## Plan Overview

A Data Management Plan created using DMPTool

Title: Seedling establishment and woody-plant encroachment in Southwest Rangelands

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## Seedling establishment and woody-plant encroachment in Southwest Rangelands

The data generated in this reserach will consist of seedlings establishment population data of the woody-shrub Honey mesquite (*Prosopis glandulosa*), and the non-native grass Lehmann lovegrass (*Eragrostis leehmanniana*). The data types to be created will be seedlings density represented in spreadsheets, graphical visualization, statistical analyses and text. The data will be created and proceed using statistical softwares like Microssoft Excel to record the data, and JMP and R to develope figures and statistical analyses. No existing data will be used in this research. To enssure the quality of the data at the moment of collection and processing, we will employ an standar protocols to record the seedlings establishment as well as various standard statistical analyses tools to process the data.

The formats that we will use for the data will be Comma-separated Values (.csv) for the spreadsheets and JMP data sheets, and R scripts (.R) for the code developed. In terms of units they will be presented as follow: plot ID (physical quantity), ambient precipitation (mm), precipitation treatments for irrigation, drought, and ambient (+80%, -80%, control) seedlings density (# of seedlings/m2), time (week #, day #), plant cover (m3). All the data will be preserved for the long-term. No transformation will be necessary to read the data. The metadata will be presented as a "README.txt" text document (.txt) along with the rest of the data, and will consist of explanation of units, and context in terms of time and relationship of every variable.

The data will be shared directly to the LTER Site Manager, which will be available on the LTER web site (https://jornada.nmsu.edu/lter/data).

The data will be available with no restrictions after research publication is completed.

The original investigator will be Luis Weber-Grullon. The responsible investigator will be Osvaldo Sala. The Jornada Basin LTER Site Manager, and who will in charge of the data once is submitted, will be John Anderson.

Osvaldo Sala (the responsible investigator) will be responsible to review and revise this data management plan prior submission.