



Overview of the Mojave Desert Ecosystem Program (MDEP)



*Supporting government agencies
through geospatial solutions.*

Introduction to the program

Historical facts about the program:

- Started in 1995 through a DOD/DOI partnership for collaboration on data for the Mojave in partnership with any and all agencies in the Mojave.
- 15 year history supporting various studies, programs and projects for the federal, state and local agencies in collaboration with NGO's and companies associated with those efforts.
- The program has and is charged with servicing the Mojave Ecoregion.
- Data support includes GIS, documents management, image management, and other data needs throughout the region.
- MDEP has support other technically related items such as large scale printing, website design, mobile data collection and large format document conversion.
- MDEP is designed to give agencies in the Mojave additional IT resources to meet mission requirements in land management efforts.

Partnership overview

Federal efforts

- The Desert Managers Group (DMG)
- The Mojave Desert Initiative (MDI)
- Southern Nevada Agency Partnership (SNAP)

National efforts

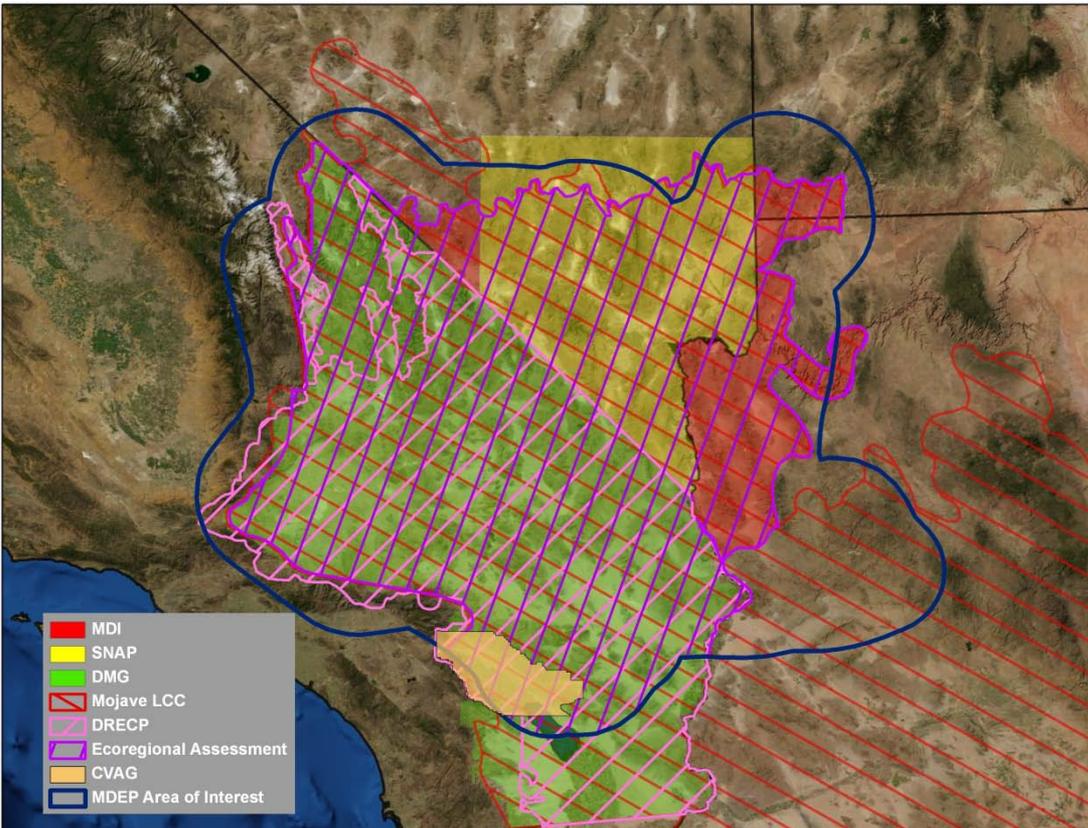
- BLM Ecoregional Assessments
- DOI Desert Landscape Conservation Cooperative (Desert LCC)

State efforts

- Desert Renewable Energy Conservation Plan (DRECP)

Local efforts

- Coachella Valley Association of Governments (CVAG)



Current aspects of the program

- MDEP is physically located at the National Park Service Mojave Preserve office in Barstow.
- The program operates with four positions: a project manager, a webmaster, a systems administrator, and a GIS analyst.
- The programs hardware systems are 100% owned by federal government agencies.
- MDEP manages its own firewall and internet access giving MDEP flexibility to work with various agencies. This also allows MDEP the ability to conform to many security standards as needed.
- Internet access is provided through a full T1 allowing for a large volume of data to travel to and from the system.
- The program hosts four .gov websites along with over 20 SharePoint sites meeting the security requirements in place for .gov along with individual site management requirements.
- The system supports both public access of data along with interagency operations within the system for various types of data.
- The program can collaborate with many agencies operating in the Mojave who have an environmental land management concern.

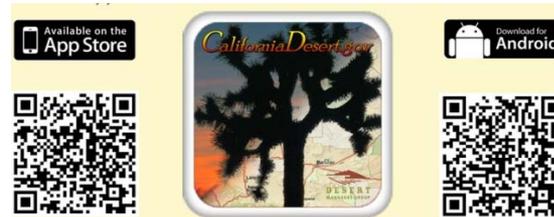
Current aspects of the program

- Mobile technology is a major focus for MDEP in trying to find new and effective ways in supporting remote data collection. MDEP has looked at both an enterprise and smartphone methodology for offering more solutions to those working in the Mojave.
- Enterprise level mobile data support consists of systems and software to allow a large number of users to access and share data from anywhere. Examples of software at MDEP are:
 - PenDragon Enterprise (Supports 250 mobile lic.)
 - ESRI Mobile
 - ESRI ArcPad
 - Microsoft Mobile
- Smartphones have developed in recent years to compete with low level portable computer systems allowing users a vast amount of features in a simple and portable form factor. Software for these devices in support of MDEP efforts are:
 - “What’s Invasive” for plant species identification
 - “SoilWeb” for identification of known soil types at a specific location
 - “ArcGIS” for basic GIS and data submission



Current aspects of the program

- Crowdsourcing is seen at MDEP is an cost effective solution for data collection on various species and subjects in the Mojave. Through partnerships with developers to establish proof of concept solutions the Mojave Desert Tortoise app and California Desert.gov app have been developed to both educate the public and provide information back to the agencies on their individual discoveries. Tools such as eye catch posters have developed as well to build interest in the application.



Mojave Desert Tortoise
Mobile App

