### **Agency/Organization:**

Southern Utah University

# **Project Name:**

Edaphic Components of Las Vegas Bearpoppy Habitat

### **Project Number:**

2023-SUU-2380A

# **Reporting Period:**

October 1, 2024 – December 31, 2024

# **Project Contact Name and Information:**

Kody Rominger, Program Manager and Research Fellow, Principal Investigator Southern Utah University <a href="mailto:kodyrominger@suu.edu">kodyrominger@suu.edu</a>
801-427-9603

### **QUESTION 1:**

### What did you accomplish during this reporting period?

- Completed soil and tissue collections for the following sites: Bitter Springs Valley I and II, Tule Springs I and II, Apex, Echo Wash, Bluepoint Spring, Bowl of Fire, Gale Hills, and Valley of Fire.
- Completed in-house soil analyses on spring 24 field samples (soil physical properties and gypsum content).
- Analyzed raw data generated from external laboratory soil analyses.

### How did these accomplishments help you reach the goal of your project?

- The in-house and external laboratory results of the spring 24 samples confirmed our hypothesis that Las Vegas Bearpoppy is not exclusively restricted to gypsiferous soils. Of the 32 transects sampled in spring 24, 7 transects (5 surface and 5 subsurface samples taken at each) were found to have zero gypsum content.
- All soils work is completed for 8/30 sites, and field samples and data are completed for an additional 10 of the remaining 22 sites. This leaves us with 12 sites remaining for spring 25.

If relevant, what indicators or benchmarks were used to determine your progress?

### **QUESTION 2:**

# What, if any, problems were encountered? Briefly describe those problems and the manner in which they were dealt.

 We were having difficulty collecting tissue samples due to the poppy population abundance being on the lower end of its life history strategy, especially around the Lake Mead area. Since tissue samples are an important component of our study, we adjusted several sampling areas to ensure live poppies would be available to sample. This also provides us with the opportunity to examine different soil substrates not previously considered when we designed the study. • We have been unable to secure access to Nellis Air Force Base and North Las Vegas Terminal. For Nellis, we have sent multiple emails, made dozens of phone calls to various folks across base, and even visited the base in-person, but have not yet discovered the "person" that can allow us access. We have not given up on this, but if we can't secure access, we'll select another area to sample as near the base as possible.

### **QUESTION 3:**

What, if any, proposed activities were not completed? Briefly describe those activities, the reasons they were not completed and your plans for carrying them out.

• All planned activities were completed.

## **QUESTION 4:**

## What is the calculated percent of work completed?

• Including D09, 52.9% (9/17 deliverables) of the planned work has been completed.

### **QUESTION 5:**

Do you foresee any upcoming problems with future project activities? If so, how do you propose to overcome those problems?

• Other than what was mentioned previously, we don't foresee any upcoming issues.

## **QUESTION 6:**

## Is there anything else you want to tell the DCP about this project?

• We feel really good about how the project is progressing and the information we are generating about the poppy.

# **QUESTION 7:**

### What was produced during the reporting period?

- **1.** Soil Physical Properties Analysis of the Spring 24 samples (gypsum content, bulk density, relationships between and within sites)
- 2. Analysis of USUAL (Utah State University Analytical Lab) results of Spring 24 samples.
- **3.** Multiple spreadsheets of data associated with the above analyses.
- **4.** Soil and Tissue samples for 10 sites (Fall 24)