

DOCKET

09-AFC-9

DATE 01/05/10

RECD. 01/19/10



BIOLOGICAL RESOURCES

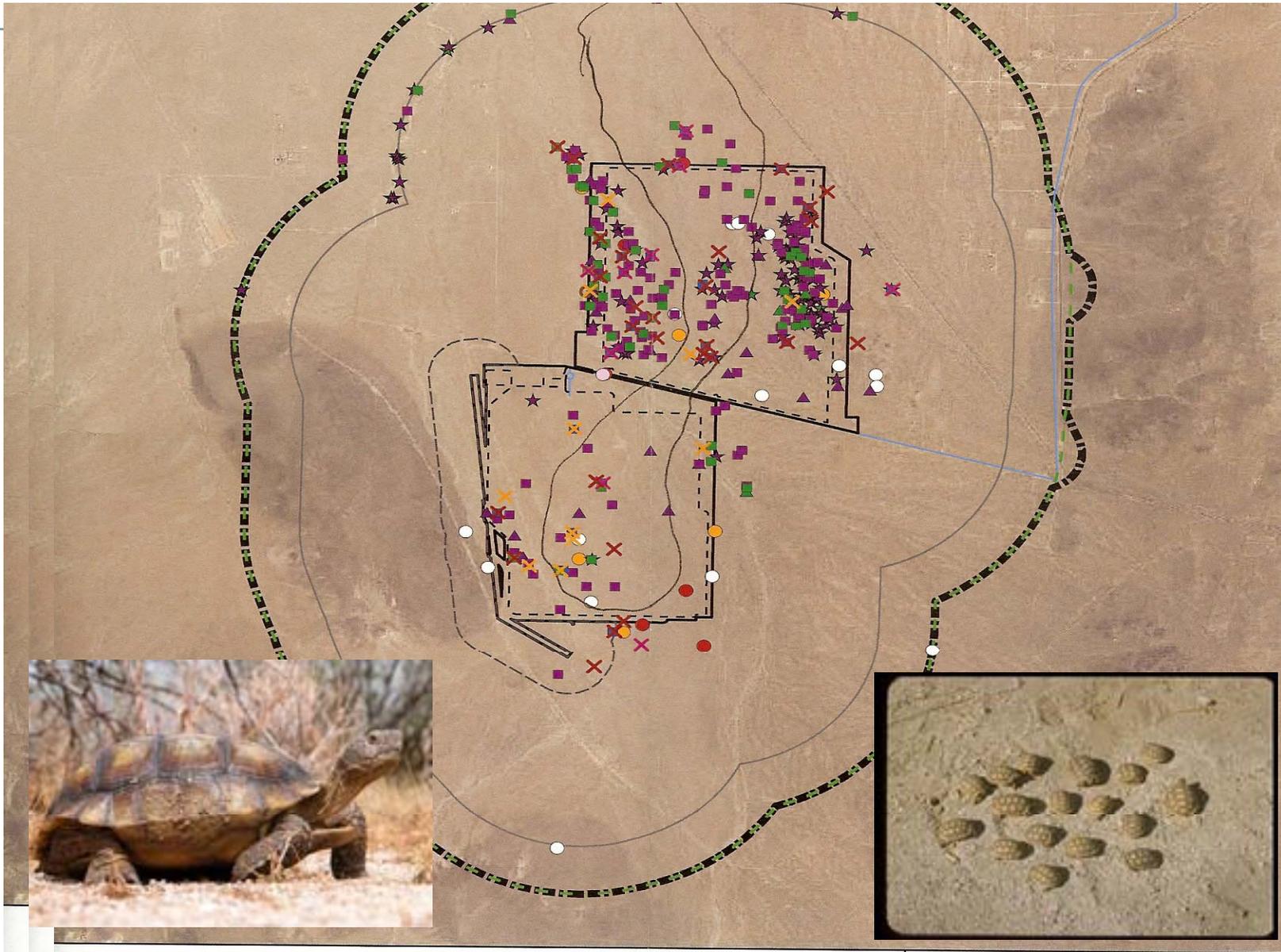


**RIDGECREST SOLAR POWER PLANT
PUBLIC WORKSHOP
January 5-6, 2010**

Desert Tortoise



- **DENSITY**
- **TRANSLOCATION**
- **TIMING**
- **COSTS**



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- 0.75-mile Transect ¹
- 1,000-foot Transect (Unsurveyed)
- Desert Tortoise Observations**
- Adult Tortoise
- Juvenile Tortoise
- Tortoise (Unknown Age)

- Tortoise Burrow - Active
- Tortoise Burrow - Occupied
- Tortoise Burrow
- Tortoise Pallet
- Tortoise Pallet - Active
- Tortoise Scat

- Tortoise Scat - Fresh
- Tortoise Tracks
- Tortoise Bone Fragments
- Tortoise Carcass - Adult
- Tortoise Carcass - Juvenile
- Juvenile Tortoise - Vehicle Collision

¹ Note:
The 1-mile and 1/4-mile CEC Buffer Transects on the southern side are greater

1 inch = 3,500 feet

Desert Tortoises Densities (USFWS 2009)

NE Mojave Density (km²)

2001	2.4
2002	-
2003	3.7
2004	1.2
2005	1.8
2007	1.7

E Mojave

2001	6.2
2002	4.1
2003	-
2004	5.3
2005	7.2
2007	5.8

E Colorado Density (km²)

2001	10.1
2002	7.7
2003	4.0
2004	6.4
2005	7.9
2007	5.0

N Colorado

2001	7.2
2002	-
2003	6.3
2004	6.9
2005	10.8
2007	4.6

Desert Tortoises Densities (USFWS 2009)

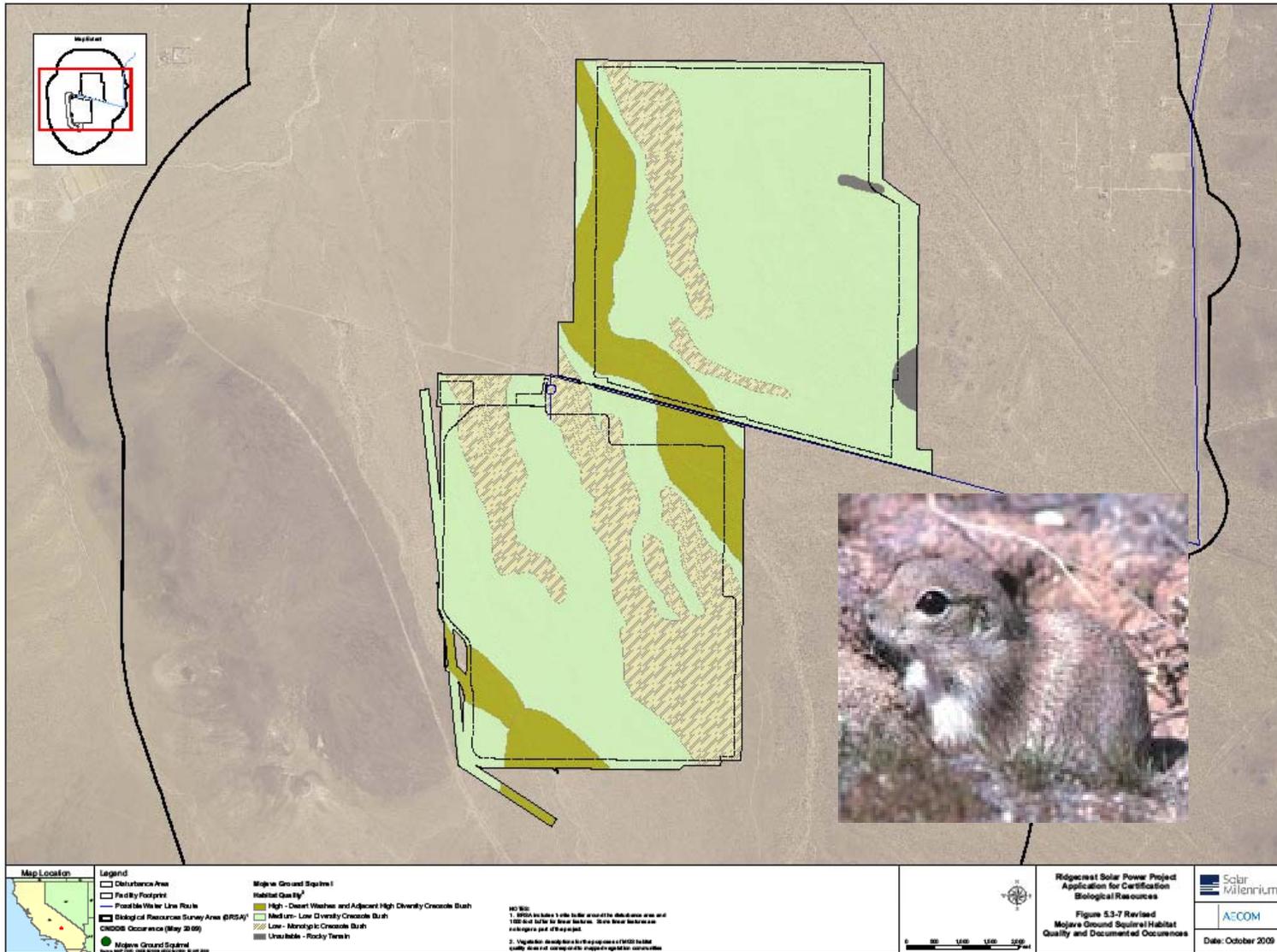
W Mojave	Density (km²)
2001	5.6
2002	5.8
2003	3.8
2004	4.4
2005	6.1
2007	4.7

	Density (km²)
Ridgecrest SPP	9.8
Ivanpah SPP	1.6 (no correction)
	Raw Data (no correction)
Ridgecrest	5.1 (km²)
Ivanpah	1.6 (km²)

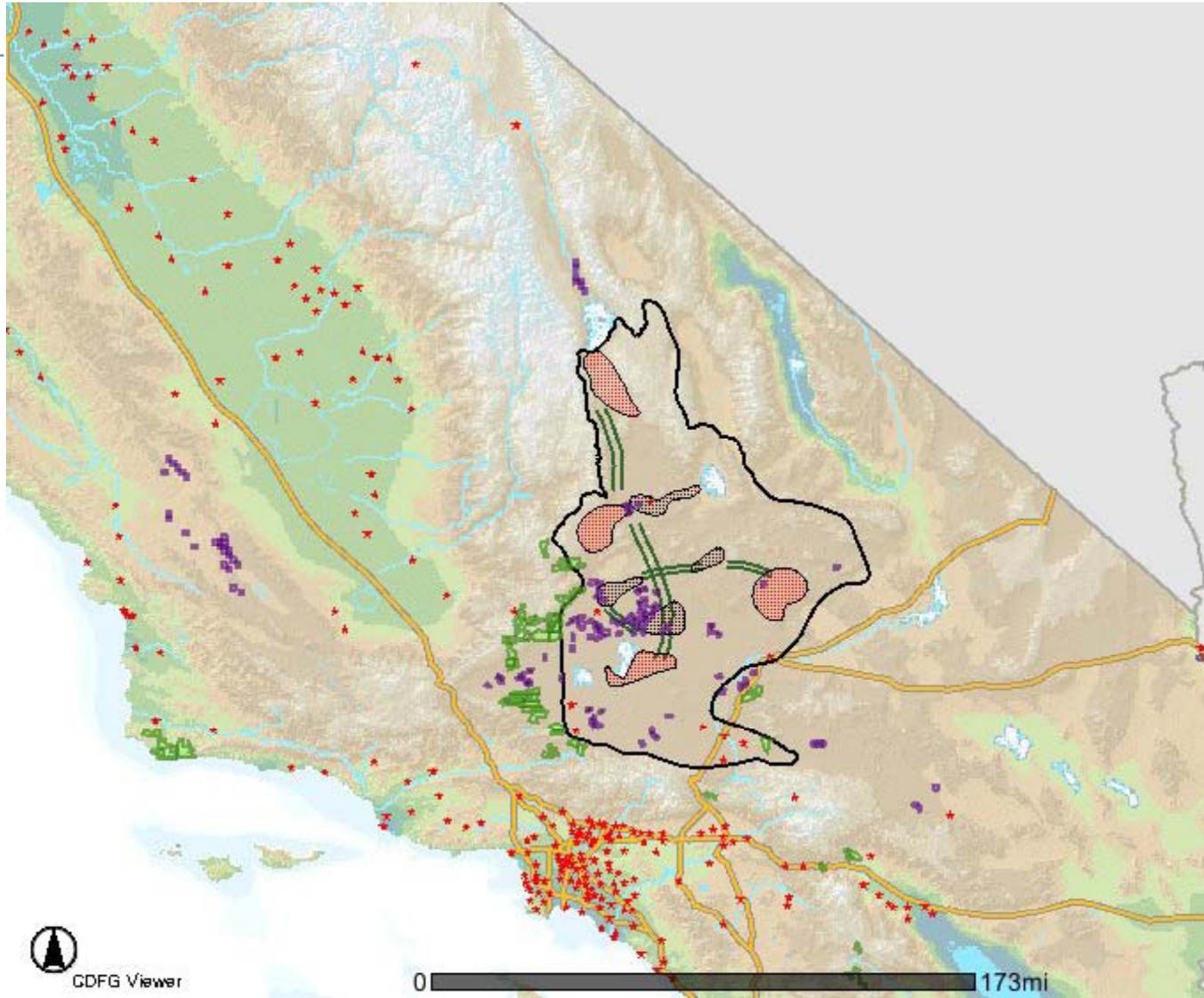
Mojave Ground Squirrel



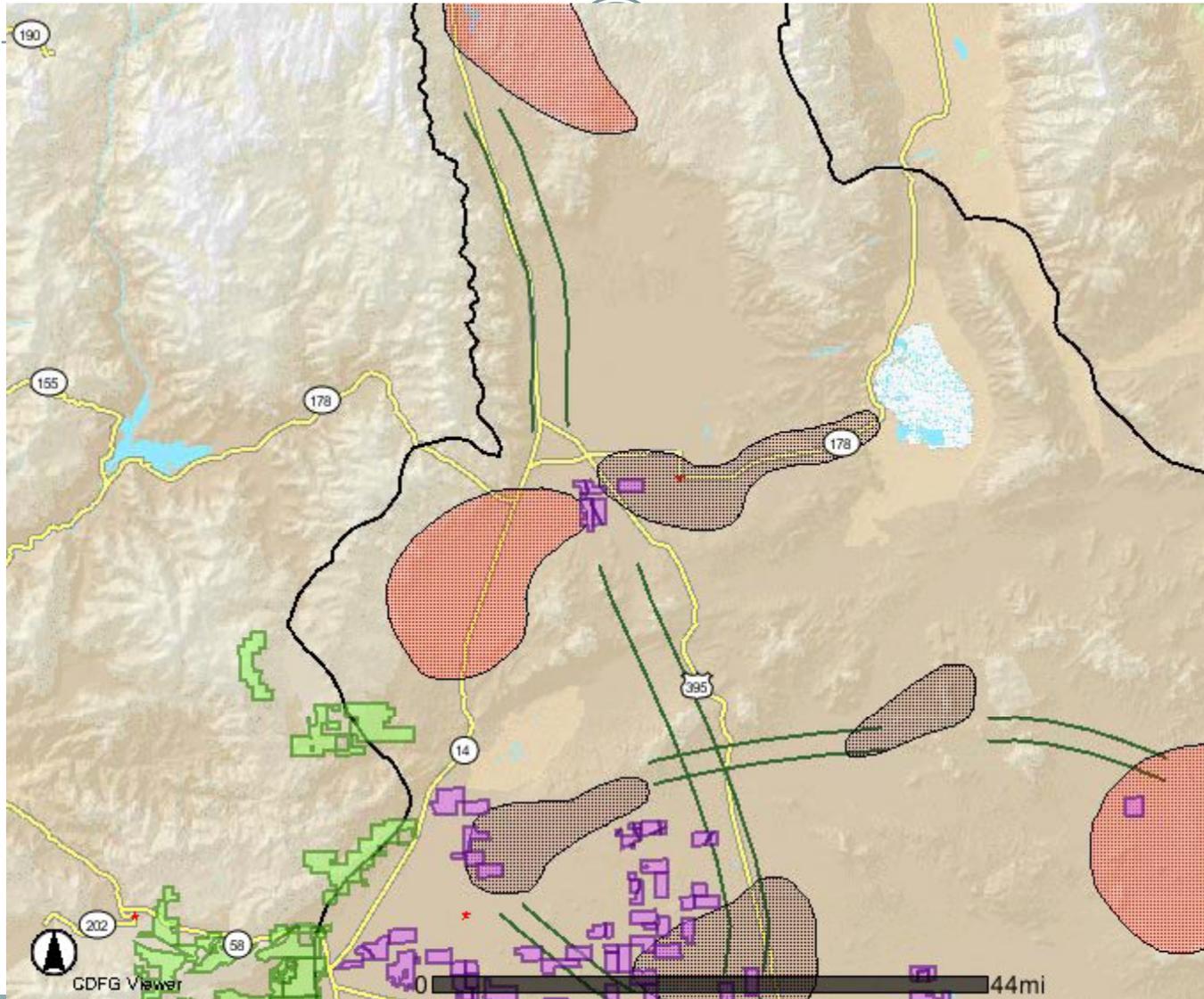
- **CONNECTIVITY**
- **TRANSLOCATION/RELOCATION**
- **TIMING**
- **COSTS**



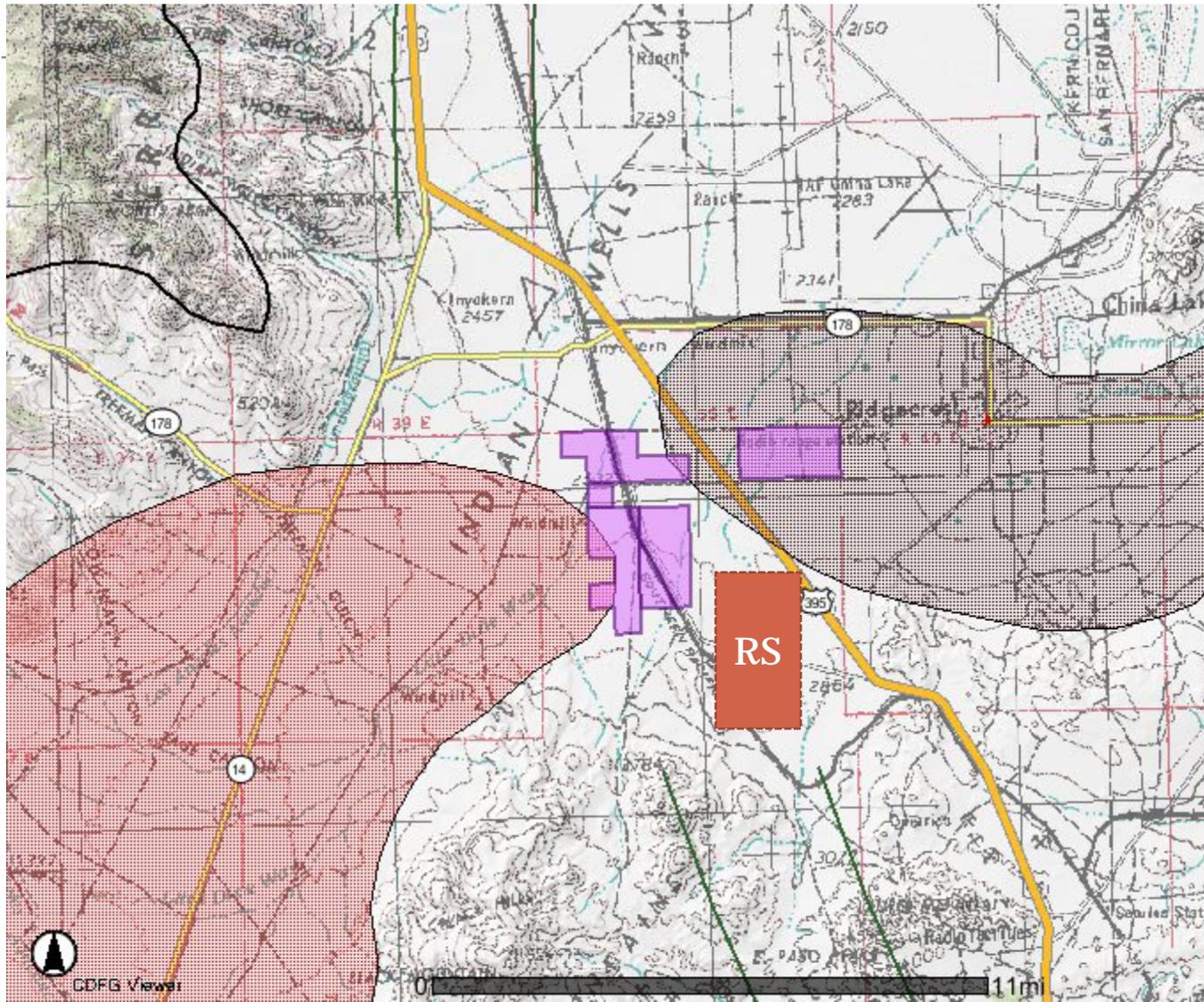
Mohave Ground Squirrel Range

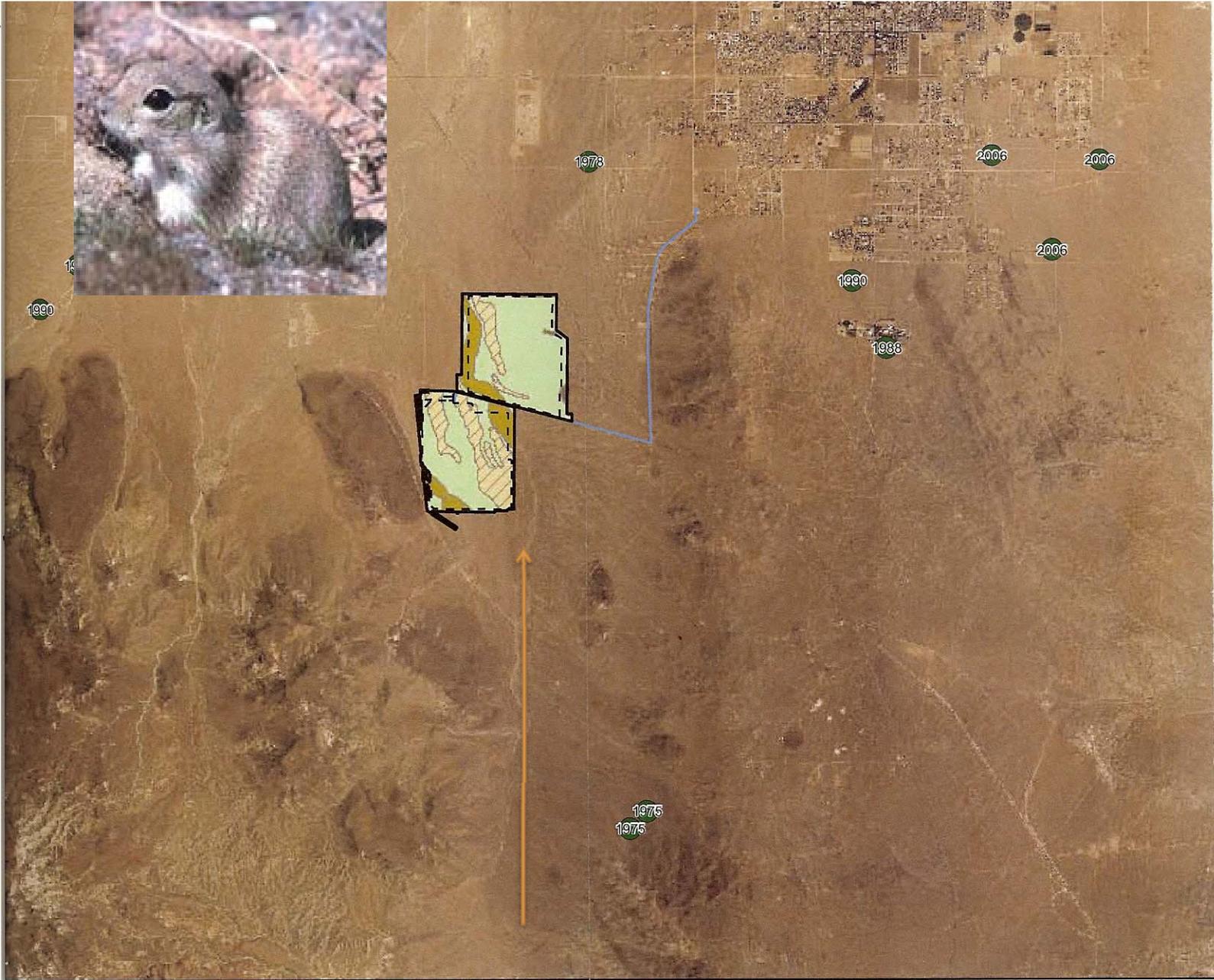


Mohave Ground Squirrel Connectivity



Mohave Ground Squirrel Connectivity





**Mojave Ground Squirrel
Habitat Quality¹**

■ High - Desert Washes and Adjacent High Diversity Creosote Bush



Other Sensitive Species

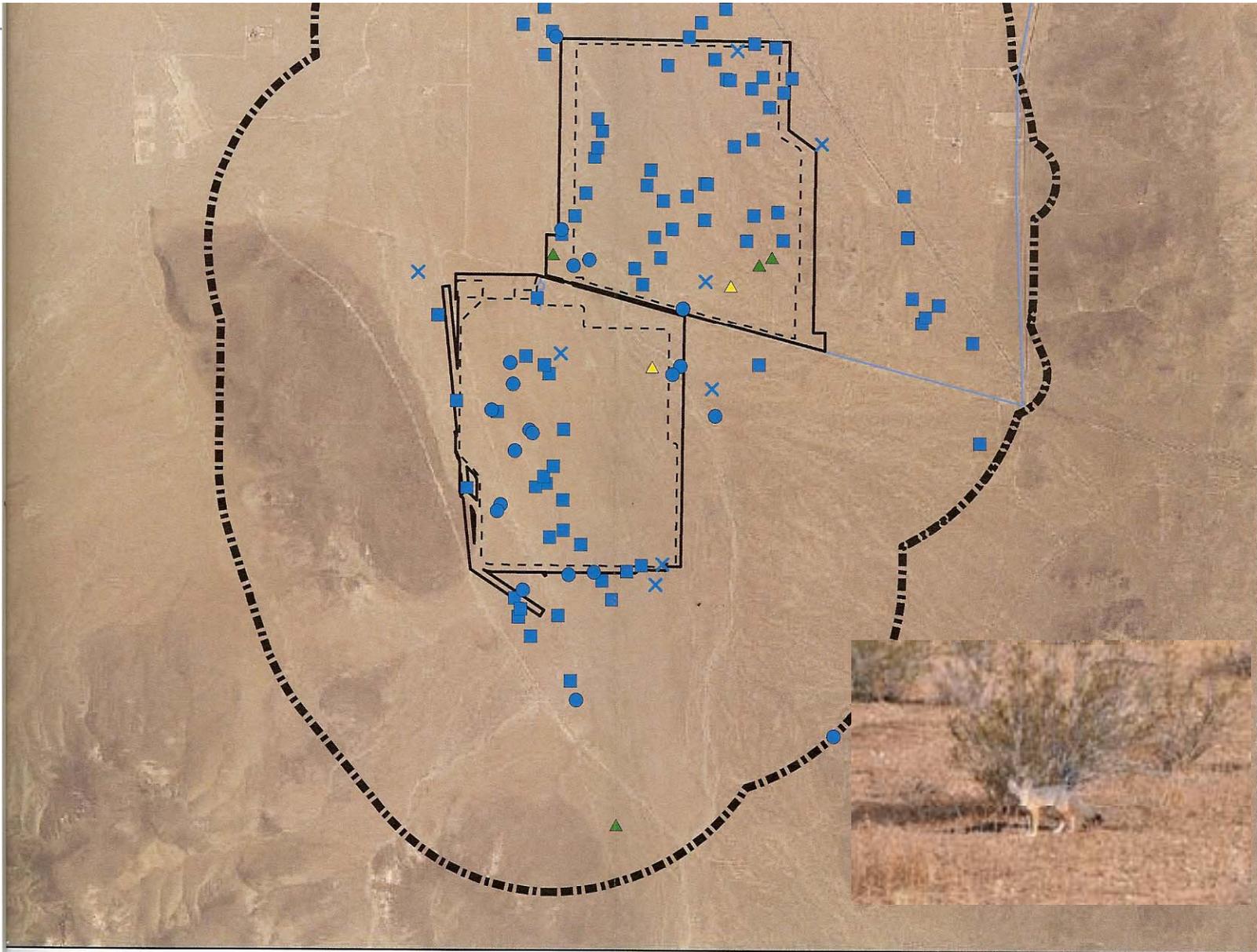


**BURROWING OWL, DESERT KIT FOX AND
AMERICAN BADGER**

TRANSLOCATION/RELOCATION

Timing

**LOGGERHEAD SHRIKE
LE CONTE'S THRASHER
MIGRATORY BIRDS
FORAGING RAPTORS**



Resident Special-Status Wildlife Species Observations

- Burrow with Badger Claw Marks
- ✕ Active Kit Fox Burrow Complex

- Kit Fox Burrow
- Kit Fox Burrow Complex
- ▲ Loggerhead Shrike
- ▲ Le Conte's Thrasher



1 inch = 3,500 feet

Study Area (BRSA)

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Other Topics

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- **PROVIDE CDFG WITH A COMPLETE APPLICATION FOR A 2081 PERMIT**
 - **PROVIDE CDFG WITH A COMPLETE APPLICATION FOR STREAMBED ALTERATION AGREEMENT**
 - **PROVIDE USFWS WITH A COMPLETE BIOLOGICAL ASSESSMENT**
 - **EL PASO WASH AND MINOR WASHES**
 - **CUMULATIVE IMPACTS**
 - **ALTERNATE LOCATION**

Compensatory Mitigation



- **Desert Tortoise: high density---difficult to mitigate**
- **Mohave Ground Squirrel: important connectivity---
may not be able to mitigate**
- **Burrowing Owl**
- **Desert Kit Fox**
- **Other Sensitive Species**
- **Indirect and Cumulative Impacts**
- **5:1 or greater ratio: $5 \times 1760 = 8800$ acres**

