

**DRAFT**  
**DMG Recommendations to USGS**  
**Concerning the RVDE Project**

These recommendations stem from a two-day workshop held in December between several of the USGS scientists involved with RVDE and various staff specialist representing the DMG. They also represent the comments of the DMG staff specialists that attended the RVDE review in Menlo Park last fall.

1. There is a concern for model validation across the eco-region. Will the various models work in both the east Mojave and the west Mojave? Is what is occurring at the Nevada Test Site applicable to Joshua Tree National Park?
2. Many management issues present themselves to land management agencies. RVDE will not be able to develop a model for each management issue. It is important that RVDE develop and calibrate locally usable models that support decisions for one immediate and significant management issue. Once ecosystem-based models have proven their effectiveness in predicting outcomes, assessing risks, etc., the program should be expanded to management issues.
3. Immediate significant management issues in need of good modeling are:
  - a. Route designation and route closure.
    1. How does travel on open routes affect native vegetation?
    2. How does travel on open routes affect mobility of key species of concern?
    3. What are the demonstrable (quantifiable) ecological benefits of closing routes?
    4. What are the impacts of various classes of routes?
    5. What are the ecological effects of routes when examined from an access standpoint?
    6. What is the threshold of social acceptability to route closures?
  - b. The effectiveness of actions to recover desert tortoise populations. How effective is closing and area to grazing and closing routes?
  - c. What is the threshold for ecosystem change?
    1. At what point does an area become so damaged that active restoration is necessary?
    2. At what point is the seed bank altered beyond ability to restore previous (pre-disturbance) composition?
    3. What areas will recover from weapons testing and how fast will recovery be?
    4. Will active restoration be required?
4. RVDE has determined that, in the Mojave, plants often respond to changes as individuals rather than communities. We need to know which indicators land

management agencies should monitor for ecosystem function and what protocols for monitoring are needed. A future monitoring program needs to serve the needs of the National Park Service Vital Signs program and the BLM off-highway vehicle and ecosystem monitoring program.

5. What is the value of a concentrated versus dispersed recreation or military maneuvers and how will recovery be impacted.
6. Much of the data generated by RVDE will be very useful. Climatological data and how that relates to vegetation data is very important.
7. It is important for land managers to know whether active restoration is needed to restore a site or whether the site will restore on its own over time. If active restoration is required, what method of restoration is most appropriate to achieving a socially acceptable state? For example, when is ripping and decompaction necessary? How beneficial are various restoration techniques for various disturbances.
8. Once a pilot model and decision support system is developed, training in the model's use will be required. USGS will need to provide customer support to land managers after the model is developed. USGS will also need to work with agencies to ensure that any future data collection meets data standards and protocols.
9. For the models to be a complete, useful tool, the social aspect of desert use must be accounted for.
10. Involve the DMG in the development of a work plan that reflect program priorities and as many program elements as possible.