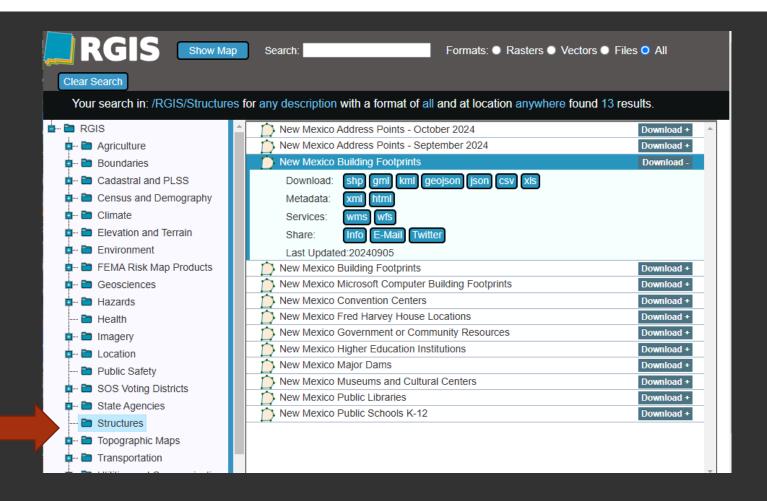
- PLSS
- FEMA Projects
- Hazards
- Public Safety
 - EOC, Fire Stations, Police Stations
- 911 Program Data
 - Roads & Address Points

DATA & IMAGERY

- SOS Voting Districts
 - Courts
 - Education
 - Community College Districts
 - Precincts
 - House & Senate Districts
 - County Commission Districts
 - Special Districts
 - Arroyo & Flood Control
 - Conservancy
 - Hospital
 - Water & Sanitation
 - Watershed

- Utilities
 - Broadband
- Water
 - Acequias
 - Watershed boundaries
 - Flood Hazard Data

BUILDING FOOTPRINTS

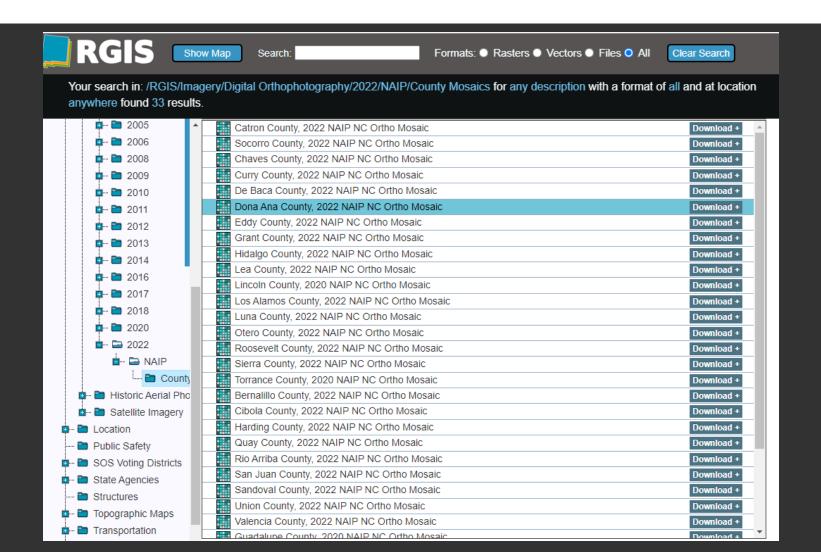


DATA & IMAGERY



• 2024 coming soon (NAIP & MRCOG)

2022 NAIP COUNTY MOSIACS



NARA HISTORICAL AERIAL PHOTOGRAPHY



IMAGE ARCHIVE

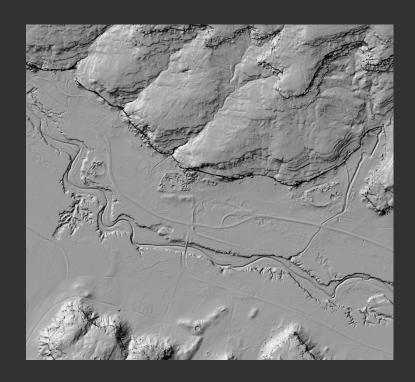
- Historic aerial photography archive dating from the mid-1930s that covers New Mexico, portions of Arizona, and Texas.
- U.S. Geological Survey
- Army Map Service
- U.S. Forest Service
 - National Aerial Photography Program
- Soil Conservation Service
- Bureau of Land Management

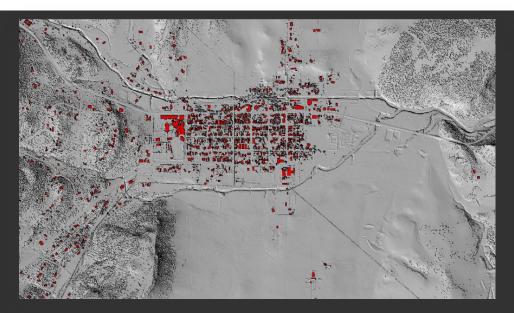
- Agricultural Stabilization and Conservation Service
- NASA
- and several private firms.
- Pacific Western Technologies
- Thomas R Mann & Associates, Inc.

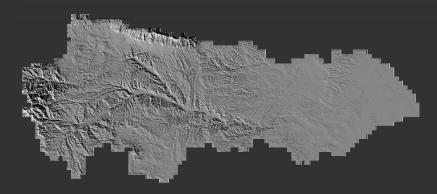
LIDAR

Statewide QL₂ LiDAR Data

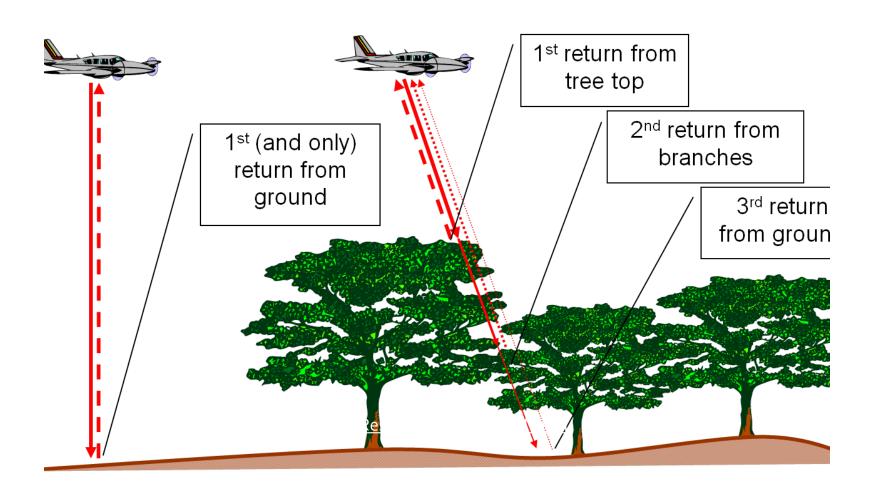
- 10cm vertical accuracy
- DEM o.5 meter



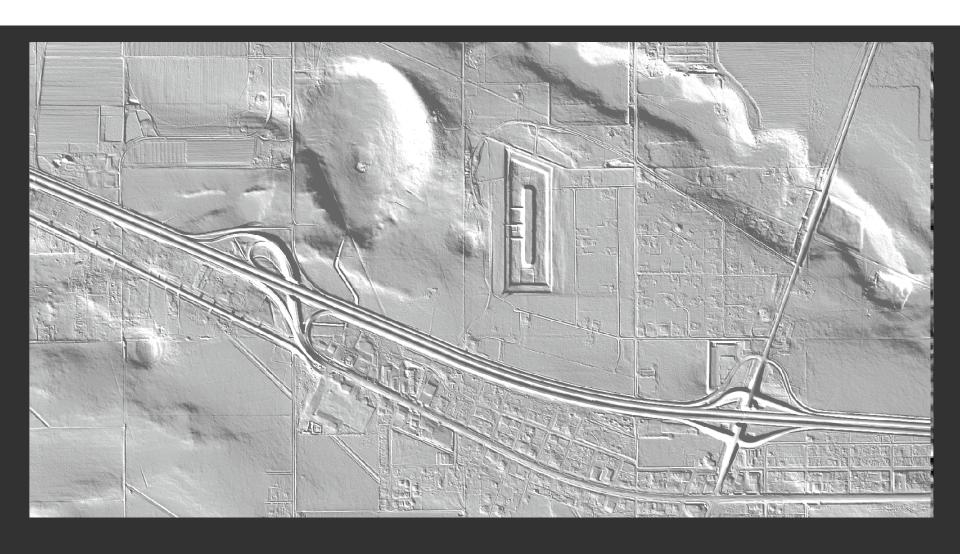




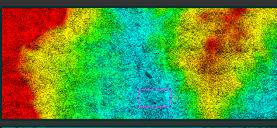
LIDAR RETURNS



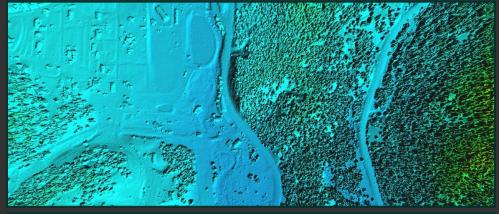
CURRENT 10 METER DEM VS USGS QL2 LIDAR



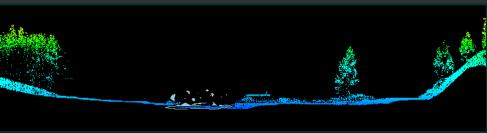
Basic Lidar Products



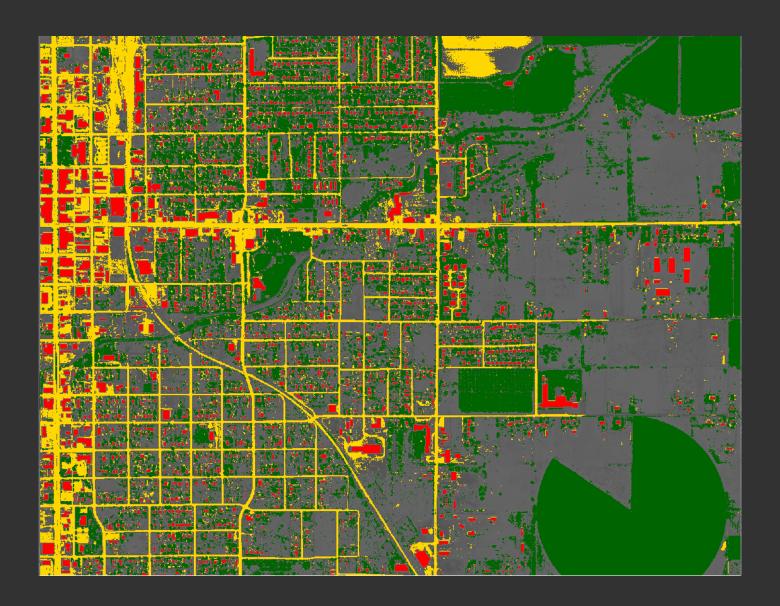
Lidar Point Cloud, Colored by Elevation La Cueva Area (Valles Caldera Project, 2010)



Surface Model



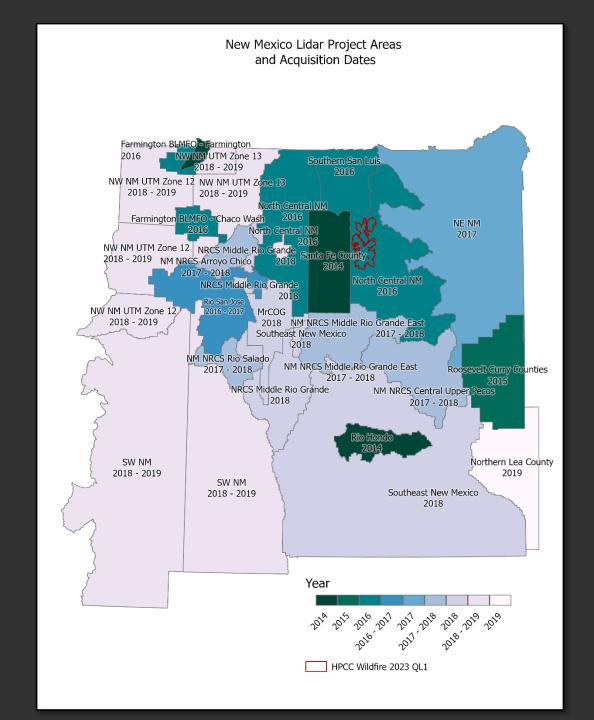
Side-View Profile



USGS QUALITY LEVELS

	Quality Levels	Data Source	Horizontal Resolution	Vertical Accuracy	
			Point Density	RMSEz in Open Terrain	Equivalent Contour Accuracy
0)L 1	LiDAR	8 points/m²	9.25 cm	1 foot
Q	!L 2	LiDAR	2 points/m²	9.25 cm	1 foot
Q	1L 3	LiDAR	1 — 0.25 points/m²	≤18.5 cm	2 feet
Q	!L 4	Imagery/ LiDAR	1 – 0.04 points/m²	46.3 – 139 cm	5 – 15 feet
0	L 5	Imagery/ IFSAR	0.04 points/m ²	92.7 – 185 cm	10 – 20 feet

Lidar Entire State of New Mexico



FEMA PROJECT PLAN INVENTORY



COORDINATE MITIGATION INVESTMENTS TO REDUCE RISK

- Coordinating Community Mitigation Hazard Analysis Efforts in New Mexico
- Centralized location for information about 'Plans'
 - Climate and Drought Plans
 - Land Use Management Plans
 - Stormwater Drainage Plans
 - Comprehensive Plans
 - Water Assurance Plans
 - Soil Water Conservation District Land Use Plan
 - Water Conservation Plans
 - Economic Development Plans
 - Master Plans
 - Economic Development
 - Other Plans

GIS.NM.GOV



Mission

The mission of this "New Mexico Geospatial" web forum is to foster collaboration, innovation, and knowledge-sharing among individuals and organizations involved in Geographic Information Systems (GIS) in the state of New Mexico. We aim to promote the effective and efficient use of GIS and technology to address the diverse needs of our communities, including government agencies, businesses, non-profit organizations, and the general public. By centralizing access to information and expanding awareness, we strive to enhance the understanding and application of GIS to support informed decision-making, sustainable development, and the overall well-being of New Mexico. read more...



Communities

Assemblages of people & content who share a common geospatial interest, goal, or vision and who need a forum for collaboration and awareness.



Dat

References to all geospatial data resources in New Mexico, including the state data clearinghouse, hosted data services and API's.



Organizations

Geospatial organizations who already have an established presence and are important to the geospatial community in NM.

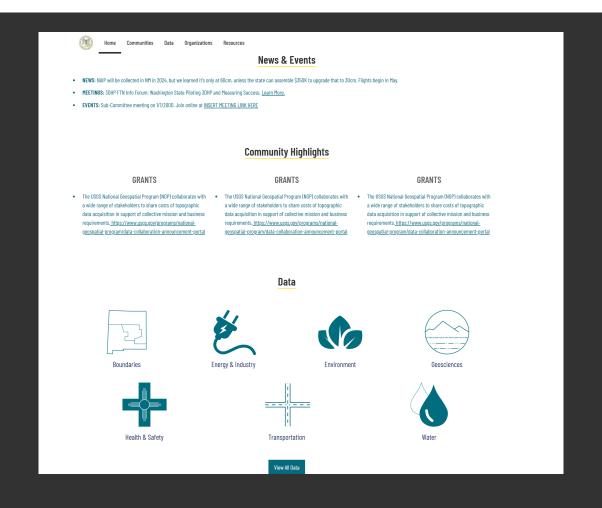


Pacourcas

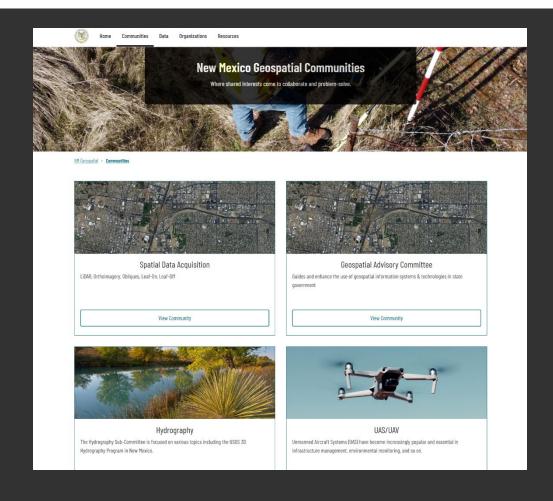
Resources which are important for geospatial professionals operating in NM, such as legislation, standards and guidelines, data use agreements, and use cases.

Back to Top

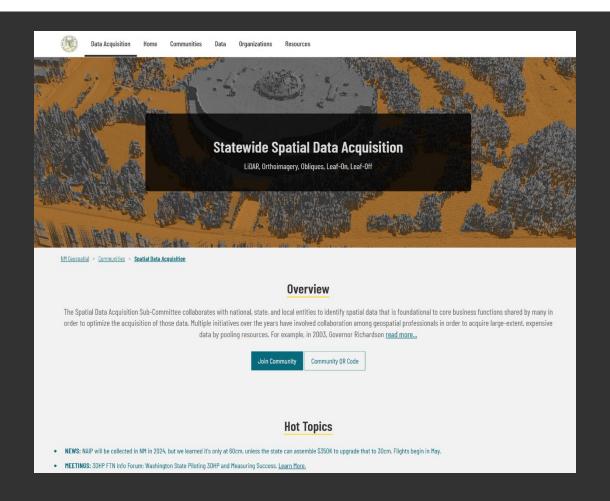
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COMMUNITIES



COMMUNITIES



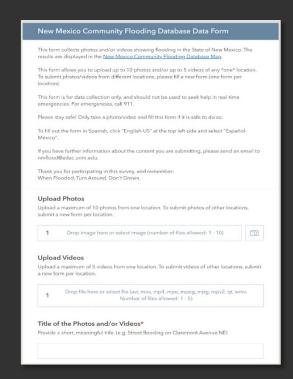


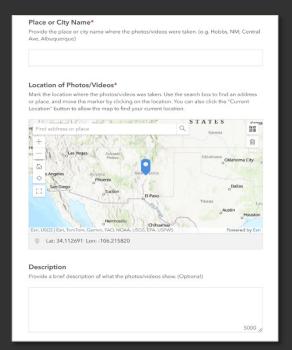
NEW MEXICO COMMUNITY FLOODING DATABASE

Collect photos and/or videos showing flooding in the State of New Mexico

SURVEY



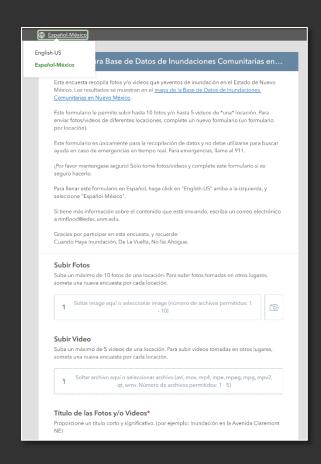




https://tinyurl.com/ms8knjhh

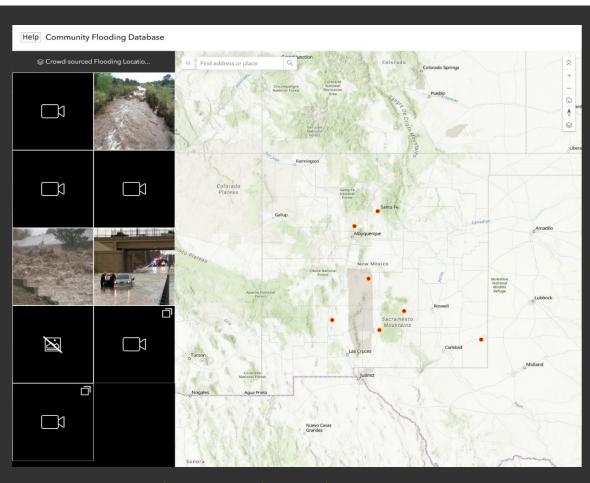


ENCUESTA EN ESPAÑOL



FLOODING WEB-APP



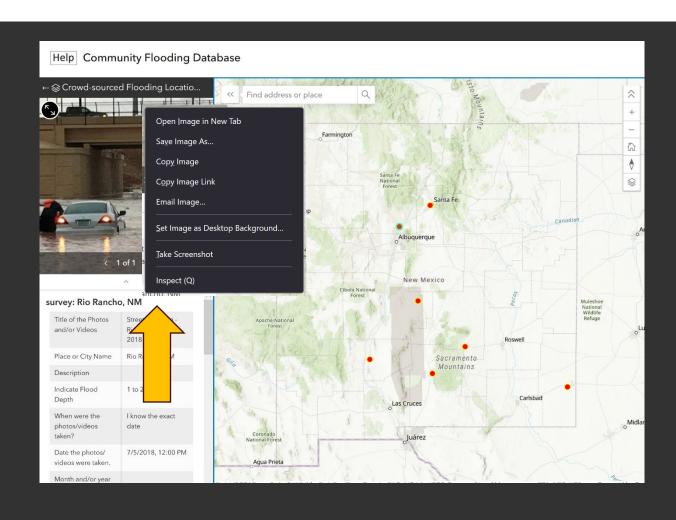


https://tinyurl.com/3jdupaev

USER GUIDE



DOWNLOADING PHOTOS/VIDEOS



GOT PHOTOS??

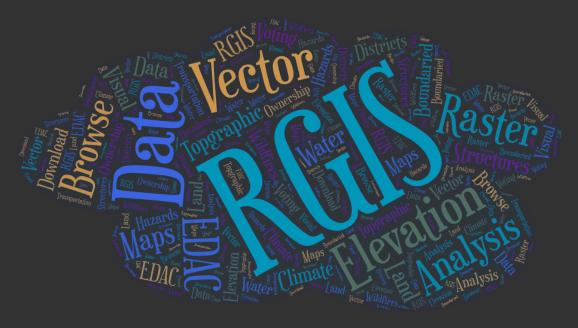


https://tinyurl.com/ms8knjhh

DATA NEEDS/REQUESTS

• What data do you need that is not available?

QUESTIONS – RGIS.UNM.EDU/RGIS6



Shawn L. Penman, Ph.D., CFM, GISP

RGIS Clearinghouse Manager Earth Data Analysis Center

505-277-3622 ext. 227 <u>spenman@edac.unm.edu</u> <u>clearinghouse@edac.unm.edu</u>



