



# **Desert Tortoise Monitoring**

**PROJECT NUMBER: 2013-GBI-1450A**

**PROJECT NUMBER: 2013-GBI-1450B**

# AGENCY PARTICIPANTS



This work was supported by the Clark County Desert Conservation Program and Southern Nevada Public Land Management Act as project to further implement or develop the Clark County Multiple Species Habitat Conservation Plan



**PROJECT NUMBER: 2013-GBI-1450A**

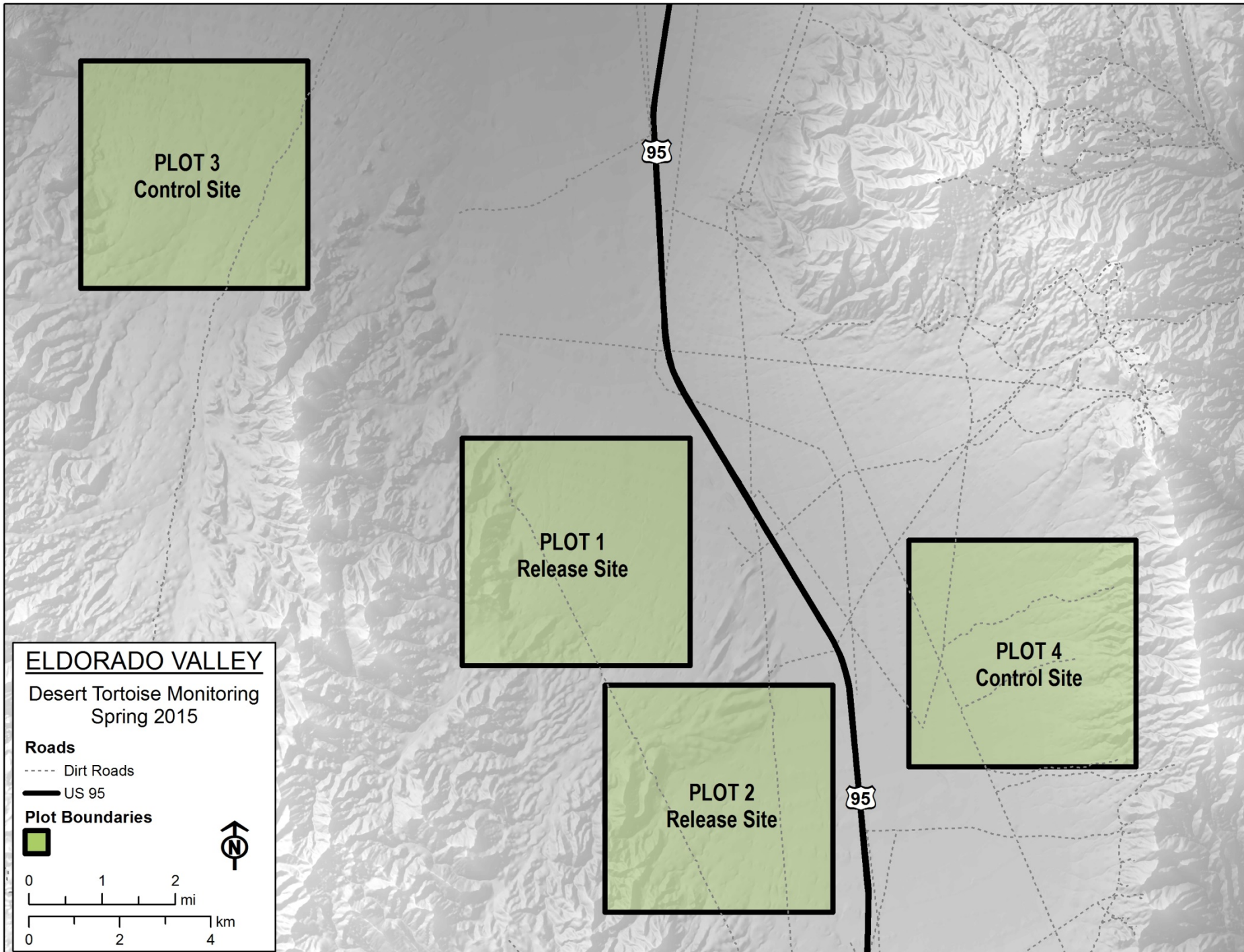


**Eldorado Desert Tortoise Monitoring**  
Year 0

# PROJECT OVERVIEW



- Part of a larger population augmentation study
- Monitor the effectiveness of translocation
- Compare two control sites to two release sites



# SUMMARY OF PROJECT TO DATE



- Crew members were provided training prior to the season
- Crew members conducted practice transect to ensure adherence to protocols
- All surveys completed and data submitted to DCP for Year 1

# TRANSECTS



- **Collect data on resident and translocated tortoises for Year 1 after translocation (Years 2 -2016)**
- **5 km parallel transects oriented east and west and 50 m apart**
- **Data recorded included location, sex, MCL, BCS and tags**
- **Unmarked tortoises were tagged**

# Surveys completed from 7 April - 28 May 2015



- Four plots completed, 400 transect lines walked, in plot order 1-4
- 88 Total live tortoises found, 85 survey tortoises
  - 75 transect live tortoise observations (63 new, 12 recaptures)
  - 10 opportunistic tortoise observations (7 new, 3 recaptures)
- 76 Total carcasses found
  - 74 transect carcass observations (1 with tag, 3 with notches)
  - 2 opportunistic carcass observations



# TELEMETRY

- **Conducted telemetry at one site in Piute Valley to estimate the proportion of tortoises active or visible during transect surveys. Data used to calibrate the results of transect surveys**



# Telemetry monitored from 6 April - 28 May 2015



- **Average number of observations = 42.2/day**
  - 12-15 previously transmittered tortoises monitored
  - 1605 total observations over 38 days

**DELIVERABLE/MILESTONE**

Year 0 Completed

Project Kick-Off

Refresher Training, Submit DMP, Begin Surveys

Complete All Plots

Project Debrief

Submit Final Data and Report

*Project Kick-Off*

**May  
2014**

**March  
2015**

**April  
2015**

**May  
2015**

**June  
2015**

**July  
2015**

**March  
2016**

**TIMELINE**

**PROJECT NUMBER: 2013-GBI-1450B**

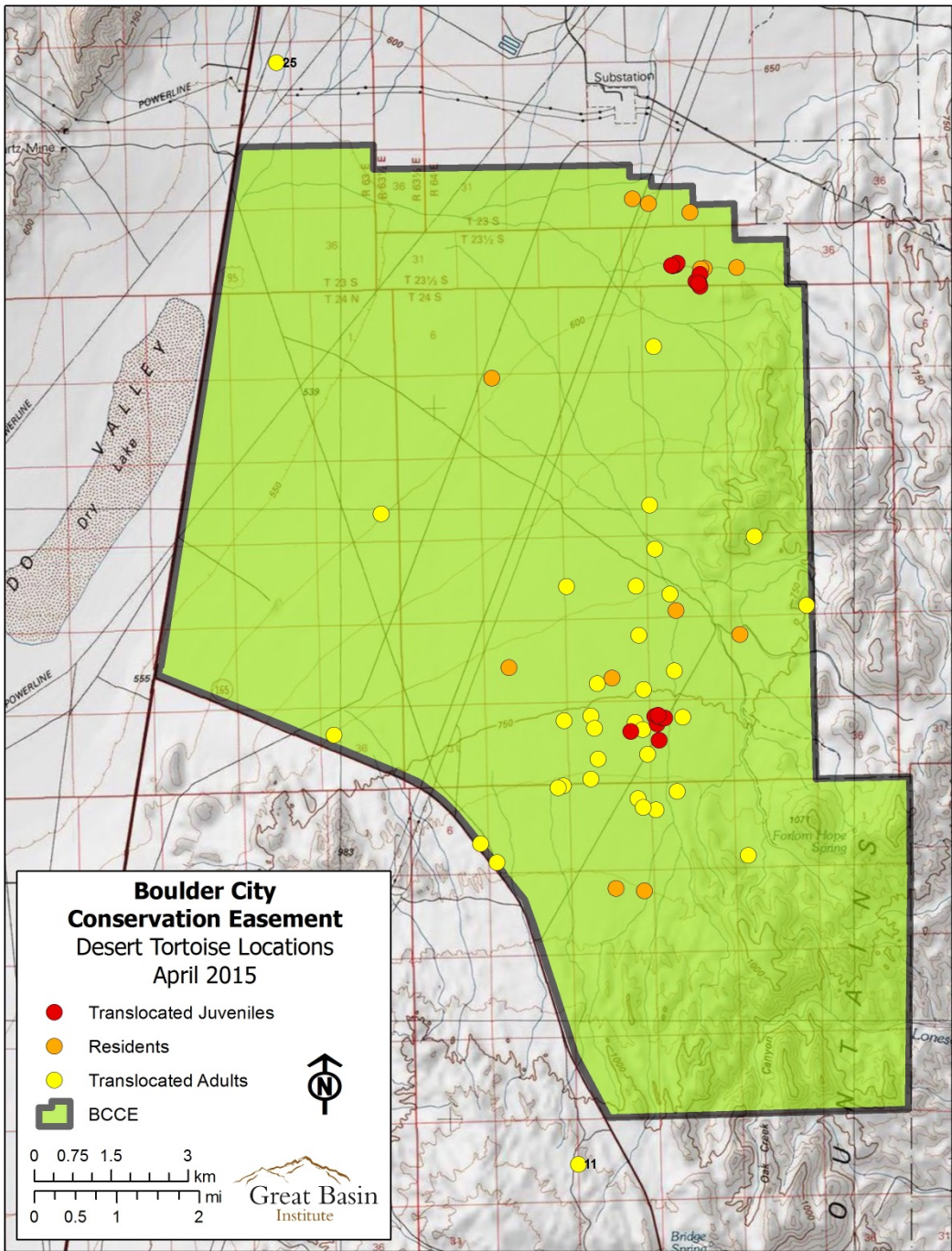


**Boulder City Conservation Easement  
Desert Tortoise Telemetry  
Year 1**

# PROJECT OVERVIEW



- PART OF A LARGER POPULATION AUGMENTATION STUDY
- DETERMINE SURVIVORSHIP AND MOVEMENT PATTERNS OF TRANSLOCATED AND RESIDENT DESERT TORTOISE
- MONITOR FOR FOUR YEARS POST TRANSLOCATION



# SUMMARY OF PROJECT TO DATE



- **Monthly observations Nov-Feb, Weekly observations Mar-Oct**
- **Transmitted 13 Resident, 40 Translocated tortoises**
- **Currently**
  - **13 Resident tortoises**
  - **28 Translocated tortoises (12 dead)**

**DELIVERABLE/MILESTONE**

Begin Monitoring

Monthly observations and data submission

Weekly observations, monthly data submission

Quarterly report submitted

Monthly observations continue

Data to be submitted monthly

*Year 2*

*Year 3*

*Year 4*

**Fall  
2014**

**Nov  
15-Feb  
15**

**Mar-  
July  
2015**

**Dec  
2014,  
Apr, July  
2015**

**July-  
Oct  
2015**

**July-  
Oct  
2015**

**2016**

**2017**

**2018**

**TIMELINE**



# VALUE TO MSHCP IMPLEMENTATION

OBJECTIVE 1: Collect transect and telemetry data on resident tortoises

**CURRENT MSHCP CONSERVATION EFFORT: Protect existing desert tortoise populations and monitor to detect trends**



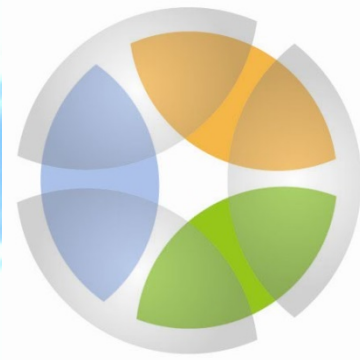


**OBJECTIVE 2: Collect transect and telemetry data on resident and translocated tortoises for 2 years after translocation**

**CURRENT MSHCP CONSERVATION EFFORT: Improve effectiveness of translocation methods and monitoring**



**THANK YOU**



**QUESTIONS?**

(Permission to use photographs provided by The Great Basin Institute)