

CLARK COUNTY FINE SCALE VEGETATION MAP

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MSHCP SYMPOSIUM 2022



desert conservation
PROGRAM



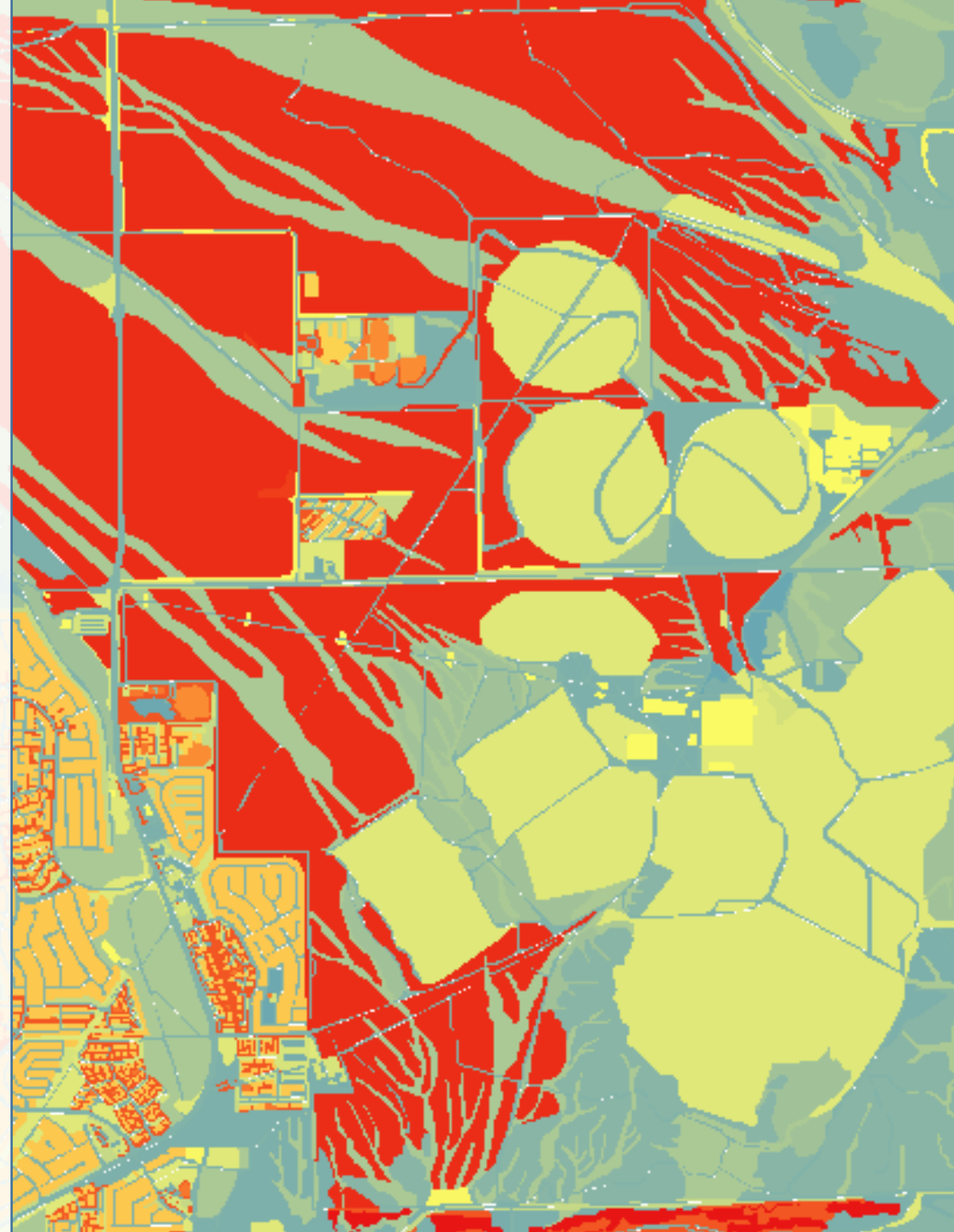
PROJECT SCOPE AND NEED

- **Need For Up to Date Map**
 - Vegetation Changes
 - Spatial Data Standards and Methods Improvements
 - County Ecosystem Map Resolution
- **Scope**
 - Accurate and up to date vegetation maps.
 - Align with other efforts by neighboring areas
 - United States National Vegetation Classification System (USNVCS)



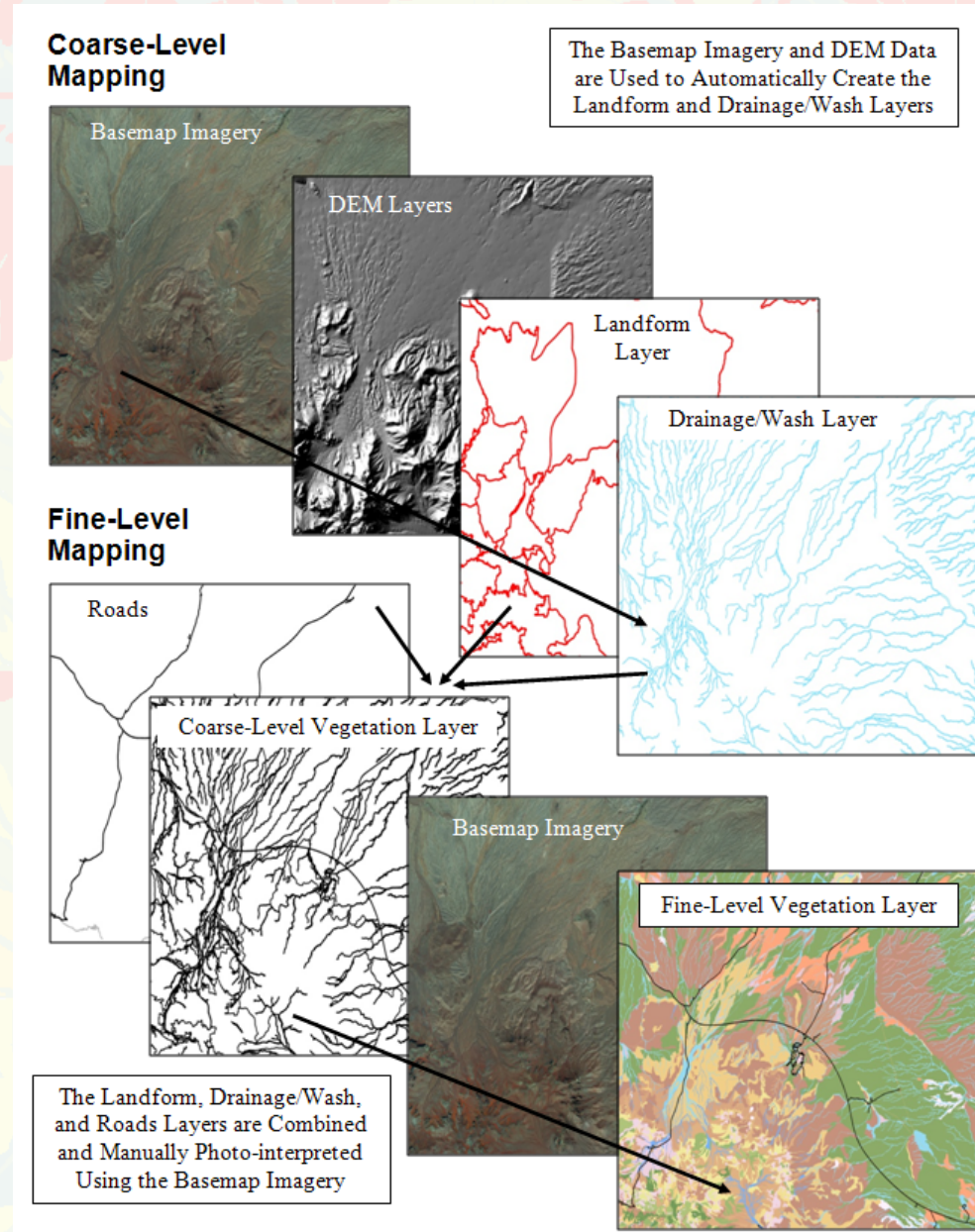
OBJECTIVES

- **Objectives**
 - Achieve a higher degree of specificity
 - Location
 - Vegetation classes
 - USNVCS
 - Natural Vegetation Alliance Level
 - Cultural Vegetation Level 4
 - Minimum Mapping Units
 - 10 Acres for Desert Upland
 - 1 Acre for Riparian
 - Vector based
 - Variable for Habitat Modeling



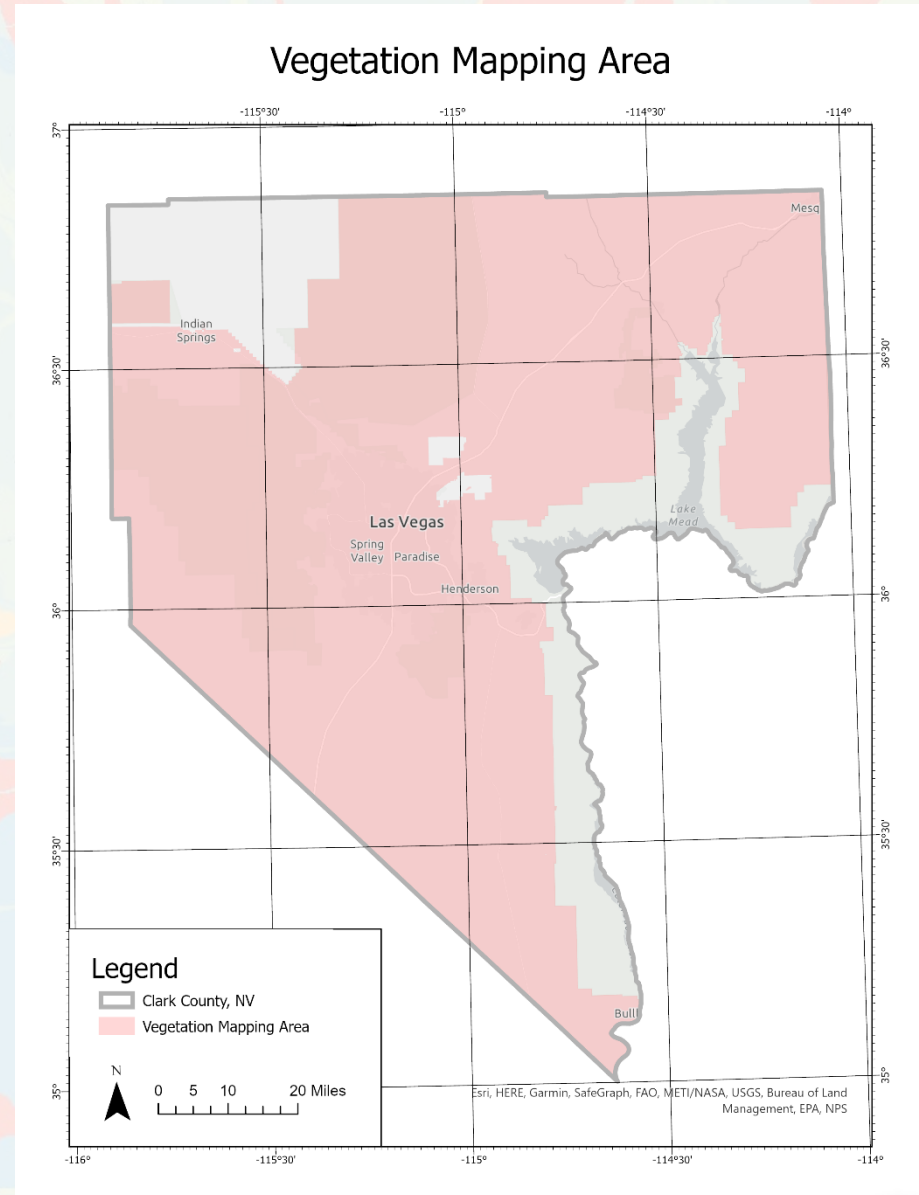
PROCESS

- Coarse-level Mapping
 - USNVC Group Level
- Fine Level Mapping
 - USNVC Alliance level
- Accuracy Assessment



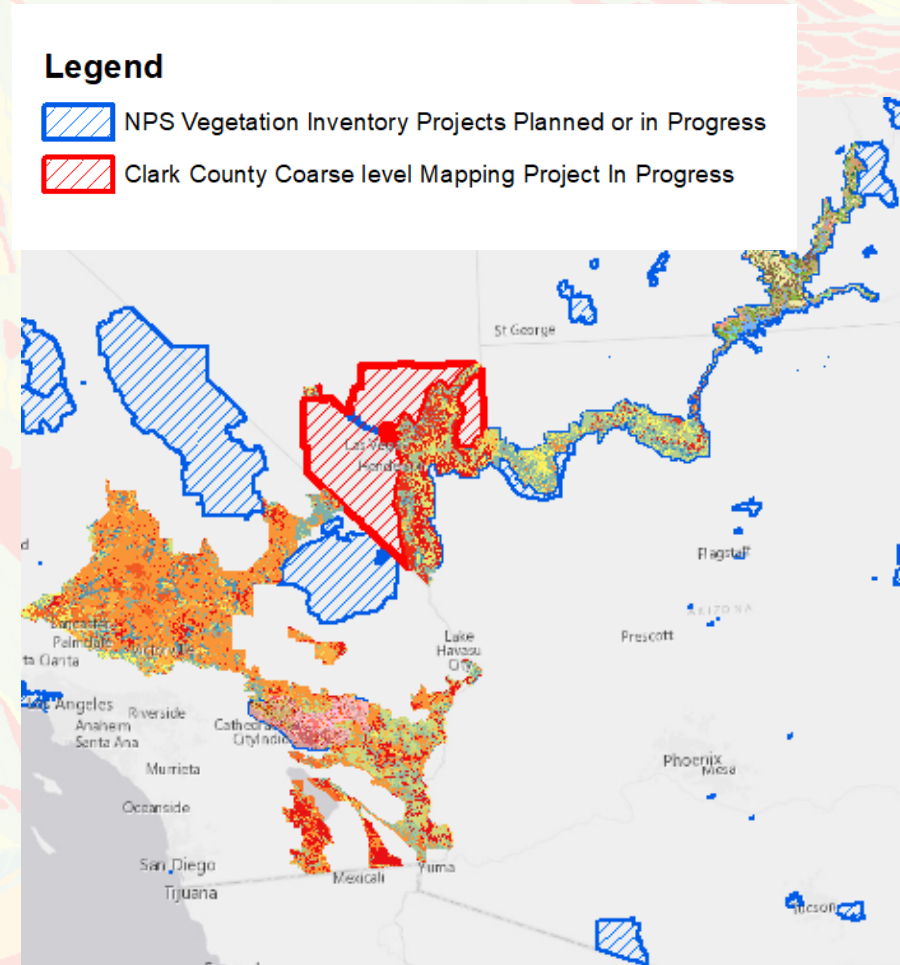
LOCATION

- **All land in Clark County**
 - Exceptions
 - Department of Defense Owned or administered lands.
 - Lake Meade National Recreation Area
- **Project Area**
 - 4,185,089 acres



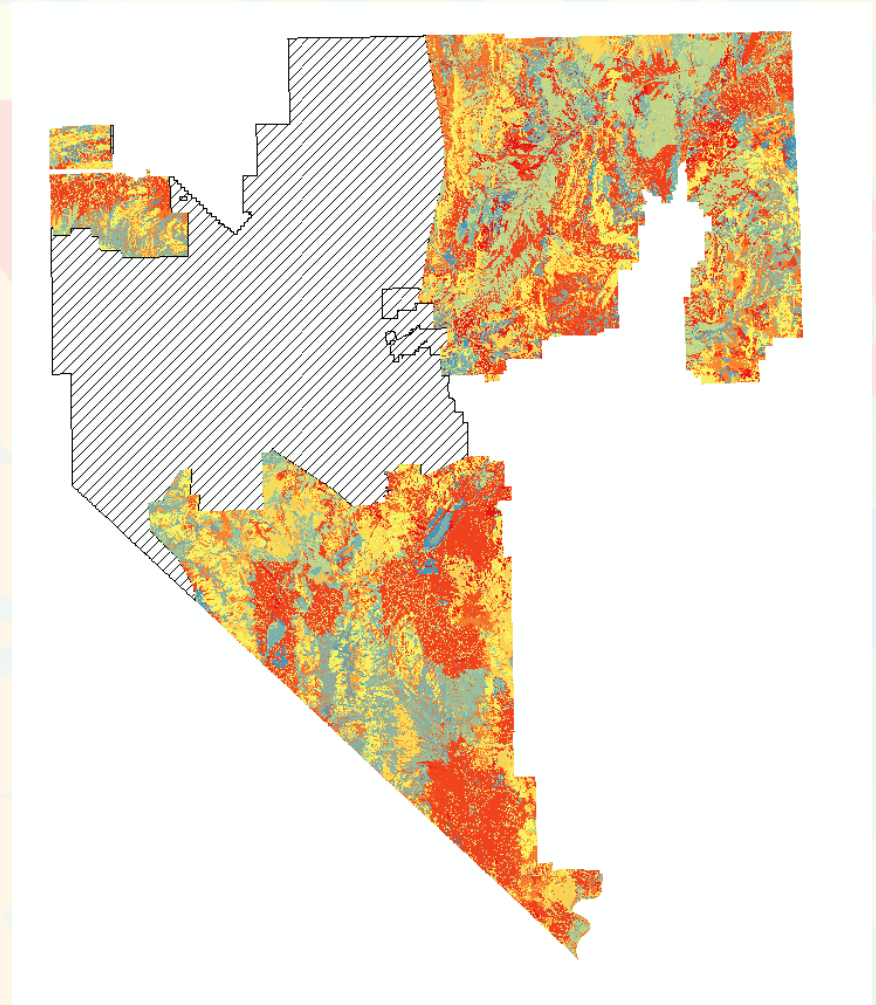
NEIGHBORING VEGETATION CLASSIFICATIONS

- Adjacent
 - Lake Meade National Recreation Area (Completed)
 - Mojave National Preserve (In Progress)
 - Desert Renewable Energy Conservation Plan (Completed)
- Other Vegetation Mapping Projects Connected through Clark County Vegetation Mapping
 - Canyon Lands National Park
 - Glen Canyon National Park
 - Grand Canyon National Park
 - Death Valley National Park
 - Joshua Tree National Park
 - Glen Canyon National Park

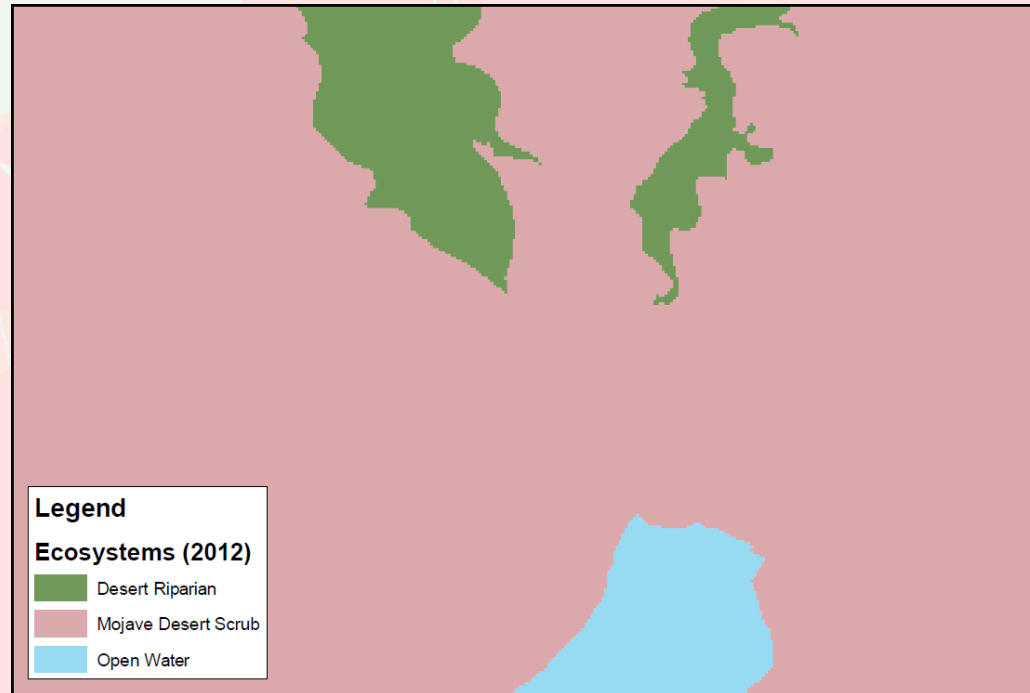


CURRENT COARSE LEVEL MAPPING STATUS

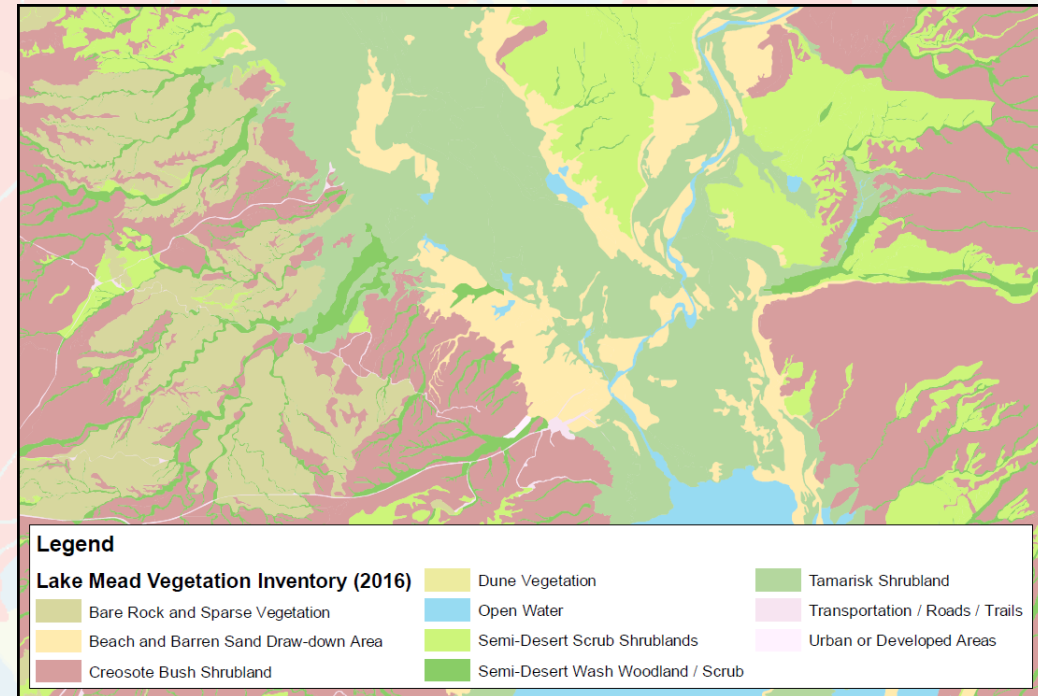
- Basis for Fine Scale Mapping
- 3,348,000 Acres Completed (As Of August, 2022)
- Project had some delays due to the complexity of certain areas in Clark County.
 - Final 837,000 Acres expected to be completed by September 30, 2022
- USNVCS Group Level or better



EXPECTED MINIMUM LEVEL OF DETAIL



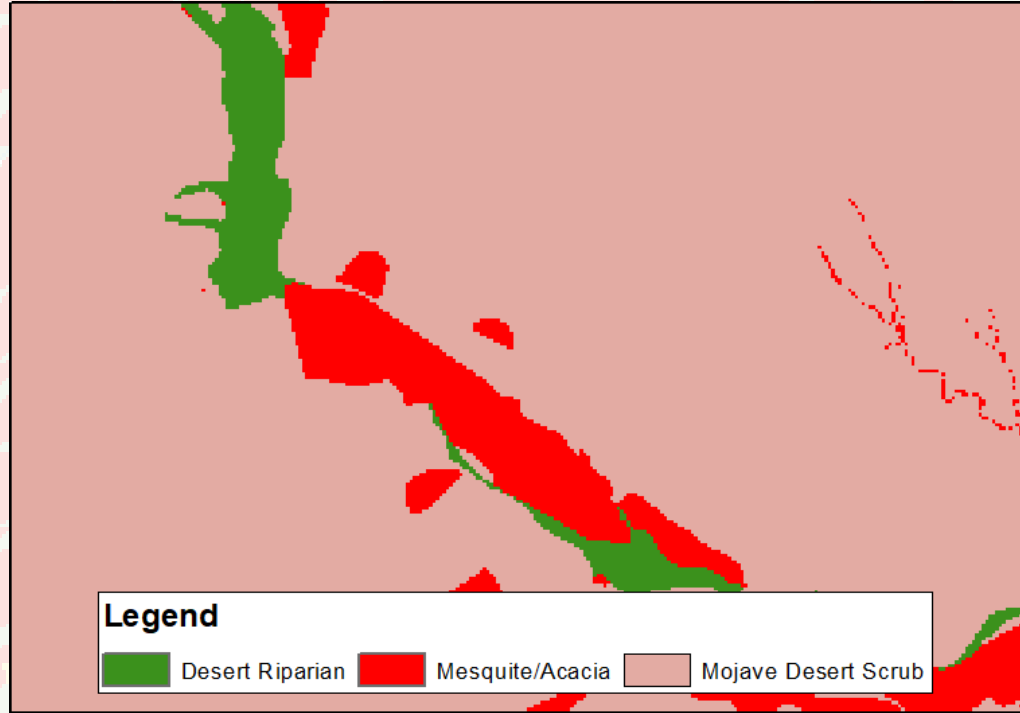
2012 Ecosystems Map
(3 Classes)



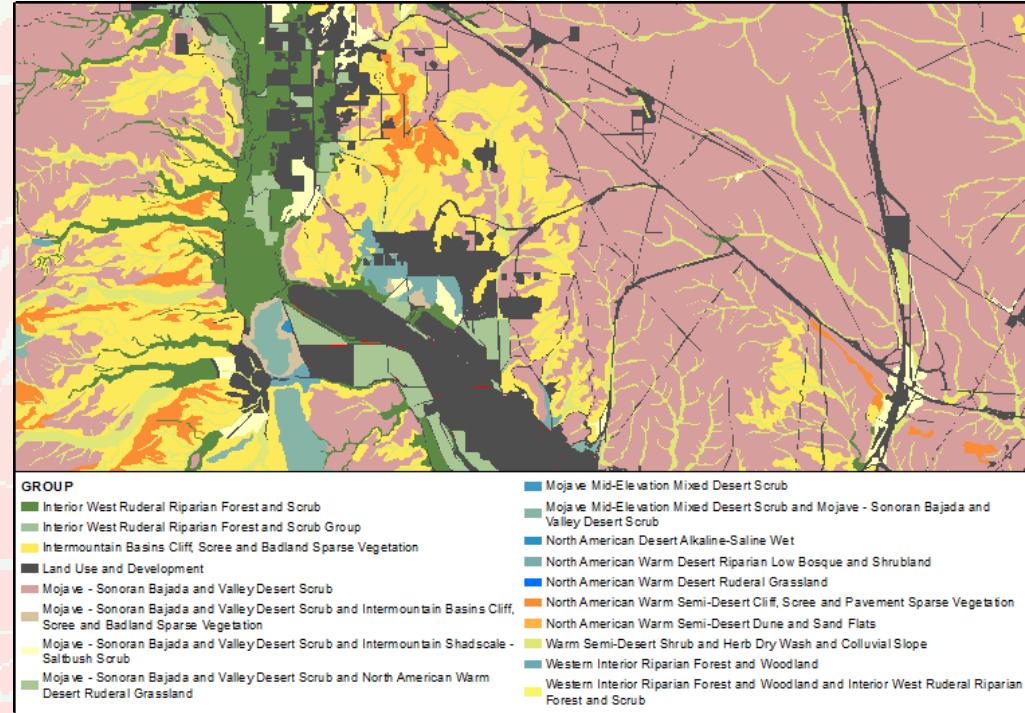
2016 Lake Mead Vegetation
Mapping (10 Classes)



CURRENT LEVEL OF DETAIL



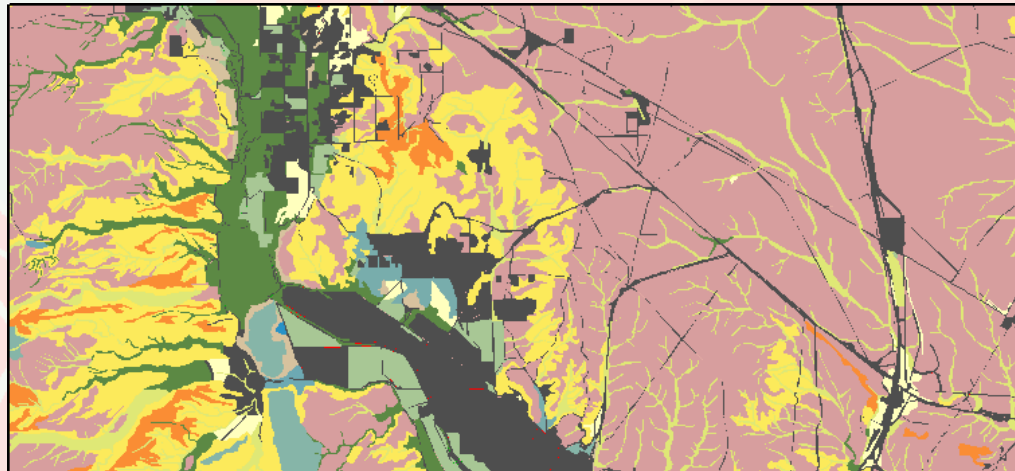
2012 Ecosystems Map
(3 classes)



2020 – 2022 Coarse Level
Mapping (18 Classes)

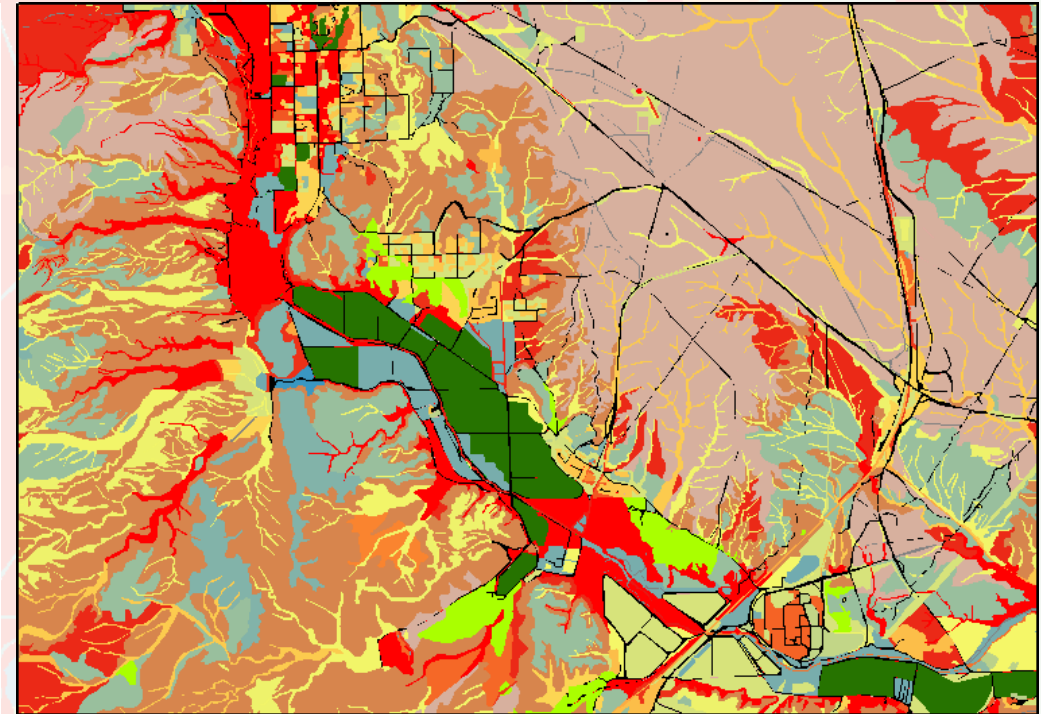


FINAL LEVEL OF DETAIL



GROUP	
Interior West Ruderal Riparian Forest and Scrub	Mojave - Mid-Elevation Mixed Desert Scrub
Interior West Ruderal Riparian Forest and Scrub Group	Mojave - Mid-Elevation Mixed Desert Scrub and Mojave - Sonoran Bajada and Valley Desert Scrub
Intermountain Basins Cliff, Scree and Badland Sparse Vegetation	North American Desert Alkaline-Saline Wet
Land Use and Development	North American Warm Desert Riparian Low Bosque and Shrubland
Mojave - Sonoran Bajada and Valley Desert Scrub	North American Warm Desert Ruderal Grassland
Mojave - Sonoran Bajada and Valley Desert Scrub and Intermountain Basins Cliff, Scree and Badland Sparse Vegetation	North American Warm Semi-Desert Cliff, Scree and Pavement Sparse Vegetation
Mojave - Sonoran Bajada and Valley Desert Scrub and Intermountain Shadscale - Saltbush Scrub	North American Warm Semi-Desert Dune and Sand Flats
Mojave - Sonoran Bajada and Valley Desert Scrub and North American Warm Desert Ruderal Grassland	Warm Semi-Desert Shrub and Herb Dry Wash and Colluvial Slope
	Western Interior Riparian Forest and Woodland
	Western Interior Riparian Forest and Woodland and Interior West Ruderal Riparian Forest and Scrub

2020 – 2022 Coarse Level
18 Classes



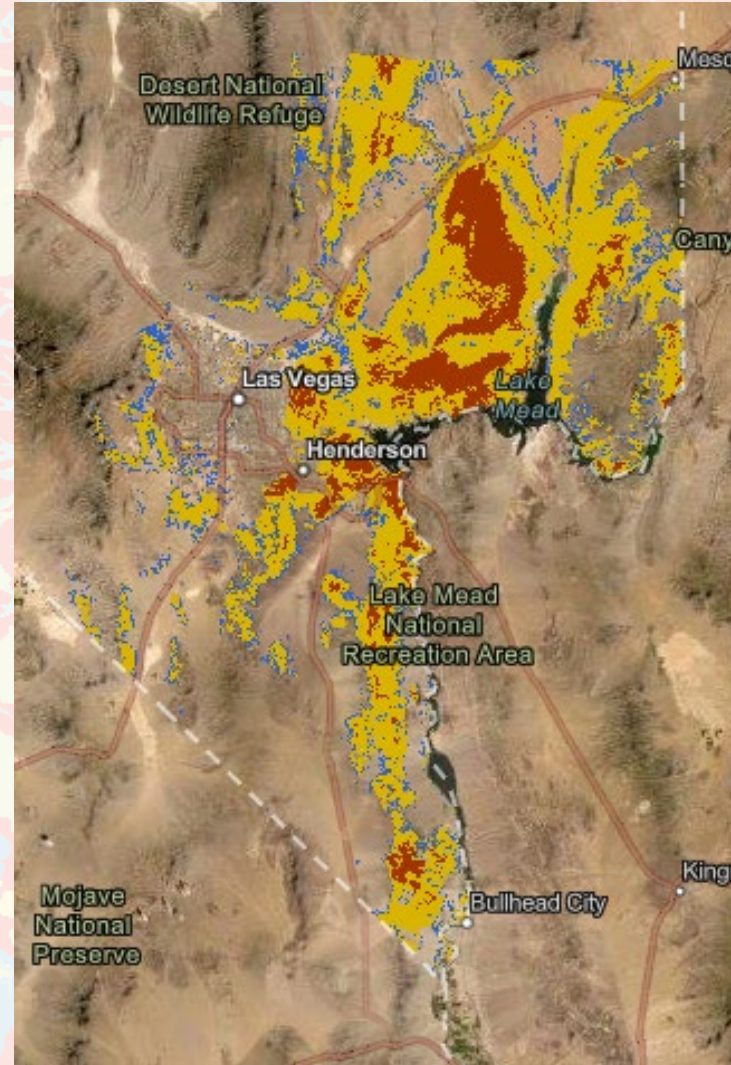
2023-2024 Fine Level Mapping
44 Classes

NAME		
Acacia - Mesquite Mixed Desert Wash Shrubland	Communications and Utilities	Hospitals and Medical Complexes
Agricultural Bushes / Ranches	Creosotebush - Burrobush Bajada and Valley Desert Scrub	Joshua Tree / Creosotebush - Mojave Yucca / Big Galleta Wooded Shrubland
Agricultural Fields	Creosotebush / Mixed Grassland Desert Scrub	Landscaped Trees and Shrubs
Athletic Fields	Creosotebush Desert Scrub	Lawns
Badlands Sparse Vegetation	Creosotebush Dune Desert Scrub	Low Elevation Shrubland Wash
Barren Landscaped Areas	Date Palm - California Fan Palm Ruderal Woodland	Mesquite Riparian Forest, Woodland, and Shrubland
Bedrock and Cliff Outcrop Sparse Vegetation	Desert Wash and River Bottom Sparse Vegetation	Mixed Ruderal Herbaceous Vegetation and Grassland
Berms and Ditches	Fremont Cottonwood - Velvet Ash - Goodding's Willow Flooded Forest and Woodland	Parking Lots
Canals and Other Man-made Watercourses	Goodding's Willow - Red Willow Riparian Forest	Ponds and Lakes
Commercial, Churches, and Other Light Industrial Sites	Greasewood Intermountain Wet Shrubland	Quarries, Mines, and Pits
	Heavy Industry	Railroads
		Recently Cleared Land
		Residential
		Riparian Woodlands
		Roads and Transportation
		Ruderal and Disturbed Vegetation
		Saltbush Shrubland
		Semi-Desert Rock, Talus, and Steep Slope Sparse Scrub
		Sparse Desert Pavement Dwarf Scrub
		Streams and Rivers
		Tamarisk species Ruderal Riparian Woodland and Scrub
		Trails and Tracks
		Transitional Lands



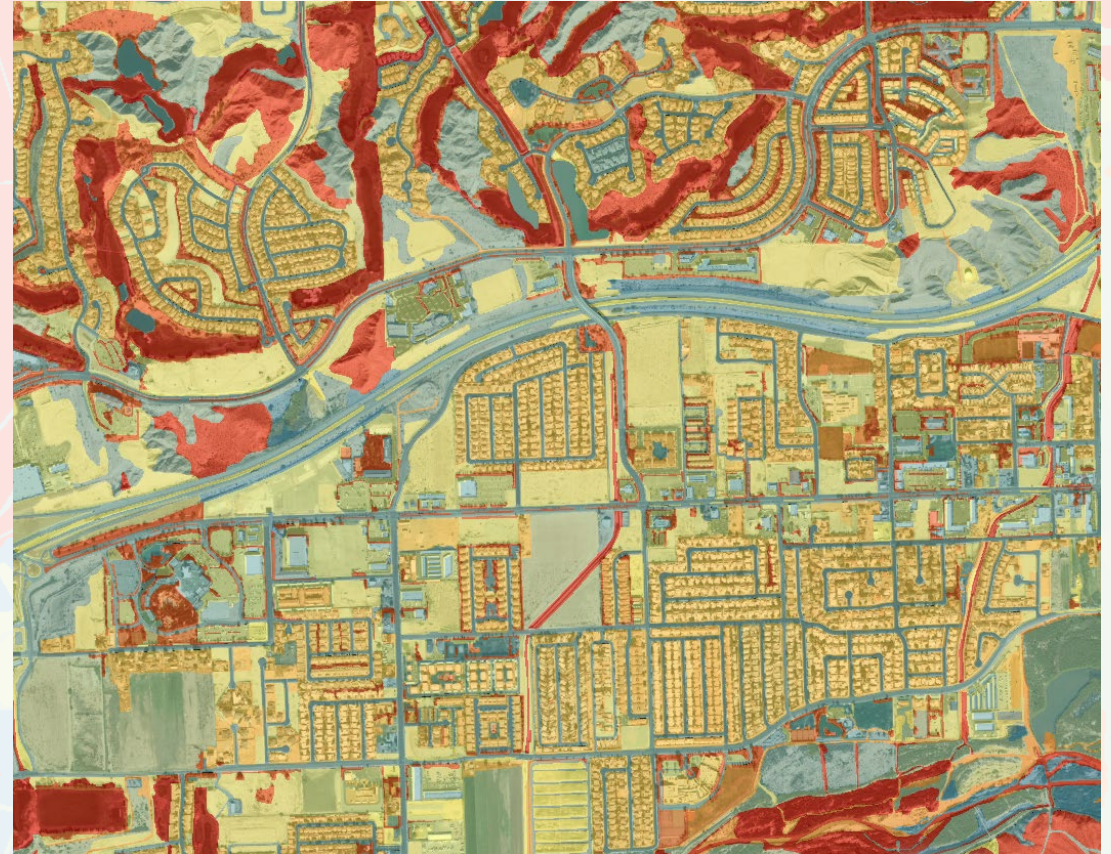
HOW WILL THIS DATA BE USED

- Habitat Modeling Input
- 51 Models Already Completed
- Habitat Quality Models for Proposed Covered Species
- Habitat disturbance tracking
- Analysis of proposed projects in Clark County for potentially sensitive biological areas.
- More...



BEYOND HABITAT DATA

- Other incidental data useful for analysis that is collected as part of this effort
 - Developed Areas
 - Roads
 - Ground Disturbance Areas
 - Asphalt areas, such as parking lots
 - Turf areas
 - Agricultural areas
 - Surface water



ACCURACY ASSESSMENT

- Data collection Beginning
- Beginning August 2022
- 1503 points will be sampled
- 90% of locations will be determined based on Coarse-level mapping
- Final 10% will be determined once Fine-level Mapping has been completed.
- Last Product completed by the end of 2025



FUNDING AND CONTRACTOR

- Clark County Multiple Species Habitat Conservation Plan(MSHCP) Section 6
 - \$1,105,542.10 over 5 years
 - Coarse level mapping
 - Accuracy Assessment
- Planned SNPLMA Round 19
 - \$1,000,000
 - Pending Approval
 - Fine-Scale Mapping
- Contractor:
 - Cogan Technology, Inc



QUESTIONS?



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