

# EIS CONNECTION



A Newsletter to Inform the Public About the Environmental Impact Statement for Activities Associated with Future Programs at Dugway Proving Ground

## Public Scoping Process Includes Talking to Stakeholders

Scoping activities to obtain input about what to address in the Environmental Impact Statement (EIS) for Activities Associated with Future Programs at Dugway Proving Ground (Dugway) have been completed. The Scope of Statement will be made available to the public when it is finalized.

### Pre-Scoping Activities

To start the scoping process for the Dugway EIS, a Notice of Intent to produce the EIS was published in the Federal Register on July 29, 1998. With publication of the Notice of Intent, Dugway prepared for upcoming public scoping meetings by:

- Publishing meeting announcements in local newspapers
- Conducting a mass mailing of a brochure announcing the scoping period to over 500 addressees
  - Providing informational materials, including fact sheets on Dugway activities and the EIS process



The public meetings included a presentation, which provided an overview of the current activities and missions at Dugway, the EIS process, and public comment opportunities.

### Public Comments

During the public scoping phase, several comments were received regarding the proposed alternatives to be addressed in the EIS. One comment noted that there was no alternative for decreased levels of training and/or testing at Dugway. As a consequence of this and other comments, the EIS will include the following Proposed Action and three alternatives:

- Proposed Action. Diversify Operations, Expand Testing Activities, and Increase Training Activities
- Alternative 1. No Action Alternative (no change in operations, testing, or training)
- Alternative 2. Decrease Testing and Training Activities
- Alternative 3. Expand Testing and Training to a Foreseeable Maximum

Some other public comments received at stakeholder meetings, public meetings, and written comments included questions about:

- Noise from low-flying aircraft and sonic booms
- Fires and how Dugway puts out fires
- Analyzing cumulative impacts, including tenants and all tests
- Incorporating environmental effects into the EIS
- The process of closing English Village and impacts of the closing
- Pre-1969 activities and their impacts
- Any impacts from the Assembled Chemical Weapons Assessment program
- Describing the smokes, obscurants, and simulants used at Dugway
- Skull Valley Goshute sacred sites, and any impacts to these sites
- The Cedar Mountain herd of wild horses

More information regarding the final Scope of Statement will be published in an upcoming issue of *EIS Connection*. e

- Establishing a toll free phone number for questions about the EIS
- Setting up public reading rooms that contain material about the EIS

### Stakeholder Meetings

Dugway identified parties that may be interested in the EIS, called stakeholders. Dugway arranged one-on-one meetings with stakeholders to provide them

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## Environmental Coordinator Corner

Welcome to the first *EIS Connection!* Dugway's Directorate of Environmental Programs is pleased to publish this newsletter. During the EIS scoping process, many of you recommended that Dugway continue to provide information about the EIS and activities at Dugway. The *EIS Connection*, which will be published throughout the EIS process, is a result of these comments.

Every issue of the *EIS Connection* will provide EIS information from the Directorate of Environmental Programs office. This is the office responsible for environmental programs at Dugway, such as the EIS. As a member of this

office and Dugway's National Environmental Policy Act (NEPA) coordinator, I ensure that Dugway activities comply with NEPA (see "The Environmental Impact Statement Process" article on page 6 for information about NEPA). I coordinate communication among the Dugway Directorate of Environmental Programs office, the contractor performing the EIS, Dugway testing and training officers, and all Dugway tenants. With assistance from Dugway's Public Affairs Office, I also coordinate EIS public involvement activities.

In the feature story of this *EIS Connection*, the scoping process is described and the comments received

during this process are summarized. The "Mission Spotlight" column provides information about activities at Dugway that will be reviewed in the EIS.

*EIS Connection* is just one of Dugway's connections with the public and it is the public's connection to Dugway. I would be pleased to add you to the newsletter mailing list and encourage you to send us any questions you may have regarding the EIS. Other Dugway public outreach efforts include a toll-free number and public reading rooms. See the "Resources" block on the back page of the newsletter for additional information about EIS resources.

Steven Klauser, *EIS Project Manager*  
Dugway Directorate of  
Environmental Programs 

## Mission Spotlight: History of Dugway

Although you may live near Dugway, you may not have a clear understanding of Dugway's mission and the activities conducted at the facility. This "Mission Spotlight" provides a brief history of Dugway and an overview of current activities.

### History of Dugway

Dugway was established in 1942 as a result of U.S. entry into World War II and the need for the U.S. to expand chemical and biological defense testing facilities. Most of Dugway's 798,855 acres came from the public domain and the State of Utah. Dugway is  
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Dugway is the nation's chemical and biological defense proving ground located approximately 80 miles southwest of Salt Lake City, Utah in the Great Salt Lake Desert.

## EIS Connection

*EIS Connection* is a newsletter published by the Dugway Directorate of Environmental Programs to inform the public about Dugway's Environmental Impact Statement (EIS) for Activities Associated with Future Programs. Contents of *EIS Connection* are not necessarily the official view of, or endorsed by, the U.S. Government, the Department of Defense, the U.S. Army, or its contractors. For questions and comments about *EIS Connection*, or to be added to the newsletter mailing list, contact:

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*Mission Spotlight, continued from page 2*

approximately 80 miles southwest of Salt Lake City in the Great Salt Lake Desert, with terrain that varies from level salt flats to scattered sand dunes and rugged mountains with elevations up to 7,000 feet.

Activities at Dugway during WWII included testing incendiary bombs and mortars, as well as establishing chemical and biological warfare and testing facilities. During the Korean War, weapons were developed at Dugway, including flame throwers, smoke generators, and flame bombs. All open air testing of chemical and biological agents was suspended in 1969, and

biological agents. After signing the BWC treaty, chemical and biological research and testing at Dugway decreased during the years 1973 to 1982. As a result of international treaties on biological and chemical munitions, Dugway began to develop methods to demilitarize damaged or old weapons. Testing of chemical and biological defense equipment and smokes and obscurants was increased in 1983 due to increased world sophistication in weapons systems and because of increased concern about the use of chemical and biological weapons by certain nations and terrorist groups.

- Operate and manage the installation's facilities and administrative, technical, and logistic services to support Dugway's mission and its tenants' training, testing, and research activities

Dugway's current activities include:

- Chemical and biological defensive testing
- Conventional munitions testing
- Smokes and obscurants testing
- Environment characterization and demilitarization technology testing
- Military equipment reliability, durability, and climatic testing
- Providing facilities for troop training activities

All of these testing activities are conducted through Dugway's West Desert Test Center. With its mission of testing and evaluating chemical and biological detectors, protective suits, gas masks, and other defensive equipment, Dugway remains at the front line of defense against weapons of mass destruction.

For years Dugway has trained DOD personnel to be first-responders to chemical or biological incidents. In two igloo-shaped facilities, known as the Bang Box, researchers determine the nature and extent of emissions caused by open burning or detonation of munitions. Conventional weapons testing is completed on artillery ranges and combat training areas.

In addition to testing, Dugway supports tenants such as the U.S. Air Force, the Army National Guard and Reserve, and universities. Additional information regarding the testing and training activities at Dugway is available in the EIS fact sheets and will be published in upcoming issues of *EIS Connection*.

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A microbiologist checks water samples for simulant bacteria at the Lothar Salomon Life Sciences Test Facility, just one of the many assets that enhance Dugway's reputation as a preeminent test center.

since that time, only simulants of these agents are allowed to be tested outdoors. Simulants are materials or organisms with physical properties that mimic traits of the chemical or biological agents under study. Organisms used as simulants do not present a risk to humans or the environment.

In accordance with the International Biological Weapons Convention (BWC) treaty signed by the United States in 1972, Dugway does not develop, produce, or stockpile chemical or

### **Present Activities**

Today, Dugway continues to support a variety of testing and training activities as part of its mission. Dugway's Mission is to:

- Test and support chemical and biological defense and detection capabilities and systems for the Department of Defense (DOD) or other Federal agencies
- Test and evaluate defense solutions for the Army

## Environmental Stewardship: Changing Habitat

Dugway has many missions that are important components to the national security of this country. Dugway and the DOD also have another critical mission and that is environmental stewardship — protection and conservation of our natural resources found on military installations. The EIS being completed for Dugway will evaluate the ways in which Dugway activities affect the environment, including plants and animals.

### Small Mammal Study at Dugway

One of the most intensive natural resource studies conducted at Dugway was on small mammals. This study investigated and mapped the plant communities at Dugway; and determined the distribution and population of small mammals within those communities. This multi-year study was duplicated in 1996, 1997, and 1998 to determine if the small mammal community and plants at Dugway have changed in 40 years.

### Similar Study Methods

The original study of small mammals and plants at Dugway focused on eight sampling areas or plots. These eight plots were based on what biologists considered the primary stable plant communities that existed at Dugway. In the 1990s study, six of the exact 1950s plots were studied again and two new plots were located in similar plant communities as those studied in the 1950s.

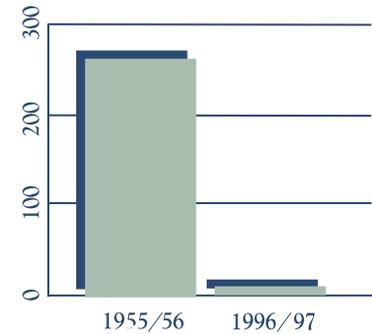
To determine the types of small mammals at each plot live traps were used. Both the 1950s and 1990s studies used similar capture and release methods and a comparable number of trap nights. A trap night is when one trap is left overnight on a sample plot.

The number and type of plants within the plant communities were also studied in the 1950s because many small mammals depend on plants and seeds for food. In the 1990s study similar methods used in the 1950s were duplicated to determine if the plants at Dugway have changed.

*The results for 1996/97 study indicated a significant decline in overall abundance, diversity, and richness.*

Figure 1

### Abundance of Chisel-Toothed Kangaroo Rats



In addition to studying the plants and small mammals, precipitation was also evaluated. Precipitation directly effects the seed production, which is a food source for many small mammals.

### Study Results

The challenge is to determine why the changes in the small mammals and plants have occurred. During this study, Dugway received more precipitation than when the study was conducted in the 1950s. With the above average precipitation there should have been an increase in small mammals, but instead there was a decrease in abundance and diversity. So what may have caused this decline in small mammals?

The study conducted during the 1950s found various species of small mammals. During the 1990s study, the current populations of small mammals were compared to the small mammals caught in the 1950s to determine:

- Abundance — How many of one species is present
- Diversity — How many different kinds of species are present
- Richness — The diversity of the community (plot) compared with the number of individuals in the community (plot)

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White-tailed antelope ground squirrel tagged during the 1990s study.

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The overall results for 1996/97 study indicated that there has been a significant decline in overall abundance, diversity, and richness. Figure 1 represents a decline in abundance of Chisel-Toothed Kangaroo Rats.

In 1998, there was still a decline in species abundance and richness in the three plots studied compared to 1950s. However, there was an increase in abundance for the ords kangaroo rat and the deer mouse in one plot as shown in Figure 2. The other two plots remained about the same as compared to 1996/97.

The most significant result of the plant study was the dominance of the exotic annuals at Dugway. Exotic annuals are plants not native to an area. Some of these exotic plants seem common at Dugway today, such as cheatgrass, Russian thistle, and storks bill, but were not common in the 1950s. For example, in one plot, cheatgrass and other exotic annuals replaced the native shadscale and budsage plants. The greatest potential impacts to the small mammal community are changes in the plant communities caused by a gradual conversion of native shrublands and woodlands to exotic annuals (most notably cheatgrass).



The juniper brush plot, one of the eight plots studied in the 1990s study.

Fire, man made or natural, at Dugway may be a critical factor in the spread of cheatgrass. Once areas have been burned and/or have been disturbed, cheatgrass can move into these areas and out compete native plants for available water and nutrients in the soils.

Depending on the time of the fire and its intensity, fire may benefit the small mammals as seen with the 1990s study. For example, in 1998, fire may have played an important factor in

the increase in abundance in one plot. This is probably due in part to the destruction of the thick carpet of cheatgrass, which opened the habitat allowing small mammals easier access. Effects such as these will be assessed in the Dugway EIS.

**Protecting Dugway Natural Resources**

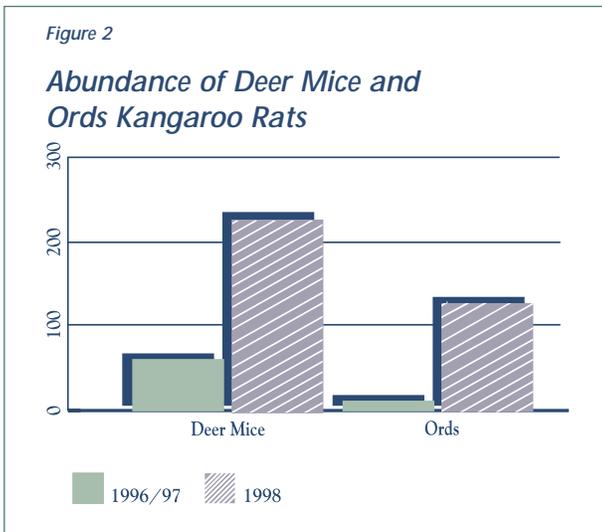
The decline in overall abundance, species diversity, and species richness could have detrimental effects on

sensitive predators, such as the kit fox and ferruginous hawks since small mammals represent the prey base of many predators. In addition to assessing effects in the

EIS, Dugway is in the process of developing and implementing mitigation plans to help protect its natural resources.

The information gained from this small mammal and vegetation study is critical for Dugway in managing the natural resources, to protect the environment, while continuing the missions that are critical to national security. (e)

*The most significant result of the plant study was the dominance of the exotic annuals at Dugway.*



## The Environmental Impact Statement Process

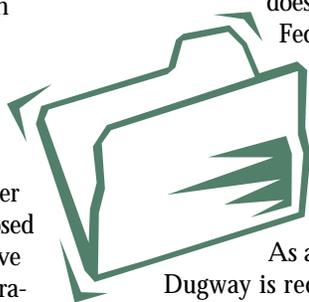
What is an Environmental Impact Statement (EIS), and what does it mean to the public and Dugway? In this issue, we introduce the EIS process and the National Environmental Policy Act (NEPA) that requires EISs. Next issue, we will look more specifically at the EIS for Activities Associated with Future Programs at Dugway.

### National Environmental Policy Act

NEPA, which was passed in 1969, requires Federal agencies to consider the environmental effects of proposed actions, evaluate possible alternative actions, and disclose these considerations to the public. The environmental impacts of any proposed action must be evaluated. Proposed actions that may require evaluation under NEPA could include major projects (for example, building a new dam) or planning decisions such as planning future operations at Dugway.

NEPA was designed to ensure that the effects on the environment are considered. The act also requires that Federal agencies integrate these considerations into their decision-making processes. Agencies are also required to integrate

public participation in the process. Public participation includes holding public meetings and responding to comments from the public, interested or affected parties, and government agencies on the effects of proposed actions. While the act requires that the environmental consequences be considered, it does not require that the Federal agency pursue the alternative that does minimal harm to the environment.



### NEPA Requirements

As a Federal installation, Dugway is required to integrate NEPA at the earliest possible time to ensure that their planning decisions follow environmental requirements. Dugway had to determine if the proposed action may have the potential to affect the human environment. Because the answer was yes, an environmental review such as an EIS is required by NEPA.

An EIS is prepared to analyze the impacts to the environment as a result of implementing the proposed action or any of the alternatives. For certain proposed actions, such as planning future activities at Dugway, it is more certain that the action will result in significant impacts.

An EIS does not state decisions regarding the proposed Federal action; rather, it provides

information for officials to use when making decisions. The EIS process involves input from the public and affected government groups and:

- Details the purpose and need for the Federal proposed action, and describes that action.
- Identifies and assesses reasonable alternatives to this action.
- Reports on the existing environment, including the land, air, water, wildlife, and cultural resources.
- Reviews the context, duration, and intensity of potential impacts to the existing environment from the proposed action and each alternative.
- Investigates and reports on ways to mitigate or lessen adverse impacts.

The EIS process includes the following:

- The Notice of Intent
- The Scoping Process
- The Draft EIS
- The Final EIS
- The Record of Decision

### The Notice of Intent

The EIS process is initiated when a Federal agency announces its intent to prepare an EIS by publishing a Notice of Intent (NOI), as Dugway did in July 1998. All notices are published in the Federal Register and local newspapers. The Dugway NOI included information regarding the scoping process, which is the process to determine what the EIS will evaluate. The NOI also included information regarding public participation, such as what materials are available and where public meetings are to be held.

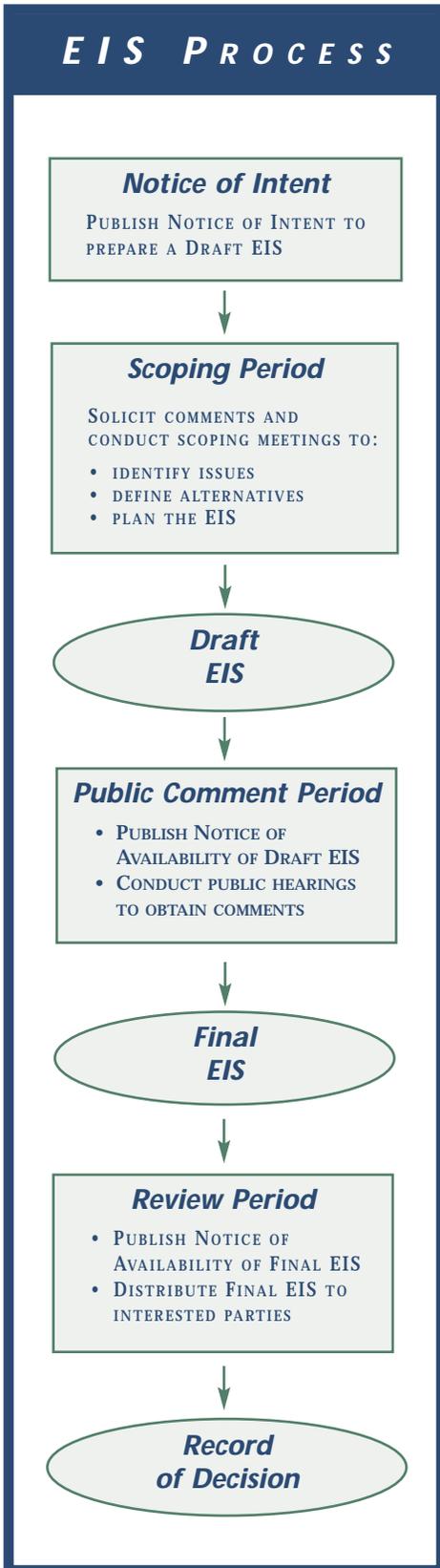
### The Scoping Process

Because the intent of NEPA is that all potentially affected or interested parties will have the opportunity to be involved, public participation is an important element of an EIS. For the Dugway EIS, comments were obtained from the public; Native American



Under NEPA, Federal agencies must consider the effects of proposed actions on the environment, including the salt flats to scattered sand dunes and rugged mountains at Dugway.

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tribes; and Federal, state, and local agencies to identify the environmental issues. These comments aid in developing and defining the scope and focus of the EIS.

**The Draft EIS**

Following the scoping period, the Draft EIS is prepared. The Draft EIS incorporates the issues and alternatives identified during the scoping process. The public has an opportunity to review and comment on the Draft EIS for a minimum of 45 days. During this public comment period, public hearings are held to solicit formal comments. All comments regarding the Draft EIS are considered, and substantive comments receive a formal response.

**The Final EIS**

Comments from the public hearings are addressed in the Final EIS. The

public has an opportunity to review and comment on the Final EIS for a minimum of 30 days. No sooner than 90 days after distributing the Draft EIS and 30 days after distributing the Final EIS, the agency makes a decision on the proposed action.

**The Record of Decision**

The final stage in the EIS process, prior to implementing the proposed action, is the Record of Decision (ROD). The ROD notifies the public of which action was chosen and why. It identifies all of the alternatives that were considered, all of the factors considered in the decision-making process, and how these factors entered into the final decision. The ROD may also contain mitigation commitments for reducing or avoiding the chosen action's adverse environmental effects.

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**Public Scoping, continued from page 1**

with an overview of the EIS process and schedule, and to identify issues regarding the scope of the EIS.

Dugway met with over 30 individuals representing environmental organizations; citizen action groups; regulatory agencies; local, city, state, and Federal government officials; and Native American tribes. During these meetings, Dugway learned that there is a misconception that Dugway performs biological and chemical offensive testing. Since Dugway only uses biological and chemical agents for defensive test purposes, these comments prompted Dugway to include more descriptive information of the mission of Dugway at the public scoping meetings.

**Public Meetings and Comments**

Many of the stakeholders attended the three formal public meetings held in September 1998 in Dugway at English Village, Tooele, and Salt Lake City. Meetings began with an open house where participants could sign-in,

gather information, view posters, and meet Dugway personnel. After a presentation which provided an overview of the current activities and missions at Dugway, the EIS process, and public involvement opportunities, attendees were encouraged to comment verbally about the scope of the EIS.

**Current Activities**

Before the public scoping period for the EIS ended on October 15, 1998, the public provided many important comments on the scope of the EIS. These comments were received by various methods including comment cards and formal letters sent through the mail, verbally at the public meetings, and via e-mail. Dugway is writing a Scope of Statement that will summarize the comments received and the resulting determinations reached by Dugway. Information regarding the Scope of Statement will be published in an upcoming issue of *EIS Connection*.

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## Resources

To be added to the mailing list, submit questions, or receive additional information (including fact sheets) relevant to the EIS for Activities Associated with Future Programs, please contact:

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EIS for Activities Associated with Future Programs  
c/o AGEISS Environmental, Inc.  
P.O. Box 463, Dugway, UT 84022-5000

**Toll Free Phone**  
(888) 489-9932

**E-mail Address**  
lisah@ageiss.com

**Website**  
<http://www.dugway.army.mil/EIS>

### *Reading Rooms*

All written material pertaining to the EIS for Activities Associated with Future Programs is available to the public in reading rooms at the following locations:

**Dugway**  
Dugway Public Library  
(435) 831-2178

**Tooele**  
Tooele City Public Library  
(435) 882-2182

**Salt Lake City**  
Whitmore Library  
(801) 944-7533  
– and –  
University of Utah  
J. Willard Marriott Library  
(801) 581-8863

## Next Issue

*Information regarding the Scope of Statement for the Dugway EIS*