



FINAL HEBER DUNES SVRA GENERAL PLAN

DECEMBER 2011



This page is a placeholder for the Commission resolution adopting the plan, plus any other resolutions such as reclassification connected with the plan. This page will not be numbered.

FINAL HEBER DUNES SVRA GENERAL PLAN

DECEMBER 2011



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FINAL Heber Dunes SVRA General Plan



WELCOME TO HEBER DUNES STATE VEHICULAR RECREATION AREA

For decades, Heber Dunes State Vehicular Recreation Area (SVRA) has been a cherished family gathering place for people to enjoy both motorized and non-motorized forms of recreation. Groups of friends and families from neighboring communities have long enjoyed afternoons spent recreating on off-highway vehicles (OHVs), socializing, and barbecuing or picnicking. Long-time visitors fondly refer to Heber Dunes SVRA as “Heber Beach,” a nod to the small, sandy dunes that create a fun and relaxed OHV recreation setting. While most visitors to Heber Dunes SVRA arrive in groups, lone visitors can also be found enjoying the solitude of an early morning or twilight OHV outing.

This document is the first General Plan for Heber Dunes SVRA. The park was owned and managed by Imperial County for decades. In 1998, California State Parks Off-Highway Motor Vehicle Recreation (OHMVR) Division began leasing and operating the park, and officially acquired the park in 2007.

State Park General Plans are broad, goal-oriented plans that serve as the primary management documents for park units within the California State Parks System. The goals of this General Plan aim to provide the framework to create an enjoyable recreational experience; to enhance OHV recreation opportunities; and to protect the SVRA’s resources including plants, wildlife, and cultural resources.

Opposite Page

Top Left: Heber Dunes SVRA hours of operation.

Top Right: Day use facilities.

Middle Left: Tamarisk trees.

Middle Right: Visitors prepare for a day of recreation.

Bottom: Facilities near Heber Beach Road.



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CHAPTER 1 INTRODUCTION



1.1 INTRODUCTION TO HEBER DUNES SVRA

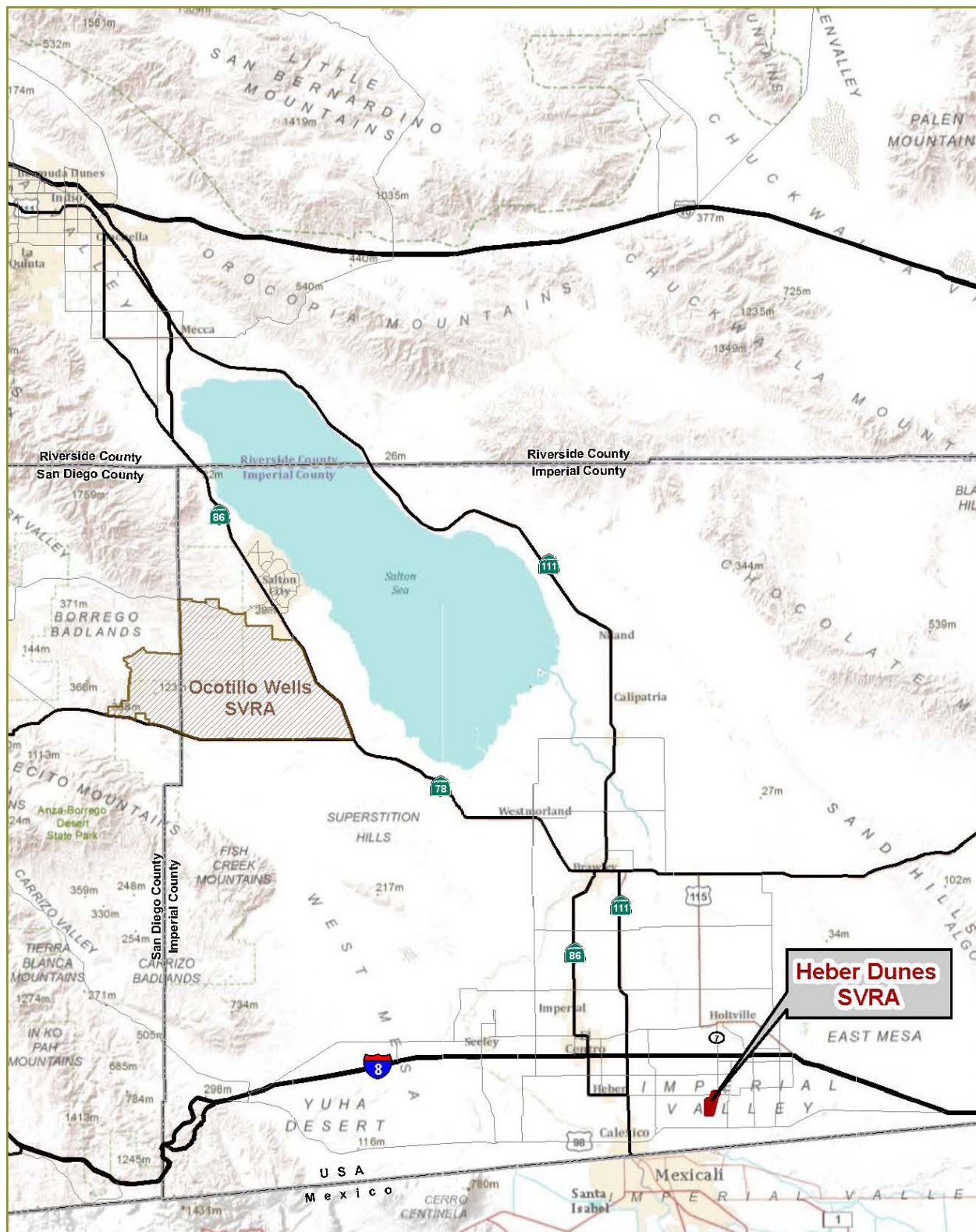
Heber Dunes SVRA is a small island of sand dunes in a large valley dominated by agriculture. For decades, Heber Dunes SVRA has been a popular recreation area for local residents to gather and recreate on OHVs, picnic, and visit with family and friends. Weekends at Heber Dunes SVRA are very popular during the spring, winter, and fall months of the year. Located within close proximity to the population centers of Imperial County, the park offers an intimate recreational experience and a family friendly atmosphere.

1.1.1 Location

Heber Dunes SVRA is a 340-acre OHV park operated by the OHMVR Division of California State Parks. Heber Dunes SVRA is located within unincorporated Imperial County in Southern California, between Interstate 8 (I-8) to the north and the Mexican border to the south, and within irrigated cropland of the Imperial Valley, just west of State Route 7 (SR-7). Figure 1 depicts the regional location of Heber Dunes SVRA.



FIGURE 1 - REGIONAL LOCATION MAP



Source: California State Parks 2009; ESRI 2010



60,000 30,000 0 60,000 Feet

Scale: 1 = 720,000; 1 inch = 60,000 feet

1.1.2 Characteristics of Heber Dunes SVRA

Heber Dunes SVRA is dominated by sand dunes, with desert vegetation scattered throughout the site, mostly along the borders and consisting primarily of creosote brush and tamarisk trees. With its natural characteristics and opportunities for OHV enjoyment, Heber Dunes SVRA provides recreational opportunities. The primary use of Heber Dunes SVRA is OHV recreation. Heber Dunes SVRA is known for being a family friendly OHV recreation area, and experiences high use on weekend days during the fall, winter, and spring. Summer weather is typically too hot for most visitors to engage in OHV recreation, although there is some activity in the early mornings and evenings.

1.1.3 Purpose Acquired

Heber Dunes was operated as an OHV park by Imperial County for more than 30 years. In 1998, OHMVR Division accepted responsibility for park operations at Heber Dunes by lease agreement. Heber Dunes was officially deeded to OHMVR Division in 2007.

1.1.4 Sense of Place

Heber Dunes SVRA has been a treasured recreation area for families and friends for generations. On any given day, extended families and friends can be found socializing and enjoying the dunes on OHVs. The small, rolling dunes offer a dramatic contrast to nearby agricultural fields. Once within Heber Dunes SVRA, farmland and towns give way to greenery, dunes, and hills, creating a unique setting within the surrounding agricultural environment.



Visitors gather at the ramada.

1.2 PURPOSE OF THE GENERAL PLAN

This General Plan directs the long-range development and management of a park by providing broad policy and program guidance. This guidance is essential to managers and staff, and is of value to those organizations and individuals who have an interest in California State Parks. A California State Park must have an approved General Plan before any major park facilities can be developed. General Plans are intended to be used for 20 years or more. Therefore, the General Plan establishes a decision-making framework that is consistent with the established vision but also flexible enough to allow for changing conditions over time.



Top: Sand dunes within Heber Dunes SVRA.
Bottom Left: Supervising Ranger, Vic Herrick, sharing his knowledge of the park.
Bottom Right: Welcome to Heber Dunes SVRA.

1.3 THE PLANNING PROCESS

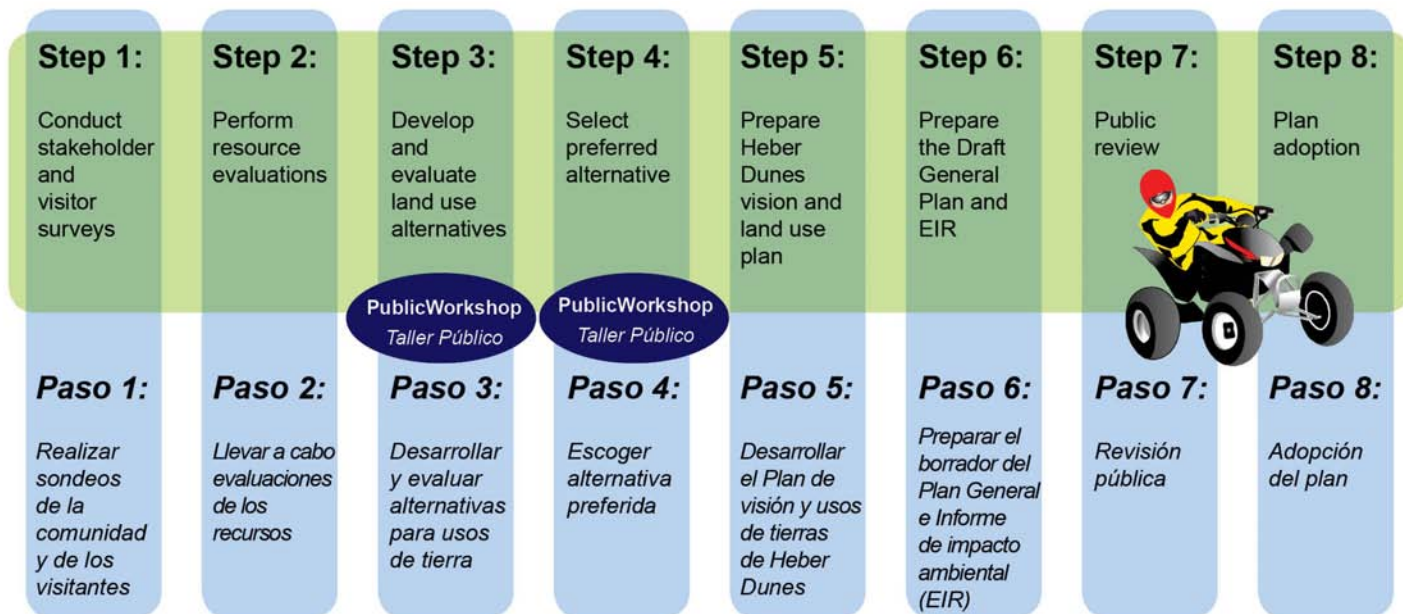
This section describes the planning process undertaken to develop the General Plan for Heber Dunes SVRA.

1.3.1 Overview of the Planning Process

This is the first General Plan for Heber Dunes SVRA. Key phases in the General Plan process included existing conditions research and resource evaluations, development and evaluation of land use alternatives, the selection of a preferred alternative, and preparation of the General Plan document. Opportunities for public input occurred throughout the General Plan process. Specifically, the public participation program was as follows:

- **On-site Visitor Survey**, using a person-to-person questionnaire. A total of 49 surveys were conducted at Heber Dunes SVRA in February and March 2009.
- **Stakeholder Interviews**, conducted with a cross-section of stakeholders regarding potential ideas, concerns, and common goals associated with development of the Heber Dunes General Plan. The interviews were conducted in March 2009.
- **Two Public Workshops**, held to gather public input during the formulation of the Heber Dunes General Plan. At the first workshop, held in October 2009, OHMVR Division staff presented concept alternatives for Heber Dunes SVRA. During the second workshop, which was held in February 2010, the Heber Dunes SVRA draft preferred alternative was presented.
- **Fact Sheets and Newsletters**, provided background information on the project, updates on project progress, and announcements of the public workshops.
- **California State Parks Website**, provided updates regarding the General Plan preparation process and opportunities for public input.

Step-by-Step Process



A young OHV enthusiast enjoys an afternoon at Heber Dunes SVRA.

1.3.2 Planning Framework

California State Parks uses a planning framework with hierarchical planning concepts and tools that influence future management of Heber Dunes SVRA. The following planning framework (Table 1) provides direction for the future management and improvement of Heber Dunes SVRA in this General Plan.

Table 1–California State Parks Planning Framework

Planning Concept	Description
OHMVR Division Mission	The OHMVR Mission guides acquisition, planning, and management of the SVRAs as part of the OHMVR Division’s responsibility to provide leadership for a statewide OHV Program.
Classification	Park management, operation, and development are guided by the park unit’s classification. Heber Dunes SVRA is an SVRA.
Declaration of Purpose	This is a broad statement of direction unique to Heber Dunes SVRA. The California Public Resources Code (PRC) 5090.43 (a) indicates that SVRAs shall be developed, managed, and operated for the purpose of making the fullest public use of the outdoor recreational opportunities present while balancing the protection of natural and cultural resources.
Park Vision	The Vision Statement is a view of the desired future conditions for the SVRA. It expresses what the park should ultimately be and look like, as well as what kinds of visitor experiences should be available in the future.
Goals and Guidelines	Goals apply to the entire SVRA to address existing issues and provide ongoing guidance to management. Guidelines provide the direction that OHMVR Division will consider to achieve these goals.
Planning Zones	Planning Zones allow for specialized management by area. These Planning Zones are developed through consideration of a variety of factors, including geographic relationships, resource values, ecological parameters, management issues and goals, types and intensities of land use, and visitor use and experience. Targeted guidelines are developed for each Planning Zone.

1.3.3 Subsequent Planning

Major programs and projects implemented during the lifespan of the General Plan will require additional planning, such as management plans or specific project plans (Table 2). These subsequent planning efforts are required to be consistent with the General Plan. Subsequent planning efforts also include preparing project-specific environmental compliance documents to implement management plans and proposed SVRA development projects.

These compliance documents will tier off and be consistent with the General Plan's Program Environmental Impact Report (EIR).

Table 2—Other Types of California State Parks Plans

Subsequent Plan Type	Description	Examples
Management Plan	Defines the objectives, methodologies, and/or designs for accomplishing management goals. Management plans are consistent with system-wide plans and policies and with the unit's General Plan. Occurring on an as-needed basis, management plans typically focus on specific management topics, goals, or issues.	<ul style="list-style-type: none"> • Resource Management Plans • Trails Plans • Operations Plans • Interpretive Plans • Concession Plans • Facility Development Plans
Specific Project Plans	Detailed implementation plans needed to accomplish specific projects.	<ul style="list-style-type: none"> • Design Concepts • Site Plans • Museum Exhibit Plans

1.4 ORGANIZATION OF THE GENERAL PLAN

This General Plan is organized into five chapters. The first three chapters provide an overview of Heber Dunes SVRA. Chapter 4 establishes the plan components, including goals and guidelines for Heber Dunes SVRA, and Chapter 5 provides references and plan contributor information. A brief description of each chapter is provided below.

- **Chapter 1** provides an introduction to Heber Dunes SVRA.
- **Chapter 2** presents a summary of existing conditions, facilities, and important resources.
- **Chapter 3** summarizes and analyzes key issues identified during the planning process.
- **Chapter 4** establishes the proposed Heber Dunes SVRA General Plan components, purpose, vision, and land use management.
- **Chapter 5** lists references cited.

A Program EIR for the Heber Dunes SVRA General Plan has been prepared as a separate document.



CHAPTER 2 EXISTING CONDITIONS



This chapter identifies the recreational, natural, cultural, interpretive, and aesthetic resources of Heber Dunes SVRA. This information provides the foundation to understand specific issues related to Heber Dunes SVRA.

2.1 LAND USE AND FACILITIES

2.1.1 Regional and Local Context

Heber Dunes SVRA is located within unincorporated Imperial County. The County is primarily a rural, agricultural region, with several population centers located near regional transportation routes. This area is easily accessible by regional transportation routes such as I-8 and SR-7. The greater San Diego area and the greater Palm Desert area are each approximately 2 hours away and are the nearest U.S. metropolitan regions to Heber Dunes SVRA. Generally, agricultural land use extends for miles in all directions around Heber Dunes SVRA, with residential homes scattered throughout the area. An intricate series of canals provide irrigation water for cropland. Several population centers are found within the expansive farmlands in the vicinity of Heber Dunes SVRA. The communities of Calexico, El Centro, Holtville, Imperial, Heber, and Mexicali are within short driving distance of the park (10 miles). As of 2005, Mexicali's population was estimated at 850,000 people, whereas the other communities can be characterized as small to medium sized population centers. Section 2.7.3 provides additional information on population trends.



Farmland near Heber Dunes SVRA.

The U.S./Mexico border, and the Calexico East border crossing, are located approximately 2.5 miles south of Heber Dunes SVRA. This crossing accommodates most of the commercial trucking operations crossing the border in this region. There are multiple commercial trucking, warehousing, and storage operations located on the north side of the border in Calexico.

Figure 2 depicts the local context of Heber Dunes SVRA, which is surrounded by large parcels of land used for agriculture. Figure 3 provides an aerial view of the park. Heber Dunes SVRA is bounded to the north by Heber Road, and I-8 is located approximately 3 miles north of Heber Dunes SVRA. Cropland is located immediately north of Heber Dunes SVRA. There are approximately five residential home sites located within 0.5 mile to the north and northwest of Heber Dunes SVRA along King Road. Cropland continues to the north, with agricultural land use dominating the area, extending north to the City of Holtville.

The South Alamo Canal forms most of the southern and eastern boundaries of Heber Dunes SVRA. The canal traverses north and south along the entire eastern site boundary of Heber Dunes SVRA and forms a portion of the southern boundary. Immediately east of and adjacent to the canal is a 306-acre undeveloped parcel of land that was purchased by the California Department of Transportation (Caltrans) for mitigation purposes associated with previous improvements to SR-7. SR-7 connects to I-8 to the north and the U.S./Mexico border to the south. SR-7, located less than 0.5 mile east of the park, is roughly paralleling the Heber Dunes SVRA eastern boundary. SR-7 provides the main regional



Adjacent agricultural land, South Alamo Canal, and perimeter road.

access to Heber Dunes SVRA. An additional 350 acres of Caltrans-owned land is located east of SR-7.

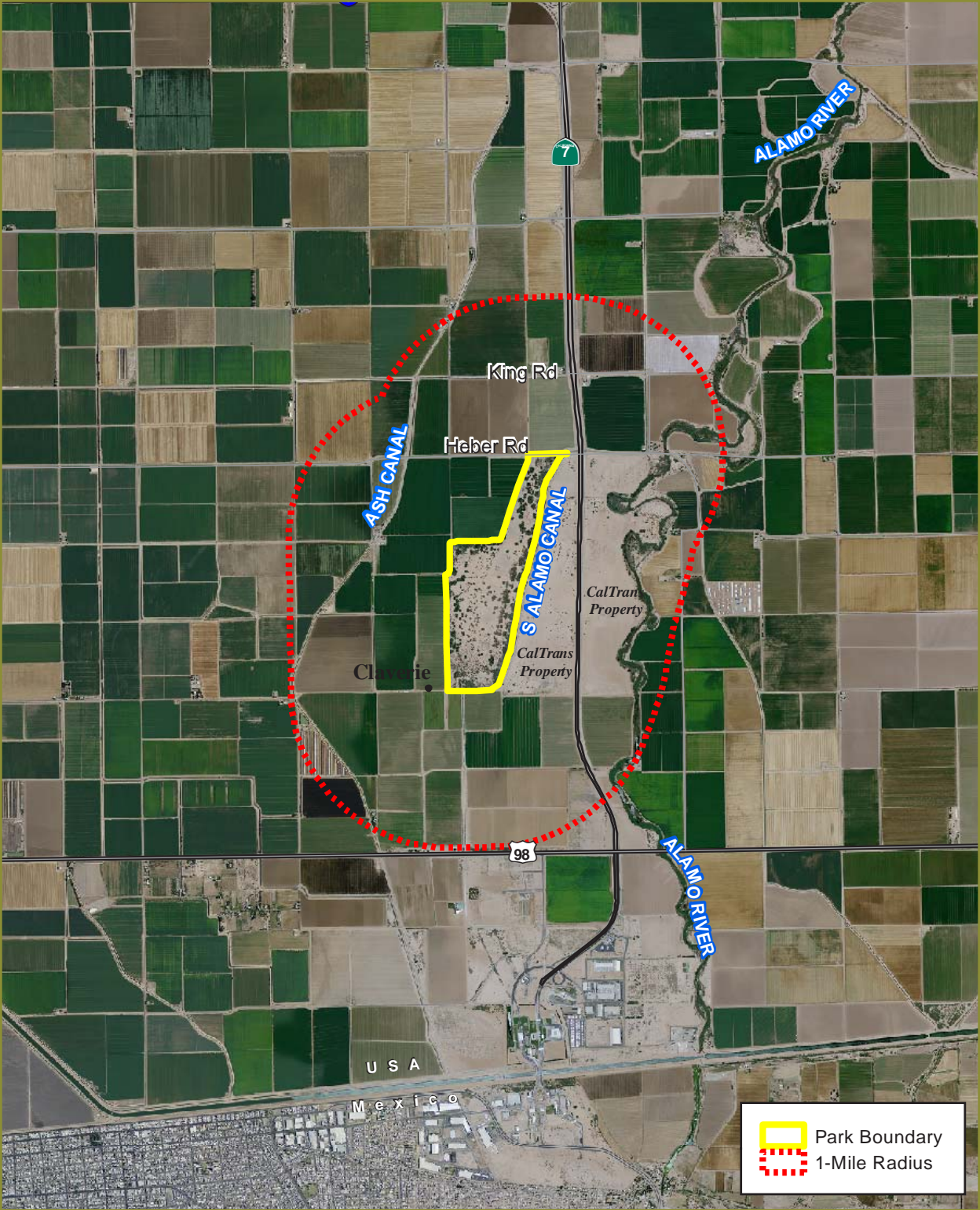
The land uses immediately south of Heber Dunes SVRA are dominated by agriculture, but suburban tract developments along SR-98 are located approximately 1 mile south of Heber Dunes SVRA.

Agricultural cropland is the primary land use immediately west of Heber Dunes SVRA, and continues for many miles to the west. There are also scattered homes to the west, with the nearest located approximately 0.5 mile from Heber Dunes SVRA along Claverie Road. The Ash Canal generally runs north and south approximately 0.5 mile west of Heber Dunes SVRA.

While Heber Dunes SVRA is a unique land use within the context of adjacent land uses, it is generally considered compatible with those uses surrounding it. This is largely because it is a rural area with very few sensitive uses (i.e., residential, commercial, or other urban uses) that could be affected by sound, dust, or traffic associated with Heber Dunes SVRA.



FIGURE 2 - LOCAL CONTEXT



Source: California State Parks 2009; NAIP 2009

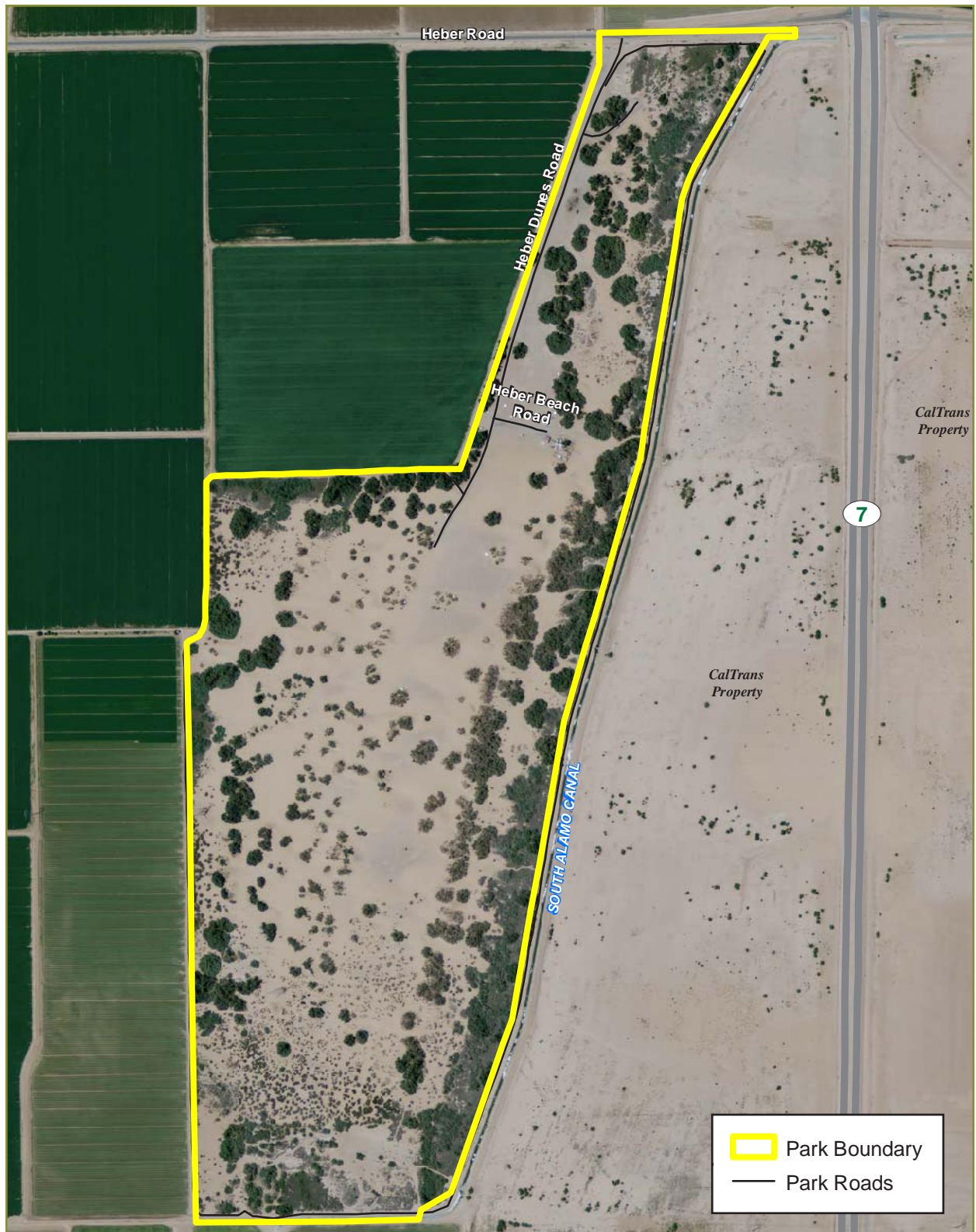


1 0.5 0 1 Mile

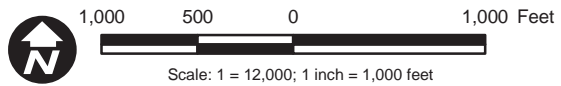
Scale: 1 = 63,360; 1 inch = 1 miles



FIGURE 3 - AERIAL VIEW



Source: California State Parks 2009; NAIP 2009



2.1.2 Regional Recreation Facilities

Imperial County offers a variety of recreational opportunities, such as hiking, boating, and OHV recreation, that are supported by the region's varied terrain. This terrain includes rugged mountains, sand dunes, dry lake beds, badlands, mud hills, desert washes, broad alluvial fans, rocky peaks, volcanic areas, natural springs, water bodies, and broad areas of desert pavement.

The varied terrain in Imperial County provides a wide variety of opportunities and challenges for OHV enthusiasts, from high-speed runs to very slow and technically difficult steep climbs through rocky and rough terrain. Heber Dunes SVRA is one of several OHV recreational areas in Imperial County.

Four other designated OHV recreation areas are located within Imperial County. These areas are summarized in the Table 3 matrix and described below.

Imperial Sand Dunes Recreation Area (ISDRA) covers approximately 159,000 acres of which approximately 83,000 acres is currently available for OHV use. Located approximately 30 miles northeast of Heber Dunes SVRA, ISDRA is characterized by very high sand dunes (some dunes are more than 300 feet tall), which provide a challenging OHV recreation experience.

Ocotillo Wells SVRA is also managed by the OHMVR Division. Ocotillo Wells SVRA covers approximately 86,400 acres and is located approximately 65 miles northwest of Heber Dunes SVRA. Most visitors to ISDRA and Ocotillo Wells SVRA originate outside of Imperial County.

Plaster City OHV Open Area is located approximately 28 miles northwest of Heber Dunes SVRA, and provides 41,000 acres for OHV use.

Superstition Mountain OHV Open Area is a 13,000-acre area located 35 miles northwest of Heber Dunes SVRA.

Several additional parks and recreation facilities which do not provide OHV recreation opportunities are located within Imperial County. Imperial County park and recreation facilities range from small neighborhood parks to regional recreation facilities. Recreational opportunities provided by these parks include passive and active recreation such as barbeque facilities, picnic areas, sports fields, and fishing and boating opportunities. County parks located in the vicinity of Heber Dunes SVRA are as follows:

Heber

- Two privately maintained County Neighborhood Parks located within tract developments, which provide playgrounds and landscaped areas

- One County Community Park with a baseball field, maintained by the Heber Public Utility District

El Centro

- One County Regional Park (Pioneers County Park), which primarily serves as a campus for Pioneers Museum and Cultural Center; the park includes several outdoor exhibits, a shade structure, restrooms, and a train station building with a patio

No County parks exist in the Calexico and Holtville areas.

In addition to public parkland, some private recreation facilities (such as recreational vehicle (RV) parks) exist within the County, but they do not provide OHV recreation opportunities.

In addition to existing regional recreation facilities, the nearby cities of Calexico, El Centro, and Holtville have various parks. Specifically, Calexico has 12 parks, El Centro has 28 parks, and Holtville has three parks. Most of these parks provide shaded areas, playgrounds, and sports fields.

While substantial recreation facilities exist in Imperial County, Heber Dunes SVRA provides a unique recreational experience in a more intimate setting. Gentle terrain of low sand dunes and meandering trails offer opportunities for family friendly recreation within close proximity to population centers. These Heber Dunes SVRA characteristics were cited as important by visitors and stakeholders during public outreach efforts.

Table 3–Federal and State OHV Recreation Areas Near Heber Dunes SVRA

Recreation Area	Manager	Recreational Opportunities	
Imperial Sand Dunes Recreation Area	Bureau of Land Management	<ul style="list-style-type: none"> • OHV recreation • Hiking • Horseback riding • Wildlife/scenery viewing 	<ul style="list-style-type: none"> • Picnicking • Nature study • Environmental Education • Camping
Plaster City OHV Open Area	Bureau of Land Management	<ul style="list-style-type: none"> • OHV recreation • Primitive camping 	<ul style="list-style-type: none"> • Day use
Superstition Mountain OHV Open Area	Bureau of Land Management	<ul style="list-style-type: none"> • OHV recreation • Primitive camping 	
Ocotillo Wells SVRA	OHMVR Division of California State Parks	<ul style="list-style-type: none"> • OHV recreation • Camping • Environmental education 	<ul style="list-style-type: none"> • Wildlife/scenery viewing • Geocaching • Picnicking

2.2 EXISTING HEBER DUNES SVRA LAND USE AND CIRCULATION

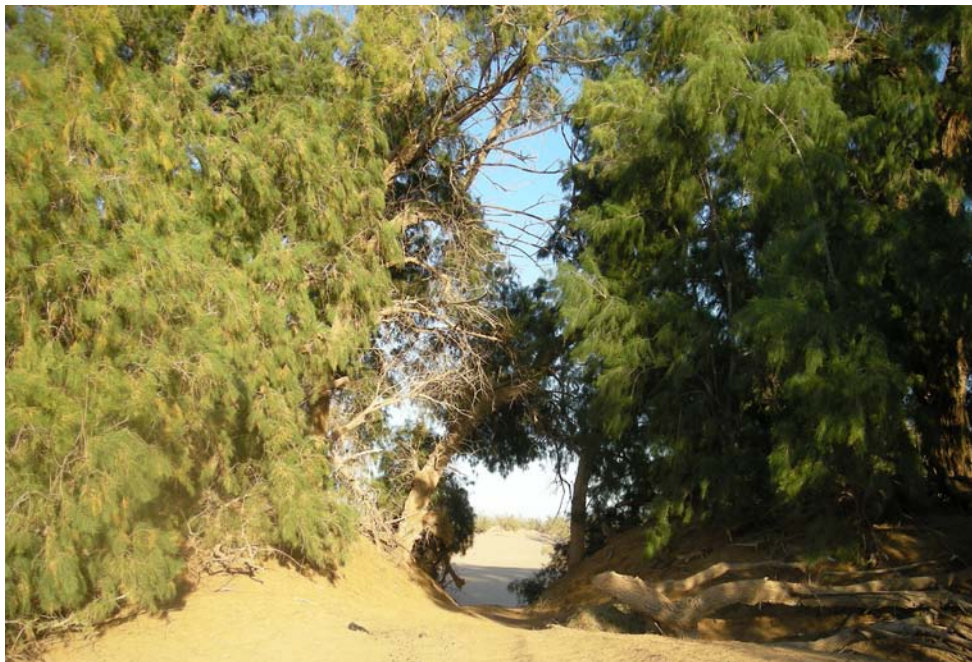
2.2.1 Land Use

Heber Dunes SVRA is largely undeveloped with limited infrastructure and improvements. The majority of the park is composed of sand dunes and natural vegetation, with a network of established trails and a perimeter road (Figure 4).

Existing on-site land uses include recreation (OHV use and associated socializing areas), administrative and operations uses, and a Heber Dunes SVRA camp host area. The majority of the site is used for OHV recreation and socializing, and these activities occur throughout the park. Heber Dunes SVRA does not have features that allow for the more extreme forms of OHV recreation, such as trail climbing, that exist in other recreational areas in Imperial County. A small developed area in the north-central portion of the site off Heber Dunes Road includes administrative and maintenance buildings, and a visitor restroom and shower facility. The host area is located near the northern boundary of the park off Heber Dunes Road. Heber Dunes SVRA camp hosts live on-site in an RV during the fall, winter, and spring, which coincide with the period of highest visitor use.

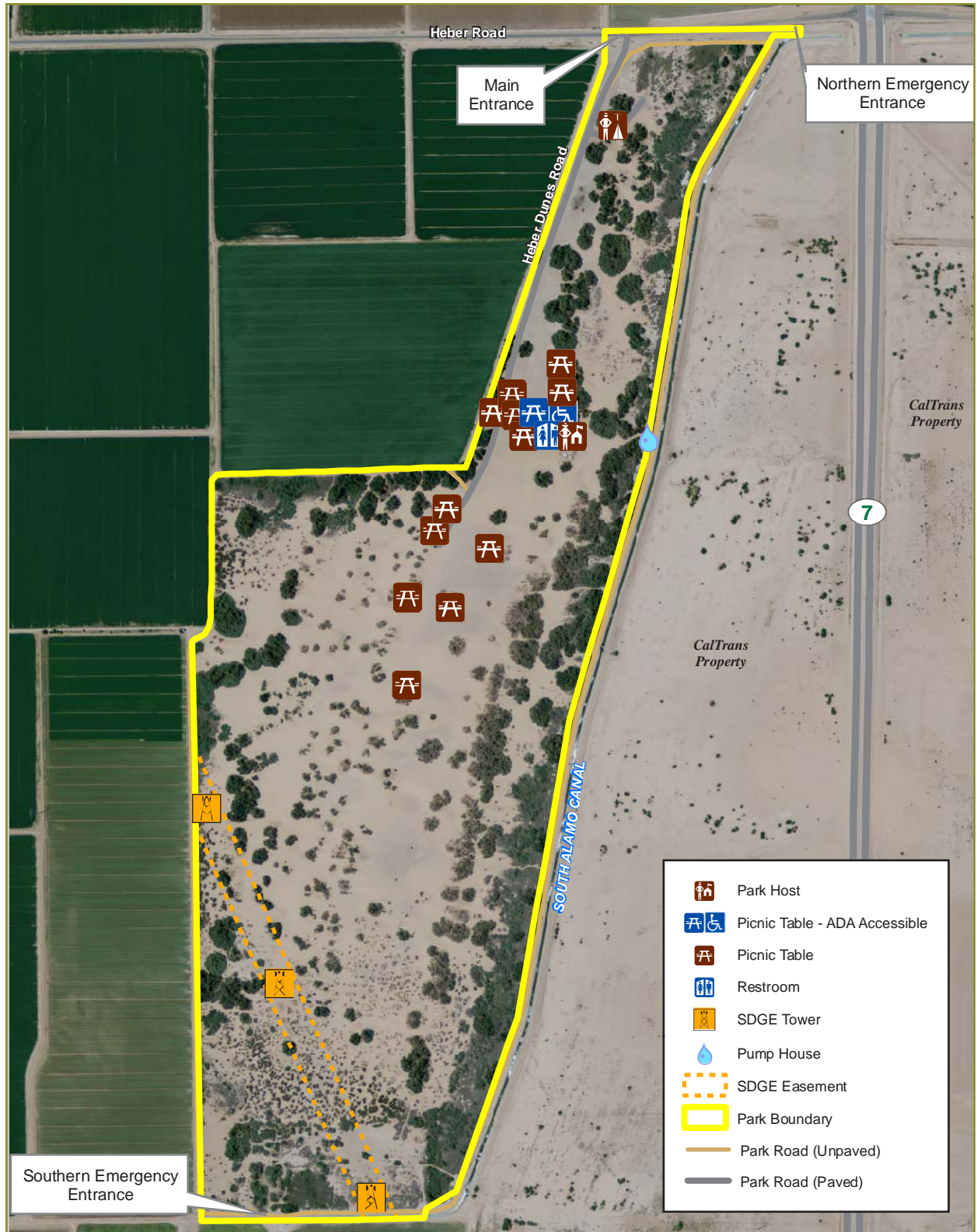
Easements and Rights-of-Way

There are multiple rights-of-way and easements that cross Heber Dunes SVRA boundaries related to power transmission and irrigation canal access.

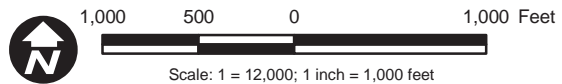


Keyhole view.

FIGURE 4 - HEBER DUNES SVRA FACILITIES



Source: California State Parks 2009; NAIP 2009



Imperial Irrigation District (IID) provides irrigation water and electric power to farmers and residents in the Imperial Valley. IID has operational facilities and water conveyance structures throughout Imperial County. IID supplies water to Heber Dunes SVRA and has water conveyance structures in the vicinity of the park. Specifically, the South Alamo Canal, which is managed by IID, is located immediately outside of the park boundary. IID has rights-of-way associated with the South Alamo Canal and South Alamo Lateral 5-A. In addition, a pump house and a water treatment plant are located on a small piece of land in the eastern portion of the park (Figure 4). These facilities are used for water delivery operations for Heber Dunes SVRA.

San Diego Gas & Electric (SDG&E) is a regulated public utility that provides gas and electric service in San Diego County and south Orange County. SDG&E transmits electricity through Imperial County. Three SDG&E transmission towers bisect the southwest corner of Heber Dunes SVRA and carry high-voltage 500-kilovolt overhead electric lines across Heber Dunes SVRA. This line was built in 1984 and has been designated a Western Electric Corridor. SDG&E has a 200-foot-wide easement that runs with the electric line through Heber Dunes SVRA (Figure 4). The electrical tower in the southernmost part of the park has become one of the more popular places for visitors due to the cleared flat area and space for parking and gathering.

For the most part, SDG&E uses existing roads to access its facilities at Heber Dunes SVRA, with the exception of the southernmost tower where access gets obscured by shifting sands. SDG&E patrols the line by air and land, and washes the insulators on the towers as needed (typically once a year) using deionized water. SDG&E requires 24-hour access to these facilities to respond to unexpected emergency outages.

2.2.2 Circulation

Access

Heber Dunes SVRA is accessed by a circulation network that includes I-8 to the north, SR-111 to the west, SR-7 to the east, and SR-98 to the south (Figures 1 and 2). I-8 is the primary east/west highway in the vicinity, connecting San Diego to the west and Arizona and beyond to the east. SR-78 and SR-86 provide connections to the Greater Palm Desert area to the north. SR-111 and SR-7 are main north/south access routes that generally connect nearby communities north and south of I-8. SR-98 is another east/west highway that runs just north of the U.S./Mexico border.

The main entrance for Heber Dunes SVRA is located approximately 0.5 mile west of the intersection of SR-7 and Heber Road. This entry point is marked with California State Parks signage and is stop-sign controlled. Intersections along Heber Road in the vicinity of Heber Dunes SVRA currently operate at acceptable levels of service during peak traffic periods.

A secondary emergency and employee access road is located approximately 565 feet west of the intersection of SR-7 and Heber Road, and is restricted by a locked gate. Another emergency access point is located on the southern edge of the park and is also restricted by a locked gate. Figure 4 identifies access points and facilities at Heber Dunes SVRA.

The main access road into Heber Dunes SVRA is Heber Dunes Road, which begins at Heber Road and runs along its western boundary. It provides 0.7 mile of paved two-lane travel into Heber Dunes SVRA, terminating at the main dirt OHV use area near the park office facilities. This internal roadway is unimproved, with no curb or gutters, and has a posted speed limit of 15 miles per hour (mph). The secondary emergency access road with entrances on the northern and southern boundaries of the park is unpaved and parallels the South Alamo Canal on the eastern boundary of Heber Dunes SVRA.

Alternative Modes of Transportation

Typical alternative modes of transportation to California State Parks include bus transit, rail, bicycle, and pedestrian facilities. However, because of the rural location of Heber Dunes SVRA and because registered OHVs must be transported to recreational areas by truck or trailer, alternative transportation options are currently limited.

Heber Dunes SVRA is located outside Imperial Valley Transit's primary bus service corridor, which includes Brawley, Imperial Valley College, El Centro, Heber, and Calexico. However, bus service to Heber Dunes SVRA may become feasible in the future as commercial and industrial development occurs within the Gateway of the Americas planning area, approximately 0.75 mile south of Heber Dunes SVRA.



Informational signage along main entrance road.

Internal Circulation

OHV circulation within Heber Dunes SVRA is a network of trails and open use areas. However, the majority of OHV use occurs in the northern part of the park, near the restroom facilities and picnic areas. There are several large, flat, claypan areas that are often used for open OHV recreation; one is near the terminus of Heber Dunes Road and the other is farther south, within the interior of the park. Sand dunes are distributed throughout Heber Dunes SVRA, and there is a cluster of higher dunes in the southern part of the park. None of these trail or open use areas has specific names or signage. An unpaved perimeter road is located along the park boundaries.

The open use areas tend to be flat, and some users enjoy passing through these areas at higher speeds. Because of topography and vegetation, at times, visibility is limited within the open use areas. Currently, open OHV use occurs in proximity to areas where large groups tend to gather (in the center of Heber Dunes SVRA, near



Recreation opportunities.

restrooms and picnic tables), which creates concerns for park visitors in these areas.

2.2.3 Facilities

There are a limited number of developed facilities within Heber Dunes SVRA (Figure 4).

Park Office Facilities – The Heber Dunes SVRA park office area is where the main concentration of infrastructure is located. A park employee lives on-site year-round in the park office area. This area includes an RV residence that receives potable water from the on-site water treatment plant and distribution facility and propane from refillable tanks, a park office and workshop/tool area, a parking area for Heber Dunes SVRA vehicles, and a storage building.

Restroom Facilities – A restroom is located at the northern part of the park near the park office facilities. It features flush toilets, sinks, and showers.

Picnic Facilities – There are 15 picnic table areas, including one that is accessible per the Americans with Disabilities Act. Seven of the 15 picnic areas are clustered near the restroom facility. The remaining six are scattered south of Heber Dunes Road. Each of these picnic table areas includes a picnic table and benches, a fire pit, and a trash can. The



One of many picnic facilities.



Volunteer camp host site at Heber Beach Road entrance.

picnic tables include a shade-cover structure. Fires are permitted only in designated fire pits.

Camp Host Facilities – This is an unimproved site on the south side of the main access road into Heber Dunes SVRA where seasonal volunteer maintenance hosts reside in an RV in the park several months each year, usually during the busy season. There are dumpsters in the immediate vicinity. Heber Dunes SVRA volunteers assist the rangers in cleanup and maintenance of Heber Dunes SVRA and facilities.

Pump House – A gated pump house and on-site water treatment plant is located in the northeastern part of Heber Dunes SVRA. It treats water drawn from the South Alamo Canal for use in Heber Dunes SVRA.

Signage – Some signage and wayfinding exists throughout Heber Dunes SVRA. At the main entrance area, a single-panel entry kiosk provides a “Guide to California Off-Road Adventures” poster. Along the entry road and perimeter road are various signs stating the rules of Heber Dunes SVRA, as well as Vehicle Code provisions related to OHV recreation. Other signs state the Heber Dunes SVRA hours and the no fireworks and no camping rules, and identify Heber Dunes SVRA boundaries.

2.3 VISITOR USE AND RECREATION

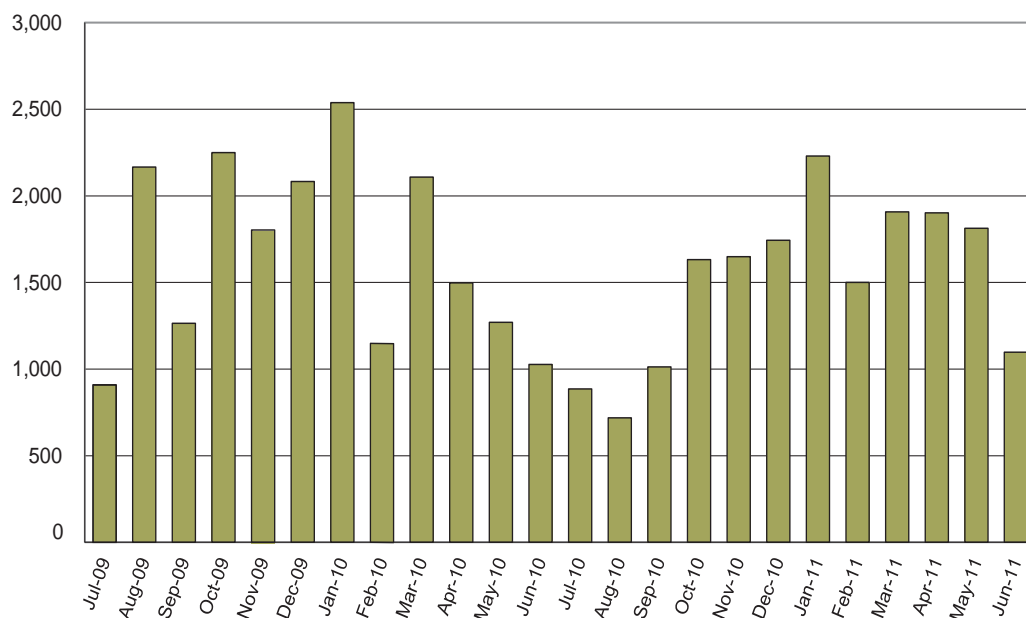
Heber Dunes SVRA is open 7 days a week year-round. Daily vehicle attendance at Heber Dunes SVRA is reported on California State Parks Monthly Visitor Attendance Reports. Counts are conducted when staff is available to perform such counts, but occasionally this figure is estimated by on-site staff. Chart 1 provides total monthly vehicle attendance at Heber Dunes SVRA from July 2009 through June 2011.

As with other OHV parks in the region, Heber Dunes SVRA experiences significant fluctuation by seasons, with the highest levels occurring in the fall, winter, and early spring (approximately September through April, with some variation). As shown in Chart 1, the number of visitors to Heber Dunes SVRA is reduced during the hotter seasons of late spring and summer (May through September). Nevertheless, some dedicated OHV recreationists visit Heber Dunes SVRA even during the hotter months, typically during morning and evening hours. Likewise, visitors may choose to recreate at Heber Dunes SVRA during summer months when temperatures are unseasonably cool.

Heber Dunes SVRA receives light visitation during the week, with the bulk of visitation occurring on Saturdays and Sundays. Sunday is generally the busiest day.

As indicated in visitor interviews administered in 2009, the majority of visitors to Heber Dunes SVRA are local residents who travel less than 30 minutes to get there. The interviews indicated that the majority of visitors are Hispanic or Latino and are from the nearby communities of Calexico, El Centro, Holtville, Imperial, and Heber, which are all within short driving distance of Heber Dunes SVRA (Table 4). As such, it is likely that a large proportion of the visitors to the park are of this ethnic background, which reflects the local communities.

Chart 1—Monthly Visitor Attendance at Heber Dunes SVRA, July 2009 to June 2011



Source: California State Parks Monthly Visitor Attendance Reports: July 2009 through June 2011.

Heber Dunes SVRA is a popular gathering and picnicking area for families and friends. The visitor interviews revealed that approximately one-third of visitors were children under the age of 15, signifying the popularity of Heber Dunes SVRA for families with children.

Visitor interviews also indicate that visitors to Heber Dunes SVRA typically come in small and large groups of families and friends (between five and 10 individuals). The primary additional recreational activities that visitors take part in are gathering with family and friends, picnicking and barbequing, watching people use OHVs, and viewing scenery.

Visitors tend to gather at ramadas or in shaded areas under trees throughout Heber Dunes SVRA, and most visitors congregate in groups in the central portion of the park. Families with small children tend to gather in the northern portion of Heber Dunes SVRA, near the restroom facility. Existing ramadas and shaded areas under trees tend to be filled to capacity by early afternoon on heavy visitor-use days.

Most visitors drive street-legal vehicles into Heber Dunes SVRA with OHVs in trailers or the bed of pick-up trucks. Visitors typically park their street-legal vehicles at picnic tables; formal parking areas are not provided within Heber Dunes SVRA. Informal parking at day-use sites tends to be preferred by visitors so that they can access supplies in their vehicles throughout the day.



Family and friends enjoy the park.

Table 4—Hispanic and Latino Composition of Nearby Communities

Community	Total Population	Percent Hispanic or Latino
Calexico	38,572	96.8%
El Centro	42,598	81.6%
Holtville	5,939	81.8%
Imperial	14,758	74.8%
Heber	4,275	98.2%

Source: U.S. Bureau of the Census 2010

2.4 SIGNIFICANT RESOURCE VALUES

2.4.1 Physical Resources

Topography

Heber Dunes SVRA consists of rolling sand dunes and areas of claypan soils. The dunes range in elevation from 25 to 50 feet above sea level and consist of fine sands with silty sand, clay silts, and silty clays. These topographic features are unique in that they are surrounded by flat, irrigated agricultural lands.



Claypan area and tamarisk-topped sand dunes.

Geology and Soils

Heber Dunes SVRA is located in the southern Imperial Valley that is part of the Salton Trough, a structural and topographic depression that lies within the Basin and Range physiographic province. The Salton Trough is an extension of the East Pacific Rise as it emerges from the 1,000-mile-long trough occupied by the Gulf of California and continues northward to Palm Springs. Several active faults occur in and near the project area, including the Imperial and Brawley Faults.

The sub-sea-level basin of the Salton Trough receives a continuous influx of sand, silt, and clay derived from the surrounding mountains and the Colorado River, which created ephemeral lakes in the Imperial Valley basin until roughly 300 years ago. As recently as 300 years ago, Lake Cahuilla filled the Imperial Valley basin to the elevation of the Colorado River delta. The shoreline of this ancient lake has an elevation of about 35 feet above mean sea level and is visible today.

Geologic maps show the region as underlain by Quaternary lake deposits and alluvium (Strand 1962). Quaternary sand dunes are mapped on the property. The Imperial Fault crosses the property from southeast to northwest (Kahle et al. 1984; Real et al. 1979). A 1937 aerial photograph (Youd and Wieczorek 1982) shows that the area surrounding the property was predominantly covered with sand dunes with a stream channel to the west of Heber Dunes SVRA. The overall large size of the dune substrate at Heber Dunes SVRA precluded its development for agriculture, unlike many of the smaller dune areas throughout the Salton Trough, which were easier to remove or level for other uses.

A county-wide soil survey indicates that six soil types exist at Heber Dunes SVRA. The majority of Heber Dunes SVRA, 83 percent, is composed of Rositas fine sand (284 acres). Other on-site soils types are Meloland and Holtville loams (21 acres), Vint loamy very fine sand (13 acres), Meloland very fine sandy loam (12 acres), Vint and Indio very fine sandy loams (9 acres), and Indio loam (1 acre).

Surface soil of the Rositas soil association consists of nearly level to moderately steep (with slopes up to 30 percent), excessively well-drained sand to silt loam formed in the transitional area between the ancient beachline of the Lake Cahuilla basin to the middle and upper levels of alluvial fans from the Imperial West Mesa (USDA 1981). The U.S. Department of Agriculture (USDA) describes these soils as deep (to at least 60 inches), highly permeable, and with a low water capacity. The soil erosion hazard is generally slight, but soils in this unit are susceptible to blowing and erosion during infrequent periods of intense rainfall.



Popular dunes for OHV recreation.

These soils are mainly used for desert recreation and wildlife habitat, but they have the potential for irrigated farming.

Climate

Heber Dunes SVRA is located in the Imperial Valley, in Imperial County, just north of the border between the United States and Mexico. All of Imperial County is contained within the Salton Sea Air Basin (SSAB). The climate is typical of a desert with low annual precipitation (2.61 inches annual average, most of which is received in late summer or mid-winter), very hot summers, mild winters, high evaporation rates, and strong temperature differentials and inversions. The winter months are the prime months for OHV recreation, with daily maximum temperatures in the 65 to 75 degrees Fahrenheit range, while the daily maximum temperatures during the hot summer months are in the 104 to 115 degrees Fahrenheit range. The climate influences the comfort level for OHV activity as well as air quality within the SSAB. The flat terrain of the valley, coupled with strong temperature differentials created by intense solar heating, produces moderate winds, which occasionally exceed 30 mph (most frequently in April and May). Wind speeds are generally less than 10 mph. Predominant wind directions are to the west and west-southwest during all four seasons. The average daily wind speed is 6.9 mph.

Air Quality

In Imperial County, the Imperial County Air Pollution Control District (APCD) is the agency responsible for protecting the public health and welfare through the administration of federal and state air quality laws and policies. Included in APCD's tasks are monitoring air pollution, preparing the Imperial County portion of the State Implementation Plan (SIP), and promulgating its rules and regulations. The SIP includes strategies and tactics to be used to attain and maintain acceptable air quality in Imperial County.



Heber Dunes SVRA on a hot day.

Both the California Air Resources Board (CARB) and the U.S. Environmental Protection Agency (EPA) designate areas according to their attainment status for criteria air pollutants. The purpose of these designations is to identify the areas with air quality problems and thereby initiate planning efforts for improvement. The three basic designation categories are nonattainment, attainment, and unclassified. Unclassified is used in an area that cannot be classified on the basis of available information as meeting or not meeting the standards. If an area is redesignated from nonattainment to attainment, the federal Clean Air Act requires a revision to the SIP, called a maintenance plan, to demonstrate how the air quality standard will be maintained for 10 years.

The SSAB is currently designated by federal EPA standards as a moderate nonattainment area for the 8-hour ozone standard and a serious nonattainment area for respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less (PM_{10}) (EPA 2009). The SSAB is in attainment for the remaining criteria air pollutants.

Hydrology and Water Resources

Heber Dunes SVRA is located within the Imperial Hydrologic Unit (HU) of the Colorado River Basin. The Imperial HU encompasses an area of approximately 2,271 square miles. The major drainages within the Imperial HU consist of the Alamo and New Rivers. The Alamo and New Rivers lie approximately 0.5 mile east and 9 miles west of Heber Dunes SVRA, respectively. Both rivers drain to the Salton Sea approximately 30 miles to the north of Heber Dunes SVRA. These rivers convey agricultural irrigation drainage water from farmlands in the Imperial Valley, surface runoff, and lesser amounts of treated municipal and industrial waste waters from the Imperial Valley. The flow in the New River also contains agricultural drainage, treated and untreated sewage,



South Alamo Canal provides water to Heber Dunes SVRA.

and industrial waste discharges from Mexicali, Mexico (CRBRWQCB 2006).

Colorado River water, imported via the All American Canal, is the predominant water supply for the area, and is used for irrigation, and industrial and domestic purposes (CRBRWQCB 2006). Numerous canals and agricultural drainages also occur within the Imperial HU. The Ash Main Canal lies approximately 0.5 mile to the west of Heber Dunes SVRA, while the South Alamo Canal borders Heber Dunes SVRA on the east and west boundaries.

2.4.2 Natural Resources

Much of the land in the vicinity of Heber Dunes SVRA is used for agricultural production and supports limited plant and animal species. However, Heber Dunes SVRA continues to provide habitat for both native and nonnative plant and animal species. This section describes the existing plant and animal life in Heber Dunes SVRA.

Plant Life

Five vegetation types have been identified for Heber Dunes SVRA:

- Creosote scrub
- Saltbush scrub
- Arrowweed/Saltbush scrub
- Arrowweed/Coyote bush scrub
- Tamarisk dune

A map of the existing vegetation and plant communities within Heber Dunes SVRA is provided in Figure 5. All of these vegetation types represent important resource values for plants and wildlife. The tamarisk dune community is dominated by nonnative plant species, whereas the other plant communities are native vegetation communities.

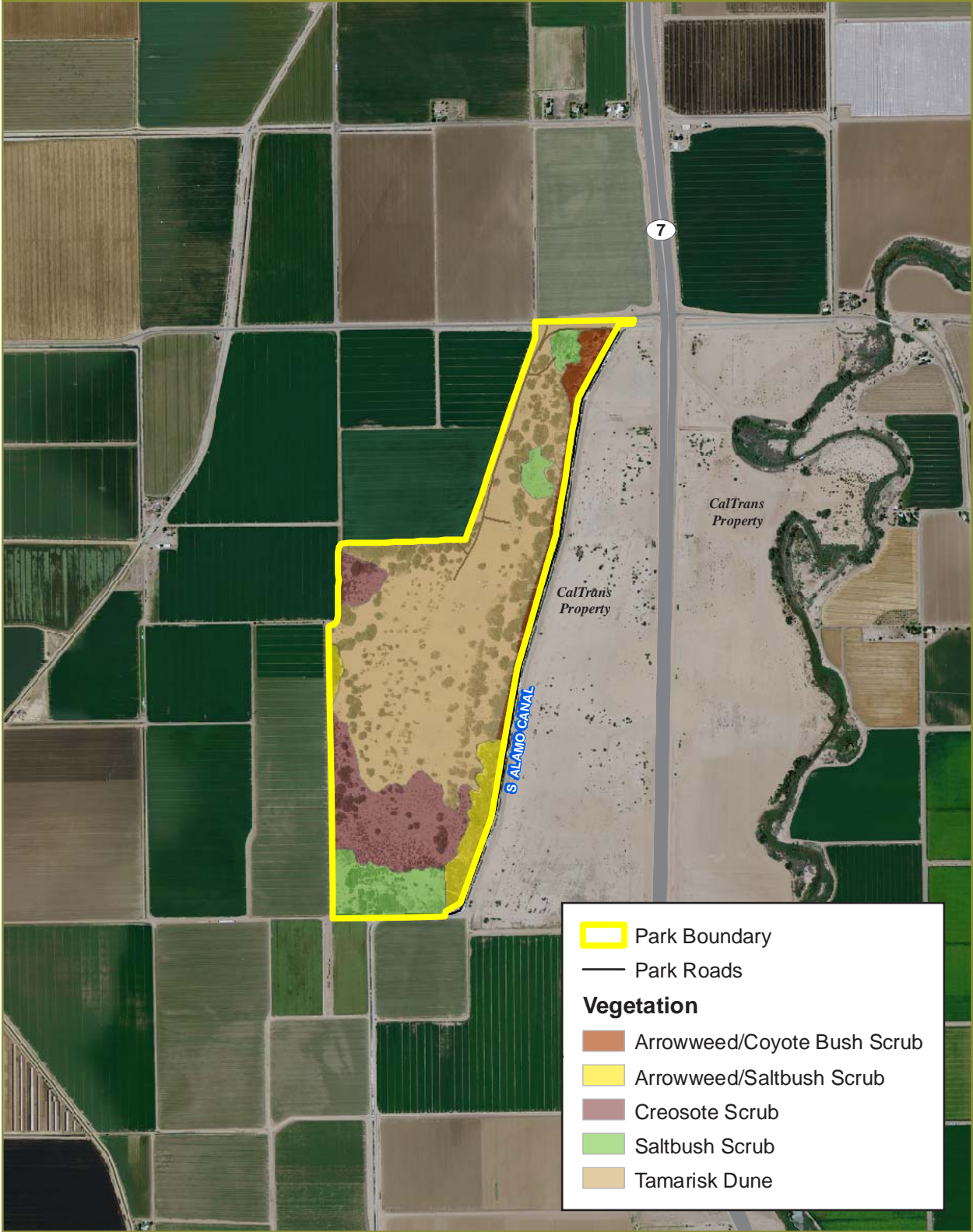
Creosote Scrub

This vegetation community is dominated by creosote bush (*Larrea tridentata*) and occurs in two different locations in Heber Dunes SVRA. Additional plant species found in these areas include narrow-leaf oligomeris (*Oligomeris linifolia*), popcorn flower (*Cryptantha* sp.), plicate coldenia (*Tiquilia plicata*), black mustard (*Brassica nigra*), and Mediterranean schismus (*Schismus barbatus*). The understory of annual plant species has declined since monitoring was implemented in 1999, and it appears that the root system of the creosote shrubs has been undermined, with portions of the topsoil layer being washed away.

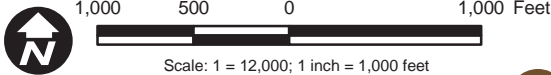
Saltbush Scrub

The saltbush scrub community is found in three different areas of Heber Dunes SVRA. Species found in this vegetation type include big saltbush (*Atriplex lentiformis*), bush seepweed (*Suaeda moquinii*), arrowweed

FIGURE 5 - VEGETATION AND PLANT COMMUNITIES



Source: California State Parks 2009; NAIP 2009



(*Pluchea sericea*), coyote bush (*Baccharis emoryi*), apricot mallow (*Sphaeralcea ambigua*), and tamarisk (*Tamarix ramosissima*).

Arrowweed/Saltbush Scrub

The arrowweed/saltbush scrub community occurs in two areas of Heber Dunes SVRA. The arrowweed-dominated shrub areas probably represent the original habitat that occurred in the low areas that are not covered by dune sands. Other species found in this community include coyote bush, salt-cedar (*Tamarix ramosissima*), black mustard, and other weed species. Similar to the saltbush scrub, there are OHV trails throughout the arrowweed/saltbush scrub areas; however, their effect on the vegetation is not as substantial as effects seen in the creosote scrub areas.

Arrowweed/Coyote Bush Scrub

This vegetation community, dominated by arrowweed and coyote bush scrub, occurs in a linear area along the eastern edge of the park. There appears to be more water available on this side of the park, possibly due to the linear South Alamo Canal that runs parallel to the eastern boundary. Because of this water resource, wetland-adapted species are scattered in this area, including mesquite (*Prosopis glandulosa*), cottonwood (*Populus fremontii*), and black willow (*Salix gooddingii*). This area also has scattered tamarisk throughout and very little native understory species. The density of this vegetation type has precluded the level of OHV activity found in the other areas of the park.

Tamarisk Dune

The tamarisk dune community covers the greatest area of the park, dominating the central portion of Heber Dunes SVRA. The large nonnative athel tamarisk trees (*Tamarix aphylla*) growing on the dunes have most likely replaced a native vegetation type. Additional species found in this area include narrow-leaf oligomeris, popcorn flower, plicate coldenia, black mustard, Mediterranean schismus, and Russian thistle (*Salsola tragus*).

Sensitive Plant Species and Plant Communities within Heber Dunes SVRA

There are no known sensitive plant species within Heber Dunes SVRA. Likewise, none of the plant communities found at Heber Dunes SVRA are considered sensitive, either locally or regionally.

Invasive Nonnative Species within Heber Dunes SVRA

The primary nonnative species of concern are athel tamarisk and salt-cedar tamarisk. Athel tamarisk trees are very large and can preclude other species (both native and nonnative) from growing near or under their canopy. The deep taproots produced by the tamarisk trees are capable of depleting the water table and affecting native vegetation up to 100 feet away. In addition, the more shrub-like salt-cedar species has become common along the east side and in the southern and northern ends of Heber Dunes SVRA.



Source: AECOM

Creosote bush (*Larrea tridentata*)



Source: AECOM

Popcorn flower (*Cryptantha* sp.)



Source: AECOM

Big saltbush (*Atriplex lentiformis*)



Source: AECOM

Arrowweed (*Pluchea sericea*)



Robert Steers, calphotos.berkeley.edu

Coyote bush (*Baccharis emoryi*)



Source: AECOM

Nonnative athel tamarisk trees (*Tamarix aphylla*)

Wildlife

The following native wildlife species have been observed throughout Heber Dunes SVRA: coyote (*Canis latrans*), bobcat (*Felis rufus*), raccoon (*Procyon lotor*), deer mouse (*Peromyscus maniculatus*), king snake (*Lampropeltis getulus*), gopher snake (*Pituophis catenifer*), coachwhip (*Masticophis flagellum*), Northern harrier (*Circus cyaneus*) and red-tailed hawk (*Buteo jamaicensis*). The five vegetation types at Heber Dunes SVRA support various wildlife species. The following sections describe wildlife observed in specific vegetation communities.

Creosote Scrub

Many desert wildlife species use creosote scrub for cover, foraging, and habitation, and some wildlife species are specific to this vegetation. Desert reptiles, amphibians, mammals, and birds will use creosote scrub to avoid predation and to escape the excessive daytime temperatures in the desert. At Heber Dunes SVRA, the creosote scrub community supports the greatest diversity of wildlife. Species observed within the creosote scrub communities include red-winged black bird (*Agelaius phoeniceus*), Gambel's quail (*Lophortyx gambelii*), lesser nighthawks (*Chordeiles acutipennis*), roadrunners (*Geococcyx californianus*), western whiptail (*Aspidoscelis tigris*), long-tailed brush lizard (*Urosaurus graciosus*), long-nosed snake (*Rhinocheilus lecontei*), desert iguana (*Dipsosaurus dorsalis*), desert pocket mouse (*Chaetodipus penicillatus*), and cactus mouse (*Peromyscus eremicus*).

Saltbush Scrub

The saltbush scrub areas of Heber Dunes SVRA provide good cover and food source for some wildlife species. This vegetation type offers the best cover for understory and ground-dwelling species such as birds and reptiles. Many of the bird species at Heber Dunes SVRA occur in this vegetation type, and the saltbush scrub has the highest density of reptile sightings on-site, particularly the western whiptail lizard, which is very common in this habitat type as an understory species. Mammal species that occur in the saltbush scrub include most of the common species for Heber Dunes SVRA, but of particular note is the spotted skunk (*Spilogale putorius*), which has only been found in saltbush scrub.

Arrowweed/Saltbush Scrub and Arrowweed/Coyote Bush Scrub

The two arrowweed scrub vegetation types support limited wildlife species. Both the arrowweed/saltbush scrub and the arrowweed/coyote bush scrub offer good cover and foraging value, but do not have as many wildlife species and sightings as compared to the creosote and saltbush scrub habitat types. The arrowweed in particular is visited by numerous bird species foraging for insects and seeds. Species that are particularly common in this vegetation include red-winged blackbird (the most common bird species at Heber Dunes SVRA), mourning dove (*Zenaida macroura*), white-winged dove (*Zenaida asiatica*), verdin (*Auriparus flaviceps*), side-blotched lizard (*Uta stansburiana*), and desert spiny lizard (*Sceloporus magister*).



Roadrunner (*Geococcyx californianus*)



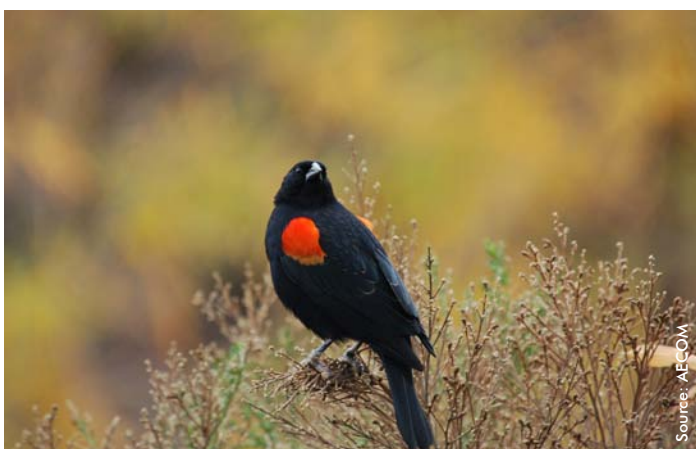
White-faced ibis (*Plegadis chihi*)



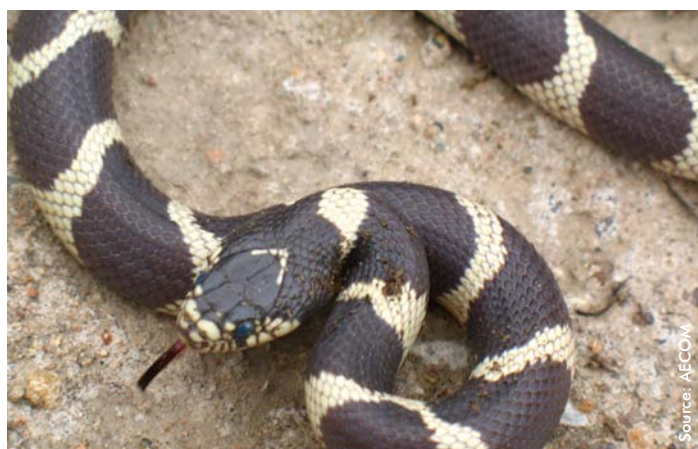
Gopher snake (*Pituophis catenifer*)



Red-tailed hawk (*Buteo jamaicensis*)



Red-winged black bird (*Agelaius phoeniceus*)



King snake (*Lampropeltis getulus*)

Tamarisk Dune

The bird, mammal, and reptile diversity in the tamarisk dune habitat is much lower than in the native vegetation types. The one exception is the sightings for sidewinder rattlesnake (*Crotalus cerastes*), which is known only to occur in the tamarisk dune areas.

Agricultural Fields

The adjacent agricultural fields and associated roads that surround Heber Dunes SVRA offer habitat value to some of the desert wildlife species. A few of the wildlife species observed in the area are actually more common in the adjacent agricultural areas than in the native vegetation within Heber Dunes SVRA, in particular, some of the large mammal species. These species include Audubon's cottontail (*Sylvilagus audubonii*), black-tailed jackrabbit, and roundtailed ground squirrel (*Spermophilus tereticaudus*) (SERG 1998). The more regular occurrence of these species in the agricultural areas is due to the high concentration of available food, making them better foraging sites for heavy browsers like rabbits. While these species are more common in the agricultural field areas, they all have been found regularly in the interior of Heber Dunes SVRA during monitoring activities.

Western burrowing owl (*Athene cunicularia*) has been observed in the surrounding agricultural areas on many occasions, but only a few times in the vegetation types within Heber Dunes SVRA.



Agricultural fields near the park.

Sensitive Wildlife Species within Heber Dunes SVRA

Western burrowing owl has been observed nesting once in the saltbush scrub and once in the arrowweed habitat. The Western burrowing owl is known to prefer agricultural areas over native desert scrub communities, as the available food sources (insects and small mammals) in the agricultural areas are usually greater year round than in many of the native vegetation areas. The Western burrowing owl is identified as a species of special concern by the California Department of Fish and Game (CDFG).



Western burrowing owl.

Other sensitive wildlife species that have been recorded from Heber Dunes SVRA are Albert's towhee (*Pipilo aberti* – CDFG special animal), sage sparrow (*Amphispiza belli* – CDFG watch list), and white-faced ibis (*Plegadis chihi* – CDFG watch list). Although not considered sensitive, Heber Dunes SVRA is one of the very most western occurrences for western diamondback rattlesnake (*Crotalus atrox*), which is known from both roadkill and live specimens found at Heber Dunes SVRA.

Pest Species

Not all wildlife found within Heber Dunes SVRA is desirable or truly wild. For example, populations of the brown-headed cowbird (*Molothrus ater*) have been observed. This parasitic species has had a large impact on local native bird reproduction rates, which ultimately impacts population growth and stability. In addition, local native species must compete with the brown-headed cowbirds for food and habitat. Another pest species common in the area is the great-tailed grackle (*Quiscalus mexicanus*).

Feral cats and dogs, along with domesticated cats and dogs that have been abandoned within or adjacent to Heber Dunes SVRA provide resource management challenges. This is because they often directly compete with native predatory species that are known to occur within the SVRA, causing degradation of bird, reptile, and small mammal populations.

2.4.3 Cultural Resources

History

Heber Dunes SVRA falls within the traditional territory of the Kamia. Also known as Kumeyaay, Ipai, Tipai, and Diegueño, the Kamia in this area settled primarily along the New and Alamo Rivers (Kirkish et al. 2000). The Kamia relied on gathering, supplementing that subsistence base with floodplain horticulture along rivers and springs (Underwood and Gregory 2006). In the late 18th Century, Spanish exploration and

settlement began in the area that is now eastern San Diego and Imperial Counties. Mexican settlers began to enter the area after California came under Mexican rule in 1821. Anglo-European contact precipitated the spread of cattle grazing and agriculture throughout the region. The development of a water conveyance system for agriculture and residential development in the early 20th Century facilitated agricultural development and associated population growth.

The dunes located within Heber Dunes SVRA were part of a much more extensive network of dunes before being graded in 1905 for the construction of irrigation canals (Craft, personal communication, 1998). Although little recorded history is available about the Heber Dunes property, oral interviews with long-time residents have provided some information. Many local residents know the area as “Heber Beach.” There are differing stories about how the label originated. Some claim that it refers to the recreational use of flood waters from the Alamo River, which created stands of water surrounded by the dune sands. Others claim the name “came as a joke, when visiting relatives from the east came to visit California with visions of palm trees and waves and orange groves in their heads, locals would take them to Heber Beach, where the eastern visitors were faced with the stark reality of the lowland tropical desert that is the Southern Imperial Valley” (Herrick 2007).

Cultural Features

No cultural resources have been identified within Heber Dunes SVRA through studies to date. However, if unanticipated resources are discovered in the future, they would need to be evaluated to determine their eligibility to the California Register of Historic Resources (CRHR) and the National Register of Historic Places, and their significance under the California Environmental Quality Act (CEQA).

2.4.4 Aesthetic Resources

Scenic Resources

The overall visual setting of Heber Dunes SVRA can be described as low rolling sand dunes with areas of desert scrub vegetation, primarily tall tamarisk trees with some creosote. Densely vegetated areas are primarily on dune tops, around the perimeter of the park, and in deeper valleys. The sand dunes are a unique feature in the area, which is surrounded primarily by flat, irrigated agricultural land. The dunes undulate across Heber Dunes SVRA, but no substantially large or pronounced geologic formations are visible on the site.

Views from the dune tops offer glimpses of adjacent dunes and vegetation. Due to topography and dense vegetation, adjacent flat agricultural areas are not visible from many dune tops in the southern portion of Heber Dunes SVRA. Because many views from dune tops are limited to adjacent rolling dunes and greenery, these views provide a feeling of escape into a natural setting for residents of a valley dominated by agricultural vistas. Topography and vegetation also create



Looking out from Heber Dunes SVRA.

unusual views, such as the keyhole view through vegetation on a dune top. Likewise, windy conditions create interesting sand patterns that provide particularly pleasing vistas at sunset.

In the southwest portion of Heber Dunes SVRA are three large overhead SDG&E transmission towers. These towers carry overhead transmission lines, which connect to smaller transmission poles located both on Heber Dunes SVRA and off-site. The towers are by far the tallest structures on-site and in the immediate vicinity.

The majority of Heber Dunes SVRA, including the entire interior, is visible only to visitors on OHVs. There are areas of more expansive flat claypan topography that provide for more distant views within the park. Vegetation ranges from small shrubs and bushes to tall trees that block views to and from the park. The densest vegetation occurs along the eastern boundary, obscuring views of the site from areas west, including SR-7. From Heber Road, there are views south to Heber Dunes SVRA along the primary access road; although, its interior is not visible.

Due to the screening nature of the vegetation surrounding the perimeter, views off-site from Heber Dunes SVRA are limited in most places. From the tops of some dunes, adjacent agricultural uses are visible; however, they are often obstructed by vegetation and other dunes.

The unique sand dune environment within Heber Dunes SVRA is surrounded entirely on the north, south, and west by flat, extensive agricultural land. Adjacent to the east is an undeveloped Caltrans parcel that was previously agricultural land. This parcel has sparse vegetation





Dense vegetation rims the park.

and is void of structures. These surrounding land uses are not directly visible from the interior of Heber Dunes SVRA due to the dense perimeter vegetation. However, the surrounding flat cropland paired with minimal tall landscaping or structures allows for vast views in almost all directions from the perimeter road.

SR-7, which is located 500 feet in the north and 2,500 feet in the south from Heber Dunes SVRA, has limited obstructed views of the park. The expansive undeveloped Caltrans parcel and the dense perimeter tamarisk vegetation limits direct views of Heber Dunes SVRA from SR-7.

Auditory Resources

The existing sound environment at Heber Dunes SVRA is influenced primarily by transportation sound emanating from vehicular traffic on the regional and local area roadway networks. The majority of vehicular traffic noise in the vicinity of the project occurs due to SR-7, east of Heber Dunes SVRA. Additional sound sources that contribute to the existing ambient sound environment to a lesser extent include occasional aircraft overflights and seasonal operation of agricultural equipment on adjacent parcels. Most on-site sound sources are OHVs used for recreation.

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals and places where quiet is an essential element of their intended purpose. Noise-sensitive land uses in the vicinity of Heber Dunes SVRA include both on-site and off-site residential uses, the nearest of which is the on-site housing for park employees. Off-site residential dwellings are single-

family residences associated with the surrounding agricultural land uses. Sound levels from peak Heber Dunes SVRA use would not likely exceed noise ordinance limits, but they would likely be audible during quiet periods.

It is unlikely that OHV use at Heber Dunes SVRA contributes significantly to ambient sound levels at nearby residences because they are located more than 0.5 mile from Heber Dunes SVRA. However, during peak OHV use, when traffic noise is low, OHV activities at Heber Dunes may be audible to people outside at these residences.

2.5 OPERATIONS AND MAINTENANCE FUNCTIONS

2.5.1 Operations and Visitor Services

Currently, the entrance gate is closed outside of operating hours to prevent entry. Visitor interviews revealed that since regular ranger patrol began at Heber Dunes SVRA in 2007, there have been improvements in the safety, cleanliness, and overall management of Heber Dunes SVRA.

The primary recreational service provided to visitors is areas for OHV use. There are currently no marked trails or signage identifying specific areas of Heber Dunes SVRA, although there are several clearly defined user areas with different topographic features (i.e., flat claypan areas, steep sand dunes, perimeter trail, rolling sand dunes). Visitor interviews indicate that most OHV enthusiasts at Heber Dunes SVRA use ATVs, while some use dirt bikes and 4x4s. Other vehicles that are used include side-by-sides, dune buggies, trucks, and sand rails. Due to the open



Convenient restroom and shower facility.



Transmission lines at the south end of the park.

nature of the area, the majority of Heber Dunes SVRA is accessible to all types of OHV use, particularly those on ATVs. There are some narrow draws that are densely vegetated and prohibit OHV access. Staff often clear brush from trail areas, particularly on the east side of Heber Dunes SVRA, to maintain their use. Heber Dunes SVRA also provides picnicking and gathering space with its covered picnic areas and fire pits. There are currently no on-site concessions.

2.5.2 Utilities

IID provides electricity and water to Heber Dunes SVRA. All water used in Heber Dunes SVRA comes from the South Alamo Canal, which runs along the eastern boundary. The South Alamo Canal is fed by the All American Canal, which receives water from the Colorado River. Water from the South Alamo Canal is treated by an on-site water treatment plant and distribution facility. Potable water is distributed to the shower/restroom facility and the permanent RV site. Wastewater from the shower/restroom facility and the ranger/staff station are served by a septic tank.

No fire hose cabinets or hydrants are located within Heber Dunes SVRA. Fire response equipment currently uses water from the South Alamo Canal to refill fire truck tanks in the event of a fire.

2.5.3 Public Safety

State Park Rangers patrol Heber Dunes SVRA. Rangers provide security for Heber Dunes SVRA, are the first to respond to fire and medical emergencies, and have law enforcement authority. In the event of an emergency, the on-call ranger requests assistance from the Southern Communication Center (SURCOM) of the California State Parks Radio System. SURCOM then directs requests to the relevant responsible agency. In addition, calls made to 911 from cell phones within Heber Dunes SVRA are automatically routed to the California Highway Patrol, which then transfer the calls to SURCOM and SURCOM who then directs requests to the relevant responsible agency. Imperial County Fire Department (ICFD) responds to all emergency calls originating from Heber Dunes SVRA. In addition, Gold Cross Ambulance is dispatched to all medical aid calls. If Gold Cross Ambulance is unable to respond, the City of Calexico Fire Department provides ambulance support.

ICFD is the jurisdictional agency responsible for responding to fires within Heber Dunes SVRA. The closest ICFD fire station is approximately 5 miles east of the entrance to Heber Dunes SVRA in Heber. The typical response time from the Heber station to Heber Dunes SVRA is approximately 10 to 15 minutes (ICFD 2009).

During stakeholder interviews, emergency responders mentioned that it is at times challenging to locate a visitor in distress because visitors have trouble clearly identifying their location within Heber Dunes SVRA. Place names and/or landmarks could help emergency responders quickly locate visitors in distress.

Heber Dunes Road provides primary access for emergency responders. Outside of the paved road, Heber Dunes SVRA is dominated by sand dunes. Emergency access to areas outside of paved roads is a challenge because it is difficult to drive on the sand dunes without four-wheel drive.

2.5.4 Concessions

There are currently no on-site concessions. Many potential “concession” goods and services are available through private sector providers in nearby population centers. Visitors tend to spend a large portion of the day at Heber Dunes SVRA.

2.5.5 Accessibility

Heber Dunes SVRA has a fully accessible restroom with van accessible parking located adjacent to the Heber Dunes SVRA office.



ADA accessible restroom facility.

2.5.6 Heber Dunes SVRA Support

Heber Dunes SVRA has a limited number of volunteers or volunteer programs on-site. Seasonal volunteer maintenance hosts reside in an RV in the park several months each year, usually during the busy season. The on-site volunteers assist park staff in cleanup and maintenance of Heber Dunes SVRA and facilities during these high-use periods. In addition, the San Diego-Imperial Council Desert Trails District of the Boy Scouts of America has participated in cleanup and debris removal at Heber Dunes SVRA.

2.6 INTERPRETATION AND EDUCATION

2.6.1 Existing Interpretation

Heber Dunes SVRA provides formalized educational programs for visitors. Additionally, on-site staff informally provide interpretive, educational, and safety information. Currently there is no formal visitor or interpretive center at Heber Dunes SVRA, nor published materials or maps specifically for Heber Dunes SVRA. OHV trails throughout Heber Dunes SVRA do not have a formalized nomenclature or signage.

2.6.2 Interpretation Audience Demographics

Visitors to Heber Dunes SVRA tend to be large groups of families and/or friends with children. Most visitors who go to the park in large groups stay for a good portion of the day, yet the total time spent using OHVs is typically only a few hours. The primary additional recreational activities that Heber Dunes SVRA visitors take part in include gathering with family and friends, picnicking and barbecuing, watching people use OHVs, and viewing scenery.

Many visitors live in the nearby communities where Hispanics or Latinos make up the majority of the residents. According to research conducted by federal recreation land managers and California State Parks, Hispanic outdoor recreation enthusiasts are interested in an outdoor experience with a strong social recreation component, such as facilities and programs that involve families, programs for youth and children, and family oriented entertainment events and festivals. This research also found that Hispanic outdoor recreation participants respond to interpersonal communication from multilingual and culturally diverse staff.



2.6.3 Local, Regional, and Statewide Context

Heber Dunes SVRA provides a unique recreational experience in a family friendly atmosphere appropriate for novice users. Visitor interviews indicated that these are valued attributes of Heber Dunes SVRA. Nestled within a sea of agricultural fields, the dunes are accessible via a short drive from nearby population centers. Interpretive and educational programming focuses on these valued attributes of Heber Dunes SVRA.

Minimal interpretive and educational programming is available in the vicinity of Heber Dunes SVRA. Regional recreation facilities located within approximately 30 to 60 minutes of Heber Dunes SVRA offer interpretive and educational programs such as youth programs, dunes and geology programs, and natural and cultural resources interpretation. While agriculture has historically played a large role in Imperial Valley's economy and culture, minimal interpretive and educational opportunities addressing the area's agricultural heritage exist within Imperial County.

2.6.4 Interpretation Issues, Opportunities, and Constraints

The availability of interpretive and educational programming within the nearby communities is limited as are the opportunities for such programming to be developed. Interpretive and educational programming at the Heber Dunes SVRA addresses an important local and regional need.



Hands-on learning for young visitors.

2.7 PLANNING INFLUENCES

This section includes a variety of influential factors to be considered when making planning decisions for Heber Dunes SVRA. These planning influences primarily originate outside Heber Dunes SVRA's boundaries and are important in understanding the park's land use, resources, and facilities in a larger context. These influences fall into four broad categories: systemwide planning, regional planning, changing demographics, and public concerns.

2.7.1 Systemwide Planning

Planning for California State Parks must be wide-ranging to consider issues that cross regional, local/community, and park boundaries. Federal, State, County, and community agencies are responsible for providing oversight and review of various planning-related laws and policies, such as CEQA, Colorado River Basin Regional Water Quality Control Board (CRBRWQCB), and Air Quality Management District regulations. Additionally, various California State Parks resource management directives guide the planning process, including the following documents that are relevant to the Heber Dunes SVRA planning effort:

- California State Parks Mission Statement
- OHMVR Division Mission Statement
- OHMVR Division Vision Statement
- 2009 OHMVR Division Strategic Plan
- California State Parks Accessibility Guidelines 2009
- Off-Highway Motor Vehicle Recreation Act
- Soil Conservation Standard and Guidelines for Off-Highway Vehicle Recreation Management
- OHMVR Resource Management
- Complete Findings of the Survey on Public Opinions and Attitudes on Outdoor Recreation in California 2009

California State Parks Mission Statement

Systemwide planning enhances the ability of California State Parks to fulfill its multi-faceted mission, which is to provide for the health, inspiration, and education of the people of California by helping to preserve the state's extraordinary biological diversity, protect its most valued natural and cultural resources, and create opportunities for high-quality outdoor recreation.

OHMVR Division Mission Statement

The Mission of OHMVR Division is to provide leadership statewide in the area of OHV recreation; to acquire, develop, and operate SVRAs; and to otherwise provide for a statewide system of managed OHV recreational opportunities through funding to other public agencies. The OHMVR

Division works to ensure quality recreational opportunities remain available for future generations by providing for education, conservation, and enforcement efforts that balance OHV recreation impacts with programs that conserve and protect cultural and natural resources.

OHMVR Division Vision Statement

The OHMVR Division will assure ongoing access to a wide variety of high quality OHV recreational opportunities through our commitment to prudent resource management, community education and environmental stewardship.

2009 OHMVR Division Strategic Plan

The OHMVR Division 2009 Strategic Plan reaffirms a commitment to protecting California's unique natural areas by providing for well-managed OHV recreation. The plan seeks to actively engage the public to achieve its goals through multiple approaches included providing transparency in program management, and providing opportunities for children to connect with the natural environment. The Strategic Plan provides a road map for the Division and is based on four strategic themes and five guiding principles.

Themes:

- **Emphasize the Basics** – Maintaining existing OHV areas in good condition and preventing environmental damage are central to the success of the OHMVR Program.
- **The Greening of OHV Recreation** – New technologies are becoming available which present opportunities for OHV recreation to be managed in ways that significantly reduce impacts to the environment.
- **Improving Technology** – New vehicles now available are far more capable than those sold in the past. The OHMVR Program must respond to these improvements in technology by providing facilities appropriate for more capable vehicles.
- **The New Gateway** – The OHMVR Program will take advantage of the opportunity presented by the presence of large numbers of young people and non-traditional user groups in OHV recreation areas by providing educational programs which teach appreciation of nature and the outdoors.

Guiding Principles:

- **Sustainability** – We must manage lands and resources in such a way that they will be available for the enjoyment of many generations of Californians to come.
- **Transparency In Decision Making** – Restoring public trust in the administration of the OHMVR Program depends upon people understanding the reasons behind decisions made by Program managers.

- **Working with Partners and Volunteers** – Meeting OHMVR Program goals is far too complex an undertaking to attempt without the assistance of numerous related agencies, and participation from individuals and volunteer organizations.



OHV practice course.

- **Considering the Needs and Concerns of Stakeholders** – The OHMVR Program will only be relevant to the degree to which it responds to the needs and concerns of those who are most invested in the success of the OHMVR Program.
- **Sound Data for Management Decision Making** – In an era of diminishing opportunities, there is little room for mistakes. Commitment of resources and management actions must be based on the best available information to ensure success.

Based on these strategic themes and guiding principles, the Strategic Plan adopts a framework of six goals for the OHMVR Program to meet its legislative mandates:

- **GOAL 1** – Sustain Existing Opportunity: Protect, preserve, and enhance existing OHV opportunities in a manner that ensures well managed, interesting, and high quality experiences, and address the environmental impacts that may be associated with those activities.
- **GOAL 2** – Increase OHV Opportunity: Add new OHV opportunities where appropriate and needed to replace loss of existing opportunities and respond to changing and future demand.
- **GOAL 3** – Staff Development: Enhance the abilities of Program managers and staff dedicated to the development, management, and implementation of the OHMVR Program.

- **GOAL 4** – Develop an Informed and Educated Community: Achieve a highly informed and educated community associated with OHV recreational activities, dedicated to safe and lawful OHV operation and responsible environmental stewardship.
- **GOAL 5** – Cooperative Relationships: Establish and maintain productive relationships between individuals, organizations, industry, and government agencies to cooperatively identify problems and develop and implement solutions to advance the Mission and Goals of the OHMVR Program.
- **GOAL 6** – Informed Decision Making: Improve the quality, quantity, and accessibility of information needed to support sound decision making, transparency of administration, and communication with the interrelated groups interested in, and associated with, the OHMVR Program.

California State Parks Accessibility Guidelines 2009

The Access to Parks Guidelines were first published in 1994; the most recent revision took place in 2009. The Access to Parks Guidelines detail the procedure to make State Parks universally accessible while maintaining the quality of park resources. Also included in the guidelines are recommendations and regulations for complying with the standards for accessibility. The vision of the guidelines is embodied in the General Plan. The guidelines that would be most applicable to Heber Dunes SVRA are for picnic sites, fixed benches, ramps, restrooms, drinking fountains, and signage.

Off-Highway Motor Vehicle Recreation Act

The Off-Highway Motor Vehicle Recreation Act requires the OHMVR Division of California State Parks to implement and administer the Off-Highway Motor Vehicle Recreation Program, which provides and supports sustainable, ecologically based opportunities for OHV recreation at specified areas throughout the state (PRC Section 5090 et seq.). The act states that effectively managed areas and adequate facilities for the use of off-highway vehicles and conservation and enforcement are essential for ecologically balanced recreation.

Soil Conservation Standard and Guidelines for Off-Highway Vehicle Recreation Management

The Soil Conservation Standard and Guidelines for Off-Highway Vehicle Recreation Management is applicable to OHV areas funded by the California OHV Trust Fund, including all SVRAs. The Guidelines provide measures to help achieve the Standard that OHV recreation facilities shall be managed for sustainable long-term prescribed use without generating soil loss that exceeds restorability, and without causing erosion or sedimentation which significantly affects resource values beyond the facilities.

OHMVR Resource Management

The Wildlife Habitat Protection Program (WHPP) mandated by PRC Section 5090.35, and the Habitat Management System (HMS) developed by the Division are a major part of each SVRA's resource monitoring and evaluation program that includes standardized protocols tailored for the needs of the particular SVRA. The goals of the WHPP are to monitor and manage wildlife and plant populations and restore habitats where necessary to sustain a viable species composition for each area. These plans enable adaptive management, allowing management practices and strategies to change, or "adapt," as warranted by the new monitoring information. Environmental scientists for each SVRA conduct and oversee the monitoring based on the HMS and other monitoring protocols.



Managing wildlife and plant habitat.

2.7.2 Regional Planning Influences

Regional Plans

The following local and regional plans will have an influence on the management, operations, and visitor experiences at Heber Dunes SVRA:

- Imperial County General Plan
- Imperial County Zoning
- Gateway Specific Plan
- State Implementation Plan for Imperial County as implemented by the Imperial County Air Pollution Control District
- Southern California Association of Governments Regional Comprehensive Plan
- Southern California Association of Governments Regional Transportation Plan

Imperial County General Plan

The Imperial County General Plan presents a comprehensive guide for development within the County and provides mechanisms to achieve desired community goals and objectives through a coordinated implementation program. Land use decisions such as area plans, zonings, subdivisions, and public agency projects must be consistent with the General Plan. While the General Plan does not directly affect state-controlled properties, it does directly affect the surrounding land uses and thereby the context of Heber Dunes SVRA. For planning purposes, reviewing the County land use provisions provides guidance on the County's vision for use of the Heber Dunes SVRA site within the surrounding community context. The General Plan includes elements that guide various facets of growth and development within the County. The elements most applicable to the Heber Dunes SVRA planning process are Land Use, Parks and Recreation, and Conservation and Open Space.

The Land Use Element describes where different types of land uses may be established in the unincorporated areas of Imperial County (Imperial County 2008a). Heber Dunes SVRA, as well as most surrounding land, is designated Agriculture by Imperial County. The nearest land use designation other than Agriculture is the Gateway Specific Plan Area, which is located 1 mile to the south at SR-98. The Gateway Specific Plan is addressed below.

The Parks and Recreation Element establishes a framework for the stewardship and development of County parks and other recreational amenities that enhance the quality of life of County residents and visitors (Imperial County 2008b). This element focuses on community- and neighborhood-type parks and does not provide policies or goals for the development of OHV recreation areas. County parks and recreation facilities are intended to serve as wide a range of interests as possible. Emphasis is placed on family oriented opportunities and those that

encourage visitor use. The Conservation and Open Space Element identifies goals and policies to ensure the managed use of environmental resources. The goals of this element also include protecting open space for the preservation of natural resources, the managed production of resources, outdoor recreation, and public health and safety. The goals and policies are also designed to prevent limiting the range of resources available to future generations.

Imperial County Zoning

Heber Dunes SVRA is zoned as Government/Special Public (G/S) Zone by the County. The purpose of the G/S Zone is to designate areas that allow for the construction, development, and operation of governmental facilities and special public facilities. Primarily, this zone allows for all types of government-owned and/or government-operated facilities, including offices or other uses. It also allows for special public uses.

The surrounding parcels are zoned for agricultural use as either General Agriculture (A2) or Heavy Agriculture (A3). The A2 zoning designation requires a lot size of 40 acres or greater, with the intent to designate areas that are suitable and intended primarily for agricultural uses (limited) and agriculture-related compatible uses. The A3 zone also requires parcels of 40 acres or more with the purpose to promote the heaviest of agricultural uses in the most suitable land areas of the County. Uses in the A3 zoning designation are limited primarily to agriculture-related uses and agricultural activities that are compatible with agricultural uses. The Imperial County General Plan presents a comprehensive guide for development within the County and provides mechanisms to achieve desired community goals and objectives through a coordinated implementation program.

Gateway Specific Plan

The Gateway of the Americas (Gateway) planning area is composed of approximately 1,775 gross acres of land in Imperial County, adjacent to the international border with Mexico and about 6 miles east of the City of Calexico. The Gateway planning area is roughly bounded by the international border to the south, the Alamo River to the east, the Ash Canal to the west, and SR-98 approximately 0.25 mile to the north. The northern boundary of the Gateway planning area is located approximately 0.75 mile south of Heber Dunes SVRA.

The Gateway planning area is proposed as a master-planned commercial and industrial complex designed to capitalize on the economic benefits of the adjacent international port-of-entry. The planned development consists of facilities for manufacturing, wholesaling, distribution, and assembly, plus related supporting transportation infrastructure and support services such as retail. Of the 1,775 gross acres within the planning area, 1,420.6 net acres are considered developable. The majority of the Gateway Specific Plan

planning area is zoned as Gateway Commercial and Gateway Industrial, with some G/S zoning in the southern portion of the planning area.

While Heber Dunes SVRA is not included within the Gateway planning area, the intensive level of development proposed for the area may create development pressure on properties surrounding Heber Dunes SVRA.

State Implementation Plan for Imperial County

A State Implementation Plan (SIP) is an enforceable plan developed by the State of California to set forth how the state will comply with air quality standards according to the federal Clean Air Act. The SIP includes strategies and tactics to attain and maintain acceptable air quality. Imperial County Air Pollution Control District (APCD) prepares the Imperial County portion of the SIP.

Southern California Association of Governments Regional Comprehensive Plan

The Southern California Association of Governments (SCAG) 2008 Regional Comprehensive Plan addresses issues of regional growth (SCAG 2008a). The Air Quality chapter contains goals that are particularly applicable to the Heber Dunes SVRA General Plan. These goals include reducing emissions of criteria pollutants to attain federal and state air quality standards, reversing current trends in greenhouse gas emissions, and minimizing land uses that increase the risk of adverse air-pollution-related health impacts from exposure to air contaminants, particulates (PM₁₀, PM_{2.5}, ultrafine), and carbon monoxide. While the 2008 Regional Comprehensive Plan does not provide specific strategies that could be implemented at Heber Dunes SVRA, it is important to be cognizant of the goals that SCAG has set for air quality and how OHV use at Heber Dunes SVRA relates to those goals.

Southern California Association of Governments Regional Transportation Plan

The SCAG 2008 Regional Transportation Plan (RTP) is a long-term transportation plan that addresses transportation issues in six Southern California counties: Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura (SCAG 2008b). The 2008 RTP presents the transportation vision for this region through the year 2035 and provides a long-term investment framework for addressing the region's transportation and related challenges. The RTP is the culmination of a multiyear effort focusing on maintaining and improving the transportation system through a balanced approach that considers system preservation, system operation and management, improved coordination between land use decisions and transportation investments, and strategic expansion of the system to accommodate future growth. The Heber Dunes SVRA is within the SCAG region and will be affected by any plans related to transit services or the highway system; however, no new transit services or highway projects are proposed in the 2008 RTP that would directly affect circulation around Heber Dunes SVRA.

2007 Imperial County Transportation Plan Highway Element

The 2007 Imperial County Transportation Plan Highway Element includes near-term, mid-term, and long-term transportation priorities and projects on Imperial County's Highway Network that were developed through a comprehensive and cooperative planning approach between the Imperial County Association of Governments, SCAG, the cities within and the County of Imperial, Caltrans, and other public and private stakeholders. According to the 2007 Imperial County Transportation Plan Highway Element, future improvements for the near term (2007 to 2015), midterm (2015 to 2025), and long term (2025 and beyond) are anticipated in the project area. Near-term projects include the following:

- Widening SR-98 from SR-111 to SR-7 from two to four lanes
- Widening SR-111 from two to four lanes
- Widening Jasper Road to become a six-lane expressway
- Constructing SR-115 to connect with I-8

Mid- and long-term projects include improving the Bowker Road interchange with I-8 and constructing a new interchange on SR-7 (northeast of Heber Dunes SVRA) to access a future planned private airport, respectively. These circulation projects could impact routes that are used to access Heber Dunes SVRA.

Regional Organizations

The following organizations have an interest in regional planning issues within Imperial County:

- Imperial County
- Imperial County Farm Bureau
- Imperial County APCD

County of Imperial

Imperial County may have an interest in the long-term management and operation of Heber Dunes SVRA as it relates to the services and oversight the County provides, such as police, fire, transportation and circulation, land use planning, and development services.

Imperial County Farm Bureau

Imperial County Farm Bureau is a nongovernmental, nonprofit, voluntary membership organization whose purpose is to protect and promote agricultural interests in Imperial County, the state, and the nation through public relations, education, and advocacy to support the economic advancement of agriculture balanced with appropriate management of natural resources. The Farm Bureau strives to protect and improve the abilities of farmers and ranchers to provide a safe and reliable supply of food and fiber through responsible stewardship of our natural resources. Heber Dunes SVRA is surrounded by agriculture; thus, understanding agricultural interests in the region has been important in conjunction with development of the General Plan.

Imperial County Air Pollution Control District

APCD is the agency responsible for protecting the public health and welfare through the administration of federal and state air quality laws and policies. Included in APCD's tasks are monitoring air pollution, preparing the Imperial County portion of the SIP, and promulgating rules and regulations.

APCD shares responsibility with CARB for ensuring that all state and federal ambient air quality standards are achieved and maintained within the County. APCD is responsible for monitoring ambient air quality and has authority to regulate stationary sources and some area sources of emissions. APCD is responsible for developing the overall attainment strategy for Imperial County and, therefore, is responsible for planning activities involving the development of emission inventories, modeling of air pollution, and quantification and comparison of emission-reduction strategies.

2.7.3 Demographics, Trends, and Projections

Most visitors to Heber Dunes SVRA travel from Imperial County (EDAW 2009; OHMVR Division 2008). The nearest population centers include Mexicali (across the international border with Mexico), Calexico, El Centro, Holtville, and Heber. These urban centers have had high growth rates over the last several years (Table 5). Recreation demand and use, over time, are affected by the changing demographic patterns of the areas served. As of June 2011, Imperial County had more than 7,100 green-sticker registered OHVs. In addition, Riverside and San Diego Counties had 132,579 green-sticker registered OHVs as of June 2011. These registered users from adjacent counties will create the highest demand for SVRA use.



Social gathering at Heber Dunes SVRA.

According to the 2010 U.S. Census, there were 174,528 people in Imperial County. SCAG projects that growth in Imperial County will accelerate, adding roughly another 100,000 residents by 2030, an increase of more than 60 percent. The Southern California region (including Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura Counties) is projected to increase to 27,240,131 by 2030 (SANDAG 2008; SCAG 2008). Over time, local and regional population growth is likely to contribute to an increase in visitation at Heber Dunes SVRA.

Table 5–Population Growth Trends

Community	2000 ^a	2010 ^b	Percent Change
Calexico	27,109	38,572	42%
El Centro	37,835	42,598	12%
Holtville	5,612	5,939	5%
Mexicali*	764,602	936,826*	22%
Imperial County	142,361	174,528	23%

Source: (a) U.S. Bureau of the Census 2000; (b) U.S. Bureau of the Census 2010; *INEGI 2010.

Hispanics or Latinos make up the majority of the residents in Imperial County. At the time of the 2010 U.S. Census, Hispanic or Latino residents of Imperial County were estimated at 140,271, representing 80.4 percent of the total County population. There were about 14 million Hispanic people out of the total statewide population of 37 million people (37.6 percent). The high proportion of Hispanic people within the County has implications for Heber Dunes SVRA planning.

For example, the 2005 California State Parks report on park and recreation trends in California found the following regarding Hispanic outdoor recreation enthusiasts:

- they often prefer to recreate in larger groups and prefer forested sites with water features and amenities to support a day-long, extended family social outing with extensive on-site meal preparation;
- they are often interested in an outdoor experience with a strong social recreation component, such as facilities and programs that involve families, programs for children and youth, and family oriented entertainment events and festivals;

- they identify stress relief and having a good family experience as the most important features of a satisfying outdoor recreation excursion;
- they enjoy picnicking, day hiking, camping, and large family gatherings in outdoor settings; and
- they respond to interpersonal communication from multilingual and culturally diverse staff.



The Complete Findings of the Survey on Public Opinions and Attitudes on Outdoor Recreation in California (California State Parks 2009) found that when compared to facility use by non-Hispanics, cross-tabulation analyses showed many significant differences between Hispanics and non-Hispanics. Hispanics were more likely than non-Hispanics to use the following amenities:

- Swimming pools
- Picnic tables
- Amusement areas
- Playgrounds
- Tennis or basketball courts
- Organized sports fields
- Open spaces to play
- Skate parks

In the same report, respondents were asked to rate the importance of a variety of California park and recreation facilities and services. The most important facilities and services to Hispanics were (1) play activity areas for tots and young children; (2) multi-use turf areas for field sports such as softball, baseball, soccer, and/or football; (3) areas and facilities for environmental and outdoor education programs; (4) hard surface trails for biking, jogging, and fitness walking; and (5) wilderness type areas where no vehicles or development are allowed.



Given that most visitors originate in Imperial County, the importance of Heber Dunes SVRA as a local recreational resource should not be overlooked. The Survey provided the following recommendation related to local parks:



A rider enjoys the unique desert scenery.

Recommendation: Provide local, easily accessible parks. Recreation providers should continue to ensure the accessibility of local parks for all citizens in California. Local parks encourage increased use by local community members.

2.7.4 Public Concerns, Interests, and Opportunities

Public input played an essential role in the formulation of recommendations, programs, and priorities for the Heber Dunes SVRA General Plan. The OHMVR Division used a stakeholder-driven process whereby issues and ideas voiced by community members guided project research, alternatives analysis, and recommendations.

The major themes presented in this section represent a synthesis of input captured from the visitor survey and stakeholder interviews on ideas, concerns, and common goals related to Heber Dunes SVRA. In effect, the major themes encapsulate the topics that were raised most through the visitor survey and stakeholder interviews.

Meets important local recreation need

Stakeholders frequently made the observation that Heber Dunes SVRA fulfills an important local recreational need. The park is close to several population centers within Imperial County and the results of the visitor survey indicate that the overwhelming majority of visitors choose to visit Heber Dunes SVRA because it is “close to home.” More than 90 percent of visitors surveyed indicated it takes them less than 30 minutes to travel to Heber Dunes SVRA. Tied to some of these concepts were comments about the potential for camping at Heber Dunes SVRA and the need to consider whether overnight use would shift the character of Heber Dunes SVRA from a local recreation area to an amenity that primarily serves regions beyond Imperial County.

Recognition of improved Heber Dunes SVRA management

During surveys, many visitors mentioned that they appreciated the improvements made by OHMVR Division since acquiring the park, including efforts to improve maintenance and safety conditions, as well as the installation of new restrooms.

Visitors and stakeholders commented that enforcement and patrol activities by the patrolling ranger, such as issuing tickets for illegal OHV use, have improved safety conditions at Heber Dunes SVRA. Likewise, some visitors pointed out that the mere



presence of a ranger may deter illegal and/or irresponsible activities at Heber Dunes SVRA. Many parents commented that they feel that Heber Dunes SVRA is a safe and comfortable place to recreate with their children because of these efforts. Some stakeholders noted that in the past Heber Dunes SVRA had problems with trespassing and associated public safety issues, such as vandalism and unauthorized late night parties. It was acknowledged that the presence of a ranger outside of operating hours and the ability to close the entrance gate overnight has likely controlled these issues.

Promoting responsible OHV use

There was widespread acknowledgement that safety conditions at Heber Dunes SVRA are generally safe. Areas of potential improvement identified by visitors and stakeholders included a desire to reduce vehicle speeds within areas where people and families gather and to generally reduce conflicts between OHV and non-OHV users. An emphasis was placed on the establishment of reduced speed zones and the availability of separate zones for novice users, especially youth, from more mature riders. The importance of OHV user education was also raised as a consideration. When visitors were asked if they “generally feel safe” at Heber Dunes SVRA, nearly all responded positively. Given that safety concerns related to OHV operation surfaced at other points in the survey—as well as in the stakeholder interviews—it is likely that visitors responded to this survey question in terms of personal safety (for example, feeling safe from criminal activity).



Enhancing the recreation experience for families and groups

The results of the visitor survey and stakeholder interviews indicated that most visits to Heber Dunes SVRA occur during weekends. These weekend visitors tend to be large groups of families and/or friends with children. Almost two-thirds of the visitors surveyed were in groups of six or more people, and visitors under the age of 15 accounted for nearly one-third of all visitors present on the days of the surveys. Dedicated solo users tend to use Heber Dunes SVRA during the week.

Most visitors who come in large groups stay in Heber Dunes SVRA for a good portion of the day, yet the total time spent using OHVs is typically only a few hours. Specifically, the survey results indicate that 80 percent

of visitors stay more than 4 hours, yet most visitors spend less than 4 hours using OHVs. The primary additional recreational activities that Heber Dunes SVRA visitors take part in are gathering with family and friends, picnicking and barbecuing, watching people use OHVs, and viewing scenery.

Environmental considerations for the planning process

Environmental considerations for the planning process that were raised most frequently involved natural areas and air quality. Heber Dunes SVRA is primarily sand dunes with pockets of vegetation (both native and nonnative) located throughout. Many visitors and other stakeholders value the natural characteristics and open area of Heber Dunes SVRA.

Most existing trees are tamarisk, a nonnative, invasive species. The value of the existing trees for shade and natural characteristics was cited repeatedly. Tied to these discussions was dialogue about tamarisk's invasive qualities and the relatively high rate at which it absorbs water. Some stakeholders would like to see the tamarisk replaced by native vegetation. Other stakeholders commented that a tamarisk removal program would be costly and difficult, and that it would be challenging to establish native vegetation in its place.

Air quality impacts from dust and engine emissions were raised as a concern. Dust was recognized by several respondents as a regional air quality issue. Discussion also included the role of existing trees in stabilizing sandy soils and thereby potentially reducing dust dispersion.



Dense areas of tamarisk trees provide shade.

CHAPTER 3 ISSUES AND ANALYSIS



This chapter identifies planning assumptions and key issues that were identified during the planning process. These issues were identified through existing conditions research, public outreach efforts, and through discussions with OHMVR Division staff. This chapter presents only those planning issues of primary importance and those that are driving the planning effort.

3.1 PLANNING ASSUMPTIONS

The following planning assumptions are based on OHMVR Division policy, core program initiatives, and statewide planning issues, which form the planning context and parameters for addressing General Plan issues.

OHMVR Division will do the following at Heber Dunes SVRA:

- Maintain and enhance OHV recreational opportunities within Heber Dunes SVRA
- Administer Heber Dunes SVRA to encourage responsible OHV recreation
- Provide education, conservation, and enforcement efforts that balance OHV recreational opportunities with programs that conserve and protect natural resources at Heber Dunes SVRA



Taking a break.

3.2 PLANNING ISSUES

3.2.1 Regional Planning Context

Heber Dunes provides unique recreational opportunities for local communities

While state and federal parkland with OHV recreation opportunities are abundant within Imperial County, these parks do not provide the intimate atmosphere or proximity to urban centers that make Heber Dunes SVRA unique. For these reasons, Heber Dunes SVRA functions as a highly valued regional park and recreation resource for residents of Imperial County.

Likewise, the majority of visitors come from the nearby communities of Calexico, El Centro, Holtville, Imperial, and Heber, which are within short driving distance of Heber Dunes SVRA. The overwhelming majority of these communities is of Hispanic or Latino origin. Park visitors to Heber Dunes SVRA reflect this ethnic background.



Sand dunes provide unique OHV recreation opportunities.

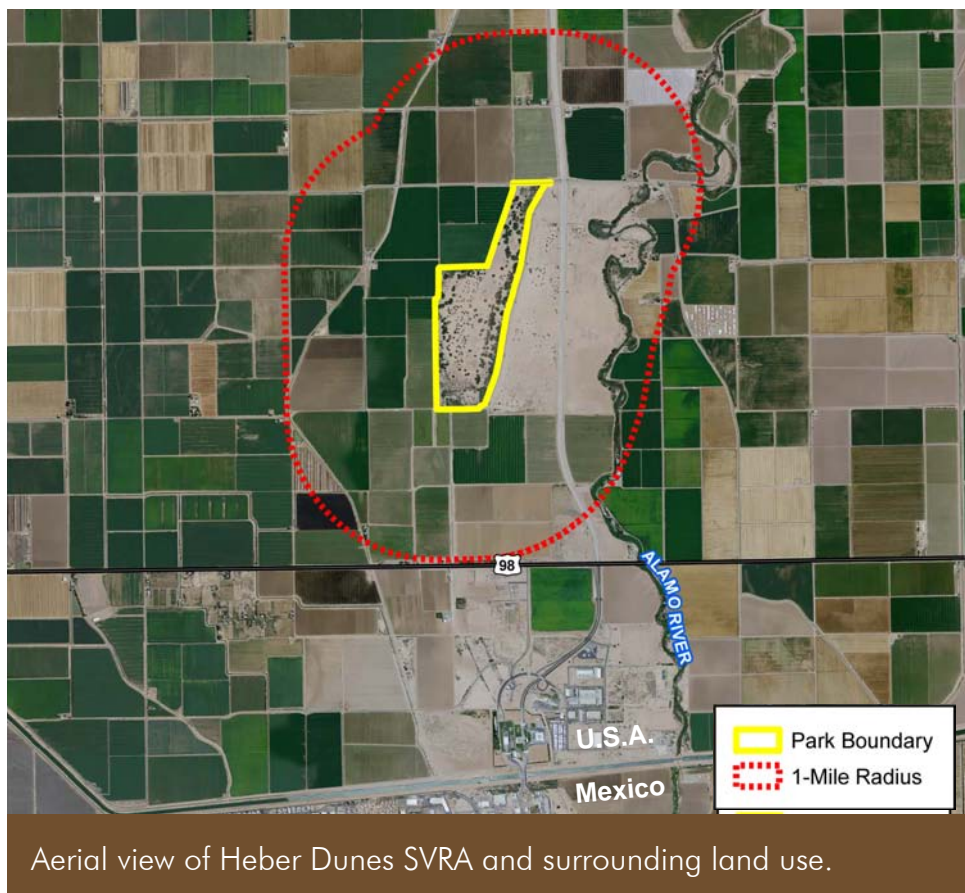
Potential air quality effects are a regional concern

Air quality is an issue of regional concern in Imperial County. Dust carried by strong desert winds is common. While the majority of land disturbance in Imperial County can be attributed to agriculture, the Imperial County APCD has identified OHV use as a possible contributing factor. The OHMVR Division is currently working with the Imperial County APCD to address this issue.

Anticipate future border-crossing-spurred economic development through defensive planning and acquisition strategies

Heber Dunes SVRA is currently surrounded by agriculture, and the designated land use to the west, north, and east is agriculture (see aerial photograph below). However, the northern boundary of the 1,775-acre Gateway Specific Plan planning area (which is primarily zoned for commercial and industrial uses) is located approximately 0.75 mile south of Heber Dunes SVRA. In general, industrial and commercial uses are considered compatible with OHV activities because these uses are not particularly sensitive to sound and/or dust. Thus, the uses that would occur under existing Gateway Specific Plan zoning are expected to be compatible with current land uses at Heber Dunes SVRA.

However, it is important to note that future regional population growth may create development pressure on the agricultural parcels adjacent to Heber Dunes SVRA. For example, if housing were to be proposed on the properties adjacent to Heber Dunes SVRA, concerns about sound and dust emanating from the park could be raised. Acquisition of adjacent properties should be considered to minimize the potential for adjacent land use incompatibilities resulting from potential future border-crossing-spurred economic development.



Aerial view of Heber Dunes SVRA and surrounding land use.

Seek collaborative planning with public agencies for the state highway borrow site and riparian access area

The OHMVR Division should seek to develop and maintain a collaborative relationship with adjacent property owners to encourage collaborative planning for proposed changes to parcels adjacent to Heber Dunes SVRA. There is the potential for the OHMVR Division to consider the acquisition of the adjacent Caltrans-owned parcel for expansion of Heber Dunes SVRA. This 306-acre undeveloped parcel would nearly double the size of Heber Dunes SVRA. The parcel is mainly flat, and it does not have the dunes structure of Heber Dunes SVRA. Acquisition of this land would allow the OHMVR Division to use the land in a manner that would not conflict with OHV recreation, thus reducing the potential for adjoining land-use conflicts. Additional recreational uses that are compatible with OHV use could be considered for this parcel.

3.2.2 Heber Dunes SVRA Land Use and Facilities

Promoting responsible OHV recreation

The OHMVR Division should promote and facilitate responsible OHV use through the General Plan. This can be accomplished through concepts such as user education programs and separate use zones within the Heber Dunes SVRA, including designated areas for novice users (especially youth) such as open OHV use areas, youth training tracks, a designated youth OHV trail or trails, and the establishment of



OHV training track at Heber Dunes SVRA.

associated management approaches. All future management decisions should promote the responsible use and enjoyment of OHVs within the park. The OHMVR Division should also continue to meet or exceed existing enforcement levels so visitors continue to “generally feel safe” when visiting the park.

Maintaining on-site and adjacent facilities access (SDG&E, IID)

Consideration should be given to organizations such as IID and SDG&E that have an interest in maintaining access to existing facilities within existing easements within the Heber Dunes SVRA. For example, IID provides water to and has facilities in the vicinity of the SVRA. Operation of the SVRA should not affect access to these facilities. Likewise, drainage patterns should not be altered in a manner that would negatively affect IID’s water conveyance structures. In addition, operation of the SVRA should allow SDG&E continued access to their transmission lines and towers within existing SDG&E easements.



Preventing encroachment of utility easements

While access to all existing utilities and associated utility easements within and adjacent to the Heber Dunes SVRA should be maintained, expansion of those easements that would in any way be detrimental to the operation and management of the SVRA in conflict with the Division’s mission to ensure quality recreational opportunities remain available for future generations should be strongly discouraged.

Improving wayfinding

Signage and identification of popular gathering areas could improve the overall visitor experience at Heber Dunes SVRA. Place names and associated wayfinding information could make the visitor experience more enjoyable by making it easier for visitors to find each other. Likewise, place names could help emergency responders quickly locate visitors in distress.

Optimizing interpretation and education resources

Given the limited availability of interpretive and educational programming in nearby communities, such programming at Heber Dunes SVRA could fill an important local and regional need. Topics that could be interpreted include the following:

- Responsible OHV recreation;
- Historic conditions that have been influenced largely by natural processes;
- Changes over time to the Imperial Valley and sand dunes from human modification;
- Dunes ecology and sensitivities to human impacts;
- History of Heber Dunes SVRA and surrounding communities, including the history and agricultural heritage of Imperial County;
- The relationship between farming and nutrition, with a focus on youth education;
- Heber Dunes SVRA's natural resources; and
- Diversity of recreational experiences offered within Heber Dunes SVRA, including open OHV use, perimeter trail use, destination outings to the interpretive exhibits, and other compatible recreational opportunities.

Distributing visitor use over underutilized areas of Heber Dunes SVRA

The predominant OHV use areas are currently concentrated in the northern part of Heber Dunes SVRA in proximity to facilities such as restrooms, shaded picnic tables, and shade cover provided by tamarisk. There is potential to expand or reconfigure facilities into other parts of Heber Dunes SVRA to distribute visitors throughout the 340 acres. Another way to encourage visitor distribution throughout the site would be to identify popular gathering areas and specific trails and OHV use areas with names and signage. This would also help improve emergency access and management of the park.

Enhancing social gathering and associated recreational opportunities

Most visits to Heber Dunes SVRA occur during weekends. These weekend visitors tend to be large groups of families and/or friends with children. Dedicated solo OHV users tend to use the SVRA during the week.

As previously identified in Chapter 2 most visitors come in large groups and stay for a good portion of the day, yet the total time spent using OHVs is typically only a few hours. The primary additional recreational activities for visitors at Heber Dunes SVRA is gathering with family and friends, picnicking and barbequing, watching people use OHVs, and viewing scenery. Many visitors and other stakeholders stated there is a need for additional passive recreational opportunities at Heber Dunes SVRA that are compatible with OHV use. Suggestions tied to these discussions included barbeque facilities, additional shaded areas, additional small and large group picnic areas, additional restrooms, additional drinking water fountains and spigots, established OHV trails removed from picnic areas, and creation of a children's trail.



Visitors enjoy Heber Dunes SVRA.

Location of Heber Dunes SVRA boundary relative to the existing "perimeter trail"

Some uncertainty exists over whether the "perimeter trail" occurs within the Heber Dunes SVRA boundary or not. The location of the perimeter trail relative to the Heber Dunes SVRA boundary should be confirmed outside of the General Plan process. If the trail, or a portion thereof, occurs outside of the Heber Dunes SVRA boundary, the OHMVR Division would need to explore rerouting the trail or pursue a boundary adjustment to bring the complete extent of the trail within the Heber Dunes SVRA boundary.

Improving accessibility within Heber Dunes SVRA

Additional opportunities to increase accessibility include designating specific trails for universal accessibility and incorporating universal accessibility into interpretation and education programs. To address all members of an interpretive audience, the following issues should be considered when designing and implementing interpretive programs:

- Hearing impairments
- Learning disabilities
- Mental retardation
- Mobility impairments
- Visual impairments
- Limited English proficiency
- Older adults

3.2.3 Significant Resource Values

Heber Dunes SVRA contains interesting and unique biological resources

Although the majority of vegetation on-site is nonnative tamarisk trees of low habitat quality, unique biological resources exist within Heber Dunes SVRA that could be preserved, restored, and enhanced. Particularly, the creosote habitat in the southern part of the park is a unique native habitat type that, with the appropriate management efforts, could be enhanced and potentially preserved. This could include managing OHV



Dense vegetation within the park.

use in creosote areas, managing tamarisk, and providing education and interpretation of biological resources. In addition, Western burrowing owls have been observed at Heber Dunes SVRA.

The existing tamarisk vegetation on-site creates a natural resources management challenge

Because tamarisk is an invasive nonnative vegetation community, biological restoration and/or enhancement efforts should consider the advantages and disadvantages of tamarisk removal. However, tamarisk is very difficult to eradicate completely because it resprouts from any remaining root structure. It is also challenging to restore native vegetation communities in the dune landscapes of Southern California. In addition, the tamarisk trees provide significant areas of shade, which are particularly valued in the desert climate of Heber Dunes SVRA. Likewise, all of the on-site vegetation (including tamarisk) serves to hold down sand. Therefore, any tamarisk removal proposals would need to consider the potential impact on visitors resulting from the loss of valued shade areas and potential incremental fugitive dust generation resulting from the potential net loss of vegetation (e.g., removal of tamarisk and unsuccessful establishment of native vegetation).

3.3 SPECIFIC AREA ISSUES

Providing places for family gatherings

The majority of Heber Dunes SVRA users are in groups of five to 10 individuals, and a large proportion are children under the age of 15. There are currently no specific OHV recreation areas for children. There is the potential to create a designated youth OHV recreation area in



Ramadas provide places for family gatherings.

the northern portion of Heber Dunes SVRA, near the picnic areas and other facilities. Additionally, there are no other activities provided for families and individuals who are not using OHVs (besides spectating). An opportunity exists to provide additional gathering places with recreational activities catered to large groups and/or families. This could be accomplished by creating an area focused on supporting family and group uses such as clustered ramadas, barbeque facilities, fire pits, and passive recreational facilities (such as horseshoe pits).

Supporting responsible OHV recreation in the claypan area

The claypan area is a smooth, flat area located in the central portion of Heber Dunes SVRA. Some users enjoy driving at higher speeds through this area, which creates visibility and safety concerns due to dust and quickly moving vehicles. Measures should be considered that would control use through this area and minimize dust generation.

Interesting and unique biological resources are concentrated in the southern portion of Heber Dunes SVRA

The creosote-based habitat located primarily in the southern part of Heber Dunes SVRA is a unique native habitat type for the park unit, although it is found throughout the greater southwest region. Planning efforts should consider measures to preserve and enhance the existing creosote habitat while maintaining and enhancing the quality of the OHV recreational experience.



Creosote bush at Heber Dunes SVRA.

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CHAPTER 4 PLAN COMPONENTS



This chapter provides an overview of the proposed Heber Dunes SVRA General Plan components, including purpose, vision, and land use management.

4.1 PARK CLASSIFICATION

Heber Dunes is an SVRA.

4.2 PURPOSE

The declaration of purpose describes the purpose of Heber Dunes SVRA and is the broadest statement of management goals designed to fulfill the vision of Heber Dunes SVRA. A declaration of purpose is required by PRC Section 5002.2(b).

The purpose of Heber Dunes SVRA is to provide effectively managed, responsible OHV and related recreational opportunities, with recognition of the significance of Heber Dunes SVRA to the local population and the greater Southern California region. The park's relatively small size and unique outdoor recreational setting provide opportunities for OHV recreation, family and social gathering, special events, and education and interpretative programs.

4.3 VISION

A park's vision describes an SVRA in future years, after the General Plan's objectives have been achieved.

The Heber Dunes SVRA General Plan provides a convenient place for friends, families, and groups to enjoy the outdoor recreational setting through OHV activity and other compatible recreational uses. On any given day, visitors would be able to take part in managed OHV recreation and other activities, relax, and enjoy the unique setting. Heber Dunes SVRA visitors will have access to well-managed, varied, and enjoyable OHV recreation opportunities. The community significance and natural history of Heber Dunes SVRA provide an opportunity for education and interpretation. Future expansion of Heber Dunes SVRA would provide a greater range of OHV recreational and resource management opportunities, along with potentially avoiding or minimizing conflicts from future development.



4.4 LAND USE MANAGEMENT

Goals and Guidelines that apply to the entire Heber Dunes SVRA (Goals and Guidelines) have been developed to address existing issues and to provide on-going guidance to management that can be implemented to achieve the long-term vision for Heber Dunes SVRA. The Goals establish the purpose and the Guidelines provide the direction that the OHMVR Division will consider to achieve these goals. Goals and Guidelines apply to the entire Heber Dunes SVRA.



Family time at Heber Dunes SVRA.

In addition to the Goals and Guidelines, Planning Zones for the proposed Heber Dunes SVRA General Plan have been developed to allow for specialized management by area. These Planning Zones were developed through consideration of a variety of factors, including geographic relationships, resource values, ecological parameters, management issues and goals, types and intensities of land use, and visitor use and experience.

Section 4.4.1 identifies the Goals and Guidelines and Section 4.4.2 presents an overview of the management intent for each Planning Zone, as well as guidelines for each Planning Zone. Section 4.4.3 lists goals and guidelines to address Heber Dunes SVRA visitor capacity.

4.4.1 Goals and Guidelines

This section provides the goals and guidelines of the General Plan, addresses existing issues and provides guidance and management strategies that can be implemented to achieve the long-term vision for the park.

Visitor Use and Recreation (VUR)

VUR Goal 1: Provide a range of high-quality and responsible OHV recreation opportunities that a diverse visiting population can enjoy, experience, and appreciate.

VUR Guideline 1.1: Accommodate and enhance existing recreation and visitor opportunities and ensure use levels are appropriate to the OHMVR Division resource protection guidelines.

VUR Guideline 1.2: Monitor demographic trends and Heber Dunes SVRA visitation patterns. Implement management actions that respond to these trends while remaining consistent with Heber Dunes SVRA General Plan’s vision, goals, and guidelines.

VUR Goal 2: Enhance individual-, family, and community-centered recreational opportunities.

VUR Guideline 2.1: Provide facilities and recreational opportunities that respond to local needs. These could include outdoor education programs, managed camping, and collaborative programs for local schools and organizations. Potential habitat-disturbing activities, such as camping, would be located to minimize impacts to environmentally sensitive areas.

VUR Guideline 2.2: Create partnerships for interpretive programs that connect Heber Dunes SVRA to the broader region, such as interpretation and education of Imperial County’s agricultural heritage and the relationship between farms and child nutrition. Consider partnerships with OHV groups, community groups, and local organizations such as the University of California Desert Research and Extension Center and the Imperial County Farm Bureau.



People from local communities frequent the park.

VUR Goal 3: Provide essential visitor and management facilities to enhance the operation of Heber Dunes SVRA and the visitor experience.

VUR Guideline 3.1: Promote opportunities to incorporate sustainability into Heber Dunes SVRA development, operations, and maintenance. Sustainability initiatives could include incorporating alternative energy and promoting energy efficiency, using reclaimed water, applying Leadership in Energy and Environmental Design (LEED) standards to new construction, and other sustainability initiatives.

VUR Guideline 3.2: Minimize greenhouse gas emissions at Heber Dunes SVRA by supporting and encouraging renewable energy powered OHV use.

VUR Guideline 3.3: Prioritize access to less-visited areas of Heber Dunes SVRA that are of low biological resource value by improving recreational opportunities in these areas first.

VUR Guideline 3.4: Establish and maintain a coordinated wayfinding program that clarifies how to access and enjoy Heber Dunes SVRA. Provide orientation and trail signs that help visitors easily understand the allowable recreational activities within the different Planning Zones.

VUR Guideline 3.5: Provide visitor use facilities that support opportunities for diverse visitor experiences, which could include a variety of OHV opportunities and other compatible recreational activities such as barbeque facilities and horseshoe pits. Locate facilities for effective and efficient visitor and staff use while minimizing use conflicts and negative effects on viewsheds and natural resources.

VUR Goal 4: Provide recreational opportunities compatible with OHV use.

VUR Guideline 4.1: Provide additional recreational and social gathering opportunities that are compatible with OHV use, such as training areas and tracks, shade structures, picnic tables, walking paths through shaded areas with interpretive programming, a children's play area, and managed camping.

VUR Goal 5: Encourage special events that are consistent with the OHMVR Division Mission and Values.

VUR Guideline 5.1: Develop partnerships with local communities to offer special events.

VUR Guideline 5.2: Actively develop partnerships with non-profit organizations or sponsors to offer special events

that feature both OHV activities and other recreational opportunities.

VUR Guideline 5.3: Coordinate with OHV clubs and nonprofit organizations to offer special events featuring OHV activities.

VUR Guideline 5.4: Use the OHMVR Division special event permit process to require appropriate traffic and safety procedures and enforcement measures for a given special event.

Interpretation and Education (IE)

Heber Dunes SVRA Interpretive Significance

Heber Dunes SVRA is capable of meeting an important local and regional need for interpretation and education. Topics for consideration are found in Section 3.2.2.

Heber Dunes SVRA Interpretive Mission

Provide educational opportunities for a broad cross-section of the public—including local communities—that address safe and responsible OHV recreation, natural history, resources, and sustainability programs. Provide OHV training programs for youth and adults.

Heber Dunes SVRA Interpretive Vision

High-quality interpretation will enhance safety and resource protection by educating the public in responsible recreation practices, and give participants enhanced enjoyment and knowledge of the history and resources of Heber Dunes SVRA.

Themes

Interpretive themes encapsulate the central messages for Heber Dunes SVRA interpretation. The unifying theme for Heber Dunes SVRA integrates the OHMVR Mission.

Unifying Theme: The history, natural resources, and recreation opportunities of Heber Dunes SVRA collectively provide a distinctive outdoor setting that is valued by both OHV enthusiasts and the broader public.



Interpretive exhibits.

Primary Themes:

- 1) Safe and sustainable OHV use in the desert.
- 2) The dunes have been shaped by natural and cultural processes that will continue to mold the dunes.
- 3) Heber Dunes SVRA's natural communities are a unique local resource.
- 4) Heber Dunes SVRA and surrounding communities have a rich history, including the agricultural heritage of Imperial County and the relationship between farming and nutrition.
- 5) Responsible conservation and sustainability practices can prevent future degradation of the environment.

IE Goal 1: Increase visitors' knowledge of and appreciation for OHV use and history, natural and cultural history, resources, and recreational opportunities of Heber Dunes SVRA.

IE Guideline 1.1: Develop youth and adult OHV training programs and supporting facilities. Provide outreach to increase visitor participation in the training programs.

IE Guideline 1.2: Interpret the history of Heber Dunes SVRA and surrounding communities, including the history and agricultural heritage of Imperial County.

IE Guideline 1.3: Provide opportunities for visitors to gain an understanding of Heber Dunes SVRA's natural resources.

IE Guideline 1.4: Interpret the diversity of recreational experiences offered within Heber Dunes SVRA.

IE Goal 2: Develop education and interpretive materials that respond to the sense of place, history, and OHV use at Heber Dunes SVRA to educate the visitor population.

IE Guideline 2.1: Heber Dunes SVRA interpretive programs should address OHV history at the SVRA and how natural processes affect the landscape.

IE Guideline 2.2: Provide a mix of interpretive and educational programs that are interactive and experiential, incorporating modern media and traditional exhibits. Expand marketing and outreach for Heber Dunes SVRA's educational programs.

IE Guideline 2.3: Provide universal access to all park visitors.

IE Guideline 2.4: Involve local community organizations and OHV organizations in the creation of interpretive programs that are attractive to Heber Dunes SVRA visitors. Provide interpretive programming in additional languages used in local

communities, such as Spanish, to ensure interpretive programs are available to a broad cross-section of visitors.

IE Goal 3: Promote outreach efforts to develop partnerships for interpretive programming and education for responsible OHV use.

IE Guideline 3.1: Expand the volunteer program and work closely with Heber Dunes SVRA volunteers to improve interpretive resources, programs, and opportunities.

IE Guideline 3.2: Collaborate with organizations such as Tread Lightly! to develop education and interpretive programming related to responsible OHV recreation.

IE Guideline 3.3: Use interpretive techniques to deliver Heber Dunes SVRA orientation information and public safety messages, such as responsible OHV use.

IE Goal 4: Expand understanding of ecological relationships and heighten awareness and sensitivity to human impacts.

IE Guideline 4.1: Provide environmental education on topics such as physical and natural resources and ecological relationships at Heber Dunes SVRA.

IE Guideline 4.2: Interpret dunes ecology and explain sensitivities to human impacts.

IE Guideline 4.3: Highlight opportunities for OHV recreationists to minimize their impacts on natural and physical resources through engaging, creative, interpretive programming and education. Seek assistance in developing creative



A fun afternoon in a sandrail.

interpretive programming from organizations such as Tread Lightly!

IE Guideline 4.4: Interpret the OHMVR Division carbon reduction goals and inspire Heber Dunes SVRA visitors to adopt similar measures in their daily lives, including OHV recreation.

Park Use and Operations (PO)

PO Goal 1: Maintain and enhance the quality of OHV recreational opportunities.

PO Guideline 1.1: Provide recreation opportunities that expand the use of Heber Dunes SVRA during weekday slow periods and during the summer “off season.” Consider extended hours during the summer to allow visitors to enjoy Heber Dunes SVRA in the early morning and late evening.

PO Guideline 1.2: Provide visitor services and products that enhance recreational experiences consistent with the PRC, OHMVR Division strategic goals and objectives, and Heber Dunes SVRA’s purpose and vision.

PO Guideline 1.3: Evaluate and implement new types of concessions to respond to regional and statewide recreation trends, demographic changes, and needs that are not being met by the private sector.



Visitors operate a variety of OHVs at Heber Dunes SVRA.

PO Guideline 1.4: Partner with organizations to enhance the OHV recreation experience with activities such as children’s recreation events, managed night use events, and OHV competitive events.

PO Goal 2: Expand Heber Dunes SVRA to enhance recreation and resource management.

PO Guideline 2.1: Acquire adjacent properties or easements from willing sellers that can enhance the recreational experience and/or resource management of Heber Dunes SVRA.

PO Guideline 2.2: Provide additional sites for events, managed camping, water features, or other visitor amenities through additional property acquisition.

PO Goal 3: Provide facilities and services that contribute to the convenience of visitors.

PO Guideline 3.1: Provide signage informing the visitor of responsible OHV recreation and extreme temperature precautions. Install or improve signage where appropriate and necessary.

PO Guideline 3.2: Ensure OHV use areas are properly maintained, where feasible, and monitor for hazards.

PO Guideline 3.3: Continue to manage Heber Dunes SVRA for informal parking to respond to OHV visitor preferences.

PO Guideline 3.4: Provide staff housing to support Heber Dunes SVRA security, emergency response, and maintenance.

PO Guideline 3.5: Work with state agencies and local communities, districts, and agencies to achieve a unified delivery of services in response to public safety emergencies.

PO Guideline 3.6: When planning new facility development or property acquisitions, address the needs for maintenance and public safety personnel, equipment, communications, and emergency vehicle access.

PO Goal 4: Provide guidance to ensure that special events are well managed and that appropriate visitor services are available.

PO Guideline 4.1: Coordinate with sponsoring organizations regarding scheduling, operating, and managing special events and ensure that any appropriate mitigation is implemented.

PO Guideline 4.2: Design and implement parking management plans to accommodate increased demand during special events.

PO Guideline 4.3: Develop alternatives for special event parking such as traffic mitigation and control plans for overflow parking on local roads.

Natural and Physical Resources (NPR)

NPR Goal 1: Manage Heber Dunes SVRA for protection of natural communities and cultural resources and the quality of the OHV recreational experience.

NPR Guideline 1.1: Identify and establish Adaptive Management Opportunity Zones where known populations of special-status native wildlife and special-status plant species are known to occur.

NPR Guideline 1.2: Utilize an Adaptive Management Process for biological resources and soil resources that incorporates the 2008 Soil Conservation Standard and Guidelines and appropriate resource management.

NPR Guideline 1.3: To the extent feasible, locate visitor-serving facilities in areas already subject to considerable disturbance or of low resource value to minimize disturbance to existing habitat areas.

NPR Guideline 1.4: Prepare and conduct surveys and inventories of natural resources in areas subject to development where sensitive biological resources are expected to occur based on monitoring efforts. These sensitive biological



Turkey vultures at Heber Dunes SVRA.

resources could include creosote scrub habitat, Western burrowing owl, or other sensitive species identified under future monitoring efforts. Use survey and inventory results to guide adaptive management decisions.

NPR Guideline 1.5: If any sensitive biological resources are found within the areas that would be affected by the proposed activities, plan and design such activities to avoid or mitigate potential impacts during construction and post-construction periods.

NPR Guideline 1.6: In the event that some disturbance to sensitive biological resources is unavoidable, appropriate measures to offset those impacts will be identified and implemented in consultation with a qualified biologist and the appropriate resource agencies.

NPR Guideline 1.7: Concentrate new trail development in areas of low habitat value. This could include existing disturbed habitat or areas of nonnative vegetation.

NPR Guideline 1.8: New trails should primarily be routed around the edges of high-quality habitat areas to avoid bisection of habitat.

NPR Guideline 1.9: Use drought-tolerant local landscaping for future projects, as feasible.

NPR Guideline 1.10: Continue to pursue best available dust-control measures, which may include watering and soil amendments.



OHV trail at Heber Dunes SVRA.

Cultural Resources (CR)

CR Goal 1: Preserve and protect significant cultural sites and features.

CR Guideline 1.1: No cultural resources have been identified within Heber Dunes SVRA through studies to date. However, if unanticipated resources are discovered within or adjacent to areas that will be affected by proposed activities, such activities will be planned and designed to avoid or minimize impacts to the identified resources.

CR Guideline 1.2: In the event that some disturbance to cultural resources is unavoidable, appropriate measures will be identified and implemented in consultation with a qualified cultural resource professional. Such measures will be consistent with all applicable rules and regulations relating to the protection of cultural resources.

4.4.2 Planning Zone Management Intent and Guidelines

The following sections provide an overview of the management intent and guidelines for each Planning Zone. All specific Planning Zone management will adhere to appropriate Goals and Guidelines, in addition to the following more specific guidelines identified in each Planning Zone. As shown in Figure 6, there are eight Planning Zones:

- Park Housing Overlay
- Entrance Use Zone
- Heber Beach Activity Zone
- Welcome Zone
- Claypan Recreational Zone
- Eastern Recreational Zone
- Dunes Recreational Zone
- Resource Management Zone



Stone retaining wall.

Park Housing Overlay (PHO)

PHO Management Intent: The Park Housing Overlay (PHO) is proposed at the northern end of Heber Dunes SVRA, overlapping both the Entrance Use Area and the Heber Beach Activity Area. Employee residence facilities in this Planning Zone would provide continuous staff presence at Heber Dunes SVRA.

PHO Guideline 1: Establish staff housing in the Park Housing Overlay to provide staff presence in the vicinity of Heber Dunes SVRA entrance.

PHO Guideline 2: Establish camp host sites to facilitate additional oversight of Heber Dunes SVRA by volunteers.

PHO Guideline 3: Minimize conflicts between staff housing and visitor facilities and activities.

Entrance Use Zone (EU)

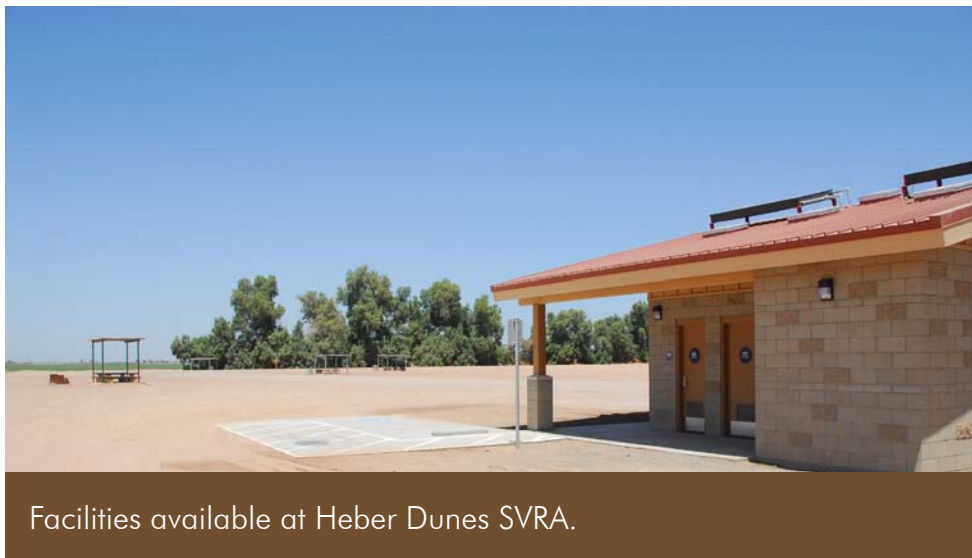
EU Management Intent: The Entrance Use Zone (EU) encompasses the main roadway into Heber Dunes SVRA and access to the Heber Beach Activity Area, Welcome Area, and Dunes Recreational Area. This area serves as the only Heber Dunes SVRA entrance. This Planning Zone would be managed to provide adequate circulation along the Heber Dunes SVRA entrance road. This area would include signage branding Heber Dunes SVRA and providing directional and responsible-OHV-use guides.

EU Guideline 1: Facilitate traffic circulation along the entrance road (Heber Dunes Road) by providing clear directional signage.

EU Guideline 2: Limit access to Heber Beach Activity Zone to specific access points to reduce potential conflict between vehicular traffic and recreational activities within the Heber Beach Activity Zone.

Heber Beach Activity Zone (HBA)

HBA Management Intent: The Heber Beach Activity Zone (HBA) is proposed in the northern portion of Heber Dunes SVRA, between the Entrance Use Zone to the west and the Eastern Recreational Area to the east. This area is characterized by a relatively flat, open area with pockets of tamarisk trees and saltbush scrub that provide shade. Currently, the area has a restroom/shower facility, shaded picnic areas, staff housing, and a staff office and workshop/tool area. HBA is primarily used by groups and families that like to use the flat, open area for novice riding. A portion of this area would be separated from other uses to create an area that includes non-OHV recreation.



Facilities available at Heber Dunes SVRA.

This Planning Zone would be managed with a focus on pedestrian mobility by limiting vehicle travel speeds and vehicular access from Heber Dunes Road to specific access points. Gathering areas and passive recreational opportunities would continue to be sited to maximize opportunities for shade. Facilities to support social gathering would be located in this area, such as single and clustered ramadas, barbeque facilities, and fire pits. Passive recreational opportunities, such as horseshoe pits and walking paths with interpretive programming, would be provided. Facilities such as a beginner's use area for adolescents and adults and a children's play area are intended to further enhance the recreational experience in this Planning Zone. Facilities to support interpretive and educational programming, such as a classroom and interpretive center, may be established in this area.

HBA Guideline 1: Separate portions of this area from other uses to create an area that includes non-OHV recreation through means such as physical barriers, signage, and/or landscaping.

HBA Guideline 2: Encourage additional recreational opportunities within this area, such as social gathering, picnicking, barbequing, and youth OHV recreation through reduced vehicle travel speeds.

HBA Guideline 3: Create additional passive recreational opportunities such as horseshoe pits, walking trails with interpretive programming, and play areas for children.

HBA Guideline 4: Install additional facilities to support recreational use of this area, such as single and clustered ramadas, barbeque facilities, and fire pits.

HBA Guideline 5: Site additional facilities and passive recreational opportunities to maximize opportunities for shade, as feasible.

HBA Guideline 6: Establish a training track designed for young and novice OHV users to gain experience, encouraging continued use of this area by families.

HBA Guideline 7: Consider adapting existing structures within this area for use as a classroom and interpretive center.

Welcome Zone (WZ)

WZ Management Intent: A Welcome Zone (WZ) is proposed between the Heber Beach Activity Zone to the north and the Claypan Recreational Zone to the south, and encompasses most of Heber Beach Road. This Planning Zone would be managed to provide a centralized location for initial visitor contact, orientation, and education. Facilities to be considered for this Planning Zone are a ranger/staff station, a maintenance facility, a visitor center, additional public restrooms, and a staging or parking area.

WZ Guideline 1: Establish this area's function as Heber Dunes SVRA's primary visitor orientation and interpretation center. Encourage visitor exploration of other portions of Heber Dunes SVRA from this area.

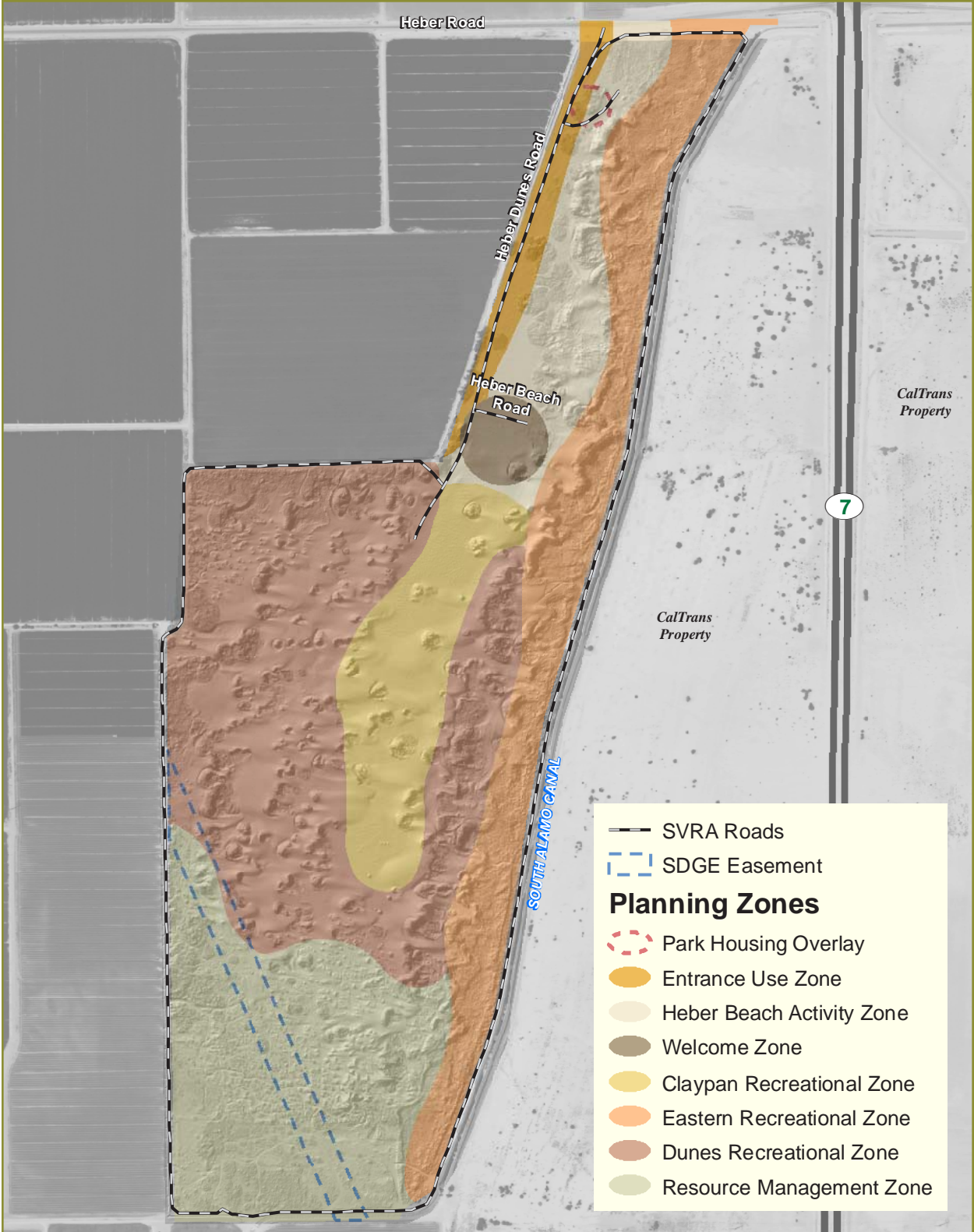
WZ Guideline 2: Provide orientation information, interpretive programs, and visitor services. Consider the establishment of facilities, such as a ranger/staff station, a maintenance facility, a visitor center, and additional public restrooms, to support these functions.

Claypan Recreational Zone (CZ)

CZ Management Intent: The Claypan Recreational Zone (CZ) is proposed in the center of Heber Dunes SVRA and is bordered by the Welcome Area to the north and the Dunes Recreational Zone to the west, south, and east. This Planning Zone would be managed to provide "open OHV use," which means that vehicular travel is not restricted to identified trails. Additional recreational and social gathering opportunities compatible with open OHV use would be considered for the CZ Zone. Individual and group picnic tables and shade ramadas would provide additional shaded gathering areas. Methods to control speed within this area would be considered.

CZ Guideline 1: Encourage continued use of this area for open OHV activity and social gathering and associated recreational opportunities.

FIGURE 6 - PLANNING ZONES



Source: California State Parks 2009; NAIP 2009



1,000 500 0 1,000 Feet

Scale: 1 = 12,000; 1 inch = 1,000 feet





Claypan recreational area.

CZ Guideline 2: Install additional facilities to support recreational use of this area as funding becomes available, such as single and clustered ramadas, barbeque facilities, and fire pits.

CZ Guideline 3: Monitor the need for speed control with respect to visitor safety within this area and examine methods to control speed.

CZ Guideline 4: Explore potential dust-control measures for this area, such as watering and soil amendments.

Eastern Recreational Zone (ER)

ER Management Intent: The Eastern Recreational Zone (ER) would be managed to provide an interesting and challenging recreational experience that capitalizes on existing topography and vegetation, primarily through the creation of new trail alignments. Existing trails may be realigned within the ER Zone.

ER Guideline 1: Provide an interesting and varied recreational experience that capitalizes on existing topography and vegetation, primarily through the creation of new trail alignments.

ER Guideline 2: Create a diversity of OHV use options by connecting new trails within this area to identified trails within the Resource Management Zone.

ER Guideline 3: Site new trails to minimize impacts to sensitive biological resources.

Dunes Recreational Zone (DR)

DR Management Intent: This Planning Zone would be managed to provide “open OHV use.” Individual and group picnic tables and shade ramadas would provide additional shaded gathering areas. Additional recreational and social gathering opportunities compatible with open OHV use would be considered for the Dunes Recreational Zone (DR).

DR Guideline 1: Encourage continued use of this area for open OHV activity and social gathering and associated recreational opportunities.

DR Guideline 2: Install additional facilities to support recreational use of this area as funding becomes available, such as single and clustered ramadas, barbeque facilities, and fire pits.

Resource Management Zone (RM)

RM Management Intent: This Planning Zone would be managed to protect natural resources while providing OHV access only on identified trails. The Resource Management Zone (RM) would emphasize visitor education and interpretation. This area has been identified as a Resource Management Zone because it contains the highest quality creosote scrub habitat and other natural resources within Heber Dunes SVRA. Rules and regulations are more restrictive in this zone than in other management areas to ensure resource protection. Efforts to enhance and restore native vegetation and wildlife habitat would be considered for this area.



Vegetation within the park.

RM Guideline 1: Minimize disturbance to creosote scrub habitat, saltbush scrub habitat, and other natural resources.

RM Guideline 2: Enhance creosote scrub habitat and other natural resources within this Planning Zone while maintaining visitor access on identified trails. Enhancement measures could include trail closure, vehicle barriers, weed control, and habitat restoration.

RM Guideline 3: Implement weed control measures where necessary to encourage recovery of degraded native habitats.

RM Guideline 4: Close secondary trails to promote soil conservation and habitat protection. Closures would target trails that duplicate routes and that are unnecessary for maintenance of the overall OHV recreation experience.

RM Guideline 5: Use identified trails to provide public access while protecting and interpreting resource values. Ensure that identified trails allow users to pass through this area to access the Eastern Recreational Zone and the Dunes Recreational Zone.

RM Guideline 6: Maintain Heber Dunes SVRA signs and other boundary identifiers that clarify the boundaries of the Resource Management Zone to minimize inadvertent OHV activity in this area. Signage should clearly indicate that the closures are intended to help protect the natural resources while still providing adequate access for OHV activities.

4.4.3 Managing Visitor Capacity

California State Parks is required to assess carrying capacity issues in drafting General Plans in order to comply with PRC Section 5019.5. California State Parks defines carrying capacity as a prescribed number and type of visitors that an area will accommodate given the desired natural/cultural resource conditions, visitor experiences, and management programs.



Visitor Management Methodology

State Parks defines Visitor Capacity Management as “A methodology used to determine and maintain the desired resource and social conditions that fulfill the purpose and mission of a park. It includes establishing initial visitor capacities, then monitoring key indicators in order to identify appropriate management actions in response to unacceptable conditions.”

An adaptive management process recognizes that management actions will have uncertain outcomes and, thus, it is important to adjust management and research decisions to better achieve management objectives. The steps that typically comprise an adaptive management process for California State Parks are presented below. Some of these steps were completed as part of the General Plan preparation process and some steps will require ongoing management, such as Steps 6 and 7.

Step 1. Identify Existing Opportunities and Constraints

Existing opportunities and constraints were documented in Heber Dunes SVRA General Plan Working Paper #2: Existing Conditions, Issues, and Opportunities, Draft Park Unit, Vision, and Goals. This working paper presents the results of initial General Plan research, which are summarized in Chapter 2 of the General Plan.

Step 2. Determine Vision and Desired Conditions

The draft vision and goals for the General Plan were drafted based on review of existing Heber Dunes SVRA issues and opportunities and other existing conditions research. The final vision and goals for Heber Dunes SVRA incorporate California State Parks staff feedback and public input.

Step 3. Identify Issues and Evaluate Alternatives

The evaluation of planning alternatives was a key step in the decision-making process toward developing a General Plan. Planning alternatives were developed to illustrate different scenarios for how Heber Dunes



ATV use is a popular activity in the park.

SVRA may evolve over the long-term. The planning alternatives were analyzed by OHMVR Division staff and the public to identify which combination of options best serves the Heber Dunes SVRA purpose and vision, the OHMVR Division Strategic Plan goals, and the public's interest in Heber Dunes SVRA's future.

Step 4. Develop Measurable Indicators and Thresholds

Key indicators that can diagnose whether the desired conditions for an SVRA are being met were developed as part of the General Plan process. These indicators are presented in Table 6 below.

Step 5. Establish Initial Visitor Capacities

California State Parks recommends that initial visitor capacities be formulated based on the analysis of existing conditions, alternative considerations, desired future conditions, and prescribed goals and objectives. Because the number of visitors Heber Dunes SVRA can support at any given time will depend on a variety of factors, Heber Dunes SVRA can be better managed through an adaptive management process, rather than by assigning a specific, quantifiable visitor capacity threshold. These factors include management actions such as operational decisions, ranger oversight practices, and natural resource management. Therefore, Heber Dunes SVRA visitor capacity is addressed in terms of desired outcomes and indicators. For example, visitor attendance could be considered within capacity if Heber Dunes SVRA receives successful assessments relative to the indicators provided below. Initial visitor capacity is presented in terms of positive indicators in Table 6.

Step 6. Monitor Use and Identify Changing Conditions

The guidelines provided below provide a framework for monitoring potential impacts or changes at Heber Dunes SVRA. The indicators identified in this section will be used to determine when an unacceptable condition exists and management actions are necessary.

Step 7. Adjust Environmental or Social Conditions

Guidelines are provided in this section regarding actions to be taken by management in the event that monitoring efforts reveal that environmental or social conditions may be approaching or exceeding thresholds.

Visitor Management (VM) Goals and Guidelines

VM Goal 1: Establish and implement an adaptive management process for managing visitor capacity at Heber Dunes SVRA in support of the purpose and vision.

VM Guideline 1.1: Consider Heber Dunes SVRA monitoring data and associated management recommendations prior to making management and improvement decisions.

VM Guideline 1.2: If monitoring efforts reveal that conditions are approaching or exceeding thresholds, management must consider alternatives and take appropriate action. Adjust management actions to direct resource and visitor experience conditions to the desired state. Potential indicators and actions presented in this plan should be updated as necessary.

4.4.4 Visitor Management Indicators

Table 6 presents goals developed specifically to address visitor management and other goals provided throughout the General Plan that will contribute to meeting the goal for visitor capacity.



Young visitor explores the park.

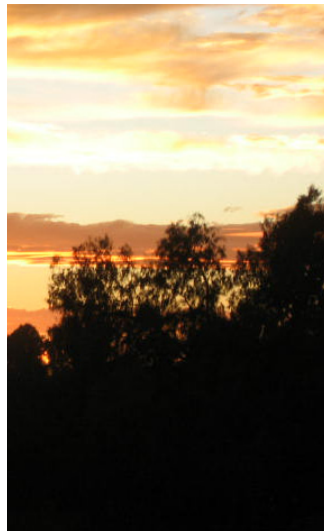
Table 6–Desired Outcomes and Indicators for Visitor Capacity

Visitor Use and Recreation	
Guideline	Provide a range of high-quality OHV recreational opportunities that a diversity of the visitors can enjoy, experience, and appreciate in a responsible manner. (VUR Goal 1)
Desired Outcome	A variety of OHV, recreational, and educational activities that enhance the appreciation and enjoyment of the park’s resources while balancing environmental resource protection needs.
Indicators	<ul style="list-style-type: none"> • Presence of returning park visitors. • Diversity of recreation activity throughout the park. • Diversity in park visitation demographics. • Conflict among park users and differing recreation activities. • Effects on park resources with increases in park visitation.
Management Actions and Monitoring Activities	<ul style="list-style-type: none"> • Implement the adaptive management process as part of park operations. • Staff observations of park resources and visitor activity during day-to-day operations. • Design facilities for user needs. • Visitor satisfaction surveys. • Evaluate new recreation opportunities, trends, and activities. • Respond to changing visitor demographics. • Implement Trail Maintenance Plan, as appropriate.

Natural Resources	
Guideline	Manage Heber Dunes SVRA for high quality OHV recreational experience and the protection of natural communities and cultural resources. (NPR Goal 1)
Desired Outcome	<ul style="list-style-type: none"> • Reasonable balance between OHV recreation opportunities vs. the protection of special-status species and native habitats. • Minimize soil erosion within key/sensitive areas such as on the edges of open OHV use areas.
Indicators	<ul style="list-style-type: none"> • Occurrence of special-status wildlife and plant species. • Active nest sites. • Presence of suitable habitat. • Abundance of prey species. • Periodic sightings reported. • Presence of associated healthy plant communities. • Lack of OHV damage to habitats and species in protected areas. • Loss of sand dune vegetation. • Change in trail difficulty and/or safety conditions due to erosion.
Management Actions and Monitoring Activities	<ul style="list-style-type: none"> • Establish and enforce trail use on identified trails that are located in areas outside of known occurrences of special-status species and habitat. • Implement Adaptive Management Measures based on information from resource management protocols. • Interpretive/educational signage and fencing in some areas to inform visitors and protect particularly sensitive areas. • Regular evaluation of condition of OHV use areas. • Identification of all factors contributing to a given erosion problem area. • Temporary or permanent closure of OHV use areas.

Cultural Resources	
Guideline	Preserve and protect significant cultural sites and features. (CR Goal 1)
Desired Outcome	Integrity and value of cultural resources retained.
Indicators	Disturbance to known cultural resources sites.
Management Actions and Monitoring Activities	<ul style="list-style-type: none"> • Survey, record, and evaluate areas of high probability for prehistoric archaeological sites. • Establish criteria of significance for each class of resource. • Investigate record and evaluate the known historic sites and areas of historic-period activity. • Staff observations of park resources and visitor activity during day-to-day operations. • Fencing and signage to prevent damage to or loss of cultural resources. • Adaptive management used to assure preservation and protection of sites.
Visitor Management	
Guideline	Establish and implement an adaptive management process for managing visitor capacity at Heber Dunes SVRA in support of the purpose and vision. (VM Goal 1)
Desired Outcome	Management actions reflect current conditions and management lessons learned.
Indicators	Updated indicators and actions for Adaptive Management Process.
Management Actions and Monitoring Activities	<ul style="list-style-type: none"> • Create checklist of actions required for successful Adaptive Management Process. • Review Heber Dunes SVRA monitoring data and associated management recommendations prior to making management and improvement decisions.

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