

**U.S. Department of the Interior
Bureau of Land Management**

Finding of No Significant Impact

**Mojave Desert Common Gardens
DOI-BLM-NV-S010-2014-0100-EA**

PREPARING OFFICE

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Chapter 1. Finding of No Significant Impact

Mojave Desert Common Gardens

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1.1. Introduction

1.1.1. Proposed Action Title/Type

Mojave Desert Common Gardens. Environmental Assessment#: DOI-BLM-NV-S010-2014-0100-EA.

1.1.2. Project Proponent

Bureau of Land Management

1.1.3. Location of the Proposed Action

BLM Southern Nevada District, Las Vegas Field Office (Lead Office)

BLM Southern Nevada District, Pahrump Field Office

1.1.4. Overview of the Proposed Action

The proposed action is to install common garden experimental plots throughout the Southern Nevada District. Once established, the project proposes to plant populations of various species within the selected gardens and to run experiments that with the ultimate goal of:

1. Evaluating the degree of genetic differentiation among populations of native plant species and to determine what degree of adaptive genetic differentiation is relevant for revegetation, reclamation, rehabilitation and restoration success.
2. Determining distances that seeds of native desert species can be transferred to minimize risk of poor adaptation to the local environment and degradation of local genetics.
3. Refining seed transfer maps with varied numbers of zones for individual species or plant functional groups which will assist with future seed procurement and revegetation efforts.

1.2. Consistency with Land Use Plans, Laws, Regulations, and Policies

Record of Decision for the Approved Las Vegas Resource Management Plan and Final Environmental Impact Statement (RMP) (October 1998)

Objective

VG1 – Maintain or improve the conditions of vegetation on public lands to a Desired Plant Community or to a Potential Natural Community.

Management Direction

VG1a. Manage to achieve a Desired Plant Community or to a Potential Natural Community.

Objective

VG2 – Restore plant productivity on disturbed area of the public lands.

Management Direction

VG2a. Rehabilitate, reclaim, or revegetate areas subjected to surface-disturbing activities, where feasible. When rehabilitating disturbed areas, manage for optimum species diversity by seeding native species, except where non-native species are appropriate.

The Proposed Action and alternatives are in compliance with the following Executive Orders, Laws, Regulations, State Statute, and Agency Policy:

- Archaeological Resources Protection Act of 1979, as amended (Public Law 96-95; 1 U.S.C. 470aa-mm)
- Bald and Golden Eagle Protection Act (16 U.S.C. §§ 668-668d, June 8, 1940, as amended 1959, 1962, 1972, and 1978)
- Clean Air Act (42 U.S.C. §§ 7401-7602, December 31, 1970, as amended 1977, 1990, 2004)
- Clean Water Act (33 U.S.C. §1251 et seq., 1972)
- The Endangered Species Act of 1973 (16 U.S.C. §§ 1531-1544, December 28, 1973, as amended 1976-1982, 1984, and 1988)
- Executive Order 12898, Environmental Justice (Feb. 11, 1994, 59 Fed. Reg. 7629)
- Executive Order 13007, Protection and Accommodation of Access to “Indian Sacred Sites”, (May 24, 1996).
- Executive Order 13112: Invasive Species (1999)
- Executive Order 13186 — Responsibilities of Federal Agencies to Protect Migratory Birds (2001)
- The Federal Land Policy and Management Act of 1976 (43 U.S.C. §§ 1701-1782, October 21, 1976, as amended 1978, 1984, 1986, 1988, 1990-1992, 1994 and 1996)
- Migratory Bird Treaty Act (16 U.S.C. §§ 703-712, July 3, 1918, as amended 1936, 1960, 1968, 1969, 1974, 1978, 1986 and 1989)
- The National Environmental Policy Act of 1969 (42 U.S.C. §§ 4321-4347, January 1, 1970, as amended 1975 and 1994)
- National Historic Preservation Act (Public Law 89-665; 16 U.S.C. 470 as amended through 2000) and its parallel authority, Protection of Historic Properties (36 CFR 800)
- Noxious Weed Act, as amended (7 USC. 2801, et seq.)
- Wild Free-Roaming Horses and Burros Act of 1971 (Public Law 92-195)

1.3. Selected Alternative

The selected alternative is for the BLM, in cooperation with the USGS, to establish 13 common garden sites and issue a right of way to BLM at different locations throughout the Mojave Desert in support of the BLM Native Plant Materials Development Program.

Over a long term period, minimum of 10 years, the proposed common gardens will be used test provisional seed transfer zones and support genetic analysis of Mojave Desert native plant species needed to manage and restore degraded desert tortoise habitat, degraded rangelands, post fire rehabilitation, mine reclamation, and other disturbed public lands. In addition, the selected alternative will help provide a baseline understanding of the naturally occurring patterns of genetic diversity across the Mojave Ecoregion. When combined with climate envelop modeling, it will be used to understand the effects of climate change and provide a foundation for BLM vegetation management in response to climate change.

1.4. Additional Scoping

1.4.1. Summary of Participation

The following agencies participated in the creation of this document:

Bureau of Land Management

- Southern Nevada District
 - Las Vegas Field Office
 - Pahrump Field Office
- Ely District
 - Caliente Field Office
- California State Office
- California Desert District
 - Barstow Field Office
 - Needles Field Office
- Arizona Strip District
 - Grand Canyon-Parashant National Monument
- National Park Service
 - Grand Canyon-Parashant National Monument
- U.S. Geologic Survey
 - Western Ecological Research Center, Las Vegas Field Station

1.5. Public Involvement

Due to the minimal impact of the project to humans and the environment in conjunction with the potential short and long term benefits no external scoping was conducted. A standard 30 comment period was conducted for this EA from September 11, 2015 to October 11, 2015. No public comments were received. A copy of the EA will be published to the BLM's NEPA register once a decision has been made.

1.6. Finding of No Significant Impact

The Southern Nevada District Office interdisciplinary review and analysis of EA# DOI-BLM-NV-S010-2014-0100 determined that the proposed action would not trigger significant impacts on the environment based on criteria established by regulations, policy and analysis.

Based on the findings discussed herein, I conclude that the proposed action is not a major Federal action and will result in no significant impacts to the environment, individually or cumulatively with other actions in the general area. No environmental effects meet the definition of significance in context or intensity as defined in 40 CFR 1508.27 and do not exceed those effects described in applicable land use plans. Therefore, preparation of an environmental impact statement (EIS) to further analyze possible impacts is not required pursuant to Section 102(2)(c) of the National Environmental Policy Act of 1969.

This determination is based on the rationale that the significance criteria, as defined by the Council on Environmental Quality (CEQ) (40 CFR 1508.27) have not been met. "Significantly" as used in NEPA requires considerations of both context and intensity.

In making this Finding of No Significant Impact (FONSI), the following criteria have been considered, in accordance with the Council on Environmental Quality (CEQ), 40 C.F.R. 1508.27.

Chapter 2. Context and Intensity

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2.1. Context

This means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short and long term effects are relevant.

Environmental impacts associated with the proposed action and alternatives have been assessed by an interdisciplinary team and described in EA# DOI-BLM-NV-S010-2014-0100. The context of the EA analysis was determined to be at a local and regional scale in Clark and Nye counties, Nevada. The effects of the action are not applicable on a national scale since no nationally significant values were involved.

2.2. Intensity

This refers to the severity of impact. The following discussion is organized around the Ten Significance Criteria described in 40 CFR 1508.27 and supplemental Instruction Memorandum, Acts, regulations and Executive Orders. The following have been considered in evaluating intensity for this proposal:

2.2.1. Effects

Impacts can be both beneficial and adverse and a significant effect may exist regardless of the perceived balance of effects.

2.2.1.1. Beneficial Effects

The proposed action will provide federal land managers with an improved understanding of native plant ecology that will assist with vegetation management in the Mojave Ecoregion. As native plants are highly adapted to variation in temperature and precipitation. Understanding this variation and degree of genetic adaptation is paramount to understanding and developing successful native plant materials for the Mojave Ecoregion. The knowledge learned from the common gardens experiments should help improve restoration efforts in the future which would provide a long term benefit to a large number of resources and assist resource managers to make more informed decisions about the ranges and potential success of key restoration plant species. Upon conclusion of the project the proposed action will establish native plants in these previously disturbed project areas thereby improving the overall ecological function and value of the habitat.

2.2.1.2. Adverse Effects

2.2.1.3. Public Health and Safety

There are no large scale regional human health and safety risks associated with the selected alternative. Risk of personal injury to those participating in the project though low will be present during certain field work activities including, fence installation, driving, equipment and tool use, herbicide application, monitoring, planting and watering. These risks will be minimized as

individuals will be encouraged to use common sense, put safety first and follow the safety tips found in section 3.12.2 of the EA.

2.2.1.4. Geographic Area

The geographic area for the selected alternative is the entire Southern Nevada District Office (SNDO). The total project area analyzed in the EA is 50 acres but significant effects are not anticipated due to individual 1.5 to 5 acre projects areas being small and dispersed both geographically throughout the entire SNDO, and over a period of time as they are built incrementally to full size according to the proposed action (Chapter 2) of the EA. Refer to Chapter 3 of the EA for geographic area descriptions for specific resources. See Table 2 in Chapter 2 of the EA for a list of the special areas designations for each of the proposed project area.

2.2.1.5. Controversy

The selected alternative will have insignificant effects to the quality of the human environment (Section 4.5 in the EA) and as such is not likely to be controversial.

2.2.1.6. Uncertainty or Risks

The degree to which the possible effects of the selected alternative to the human environment are uncertain, or involve unique or unknown risks is very low.

2.2.1.7. Precedence

The degree to which the selected alternative may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration is very low.

2.2.1.8. Cumulative Impacts

The total project area analyzed for the selected alternative includes 17 sites on 85 acres across the Mojave Ecoregion in California, Arizona and Nevada. Cumulative effects caused by the proposed action are not anticipated due to individual project areas being small and dispersed both geographically throughout the entire Mojave Ecogregion, and over a period of time as they are built incrementally to full size according to the proposed action.

2.2.1.9. National Register of Historic Places

The degree to which the selected alternative may adversely affect districts, sites, highways, structures, or other objects listed in or eligible for listing in the National Register of Historic Places, or may cause loss or destruction of significant scientific, cultural, or historical resources is very low.

2.2.1.10. Endangered, Threatened and BLM Sensitive Species

All sites for the selected alternative will have tortoise fencing installed which will minimize the potential for tortoises to be impacted by entering the sites. Some sites are previously disturbed, within a area previously cleared of tortoises and fenced or are low quality tortoise habitat and

thus installation of the common garden sites in these areas is assumed to not result in the loss of tortoise habitat. Thus it is assumed that only the Beatty, Goodsprings, Loran, Pahrump, Sandy Valley, and Mormon Mesa sites will result in the loss of potential tortoise habitat. The following four project areas occur within ACECs and desert tortoise Critical Habitat Units (CHU): Cactus Mine Alternate and Searchlight Loran in the Piute Eldorado ACEC, and Mormon Mesa in the Mormon Mesa ACEC. Five acres of disturbance is allowable in desert tortoise CHUs and 20 acres (which includes acres in desert tortoise CHUs) of disturbance is allowable in areas designated desert tortoise habitat according to the Section 7 consultation for this project area located within the SNDO are covered under the current Programmatic Biological Opinion (84320-2010-F-0365.R003) contingent on compliance with the terms and conditions. Only 4.5 acres within desert tortoise CHUs and 10.5 acres (which includes acres in desert tortoise CHUs) for a total of 10.5 acres in desert tortoise habitat will be used for the selected action. Additional consultation maybe required as the remaining 9.5 acres of desert tortoise habitat and 0.5 acres of desert tortoise CHU habitat are needed in the project areas.

Areas of with moderate to high concentration of BLM sensitive species were avoided when selecting project areas and most all project areas for the selected alternative are within predisturbed areas so there are no anticipated effect to population levels or distribution.

The degree to which the action may affect an endangered and threatened species, and its habitat is discussed in section 4.26 of the EA. The degree to which the action may affect an BLM sensitive species and its habitat is discussed in section 4.6 and 4.28 of the EA.

2.2.1.11. Federal, State, Local, or Tribal Law, Regulation or Policy

The selected alternative does not threaten a violation of a federal, state, local, or tribal law, regulation or policy imposed for the protection of the environment, where non-federal requirements are consistent with federal requirements.

2.3. Review and Approval

	Signature	Date
Reviewed by: Fred Edwards Botanist, Southern Nevada District		
Reviewed by: Nicollee Gaddis NEPA Lead		
Approved by: Deborah MacNeill Field Manager, Pahrump Field Office		
Approved by: Gayle Marrs-Smith Field Manager, Las Vegas Field Office		