



# *Fire Management Spatial Happenings*



USFWS GIS Workshop  
NCTC, WV, 2014





# *FMIS – Shapefile Requirement*

- Wildfire and Treatment Reports => 10 Acres
- Effective FY2013
- Other Agencies Looking to Adopt
- IRWIN – Integrated Reporting of Wildland Fire Information
- Future Capabilities



# Fire Management Information System

Home

Fire Incident Reports

Add Report

Check Fire Code

Severity Records

ES/BAR Records

Download Shapefiles

Utils/Reports

Admin

Logout

Redbrook South 2dS - 5477 (Complete)

Identifying Info

**Point Of Origin**

Incident Progression

Acres

Regime

Final

Attachments

## Point of Origin Information

Required fields are marked with \*

Latitude:\*

Longitude:\*

Land Owner Kind:\*

Land Owner Category:\*

Treatment State:

Aspect:

Slope Percentage:

Elevation:

Fuel Model Type:

Dominant Fuel Model:

Fire Danger Index:

Weather Station ID:

Shapefile (\*.zip):  No file chosen (Only WGS 1984 projections accepted)

Current Shape File: [Mashpee Mx 2.zip](#) [Delete](#)





# FMIS Refuge Area Mapper

Lon: -94.118354, Lat: 29.328464  
Scale: 1:288572

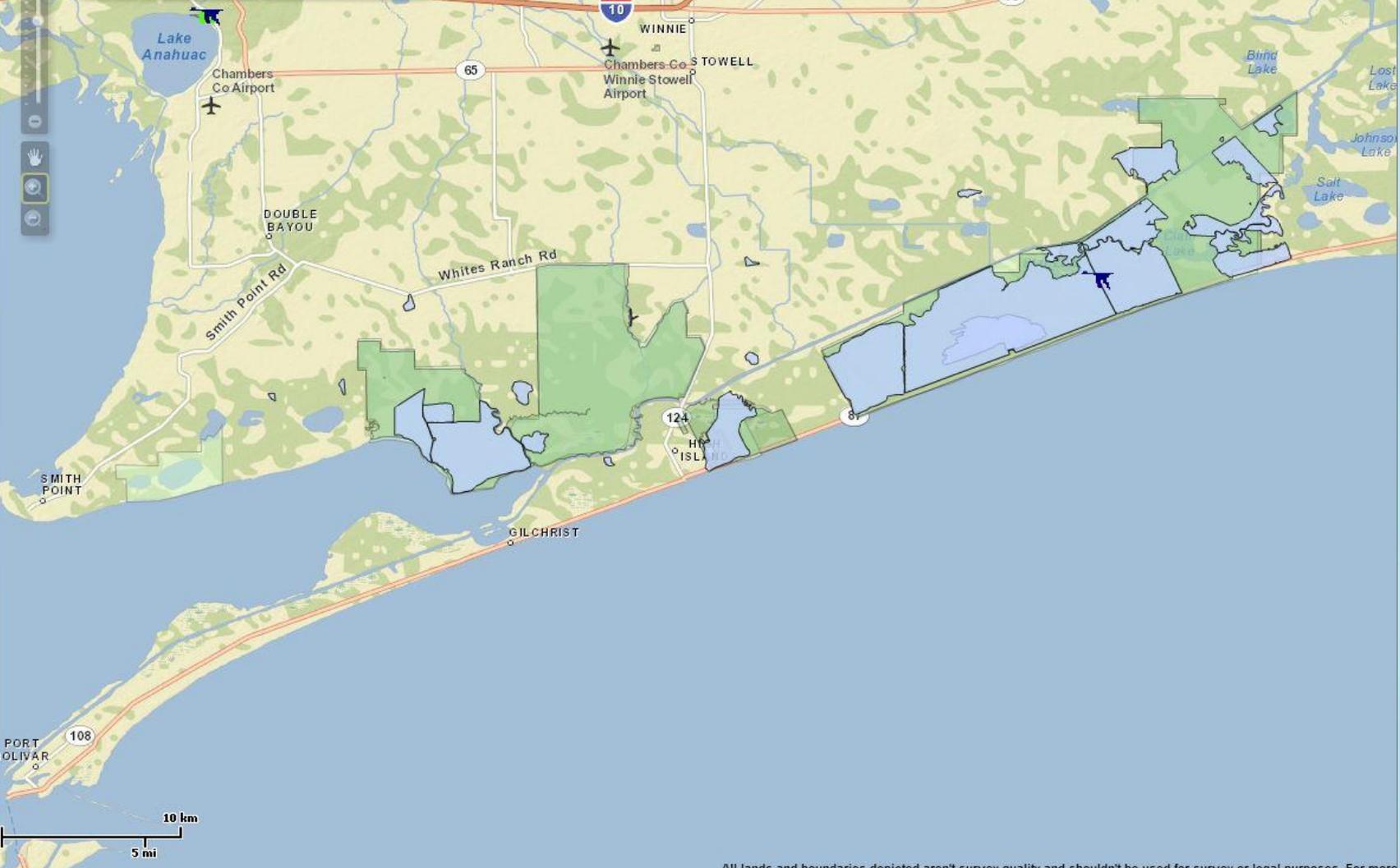
DMS?

Streets Aerial Topo

### Get Location

Press green icon to click map:







# *USFWS Fire Atlas Project*

- Wildfire and Treatments => 10 Acres
- Category 1 and 2 Refuges
- 1984 to 2013
- Integrated into FMIS



# *Spatial Fire Management Planning*

- Spatial FMP Pilot Project
- NSW Parks and Wildlife Division
- New Mexico District Pilot Process
  - Original Draft FMP for Sevilleta NWR – 202 pgs
  - New Mexico District Plan – 42 pgs
  - Sevilleta NWR Section – 14 pgs
  - Map Description Document – 18 pgs
  - NEPA Currently being done for District Plan
  - 3 Primary Map Documents
  - Strike Team Concept for interested parties



**\*MAP USE\***

The *Sevilleta Spatial FMP* is composed of (3) maps that display spatial information to increase the efficiency and availability of data necessary to conduct fire management operations and communicate critical information to a diverse audience.

- The Project map provides information on completed and planned fuels treatments to meet refuge objectives.
- The Condition Overview map set will generally describe land management conditions such as vegetative cover type, topography, and fire history.
- The Operations map provides guidance for managing both planned and unplanned ignitions.

**\*PLANNING AND IMPLEMENTATION CONSIDERATIONS\***

\*Firefighter and public safety will be the first consideration in all fire management actions

- \*Smoke impacts to visibility along highway 60 and Interstate 25 will be considered, monitored and mitigated as appropriate
- \*The District FMO will coordinate and prioritize annual fuels program of work.
- \*Numerous research sites occur throughout the refuge. Sevilleta NWR hosts a Long Term Ecological Research project which conducts a variety of research across the refuge. The LTER manager should be consulted during project development regarding protection of sites or other requirements when developing fire project plans.
- \*Utilize existing natural and man-made fuel breaks to the maximum extent possible before creating new disturbances.
- \*Retardants and foams will not be used within 300 feet of any waterway.

**\*MANAGEMENT UNITS\***

Management units are based on five broad-scale vegetative biomes located on Sevilleta NWR: Rocky Mountain Conifer Savanna and Woodland, Riparian, Colorado Shrub-steppe, Chihuahuan Shrub-lands, and Short-grass Prairie. To facilitate the planning and implementation of management activities, road systems and topographical features have been used to define each management unit where practical. As a result, there will be overlap of biomes across unit boundaries due to the location of some road systems on the refuge. Planning for fire projects should not be limited by unit boundaries but should be based on both the refuge objectives and practical implementation of the project.

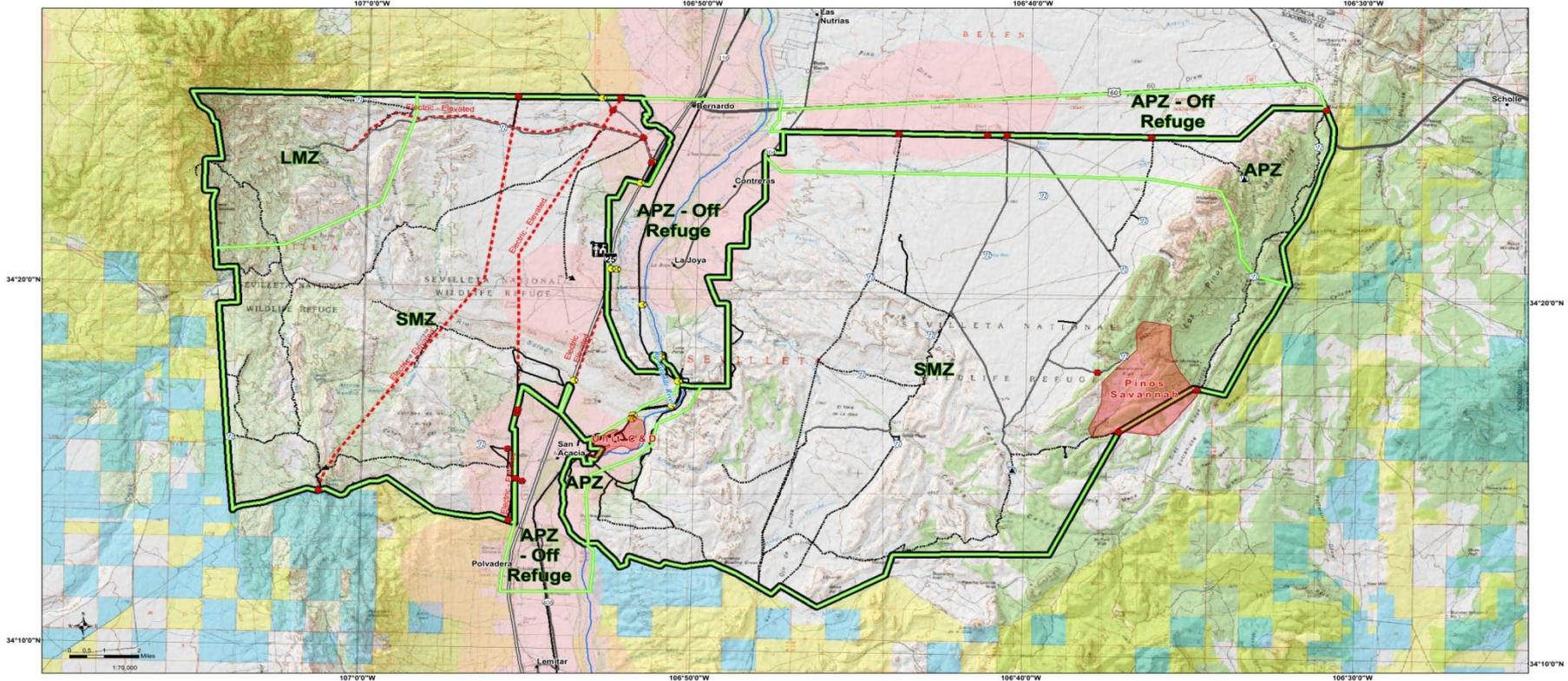
Detailed Biome descriptions of faunal, floral, soils and fuels characteristics are included as part of the Sevilleta NWR FMP appendix within the New Mexico Fire District Fire Management Plan.

**\*FIRE MANAGEMENT ZONES\***

Zones provide land managers, incident personnel, cooperators, and adjacent landowners a clear picture of geographic areas associated with a certain set of management actions. Zones also assist in prioritizing treatments to meet both fuels reduction and resource management goals. Therefore, zone boundaries have been defined based on values at risk (infrastructure, improvements, critical habitat, and research sites) and land management objectives. While zoning provides general guidelines for asset protection and how fuels may be managed, FWS also considers in detail the wide range of cultural and cultural heritage values that may be found in an area. Accordingly, management practices will vary between zones even though fuel loads and types may be similar. This management flexibility is essential for the maintenance of resource and other identified values across the planning area. Any identified constraints concerning management actions are specifically identified on the Operations map. It should also be noted that the potential advantages and importance of on-refuge zones are complemented by identifying neighboring zones with potential high asset protection values. Whether these are formally designated as Asset Protection Zones or not, the identification of on and off-site zones provides practical information to assist refuge management and neighboring landowners with identification and implementation of mitigation measures and management actions.

**FIRE MANAGEMENT ZONE DEFINITIONS**

**APZ - Asset Protection Zone**  
 Primary Objective: Protection of life/property or other high value resources including critical habitat requiring protection from fire. Resource values are secondary  
 Primary Strategies: Reduce fire hazard through pre-active fuels treatments for zoon protection, institute full suppression of wildfire  
**SMZ - Strategic Management Zone**  
 Primary Objective: reduce fuel intensity at landscape level to allow for safer, less costly wildfire management while balancing resource values  
 Primary Strategies: full range of wildfire management options considering resource values. Areas with high hazard will be identified for fuels projects to reduce to moderate fire behavior  
**LMZ - Land Management Zone**  
 Primary Objective: manage fire to promote resource values, restore or maintain desired resource conditions  
 Primary Strategies: full range of wildfire management options with primary consideration for resource values and objectives. Fuels projects will be identified to restore or maintain resource conditions within desired conditions



**LEGEND**

<b>Boundary / Zones</b>	<b>Transportation / Infrastructure</b>
Sevilleta NWR	Road Unknown Surface
Fire Management Zones	Road Native
Critical Habitat	Utility Line
Assets / Values at Risk	Locked Gate
300' Retardant Buffer	Gate
WUI Values at Risk	Fire Station
Cultural Resource	Ranger Station
Land Use	Proposed Projects
BLM	Fuels Proposals
State	

MANAGEMENT UNITS			
Unit Name	Acres	Objectives	Assets / Values at Risk
Chihuahuan Desert			
Short-grass Prairie			
Colorado Shrub Steppe			
Riparian			Community of La Joya
Pinon-Juniper			

PROJECT HISTORY (all non-fire treatments)						
FY	Project Name	FMS#	Zone	WUI	Type	Acres
2007	SER UNIT A	8950	APZ	Yes	Mech	7

PROPOSED PROJECTS						
FY	Project Name	Zone	WUI	Type	Project Objective	Projected Acres
2012	Tamarisk reduction	APZ	Y	Mech/ H/R		40
2012	Pinos savanna	SMZ	Y	Rx	P-J savanna - reduce PJ	1,000
2012	Unit C&D	APZ	Y	Mech	Fuel break construction	40
2013						
2013						
2014						
2014						
2015						
2015						



**U.S. Fish & Wildlife Service**  
**Sevilleta NWR: Project Map**

Questions regarding the data portrayed on the maps, send in the completion of this map should be directed to:  
 USFWS Southwest Regional Office, Ch of Fire Management Administration, 985-338-1683

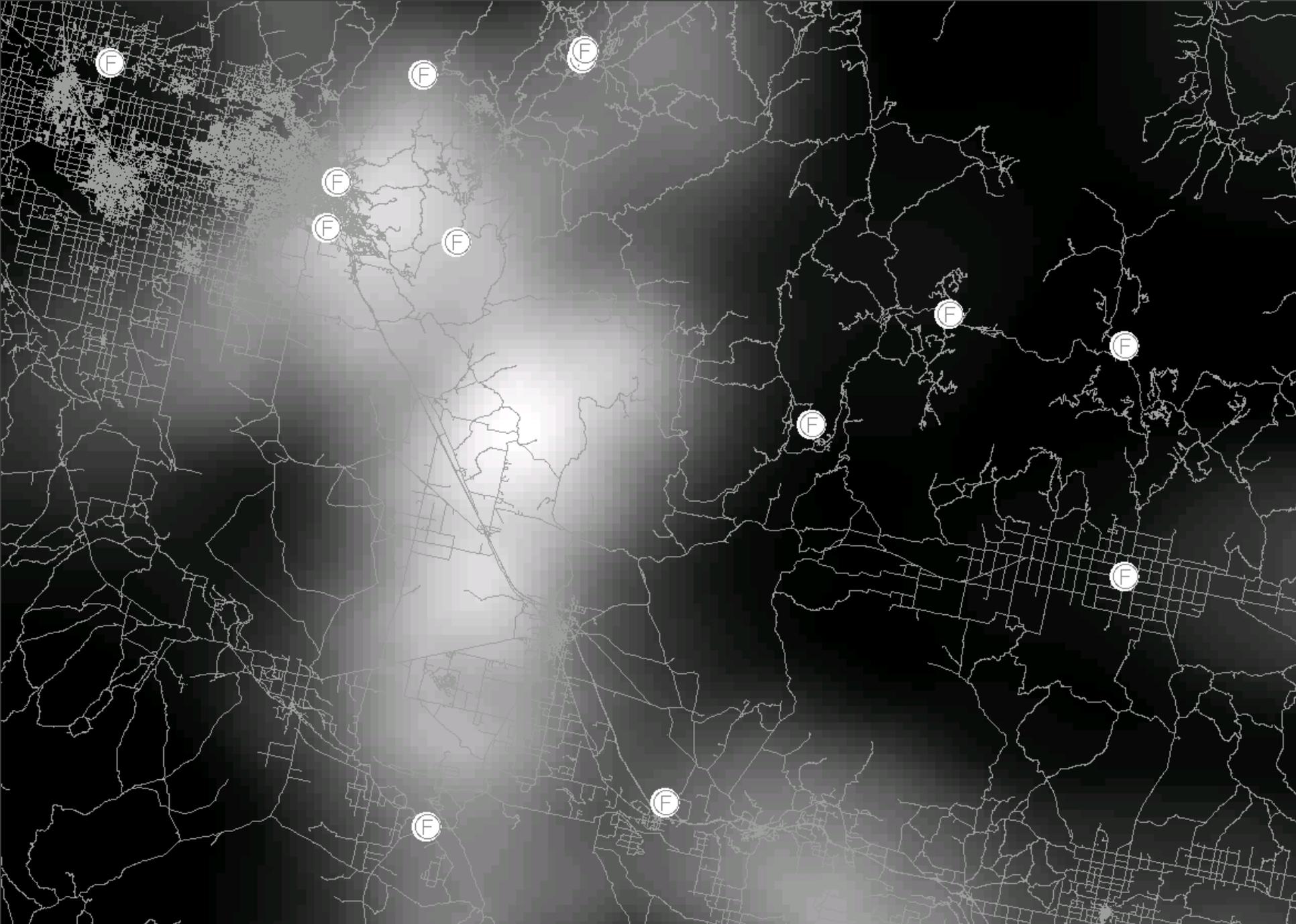
Map and Data Disclaimer: The US Fish and Wildlife Service (FWS) attempts to use the most current and complete geospatial data available. Geospatial data accuracy varies by theme on the maps. These maps are intended as general guides and are not intended for use in legal proceedings. The FWS does not warrant the accuracy or completeness of the data or the results of any analysis performed on the data. The FWS does not warrant the accuracy or completeness of the data or the results of any analysis performed on the data. The FWS does not warrant the accuracy or completeness of the data or the results of any analysis performed on the data. The FWS does not warrant the accuracy or completeness of the data or the results of any analysis performed on the data.





## *DOI Preparedness Formulation and Allocation Model*

- Geospatial model designed to justify DOI fire budget.
- Measures risk to highly valued resources.
  - Developed Areas
  - Critical Habitat
  - Agency Assets
  - Critical Watersheds



Average Risk to DA within 15km radius (acres)



## *Geospatial happenings Misc Duties as Assigned- 2014*

- Vice-Chair, NWCG Geospatial Sub-Committee
- Chair NFLT National Fire Data Team
- WFDSS Geospatial Team
- Great Basin Type 2 IMT

Questions?

