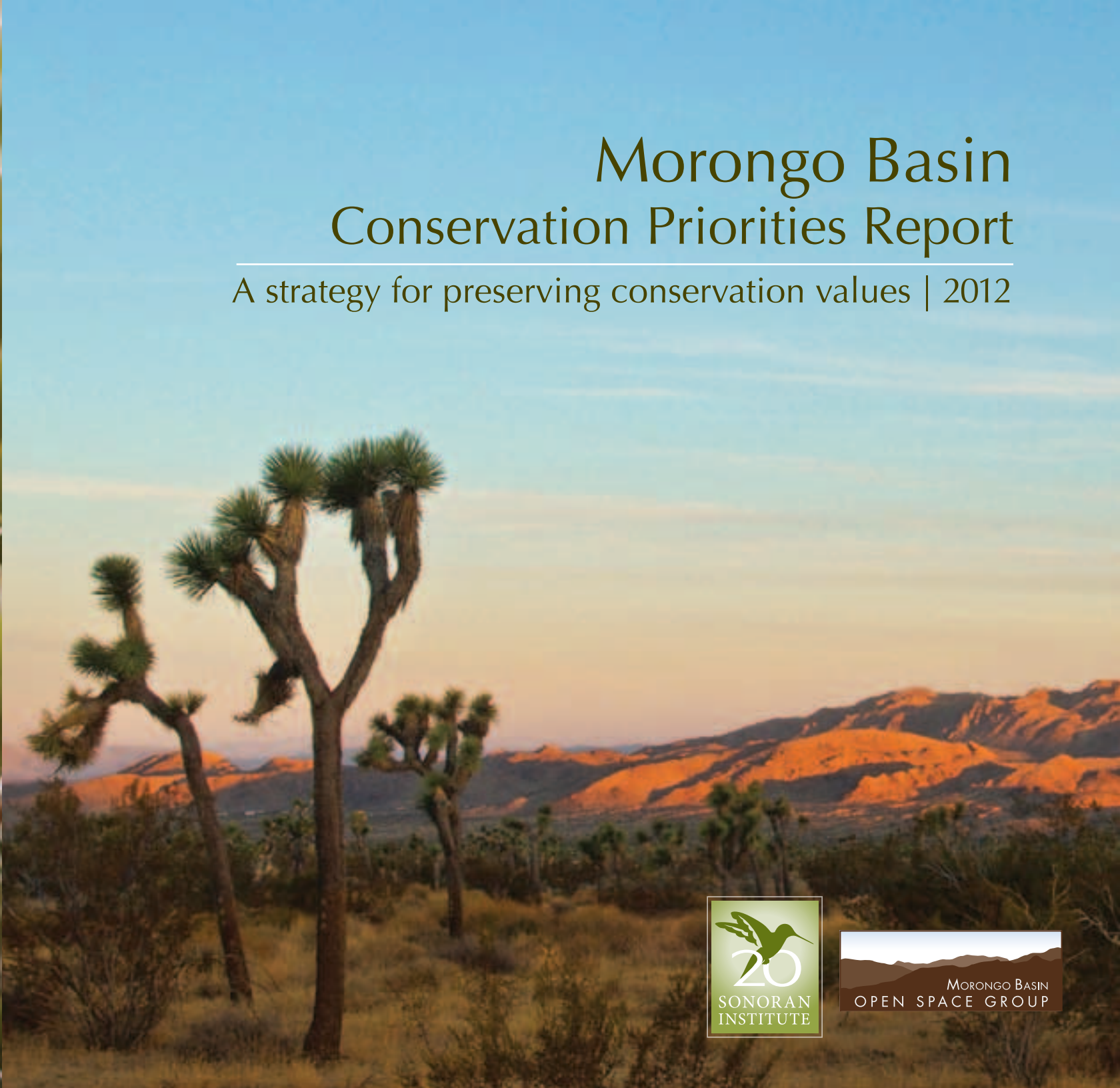


Morongo Basin Conservation Priorities Report

A strategy for preserving conservation values | 2012





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Founded in 1990, the Sonoran Institute helps communities conserve and restore those resources and manage growth and change through collaboration, civil dialogue, sound information, practical solutions and big-picture thinking.

Our passion is to help shape the future of the West with:

- Healthy landscapes that support native plants and wildlife, diverse habitat, open spaces, clean energy and water, and fresh air.
- Livable communities where people embrace conservation to protect quality of life today and in the future.
- Vibrant economies that support prosperous communities, diverse opportunities for residents, productive working landscapes and stewardship of the natural world.

The Sonoran Institute is a nonprofit organization with offices in Tucson and Phoenix, Arizona; Bozeman, Montana; Glenwood Springs, Colorado; Sheridan, Wyoming; and Mexicali, Baja California, Mexico.

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Executive Summary

Conservation Priorities for the Morongo Basin: From Community Values to Conservation Priorities

The Morongo Basin Conservation Priority Setting Project was undertaken between 2008 and 2010 as part of ongoing efforts to support the basin's long-term development and conservation. Project efforts are based on goals that originate in community values and are grounded in conservation science.

This report presents the results of the project. It is intended to serve as a resource guide to inform conservation choices and support planning activities in the basin. It is our hope that the choices and decisions made as a result of our priority setting will respect our “backyard” desert landscapes while supporting the social and economic well-being of basin communities over the long term.

Collaboration at its Best

Communities across the Morongo Basin each embrace an independent identity while sharing a sense of place and a quality of life they want to preserve and enrich. This includes open space and rural independence, opportunities for recreation and employment, and small-town character. Conservation priority setting helps to define specific areas of focus for the community's efforts at preservation. It is a process that recognizes the limitations of resources, the complexity of the available data, and the diversity of needs and concerns that must be taken into account. It is a collaborative process that aims to recognize, honor, and preserve the places that are most representative of shared values.

Morongo Basin – A Strong Sense of Place with Challenges

The Morongo Basin spans 1,400 square miles in the Mojave Desert and contains richly varied landscapes and numerous human and wildlife communities. It forms a well-defined region with a strong sense of place. The basin reaches from the San



Bernardino and Little San Bernardino mountain ranges to the west to the lower elevations of Wonder Valley to the east. The area is sandwiched by Joshua Tree National Park to the south, and the Marine Corps Air Ground Combat Center (MCAGCC) to the north. At the heart of the basin are the city of Twentynine Palms, the town of Yucca Valley, and several unincorporated San Bernardino County communities including Joshua Tree and Morongo Valley. See Map 1 on page 12. Along with ancient petroglyphs, desert springs and historic homesteaders' cabins, the area is home to threatened desert tortoises, iconic Joshua trees, and a wealth of other wildlife that depend for survival on intact natural landscapes and the room to roam. The area's attractiveness to visitors and new residents heightens the sensitivity of all these treasures to the impacts of land use decisions. Invasive plant and animal species, demands on local water supplies, and climate change put pressure on the delicate balance of the natural surroundings.

A Partnership for “Basin-Wise” Planning

Given the pace and complexity of change and the expressed need for a regional approach to considering planning and conservation, the Morongo Basin Open Space Group was formed in 2006. This planning partnership consists of local, state, and federal entities from the government, business, and community sectors. Its goal is to provide local communities and land managers with information and opportunities for dialogue to support forward-looking decisions that balance basin-wide conservation and growth.



Setting Priorities for Targeted Conservation

In 2008, the Open Space Group and the Sonoran Institute implemented a community-wide process from which emerged five conservation values that guided priority setting. Outreach included visits to local community gatherings, events, and club meetings to listen, discuss, and to gather ideas and suggestions on local community treasures. In addition, bimonthly Open Space Group meetings hosted lively discussions between planning partners and stakeholders regarding the most important commonly held values to be used in effectively planning for the long-term prosperity and conservation of the region.

The five conservation values that emerged are:

- Protecting Joshua Tree National Park
- Protecting the Mission of the Marine Corps Air Ground Combat Center
- Wildlife Connectivity and Habitat
- Maintaining Community Identity
- Protecting Community Views and Treasures

The conservation priority setting process analysis area covered more than 528,000 acres and over 62,000 parcels of public and private land across the Morongo Basin. The analysis excluded lands within the boundaries of the national park and Marine base. See Map 1 on page 12 for more detailed information. The analysis resulted in the identification of areas that have the highest conservation value and present the best opportunities for conservation, based on the criteria suggested by workshop and meeting participants. The conservation values and priorities that emerged include:

1. Protecting Joshua Tree National Park:

The health and integrity of Joshua Tree National Park is crucial to the future of the Morongo Basin. With spectacular desert scenery and over 1.3 million visitors annually, the park is a vital economic engine to the region.

The Open Space Group identified about 150,000 acres across the Morongo Basin that, if protected, will enhance Joshua Tree's ability to preserve wildlife, scenery, and natural and historic objects for the future. About 64 percent of these unprotected land parcels are public lands managed by 12 different government agencies; the remaining are private lands. See Map 5 on page 24.

2. Protecting the Mission of the Marine Corps Air Ground Combat Center:

Given its size and economic importance, the community placed a high priority on ensuring that the Marine Corps Air Ground Combat Center (MCAGCC) is able to fulfill its own mission while functioning as part of the larger basin community. About 30 percent of the land area of the MCAGCC—which covers more than 900 square miles and has a population of about 14,000—lies within the Open Space Group project area. Local land uses have the potential to substantially impact base operations.

The Open Space Group identified about 52,400 high-priority unprotected acres that, if conserved, will help ensure the base's continued mission success by buffering base operations from unintended impacts of development. The unprotected public land is almost entirely managed by one federal agency, the Bureau of Land Management (BLM). Approximately 26,000 acres of unprotected private lands are considered high priority for the base mission. Almost all of these are vacant, smaller parcels located in many instances away from existing infrastructure and embedded in the BLM-private lands checkerboard area including Copper Mountain, between the MCAGCC and the national park. See Map 6 on page 26.

3. Maintaining Wildlife Connectivity and Habitat:

Connectivity for wildlife and habitat is a key component of two of the regional planning goals identified by the Open Space Group: connectivity for people and wildlife, and protection of community values.

About 78 percent of the parcels designated as high priority for the conservation of wildlife connectivity and habitat are public lands, mostly managed by the BLM. The remaining parcels are on private land. In the Pinto Mountain and Wonder Valley areas, contiguous blocks of public land present opportunities to create large tracts of protected intact habitat. Given this pattern of land ownership, the BLM's land management choices have the potential to contribute to the preservation of wildlife connectivity and habitat in the Morongo Basin.

Most of the private parcels in the linkage design are unprotected and relatively small (averaging 6.5 acres). Given this, retaining the viability of wildlife linkages will require creative approaches, such as land swaps, to protect the corridors. See Map 7 on page 28.



4. Maintaining Community Identity:

As new residents and more visitors are drawn to the Morongo Basin, development is changing the face of the region. Community partners entered into the collaborative process seeking to maintain distinctions between the communities in the basin. This priority involved identifying the places that are important to communities in the basin and that preserve and showcase the spaces, views, and landmarks that residents associate most strongly with their hometowns.

The Open Space Group focused on the communities along State Route 62, including Twentynine Palms, Yucca Valley, Joshua Tree, and Morongo Valley. Many of the high-priority parcels are situated along State Route 62 outside community boundaries – between the communities. The western portion of Twentynine Palms along the highway is also designated high priority, mostly for its unobstructed views of Joshua Tree National Park. Given this, the city of Twentynine Palms will be a key partner in efforts to maintain the intercommunity corridors and demarcate community gateways.

Fifty-six percent of the parcels designated as high priority for this conservation value are privately owned. Those parcels located near State Route 62 are of special interest as community separators along the highway. The most important partners for planning to maintain community identities throughout the region are local jurisdictions, state transportation authorities, and, especially, large private landholders. See Map 8 on page 30.



5. Protecting Community Views and Treasures:

Central to the conservation priority setting process are answers to the questions:

What do residents treasure about life in the Morongo Basin? What do community members value? To find answers, the Open Space Group and the Sonoran Institute sought input from approximately 300 residents in the region. Key responses are detailed below.

MORONGO BASIN TREASURES: Top 5 Place Responses

1. Joshua Tree National Park
2. My backyard
3. Big Morongo Canyon Preserve
4. Pioneertown
5. Pioneertown Mountains Preserve

MORONGO BASIN TREASURES: Top 5 Responses not Shown on a Map

1. Dark night skies and stars
2. Clean and clear blue daytime skies
3. Views and vistas from and to mountains and hills
4. Rock formations
5. Clear and open ridgelines

See page 34 for a more complete listing of top places and treasures. Also, see the Community Views and Treasures map, Map 9 on page 32, for land areas deemed to be important conservation priorities.

Among the areas of highest importance for conserving community views and treasures, by land area, publicly owned lands predominate at 58 percent. By number, however, the overwhelming majority (86%) of the parcels are privately owned. Of the 1,730 private parcels in the high-priority category, just 101 have protected status.

Community Values in Action – The Opportunity:

The project identified 1,406 composite high-priority parcels, which are parcels that earned a high-priority ranking on at least two of the five conservation values considered. These composite high-priority parcels make up only two percent of all of the parcels considered, but together they occupy about one-third of the total land area. Land parcels identified as composite moderate-high priority represent about another one-third of the total land area studied in the basin.

Key characteristics of the composite high-priority parcels are:

- Larger parcels (the high-priority parcels average 134 acres in size, and the high-moderate-priority composite parcels average 15 acres; the average parcel size in the basin is still smaller, 8.3 acres).
- Often located near existing protected areas.
- Often in or near the wildlife linkage design, lands where wildlife can easily live and roam.

Protection of these parcels will lead to significant conservation benefits, including healthy ecosystems, cleaner air and water, and enhanced viewsheds for future generations, because they:

- Provide large areas of contiguous habitat and roaming area, with connections to other protected areas.
- Prevent fragmentation of existing habitat and linkage design areas.
- Represent an opportunity for improvement of their protection status. Currently, only 18 percent (249 parcels) of the high priority parcels are protected.

An example of a composite high-priority parcel with multiple conservation values for acquisition might be a greater than 320 acre parcel located in the linkage design and near or adjacent to existing protected lands, under a military air space route.

Recommended Action Steps:

Maintain a Forum and Dialogue for Regional Conservation Planning

The conservation priorities detailed in this report, along with the findings from other regional inventories and assessments, can be used to support regional conservation goals developed by the Morongo Basin Open Space Group. These products, and subsequent ones, can be a guide for local policy makers and citizens' groups to embrace specific policies, strategies, and tools that support regional conservation goals.

Continue to Buy Land for Conservation Purposes

A “fee simple” purchase, an outright purchase leading to full ownership, can be the most straightforward way to maintain a critical parcel for conservation. For example, the Mojave Desert Land Trust and its conservation partners have successfully used this strategy to conserve 2,126 acres within a key wildlife corridor in Joshua Tree, while The Wildlands Conservancy is a key conservation landowner in the western areas of the basin whose holdings include the Pioneertown Mountains Preserve. Depending on the location, this type of purchase may be appropriate for lands that may remain in private ownership as well as ones that might be transferred to public ownership.

Actively Establish Conservation Easements

Another option is to separate development rights from other rights of ownership to create a conservation or scenic easement that will be held in perpetuity by a land trust or a local government. Current landowners may choose this option over selling land in instances where they prefer to retain a stake in the land, or this may be appropriate when funds are not available for fee simple purchases but are for obtaining easements.

Support Conservation Management and Designations by Public Lands Managers

Public lands managers enjoy myriad opportunities to work collaboratively with owners and managers of adjacent lands to coordinate conservation efforts. The BLM is a major land manager in the region. Several parcels of BLM land on the northern boundary of Joshua Tree National Park have been proposed for transfer to the park, and these transfers can be supported at the local and national levels by public engagement and education. Maintaining a dialogue with the BLM and

the other public lands managers ensures a coordinated approach to protecting linkage design areas and to consolidation of publicly held lands into larger blocks of wilderness or into national monuments. This is the case with the proposed Sand to Snow National Monument. There is also an opportunity to work with the BLM and other public agencies to reclassify lands where appropriate and to consolidate lands or expedite transfers, where these actions fit with the plans and needs of local communities and jurisdictions.

Enact Incentives and Regulations for Wildlife-Sensitive Development

Local government land use policies and regulations provide the setting for on-the-ground actions to protect wildlife corridors and provide incentives for conservation-sensitive development. For example, adoption of local ordinances that allow developers more flexibility in site layout and design can reduce fragmentation of natural areas by allowing development to be clustered. With access to model ordinances and examples of successful implementation in other communities, local governments have additional resources from which to create appropriate local incentives and regulations.

Actively Pursue Alternative Funding for Conservation

Work collaboratively with local, regional, and national organizations to obtain funding for land purchases, stewardship endowments, and conservation easements. Explore funding options and programs that meet community needs and that can be supported by local ballot initiatives, including taxes, bonds, or special districts designed to meet specific conservation goals. One possibility is the establishment of a conservation district for the basin.

Thank You

The conservation priority setting project could not have been completed without financial support from The Community Foundation Serving Riverside and San Bernardino Counties, the Lincoln Institute of Land Policy, the Sonoran Institute, and Joshua Tree National Park. The Wildlands Conservancy provided funding for “The Joshua Tree–Twentynine Palms Connection,” an invaluable wildlife connectivity study, with additional funding provided by Joshua Tree National Park.



Preface

Early in her tenure as regional land use planner for the Morongo Basin Open Space Group, Stephanie Weigel traveled to Cortez, Colorado, for a conservation priorities workshop hosted by the Montezuma Land Conservancy. The workshop, based on pioneering methods developed by the conservation biologist Dan Perlman, was the first collaboration between Perlman and John Dibari and Marjo Curgus, then of the Sonoran Institute.

Weigel returned to the desert enthusiastic about the process of setting conservation priorities and the impact it could have on local conservation planning. Over the next year and a half, she and others worked to secure support for a similar endeavor in the Morongo Basin.

The Morongo Basin Conservation Priority Setting Project was undertaken between 2008 and 2010 as part of the Open Space Group's efforts to plan for the basin's long-term development and advance goals that are grounded in community values and conservation science.

This report presents the results of the project. It is offered as a resource to guide conservation choices and planning decisions that will respect our "backyard" desert landscapes while supporting the social and economic well-being of basin communities.

The authors are grateful to those already mentioned; to Kristeen Penrod and her coauthors at SC Wildlands, who developed the local wildlife connectivity studies used in the work; and to Sean Murphy of Joshua Tree National Park and Cameron Ellis of the Sonoran Institute for their GIS expertise. Special thanks are due to the Morongo Basin Open Space Group planning partners and local stakeholders, under the leadership of chair Curt Sauer, who participated in numerous work sessions, refining the answers to "What is really important?" to the Morongo Basin's treasured way of living with the desert.



COMMON MYTHS ABOUT CONSERVATION AND DEVELOPMENT

Myth	Facts
1. Conservation takes land off the tax rolls.	<ul style="list-style-type: none"> - Land trusts pay taxes, too. The Mojave Desert Land Trust paid \$29,000 in property taxes in 2011, and expects that number to increase to \$35,000 for 2012. - The federal government makes payment in lieu of taxes on conservation lands.
2. Conservation stalls development and hinders a community's economic engine.	<ul style="list-style-type: none"> - A variety of housing choices and conservation have been successfully and profitably implemented in many communities. - A well-designed, integrated community can accommodate more homeowners than a typical "cookie cutter" development, and can preserve natural areas for future generations.
3. Conservation limits a community's ability to increase its tax base and collect revenue.	<ul style="list-style-type: none"> - New development next to conserved lands generates proportionally more tax revenue. - Community services studies have repeatedly shown that new residential development costs communities more money to provide services than the residential development pays in revenue. - Open space typically contributes more to local government in revenue than it requires in services.
4. Conserved lands don't provide anything useful to a community and, if developed, could be used for higher and greater purposes.	<ul style="list-style-type: none"> - Complimentary benefits provided by conservation lands (also known as "ecosystem services") increase quality of life, protect us from flooding, and purify air and water. - The costs of creating these natural benefits when conservation lands are eliminated far exceeds the costs of maintaining these services. - In unique and scenic areas, conservation lands serve as an economic engine by attracting tourists and wildlife watchers to the area. In 2010 visitors spent over \$58 million in the national park and nearby communities, supporting over 800 local jobs. - Strategic conservation protects the mission of the Marine base, the primary source of economic activity in the basin with a payroll of \$637 million.
5. Conservation is a luxury we can't afford in today's economy, where people and local governments are struggling to make ends meet.	<ul style="list-style-type: none"> - Property values increase when open space is conserved, which increases local revenues without requiring development of services and infrastructure. - Businesses making relocation decisions often require amenities and consider quality of life issues for their employees. - Communities that offer open space, recreation, wildlife opportunities, and scenery are more likely to attract relocating or start-up businesses that contribute to the local economy.

References: "The Economic Arguments for Conservation", www.maineaudubon.org; "It Pays to Save!", www.tpl.gor/benefits



Why Set Conservation Priorities?

Open space and rural self-reliance, recreational opportunity and small-town character: communities across the Morongo Basin, together with a world-renowned national park and a Marine base with a training mission, share a place and a quality of life they want to preserve and enrich. Even in a broad and varied region where people's interests diverge and sometimes compete, all share the goal of protecting, long term, the things that we care about. This is the meaning of conservation.

There is no question that change is constant, and that development in the region will continue. But what determines the pace of change, the nature of development? How can it be influenced by choices made purposefully by those whose lives it will affect? And how can all who have a stake in the basin's future be empowered to participate?

Conservation priority setting is designed to address those questions by defining specific areas of focus for the community's efforts at preservation. It is a process that recognizes the limitations of resources, the complexity of the available data, and the diversity of needs and concerns that must be taken into account. It is a collaborative process that aims to recognize, honor, and preserve the places that are most representative of shared values. It also recognizes that conservation and development

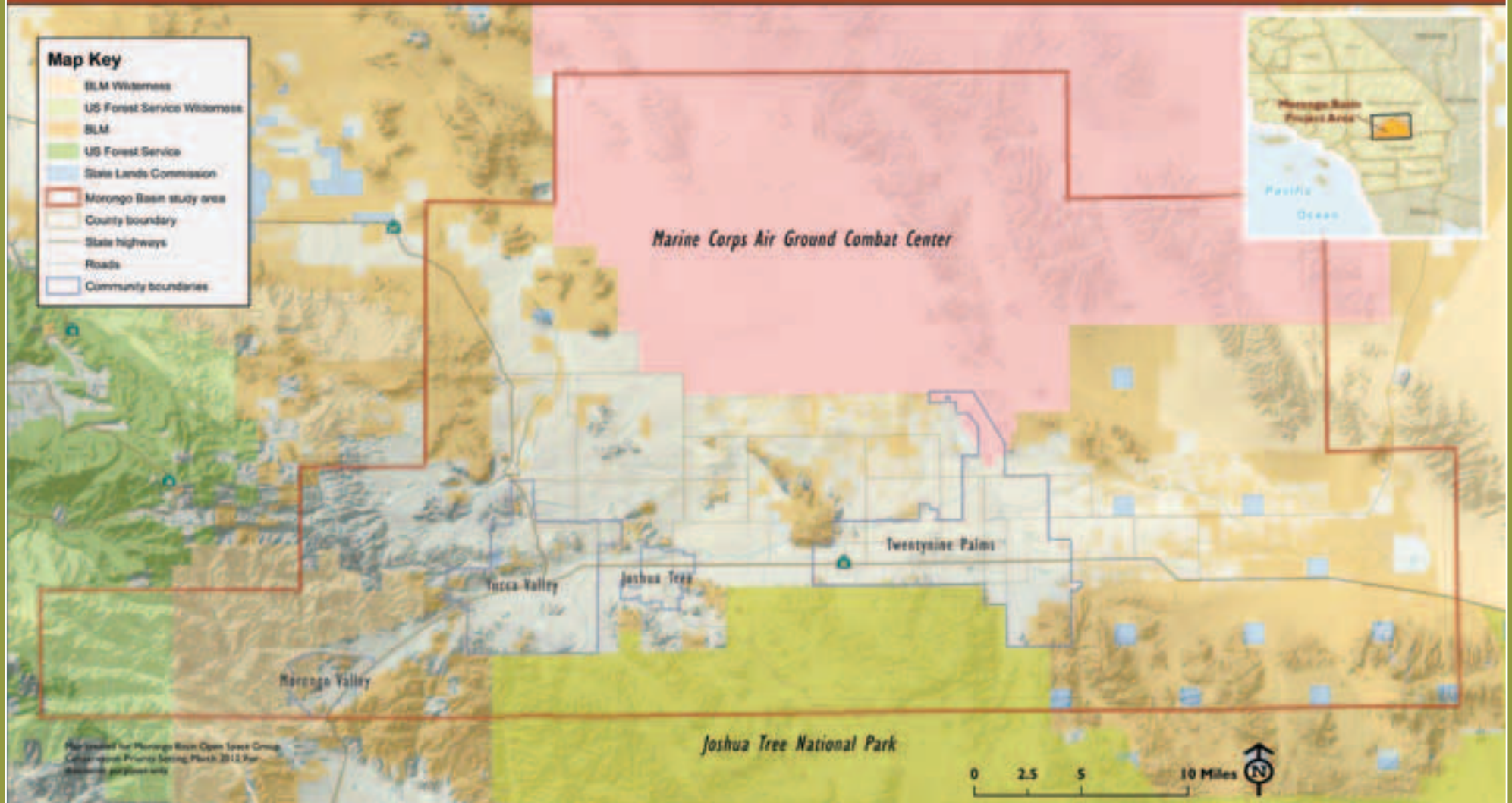
are not necessarily at odds, and can complement each other to build healthy economies (see "Common Myths about Conservation and Development on page 10).

The first step in the conservation priority setting process is to bring people together so they can articulate and share their views about what is important to conserve. The next is to distill their contributions into a practical set of goals for regional conservation. The next step is complex: translating those goals into identifiable values that can be named, discussed, and described in terms of features—the traits that can in turn be mapped and measured as they apply to actual parcels of land. What makes conservation desirable for a given piece of land; what makes it feasible? The remaining piece of the process includes all of the analysis—of geography, ownership status, and present uses—that allows the resulting information to be turned into practical tools for planning and decision making.

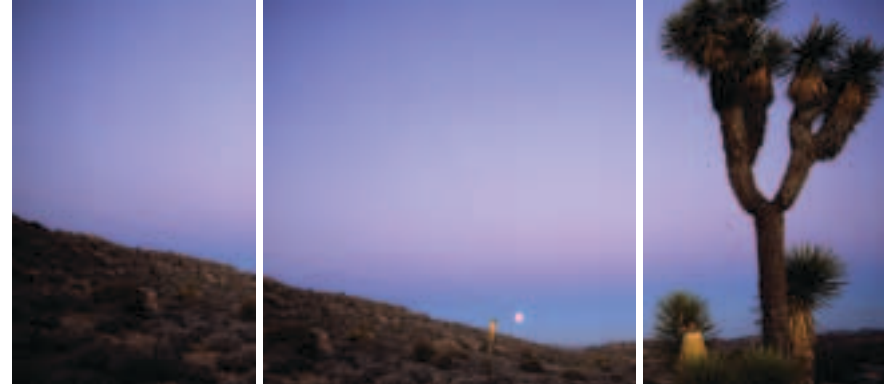
Equipped with this kind of knowledge and insight, residents and visitors are much more effective stewards and neighbors, able to create solutions that work for themselves, their communities, and the entire Morongo Basin region.



Morongo Basin Project Area



The Morongo Basin



2

The Morongo Basin spans 1,400 square miles in the Mojave Desert and contains richly varied landscapes and numerous human and wildlife communities, yet it forms a well-defined region with a strong sense of place. The Mojave's extremes of climate have created a fragile landscape of subtle beauty and majestic vistas that is treasured by those who live, work, and visit here. Dark night skies; desert plants, birds, and other wildlife abounding in wilderness areas and backyards alike; an independent spirit that reflects the area's past, from the Serrano and Cahuilla Indians to the prospectors and homesteaders of the nineteenth and twentieth centuries—these are the natural and cultural values that unite the basin's communities and give focus to conservation planning efforts.

The basin reaches from the San Bernardino and Little San Bernardino mountain ranges to the west, which rise above 3,500 feet, to the lower elevations of Wonder Valley to the east at about 1,400 feet. Its southern portion is occupied by the northern boundary area of the spectacular Joshua Tree National Park, and much of its northern portion by the world's largest U.S. Marine base, the Marine Corps Air Ground Combat Center (MCAGCC). At the heart of the basin are the city of Twentynine Palms, the town of Yucca Valley, and several unincorporated San Bernardino County communities including Joshua Tree and Morongo Valley.

Along with ancient petroglyphs, desert springs and oases, and historic mine remnants and homesteaders' cabins, the area is home to threatened desert tortoises, iconic Joshua trees, and a wealth of other wildlife that depend for survival on intact natural landscapes and the room to roam. Across the arid basin, desert washes drain water from the mountaintops to the valley floor and provide the spaces and corridors where native plants and animals live and travel. These crucial habitat linkages, uniting the Morongo Basin and connecting it to the wider Mojave Desert and beyond, are at the core of conservation planning throughout the region.

The area's attractiveness to visitors and new residents heightens the sensitivity of all these treasures to the impacts of land use decisions. The spread of invasive plant and animal species, impacts on local water supplies, and the unpredictable effects of climate change all put pressure on the delicate balance of the natural surroundings. This is why the Morongo Basin Open Space Group is pursuing an innovative approach to supporting planning for growth across the region—one that maximizes community participation, makes the most of community values like the entrepreneurial ideal and the enjoyment of desert landscapes, and results in the development of workable strategies for the continued development of a strong and sustainable regional economy.



ONE OF THE MOST IMPORTANT CONSERVATION PRIORITIES of the Morongo Basin is watershed protection. Water is a necessity to life and, without it, all other conservation strategies are moot. Due to minimal rainfall, most of the desert environment is dependent on the available stores of water underground called aquifers. Because aquifers seldom coincide with any particular political or geographical boundary, these resources are often shared by more than one community. With extremely limited rainfall and a growing population, these desert aquifers are likely to experience declines over time. A regional approach to conservation offers our best chance to develop community-based guidelines and strategies of sustainable watershed-based management for this most limited and precious of resources – our region’s water.

The Morongo Basin Open Space Group would like to thank participating federal, state, county, municipal and non-governmental organizations, and citizens of the Morongo Basin for their help and cooperation during the research and development of this report.



A Regional Vision for Stewardship: The Morongo Basin Open Space Group

Given the complexity of conservation interests and the multitude of responsible agencies across the basin, preparing for the future of the basin-wide community calls for an inclusive and collaborative approach to regional planning for development and conservation.

To respond to that need, the Morongo Basin Open Space Group (MBOSG)—a planning partnership of local, state, and federal entities from the government, business, and community sectors—was formed in 2006. The group’s aspiration was to work together to provide local communities and land managers with the information and support they would need to make informed and forward-looking decisions about conservation and growth issues that affect the entire basin.

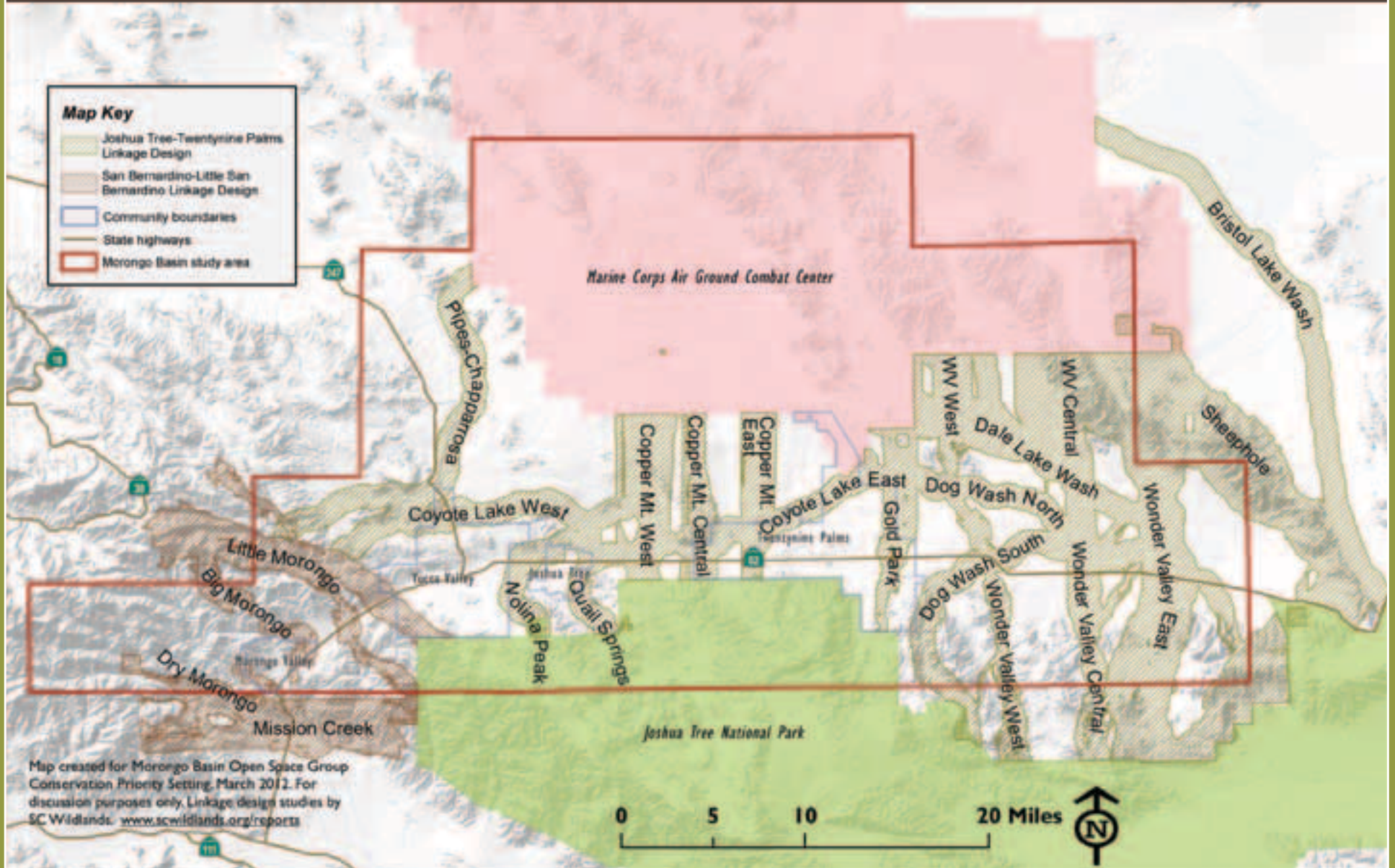
By August of 2007 the MBOSG was meeting regularly and had developed an operating agreement that outlined its purposes and processes. The following spring, with financial backing from The Community Foundation Serving Riverside and San Bernardino Counties, the Sonoran Institute hired a regional land use planner to support the Open Space Group’s work. The addition of a full-time staffer with expertise in planning, spatial analysis, meeting facilitation, and outreach has enabled the Open Space Group, with its planning partners, to engage the community in collaboratively developing resources that inform planning on a regional scale.

The economic recession has presented special challenges to the communities of California’s Inland Empire as the engine of growth has slowed. But challenge can be turned to opportunity, and the planning partners have worked hard to take advantage of the lull in development to lay the groundwork for smarter growth. Since 2008 the MBOSG has conducted outreach exercises to identify cherished community treasures, worked to integrate connectivity for people and wildlife into local plans and projects, and built the capacity of all stakeholders to understand and address the issues surrounding land use and conservation planning. By providing a context for interaction in which all are welcome to have a voice, the group has fostered the identification of shared interests, or community values, and made them the basis of a framework for “basin-wise” conservation planning.



The MBOSG is guided by four broad goals for regional planning: maintain buffers and separators; enhance connectivity; promote community values; and protect water quality and quantity. Having these planning goals in place streamlined the agenda for setting conservation priorities. Agreed-upon goals allowed the Open Space Group to implement an inclusive process of analyzing just what it is about a given place that makes it important to conserve; from that process emerged the five conservation values that guided priority setting.

Morongo Basin Wildlife Linkage Design Branches



Regional Planning Goals

BUFFERS and SEPARATORS

Use community separators to maintain the distinct community identities of Joshua Tree, Yucca Valley, and Twentynine Palms.

Protect the mission of Joshua Tree National Park by promoting compatible adjacent land uses.

Prevent encroachment on federal and private lands that would jeopardize the mission of the Marine Corps Air Ground Combat Center (MCAGCC) in Twentynine Palms.

CONNECTIVITY

Protect and enhance wildlife movement between MCAGCC, Joshua Tree National Park, and the San Bernardino Mountains and National Forest.

Create a regional trails and open space network.

COMMUNITY VALUES

Create opportunities for economic vitality and development compatible with conservation.

Support the missions of the county, city, and town.

Preserve the basin's quality of life by preserving and protecting corridors and habitats, dark night skies, and community identity.

WATER QUALITY AND QUANTITY

Protect the watersheds, washes, and associated natural processes.

Protect native groundcover and enhance natural infiltration.



WHAT IS CONNECTIVITY ALL ABOUT?

Since its beginnings, the Open Space Group has included connectivity for wildlife and people as a key regional planning goal. The vision of a regional trails and open space network—providing room for wildlife to roam and a system of established trails where residents and visitors can experience the basin's "desert backyard"—has found its way into several local planning efforts. This network is based upon two wildlife linkage design studies produced by Science and Collaboration for Connected Wildlands (SC Wildlands), a nonprofit organization dedicated to ensuring functional habitat connectivity.

"A Linkage Design for the San Bernardino–Little San Bernardino Connection" covers western portions of the Morongo Basin and was developed as part of the larger South Coast Missing Linkages Project. For the remainder of the basin, MBOSG planning partners commissioned the development of "A Linkage Design for the Joshua Tree–Twentynine Palms Connection."

Each study used input from experts on local flora and fauna to develop a diverse list of focal species. These are species that would be impacted by loss or fragmentation of their habitats and that, taken together, serve to represent the needs of the full range of species found in the area. By considering the focal species and their requirements with respect to elevation, vegetation, topography, and road density, SC Wildlands developed maps—the linkage designs—that delineate the land areas that can best accommodate all of the focal species living in or moving through the basin. Each linkage design is composed of several branches (see Map 2 on page 16) that accommodate different focal species.*

Meanwhile, the Open Space Group has compiled information about existing trails and local aspirations for a basin-wide trails network. The city of Twentynine Palms has recently partnered with the National Park Service Rivers, Trails, and Conservation Assistance Program and the MBOSG to develop a Master Trails Plan. It will include connections to the park, the base, and adjoining county areas. San Bernardino County's Special Districts Department has proposed an educational trails system for the Desert View Conservation Area in Joshua Tree. These and other existing trails networks, including the Pacific Crest Trail as it crosses through the San Bernardino mountains, present excellent opportunities to build connectivity across the basin by establishing a network of open space and trails.

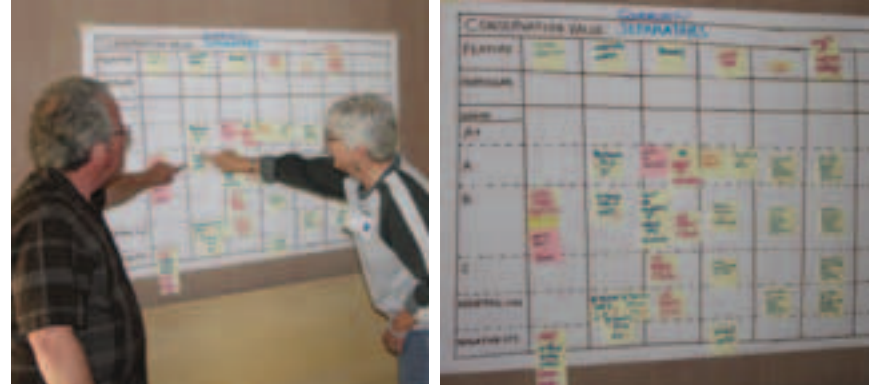
**These studies were produced by Kristeen Penrod and coauthors at SC Wildlands between 2005 and 2008 and have been invaluable in informing regional conservation planning for the Morongo Basin. Both the city of Twentynine Palms and the town of Yucca Valley are considering the linkage design maps as they update their general plans.*

Morongo Basin Open Space Group Conservation Priority Setting

Conservation Values with Features

Park Mission	MCAGCC Mission	Wildlife Connectivity & Habitat	Community Separators	Community Views & Treasures
<ul style="list-style-type: none"> • Location – Proximity to Park • Location – Linkage Design • Habitat Quality – Road Density • Habitat Quality – Riparian Habitat • Size of Parcel • Shape of Parcel – Perimeter Contiguous with Park • Parcel Suitability for Development – Zoning Class • Adjacent Property Use and Plans – Zoning Class • Development Pressure – Existing Proposals • Species Preservation 	<ul style="list-style-type: none"> • Location – Proximity to Base • Size of Parcel • Current Land Use – Improvements • Development Potential – Ownership • Species Preservation • Location and Geography – Airspace/ Air Corridors and Adjacency • Parcel Assessed Value 	<ul style="list-style-type: none"> • Linkage Design • Location & Proximity • Impediments to Connectivity • Threatened – Proposed Development, Energy Proposals • Streams • Barriers – Potential Crossings • Size of Parcels • Species Preservation 	<ul style="list-style-type: none"> • Visual Quality • Separates Communities • Proximity • Land Use – Current Zoning • Size of Parcel & Ownership • Length of Highway Frontage & Ownership 	<ul style="list-style-type: none"> • Iconic Places • Land Ownership • Dark Night Sky • Iconic Views • Ridgelines • Scenic Highway/Byway • Community Defined Scenic View Areas

Conservation Priorities



The Morongo Basin Conservation Priority Setting Project was undertaken by the MBOSG and the Sonoran Institute to identify the areas that combine high conservation value with promising conservation opportunity, and to strategize the most effective ways to protect those priorities.

Defining Conservation Values

To focus the work of identifying conservation priorities for the basin, the Sonoran Institute facilitated a half-day pre-workshop, followed by a two-day workshop, and several follow-up working sessions. Building on earlier work that defined common interests and regional conservation goals, the participants proposed values to be used in ranking locations according to their importance for conservation. They then developed an initial matrix (a large wall chart) for each of the proposed conservation values. The charts (an example is shown above right) ranked the various aspects of each value—its features—in order of importance, and then defined particulars for each feature—the details about that feature that are attached to a specific place.

The initial workshops were followed up with working-group meetings to refine the charts; the results of those meetings were summarized in the table shown on page 18 of the five conservation values and their defining features. It should be noted that some issues of concern are essentially not able to be mapped, so those types of features were not included in the analysis. Information about the features (and their particulars) that could be mapped was entered into a geographic information system (GIS), then used to produce maps and ownership analyses of the priority areas for each of the conservation values. The results were thus based on input gathered at meetings involving community members and local experts in 2008-2009, and were generated using the best available data at that time. The features identified for each of the conservation values are explained in appendix A.

The Lay of the Land

The entire Morongo Basin project area, covering more than 870,000 acres, includes over 64,000 parcels of public and private land. Within the boundaries of the planning area, 30% of the land is encompassed by the Marine Corps Air Ground Combat

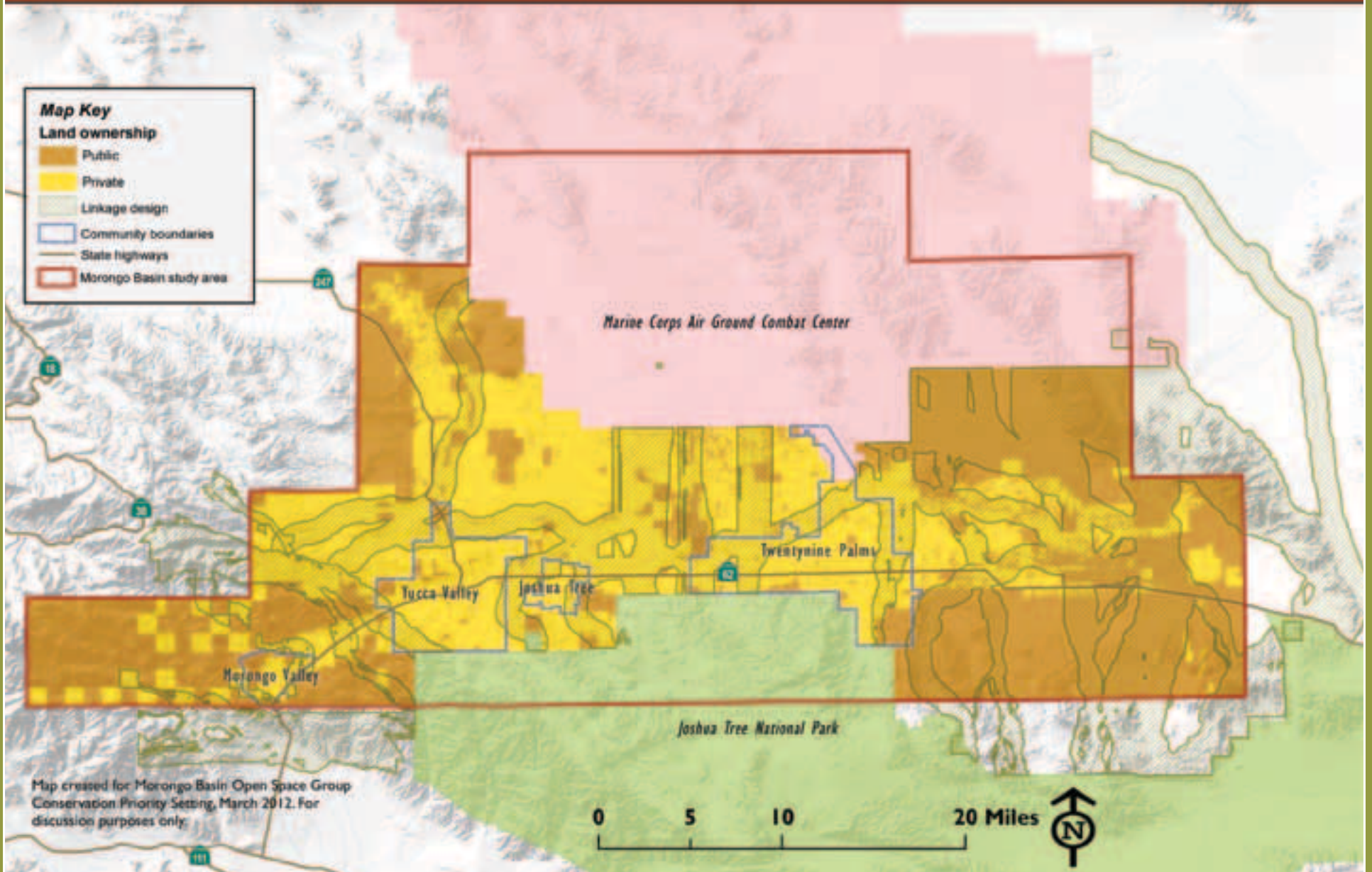
Center and 8% by Joshua Tree National Park; those lands were not included in the conservation priority setting analysis. Of the land area that was included—consisting of 62,416 parcels—43% is privately owned and under local jurisdiction, and nearly half (47%) is public land overseen by the Bureau of Land Management.

Each parcel of land analyzed was assigned to a “protected” or “unprotected” category. By area, about a quarter of the lands are protected; the majority of that protected area is public land. In fact, 65% of the land that is currently protected falls under BLM management, including the Big Morongo Canyon Preserve and BLM wilderness areas. This breakdown underlines the importance of working with the BLM, especially with regard to the smaller and more scattered parcels in its “Unclassified” land use class. (Unclassified parcels are managed on a case-by-case basis, so are not necessarily protected from development incompatible with conservation goals.)

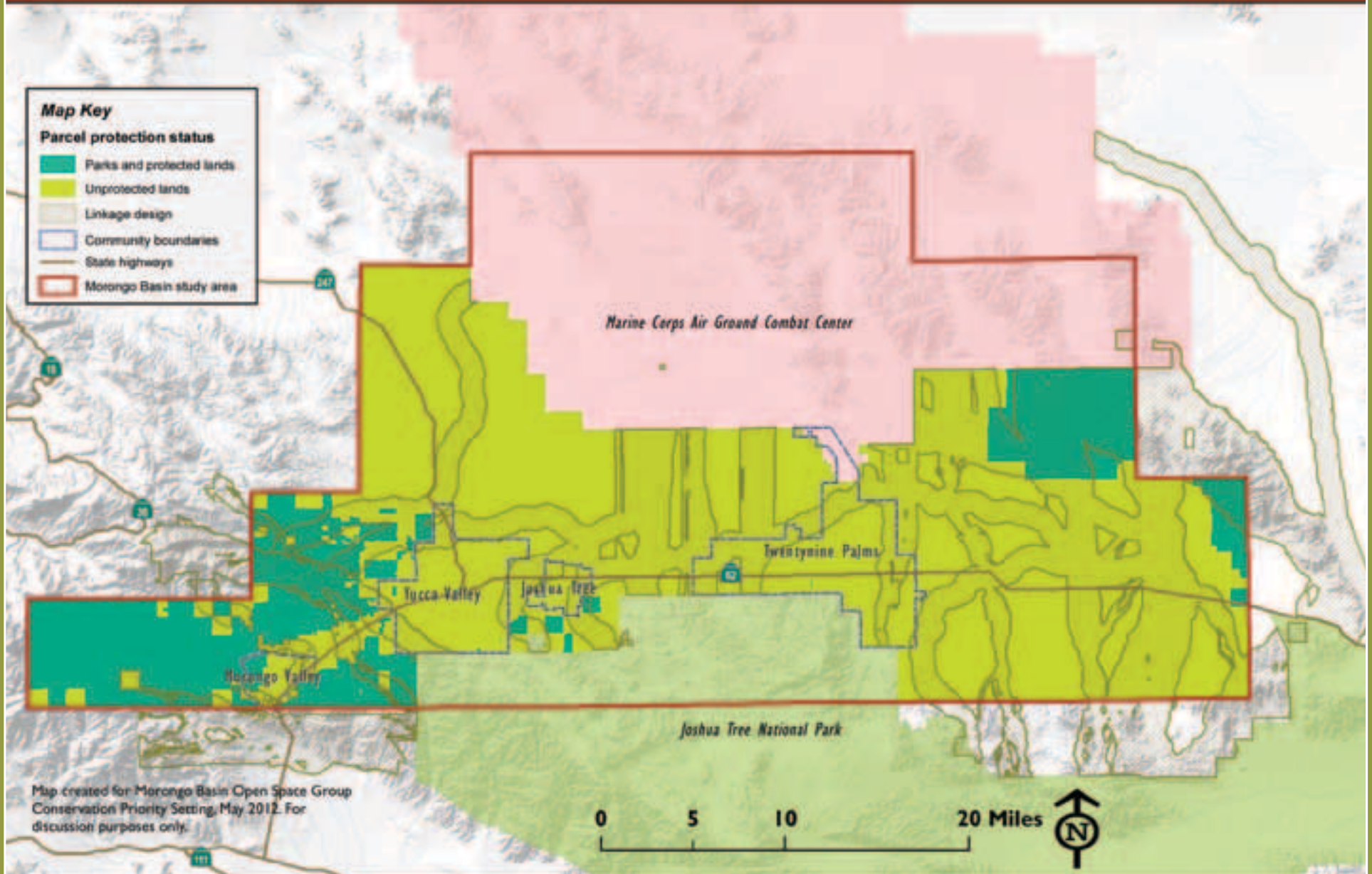
In general, conservation efforts should build on lands that are already protected. Both for economic reasons and scientific ones, it is far more effective to extend protection to a wider area than to create isolated conservation “islands.” Therefore a regional strategy for preserving connectivity and open space will also consider the status of private lands adjacent to BLM lands; where plans for private land conservation are in place, a better case can be made for reclassifying BLM lands to increase protection.

The notable exception to the public status of protected lands is the more than 25,000 acres of private land held by The Wildlands Conservancy (TWC), which encompass about 18% of the protected lands in the Morongo Basin. The Wildlands Conservancy is a private nonprofit organization that purchases lands outright and stewards them for conservation in perpetuity. TWC was the original sponsor of the SC Wildlands linkage design study for the Joshua Tree–Twentynine Palms connection. Another local conservation organization, the Mojave Desert Land Trust, is focusing resources on purchases of national park and designated wilderness inholdings, adjacent private lands, and parcels located within wildlife corridors. The Trust then transfers the lands to public ownership and management, but retains the responsibility of monitoring to make sure they keep their status as conservation lands.

Morongo Basin Public & Private Lands



Morongo Basin Protected & Unprotected Lands



BLM Land Use Classes

Bureau of Land Management parcels in the Morongo Basin are assigned to one of several “multiple use” classes. The classification determines the allowable types and intensities of uses under the BLM’s 1980 California Desert Conservation Area Plan, as amended by the West Mojave Plan.

BLM multiple use classes from the West Mojave Plan:

BLM Controlled — Includes designated wilderness areas and areas “primarily recommended for wilderness” by Congress

BLM Limited — Managed for lower-intensity, controlled multiple uses that protect natural, scenic, ecological, and cultural resource values

BLM Moderate — Controlled balance between higher-intensity use and public lands protection. Allowed uses include energy and utility development

BLM Intensive — Concentrated use of lands and resources to meet human needs

BLM Unclassified — Scattered parcels of land managed on a case-by-case basis

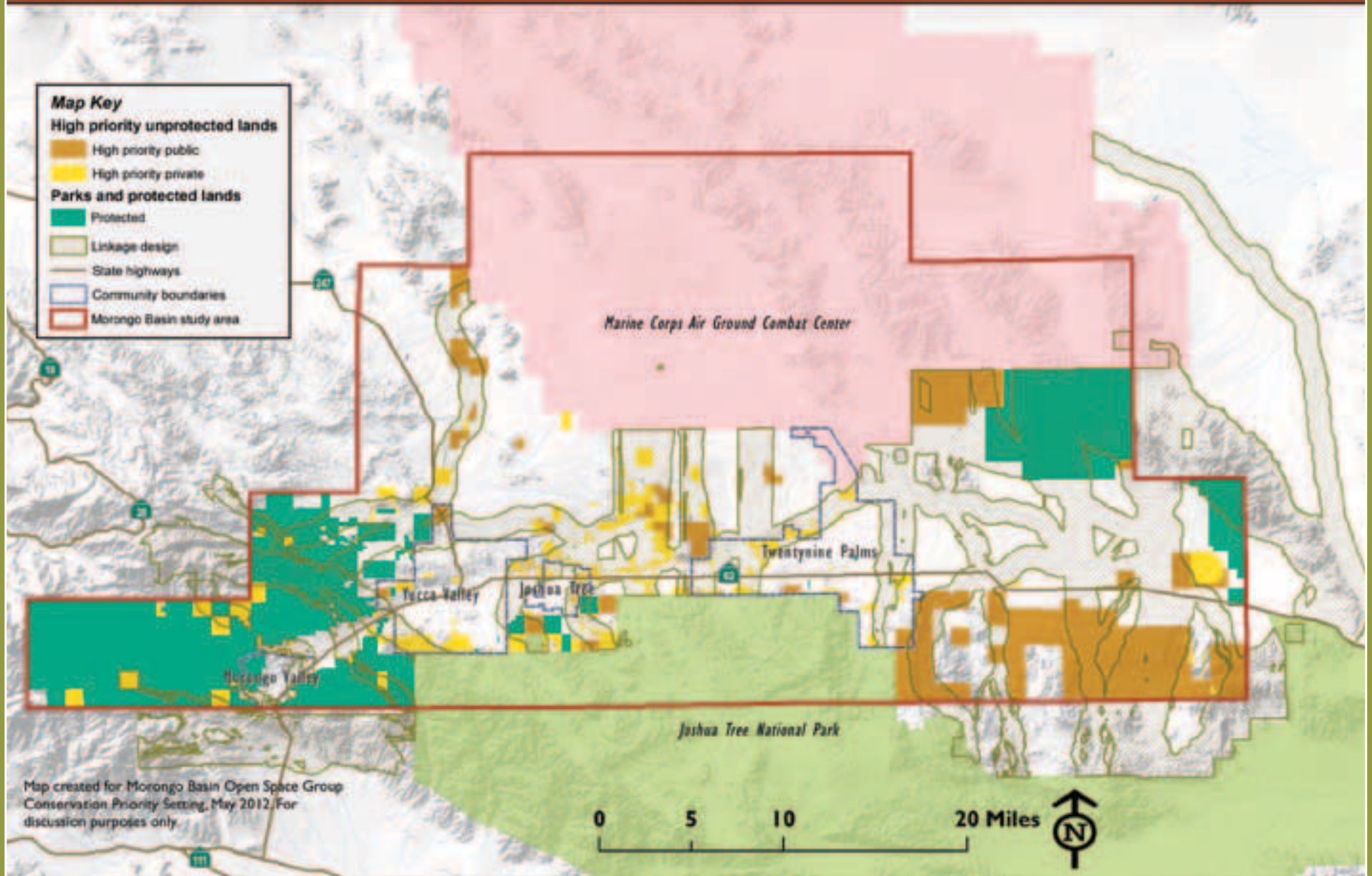


PROTECTION STATUS	
PROTECTED	UNPROTECTED
Private lands in conservation status (The Wildlands Conservancy, Mojave Desert Land Trust)	Private lands not in conservation status
BLM multiple use class Controlled (includes wilderness)	BLM multiple use classes Limited, Moderate, Intensive, or Unclassified
Big Morongo Canyon Preserve Area of Critical Environmental Concern, pending legislative protection via California Desert Protection Act of 2011.	Public lands not managed for conservation
U.S. Forest Service	Tribal lands
San Gorgonio Wilderness (BLM and U.S. Forest Service)	
Local parks and protected space	

The remainder of this section discusses the five conservation values the Open Space Group used to determine priority areas and summarizes the findings for each one. The features defined by the working groups for each conservation value (listed on page 18, and more completely described in appendix A) were used in the analysis to generate summary scores that were used to categorize land areas as high, moderate or lower priority. More detailed information about the ownership and protection status of high-priority areas can be found in appendix B.



Considerations for the Protection of Joshua Tree National Park Mission



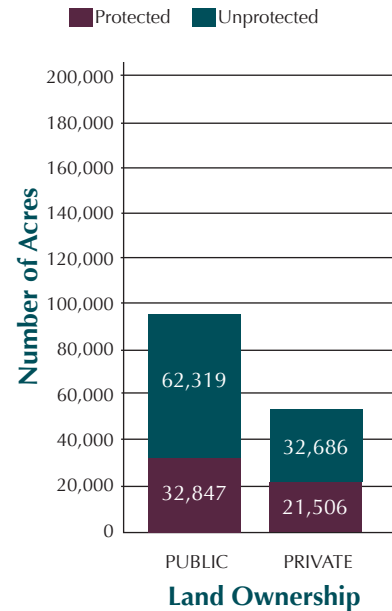
Protecting Joshua Tree National Park

The mission of Joshua Tree National Park is crucial to the health of the Morongo Basin. By safeguarding fragile landscapes, wondrous geologic formations, and critical watershed features like its five fan-palm oases, the park contributes directly to the quality of life for basin residents: community treasures like dark night skies, abundant wildlife, and spectacular scenery are enhanced and protected when a national park is a neighbor. But equally important is the economic impact of a destination that attracts 1.3 million visitors a year and supports more than 665 local jobs. Many residents work outside the area to support their households; the \$32 million in visitor spending that Joshua Tree National Park brings to Yucca Valley, Joshua Tree, and Twentynine Palms serves to keep jobs and spending at home in the basin.

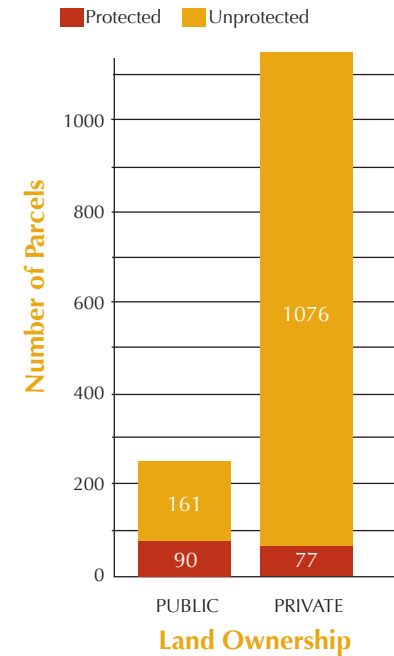
Although the park has the capacity to manage the resources within its boundaries, activities and development on adjacent lands and throughout the basin have significant impacts on the success of its mission. For example, while the park itself provides connectivity for animal and plant life across the southern California desert region, the viability of park wildlife in turn depends on the maintenance of linkages between the park and other natural areas distant from its borders. Industrial developments proposed for the southern boundary of the park, including a garbage dump and facilities for water extraction and solar power production, would affect park resources such as water quality and quantity, viewsheds, wildlife habitat and connectivity, and dark night skies. Residential developments on both the north and south boundaries of the park, if not designed specifically to avoid such problems, can impair park managers' ability to control invasive plants and threats of fire. Fire hazard awareness is necessary on both sides of the boundary. The park's eastern boundary is vulnerable to the impacts of off-highway vehicle use, which is permitted on some adjacent BLM-managed and privately held lands.

The Joshua Tree National Park mission map identifies those areas across the Morongo Basin that, if protected, will enhance the park's ability to preserve wildlife, scenery, and natural and historic objects over the long term. Of those areas, about 150,000 acres have been identified as critical to the park's mission. Conservation actions will focus on the priority parcels that are currently unprotected—nearly two-thirds of the total. Protection of larger BLM-managed parcels adjacent to already protected lands (including park land, BLM wilderness, and TWC preserves) can contribute substantially to the national park's ability to carry out its mission. Some of these lands are included, for possible transfer to the park, in proposed federal legislation known as the California Desert Protection Act of 2011. High-priority parcels for this value that are located in linkage design areas afford the opportunity for multiple conservation benefits: their preservation will strengthen the national park while improving connectivity and habitat for wildlife.

PARK MISSION High-Priority Acres



PARK MISSION High-Priority Parcels

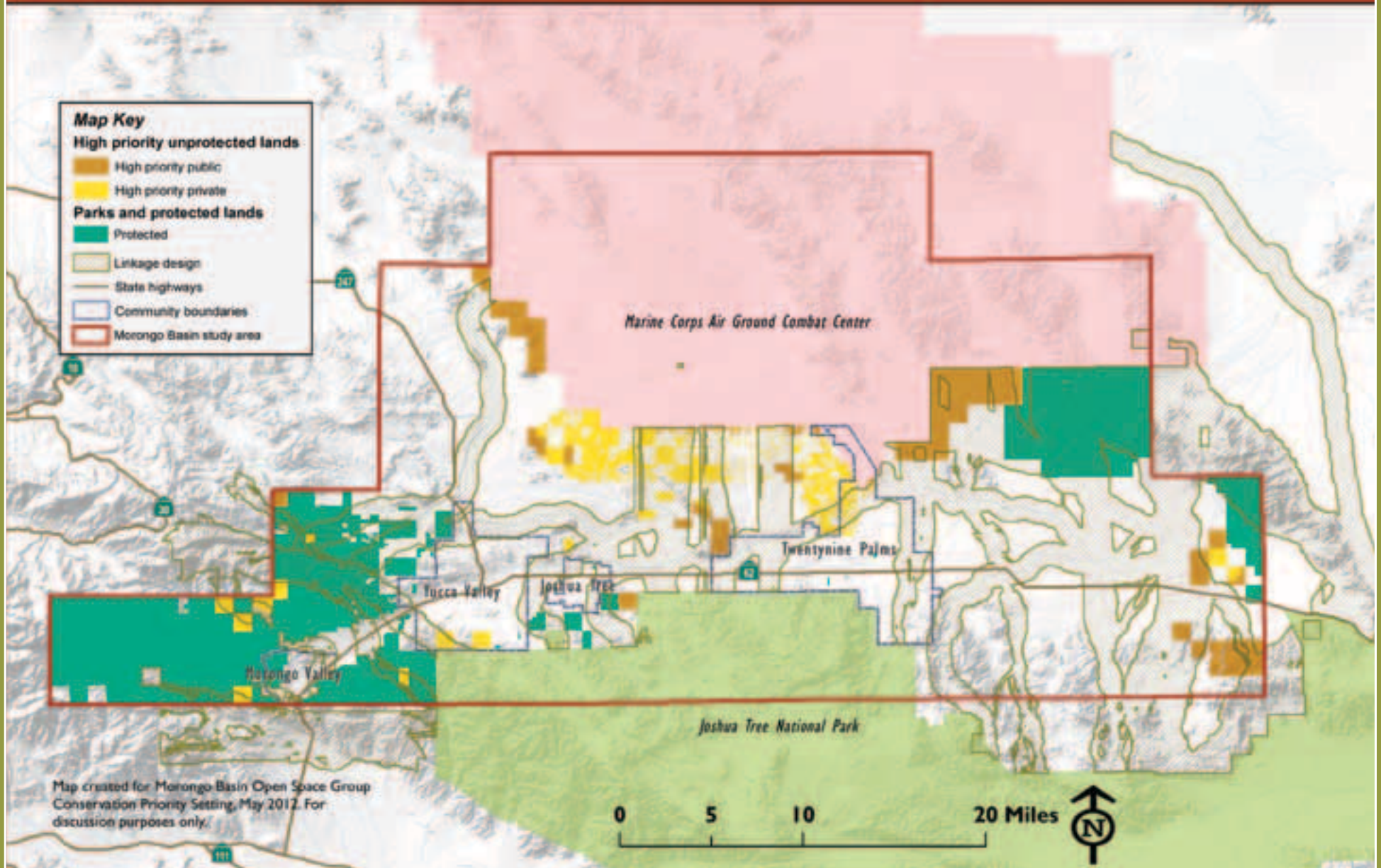


Because the value of Joshua Tree National Park to the basin comprises economics, conservation, recreation, and overall quality of life, the work of supporting its mission is an especially fertile ground for partnerships between conservationists, landowners, businesspeople, local governments, and federal agencies—all of whom have a stake in the park's success.

A uniquely diverse array of plants and animals make their home in Joshua Tree National Park, where three distinct California ecosystems overlap. The biological richness of this site, where the Colorado and Mojave deserts meet the high pinyon and juniper forest of the San Bernardino and Little San Bernardino mountain ranges, was the key to its designation in 1936 as a national monument. The park has a stark and subtle beauty that may not reveal itself to the uninitiated highway passerby, but local residents know that its mission is crucial to the health of the Morongo Basin.

The National Park Service preserves unimpaired the natural and cultural resources and values of the national park system for the enjoyment, education, and inspiration of this and future generations. The Park Service cooperates with partners to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world.

Considerations for the Protection of MCAGCC Mission





Protecting the Mission of the Marine Corps Air Ground Combat Center

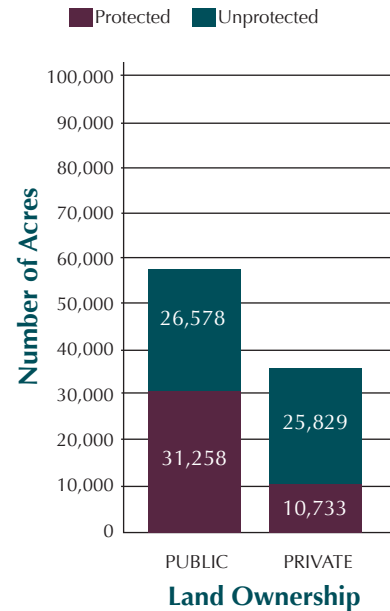
The Marine Corps Air Ground Combat Center at Twentynine Palms (MCAGCC), covering more than 900 square miles and with a population of about 14,000, must play a key role in any comprehensive planning for the Morongo Basin. A large portion of MCAGCC lies within the Morongo Basin Open Space Group’s project area, occupying about 30% of it, and its occupants represent a sizable portion of the local economy. One of the most important goals identified by the planning partners is to ensure that the Combat Center is able to fulfill its own mission while functioning as part of the larger basin community.

The mission of the Marine Air Ground Task Force Training Command at MCAGCC is to conduct relevant live-fire combined arms training, urban operations, and Joint/Coalition level integration training that promotes operational forces readiness as well as to provide the facilities, services, and support responsive to the needs of resident organizations, Marines, sailors, and their families today and tomorrow.

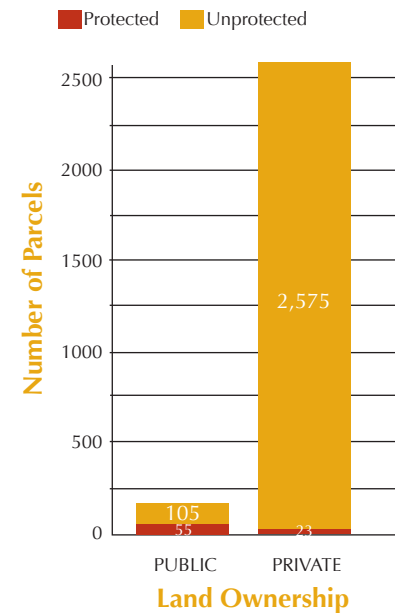
Perhaps less well known is that MCAGCC is an established and active conservation partner. The goals of military installations across the United States include conservation and responsible land stewardship: to carry out its mission of training and force readiness, a base relies on those characteristics of its geographic setting that drove the decision to locate there. Incompatible land uses in nearby areas can impair operations, and in extreme cases have even forced military installations to close. In the past decade the Department of Defense has worked proactively with outside partners to promote conservation efforts in the surrounding communities. The department’s Readiness and Environmental Protection Initiative (REPI) helps preserve lands that are important to military missions by providing funds for the purchase of conservation easements; an active REPI program is in place that includes the Morongo Basin.

An even more hands-on illustration of the Combat Center’s participation in resource conservation is its work in protecting and rearing juvenile desert tortoises. MCAGCC operates a special area known as the Tortoise Research and Captive Rearing Site

BASE MISSION High-Priority Acres



BASE MISSION High-Priority Parcels

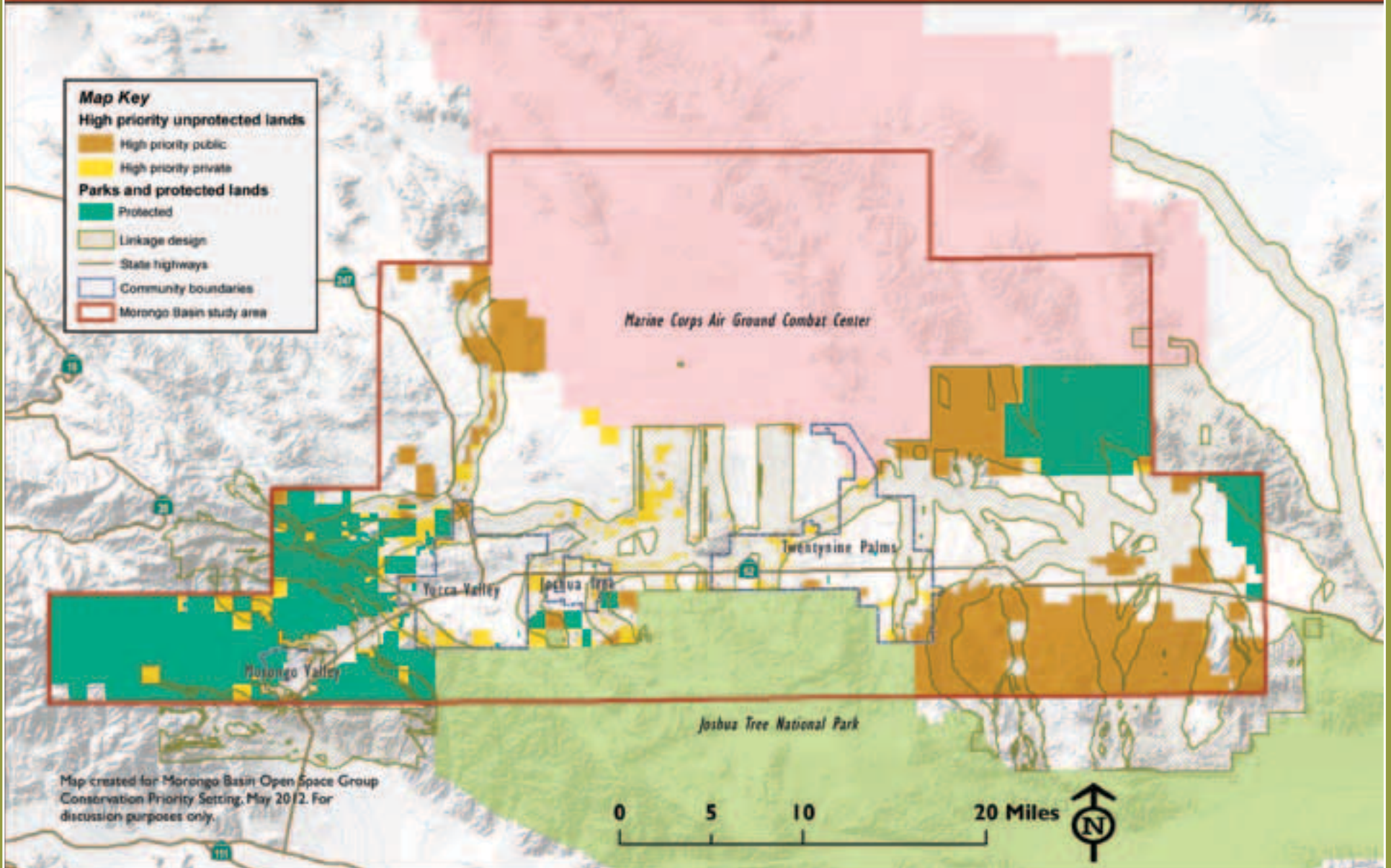


(TRACRS), and protocols are in place—and enforced—for the actions to be taken when a Marine, sailor, or civilian encounters a tortoise anywhere on the base.

The features used to determine which land areas are most worthy of conservation to support the Combat Center’s mission—features such as location and terrain, presence of sensitive species, and proximity to the base—were developed by MCAGCC personnel.

The MCAGCC mission map shows that many of the highest priority parcels are located close to the base boundaries on the south and southwest, reflecting the Combat Center’s interest in the impact of activities and land use along its borders. But there are high-priority parcels distant from the base. Some are large, section-sized “building blocks” adjacent to other protected areas; these include, in the Morongo Valley area, some held in conservation by The Wildlands Conservancy and others within the Big Morongo Canyon Preserve. In addition to their conservation value as relatively unfragmented habitat areas, such larger parcels are critical to military training needs for continuous air corridors and airspace. The same can be said of other parcels located in linkage design areas that connect the Marine base with the national park.

Considerations for the Protection of Wildlife Connectivity & Habitat





Roughly half (45%) of the high-priority base mission land area is considered protected, while the remaining 55% is considered unprotected. The unprotected land area is split almost equally between public and private ownership. Of the unprotected public lands, almost all are BLM lands in land use classes that allow development potentially incompatible with conservation protection. These areas can be examined for their value to the MCAGCC mission, and their land use classifications can be changed by amendments to the BLM's current resource management plan, the West Mojave Plan.

A unique opportunity is presented by the numerous private parcels located to the south of the base and north of the incorporated communities, in the area known as the Mesas. Land conservation and consolidation in that area, perhaps funded through the REPI, would serve a win-win function by preventing encroachment that could threaten the MCAGCC mission while preserving vital open space and connectivity for wildlife.

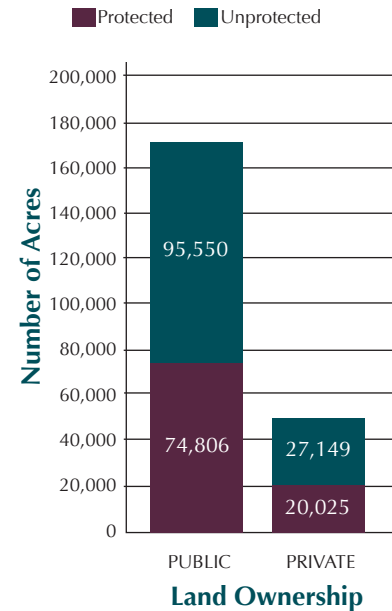
Wildlife Connectivity and Habitat

The maintenance of connectivity and habitat for wildlife is central to any regional conservation effort, since preservation of habitat, along with safe conduits for travel between livable areas, is essential to the survival of irreplaceable plant and animal life. The Morongo Basin is gifted with a vastly diverse flora and fauna that includes many sensitive and some endangered species, from nationally known symbols of the region like mountain lions, bighorn sheep, and Joshua trees to obscure treasures like the Mojave fringe-toed lizard and velvet ant. The high regard for wildlife among the basin's residents is evident both in their responses to questions about the treasured features of the region and in the popularity of activities that keep people in close contact with their natural surroundings.

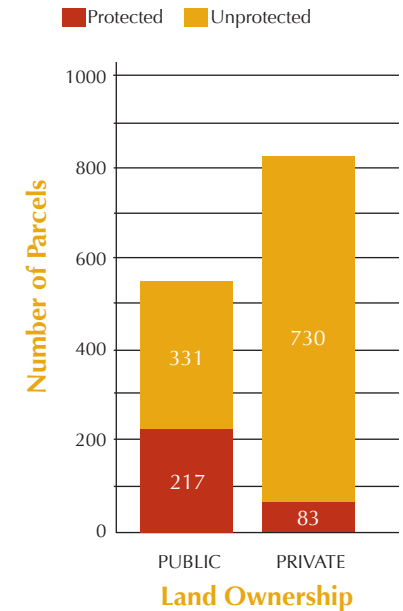
Wildlife connectivity and habitat was chosen as one of the five conservation values in the priority-setting project because it is a key component of two of the regional planning goals identified by the Open Space Group: connectivity for people and wildlife, and protection of community values.

The linkage design studies conducted by SC Wildlands (see Map 2 on page 16) served as a basis for determining the importance of land parcels for wildlife connectivity; thus, location within or overlapping one of the linkage design areas tops the list of features considered in prioritizing parcels for this conservation value.

WILDLIFE CONNECTIVITY & HABITAT High-Priority Acres



WILDLIFE CONNECTIVITY & HABITAT High-Priority Parcels

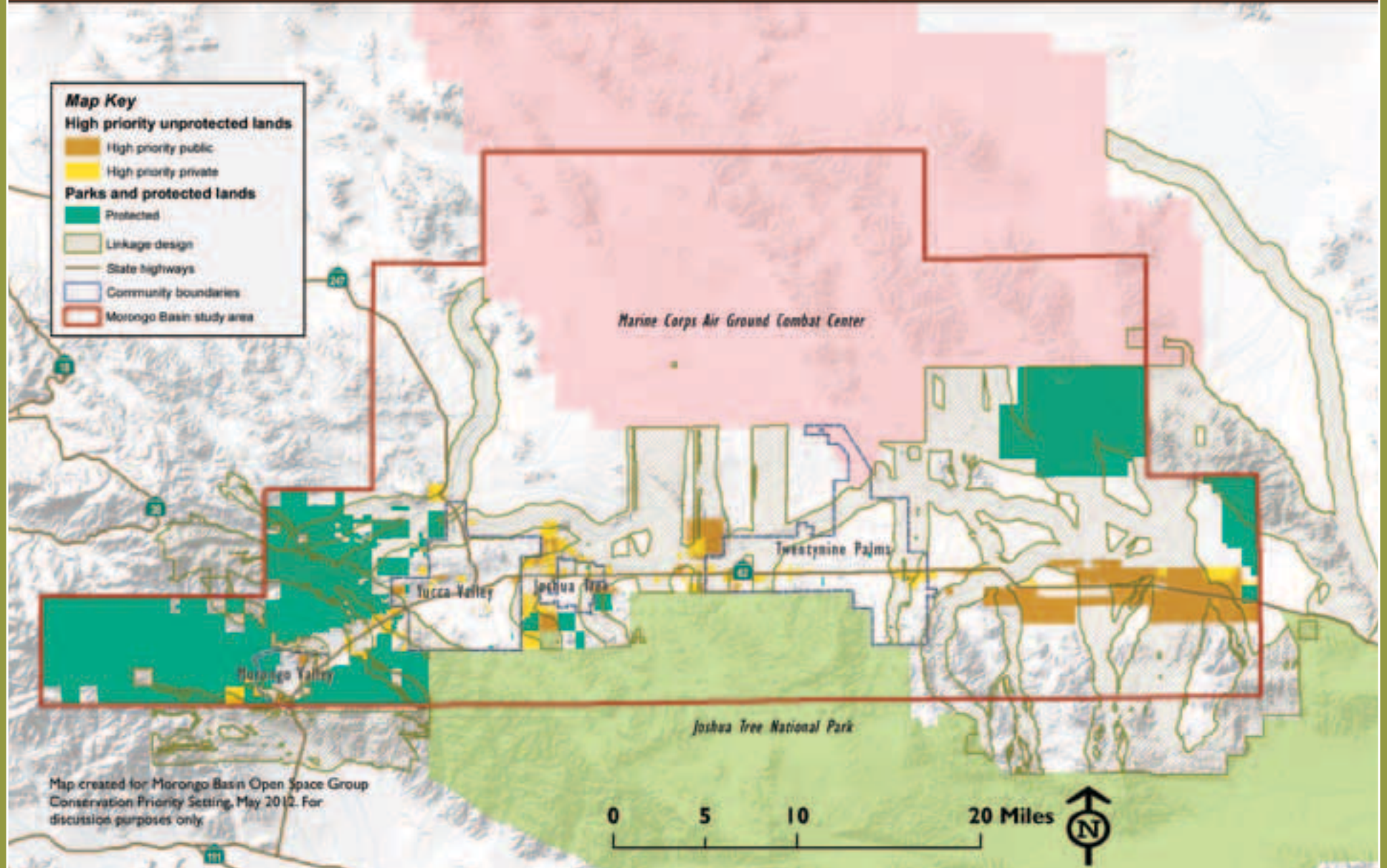


But other features were influential as well, such as parcel size, the potential for road crossings and other barriers, and the proximity of desert washes.

Much of the linkage design area appears on the map as high priority; most of the other high-priority areas are large parcels adjacent to other protected lands. In the Wonder Valley area, these include parcels near the Marine base and the national park; others are located within the proposed Sand to Snow National Monument, an area that connects the park with the San Bernardino National Forest via Morongo Valley and includes lands under the protective stewardship of The Wildlands Conservancy.

The majority of the land area designated as high priority for the conservation of wildlife connectivity and habitat is public land; less than a quarter is privately held. About a third of the total high-priority land for this value is public and already under protection; much of the rest of the public land could be protected via redesignation of BLM lands including some large, contiguous blocks in the Pinto Mountain area and Wonder Valley. These areas connect to the national park and to other BLM lands with protected status, and—since they are not “checkerboarded” with private inholdings—they offer the opportunity to create large tracts of protected intact habitat, preserving room to roam for bighorn sheep, desert tortoise, and other species.

Considerations for the Protection of Community Identity





Given this pattern of land ownership, the BLM’s land management choices have the potential to contribute greatly to the preservation of wildlife connectivity and habitat in the Morongo Basin. While it makes sense to focus conservation efforts on these large public parcels, it is also important to pay attention to land management practices on smaller (usually privately held) parcels, especially those located within the linkage designs. Uses that are not wildlife friendly can fragment connectivity and undermine the benefits of preserving the larger tracts. The vast majority of the private parcels in the linkage design are unprotected and relatively small, averaging 6.5 acres. Strengthening connectivity and retaining the viability of wildlife linkages will therefore entail creative approaches, such as land swaps that create larger management units and wildlife-friendly development choices.

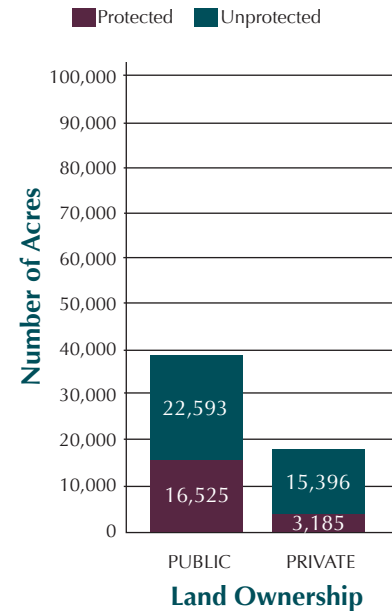
Wildlife connectivity is at the heart of the Open Space Group’s mission. Much work and study has been done with the support of the planning partners, and a great deal has been learned in the past decade about where our plants and animals live and roam and how we can best allow them to thrive. The challenge for regional planning is to translate that knowledge into community decision making that optimizes the harmony between human connectivity—economic, recreational, and geographic—and the fitness of habitat for the wildlife we depend on and cherish.

Maintaining Community Identity

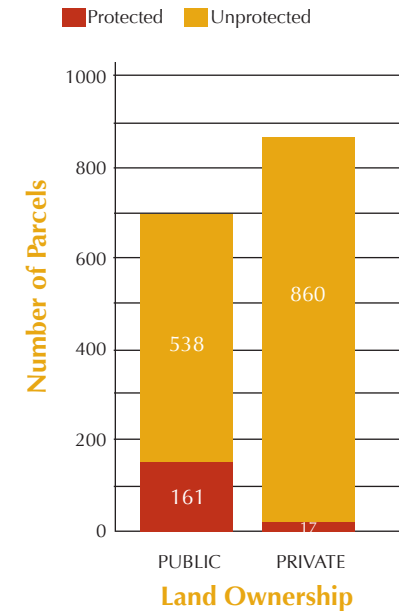
As new residents and more visitors are drawn to the Morongo Basin, development is changing the face of a region that, until now, has consisted of small communities strung distantly along the connecting roads and surrounded by rural terrain. These communities have distinct identities, and each values its unique character and contribution to the culture and economy of the basin. Planning for growth, therefore, includes identifying the places that are important for buffering those communities—not only to maintain geographic distance between them, but to preserve and showcase the spaces, views, and landmarks that residents associate most strongly with their hometowns.

In its analysis of land parcels to determine their importance as community separators, the Open Space Group focused on the communities along State Route 62. These include the two incorporated entities, the city of Twentynine Palms and the town of Yucca Valley, and the unincorporated communities of Joshua Tree and Morongo Valley.

COMMUNITY IDENTITY High-Priority Acres



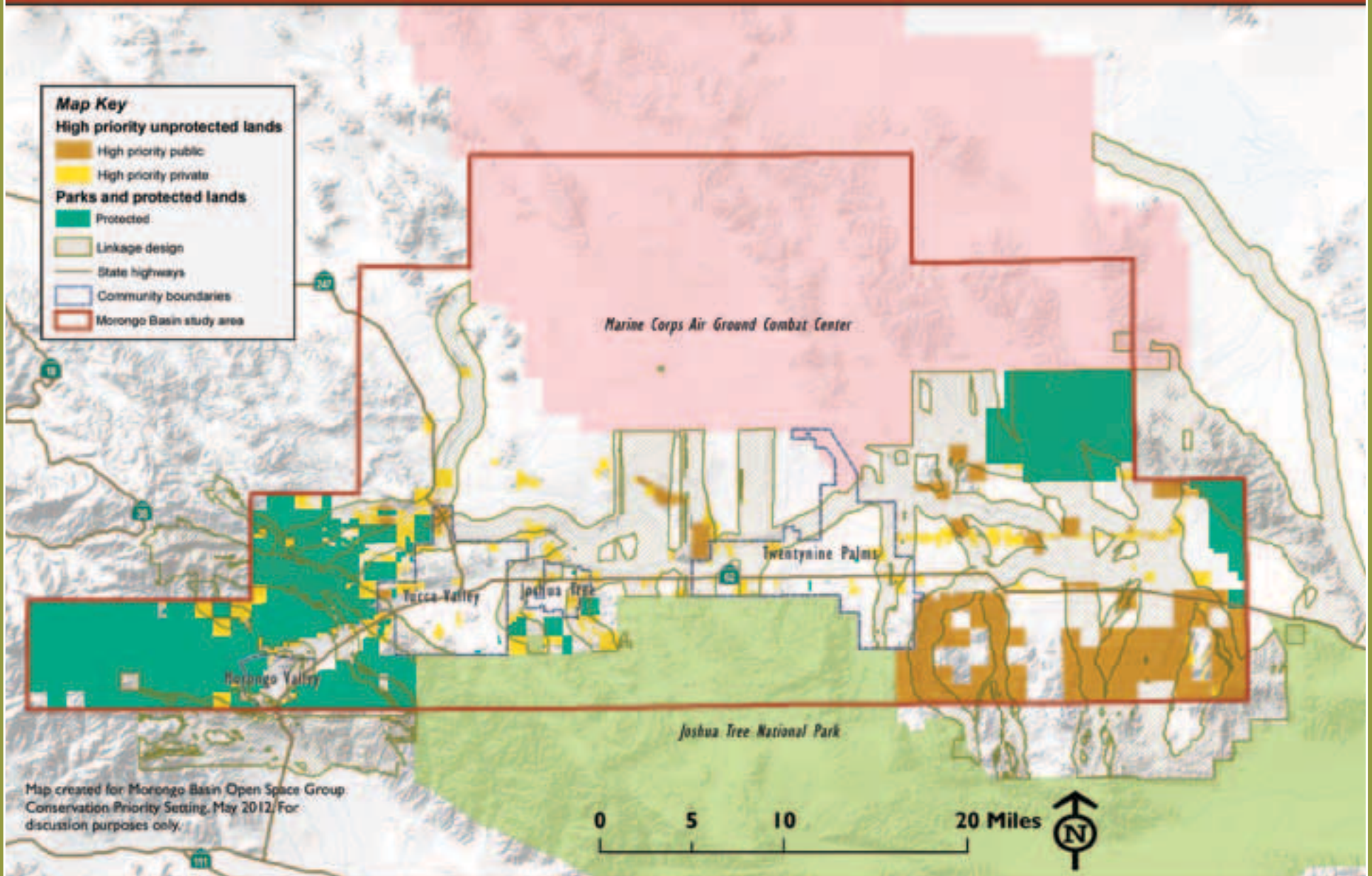
COMMUNITY IDENTITY High-Priority Parcels



Unlike other kinds of open space preserves that seek to leave natural areas undisturbed, whether for their own sake or to prevent encroachment upon other important land uses, community buffers and separators serve to safeguard and highlight the character of a particular community. Thus the features that guided the priority ranking of each parcel for this conservation value show a different emphasis (see the chart on page 18 or appendix A). They include, for example, the specific location of a parcel in relationship to one or two communities; the visual appeal of a parcel (as opposed to finer-grained criteria like habitat quality); and adjacency to the highway itself, since it is all the communities’ main route of entry and exit.

Many of the high-priority parcels shown on the map, as one would expect, are situated along State Route 62 outside the community boundaries; that is, between the communities. Notice, though, that much of the western portion of Twentynine Palms along the highway is also designated high priority. These areas, within the city limits but beyond the more densely settled core of the town, are especially valued for their unobstructed views of Joshua Tree National Park and of iconic landscapes in the city itself. Thus, the city of Twentynine Palms will be a key planning partner in efforts to maintain the intercommunity corridors and demarcate community gateways.

Considerations for the Protection of Community Views & Treasures





Yucca Valley and Joshua Tree residents see the boundary between their communities as a significant transition area. Many favor allowing the county-governed land there, most of which is privately owned, to remain as undeveloped Joshua tree forest, symbolic of an entry to Joshua Tree from the west. To the east between Joshua Tree and Twentynine Palms, fewer parcels are designated as high priority because most are zoned for commercial or medium-density development, a feature that lowered the conservation priority ranking assigned to a parcel. However, this area is perceived by residents as a gateway between the two communities. Planning that supports the conservation value of community separators between Joshua Tree and Twentynine Palms, therefore, will involve local government entities in the development of design standards that incorporate the gateway concept.

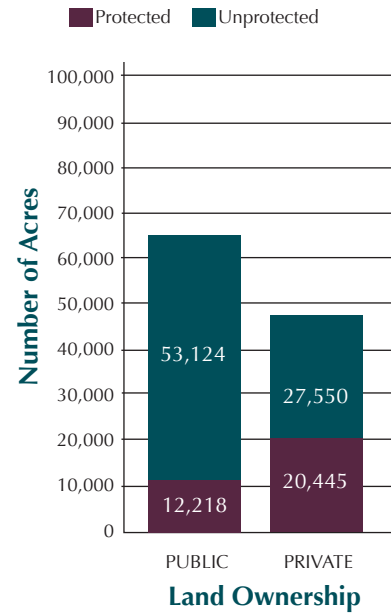
To the west, between Yucca Valley and Morongo Valley, many high-priority parcels are located along the steep grade closest to Yucca Valley, where in 2010 the state transportation department erected a four-foot concrete safety barrier down the center of the four-lane highway. In addition to its obvious impact on connectivity, this infrastructure has a profound visual effect that alters the experience of entering or leaving the town of Yucca Valley. Discussions are ongoing between the California Department of Transportation and local stakeholders about ways to mitigate the barrier's effects on wildlife.

Thus the most important partners for cooperative planning to support the maintenance of community identities throughout the region are local jurisdictions, state transportation authorities, and, especially, large private landholders. It is challenging to preserve open space in close proximity to relatively urbanized areas, given the economic pressures that accompany development and the impact that limiting it can have on land values. However, all of the Morongo Basin stakeholders stand to gain by nurturing the rural quality of the region and by making sure the connecting highway does not evolve into a corridor lined with unplanned development that detracts from its essential character.

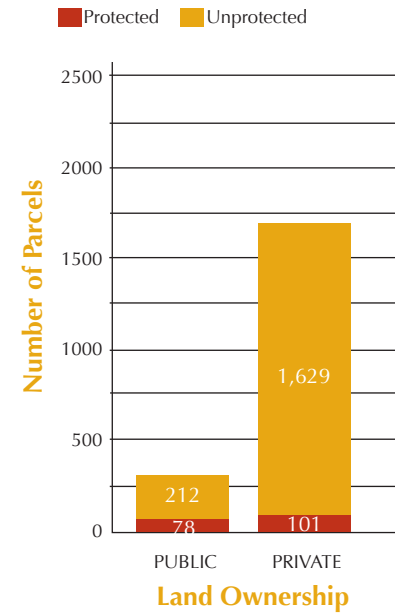
Protecting Community Views and Treasures

What do residents treasure about life in the Morongo Basin? That question, central to the conservation priority setting process, was asked of residents at the Open Space Group's outreach events. Residents' answers included specific places like Big Morongo Canyon Preserve, Pioneertown, Black Rock, and the Oasis of

VIEWS & TREASURES High-Priority Acres



VIEWS & TREASURES High-Priority Parcels



Mara. But just as prominent among the responses were less tangible features of the environment and culture, such as clear and starry night skies, mountain views with open ridgelines, affordable family living, and the local community of artists.

The community views and treasures map (Map 9 on page 32) depicts land areas deemed to be important conservation priorities for protecting and maintaining these treasured aspects of the region. They include view points, scenic routes, and iconic places.

The high-priority parcels shown on the map encompass a spectrum of development densities that are conducive to the enjoyment of this value. Some of the views and treasures depend on low density—such as views from the roads of the small tract homestead areas in Wonder Valley, or open ridgelines.

Others are compatible with denser residential development: in many cases what makes a parcel important is the view from the parcel, or the access it provides from an inhabited area to a natural landscape or wildlife habitat. The Joshua Tree Highlands and Monument Manor neighborhoods near the west entrance to the national park, for example, benefit from a density and design that allows for natural flows of water and wildlife, creating desirable places to live and stay that are close to

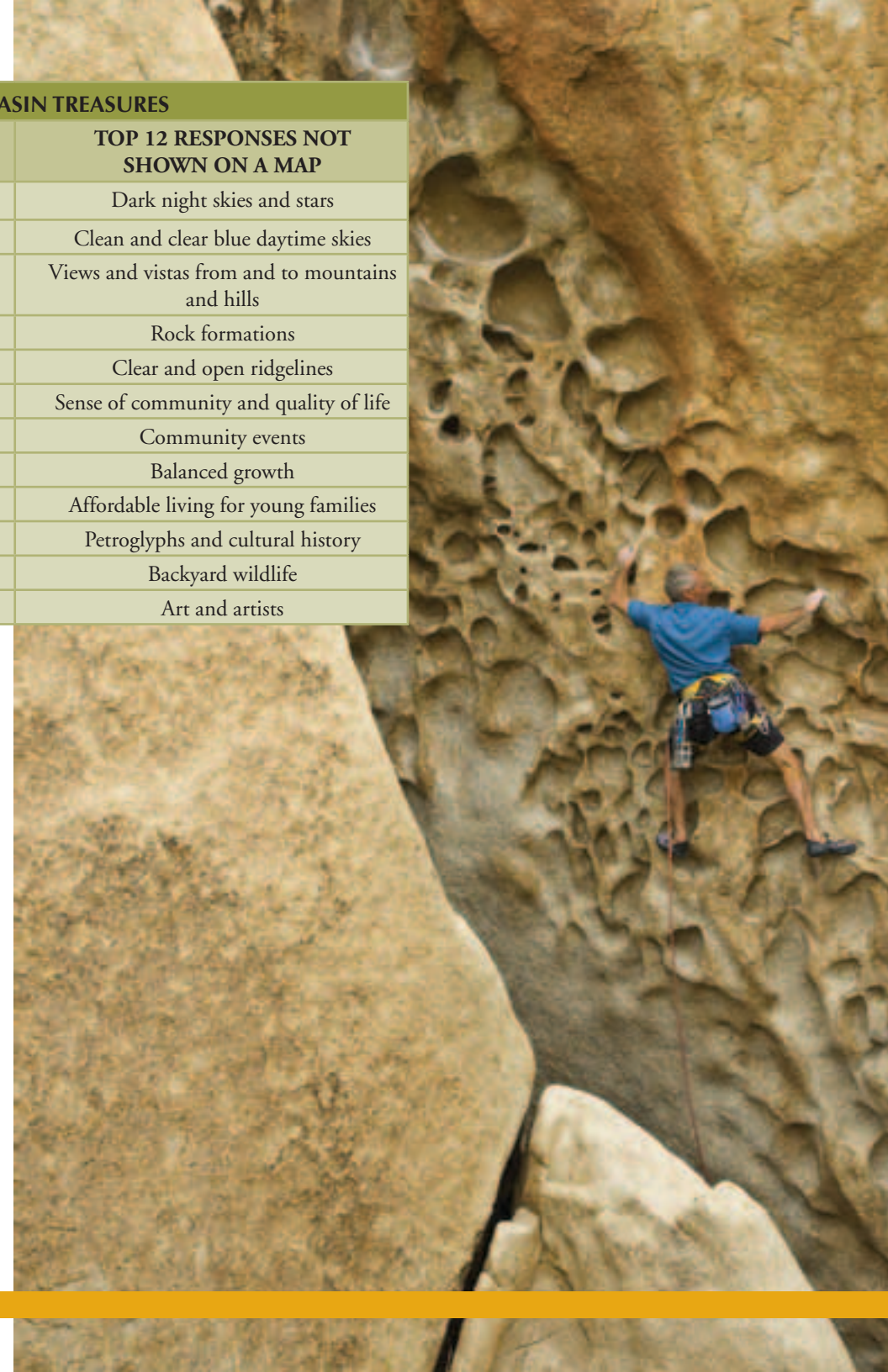
the protected park. Neighborhoods like these include numerous vacation rentals that contribute to the basin’s tourist economy.

When participants in the Open Space Group’s outreach efforts were asked to map their community treasures, one of the most common responses was “my backyard.” It is clear that in assessing what they prize about the region’s quality of life, residents include themselves, their neighbors, and the way they live on and enjoy the land. The valuing of community views and treasures does not devalue development; rather, it calls for a “basin-wise” quality of development—that is, for the importance of these priceless features to be considered in decisions about where and how growth takes place in the Morongo Basin.

Among the areas of highest importance for conserving community views and treasures that are unprotected, public lands predominate, making up about twice as much of the high-priority land area as unprotected private parcels. Of these public unprotected parcels, most are larger BLM-managed areas in the Joshua Tree National Park saddle—former park lands now bounded by the park on three sides and to the north by the state highway. By number, however, the overwhelming majority of unprotected parcels are privately owned. Private unprotected parcels in Pipes Canyon and other western parts of the study area may be appropriate for inclusion in existing TWC holdings in that area.

Also ranked high priority are a large number of smaller, privately owned parcels, either along Amboy Road in Wonder Valley or near the boundaries of the settled communities, that can be observed from major roadways. These are valued partly for the abandoned or rehabilitated “jackrabbit homesteads” they contain, a legacy of federal land grant programs. Because the value of views is particularly subjective and intangible, the parcels among these that offer the best opportunities for conservation are likely to be the ones that score high on other values too.

MORONGO BASIN TREASURES	
TOP 12 PLACE RESPONSES	TOP 12 RESPONSES NOT SHOWN ON A MAP
Joshua Tree National Park	Dark night skies and stars
My backyard	Clean and clear blue daytime skies
Big Morongo Canyon Preserve	Views and vistas from and to mountains and hills
Pioneertown	Rock formations
Pioneertown Mountains Preserve	Clear and open ridgelines
Black Rock	Sense of community and quality of life
Sky’s the Limit Observatory	Community events
Oasis of Mara	Balanced growth
Giant Rock	Affordable living for young families
North Park	Petroglyphs and cultural history
Joshua Tree and Southern Railroad	Backyard wildlife
Dale Mining District	Art and artists



Community Values in Action: What Comes Next



5

People who care about conserving the treasured places and ways of life in the Morongo Basin want to know where their conservation efforts should be directed and what those efforts should look like.

Among the MBOSG planning partners, early discussions focused on the importance of identifying the places in the basin where conservation would serve the goals of multiple groups or advance more than one of the interests shared widely in the community. By carefully directing limited resources to areas like these, conservation partners have the best chance of achieving the success that inspires further action and broader participation. And the benefits that flow from that success will continue to build public support for community stewardship.

The conservation priority setting project was designed to illuminate such multiple-benefit areas by simultaneously mapping a variety of conservation values. Where are the “win-win” locations—for example, a place that provides access to wilderness for hikers while maintaining connectivity for wildlife; or a treasured view point that also buffers Joshua Tree National Park from dense development along its boundary?

Lands that Offer Multiple Conservation Benefits

Computer-based mapping tools have enabled the planning partners to answer questions about where priorities overlap on the ground. A composite map was created, combining the priority ranking information from all five conservation values and highlighting the parcels whose protection will serve a broad range of conservation planning goals.

The 1,406 *composite high-priority parcels*, represented in red on Map 10 (on page 36), are those that earned a high-priority ranking on at least two of the five conservation values considered. (Only two parcels, among the more than 60,000 analyzed, ranked as high priorities for all five conservation values.) These composite high-priority parcels make up approximately 2% by number of all the parcels considered in the

basin-wide conservation priority setting analysis; however, together they occupy about one-third of the land area.

Composite moderate-high-priority parcels, shown in orange on the map, are parcels that are not included in the composite high-priority class but that either (1) rank as “high” for one of the five conservation values, or (2) rank as “moderate” for at least three of the conservation values. There are 11,725 of these parcels, occupying about one-third of the land in the analysis area. The remaining one-third of the land area consists of composite lesser priority parcels.

What characterizes the composite high-priority parcels? They are

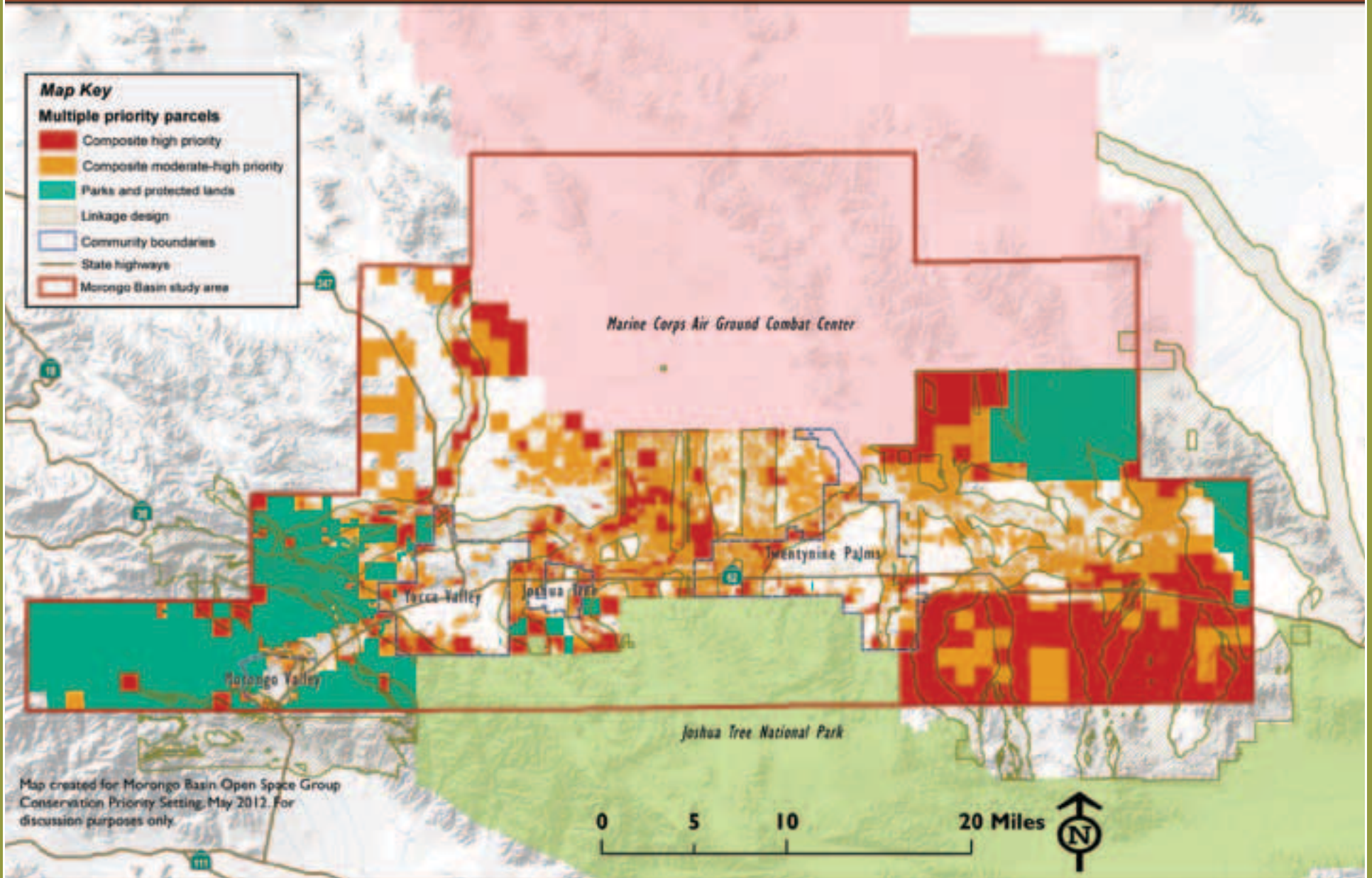
- larger parcels (the composite high-priority parcels average 134 acres in size, while the composite moderate-high-priority parcels average 15 acres; the average parcel size in the basin is still smaller, 8.3 acres);
- often located near existing protected areas;
- often in or near a linkage design branch.

Why focus on them? Protection of these parcels will lead to significant conservation benefits, because

- they provide large areas of contiguous habitat and roaming area, with connections to other protected areas;
- they prevent fragmentation of existing habitat and linkage design areas;
- there is room for improvement of their protection status: Currently only 18% of the composite high-priority parcels are protected. Of the unprotected composite high-priority parcels, the majority are private lands; 18% are managed in one of the BLM land use classes: Intensive, Moderate, or Unclassified. The remaining 27 unprotected public parcels are owned and managed by state, local, and tribal government entities.

Considerations for Conservation: Multiple Priority Parcels

The high priorities shown in red are those that ranked high on 2 or more of the conservation values. Moderate-high-priority parcels, shown in orange, either had 1 high or 3 moderate rankings.



What actions have already been taken to protect the parcels that offer multiple conservation benefits? To date,

- The Wildlands Conservancy has recognized the value of these composite high-priority parcels: the largest number of protected parcels are owned by TWC (87 of 249); and
- the BLM manages 162 of the protected parcels either as wilderness, in the Limited land use class, or as part of Big Morongo Canyon Preserve.

Where are they? Parcels that are classed as composite high or composite moderate-high conservation priorities are predominantly located

- in the San Bernardino–Little San Bernardino linkage design, excluding areas along State Route 62;
- close to the northern boundary of the national park;
- in the Copper Mountain East and Copper Mountain Central linkage design branches, including parcels between those branches;
- in the Pipes Canyon Wash branch of the linkage design;
- in section-sized BLM tracts across the Morongo Basin.

The map of conservation priorities offering multiple benefits provides a starting point for planners looking to guide the direction of development and growth. It highlights opportunities for protecting what the community values, and specifically indicates areas that should be considered for conservation acquisition. Given the difficult economic climate, it is worth noting that recent collaborative efforts have resulted in the acquisition for conservation of large parcels of land adjacent to the national park at costs ranging from \$1,100 to \$1,500 per acre.



Multiple Benefit Conservation Action Areas



Where to Focus Collaborative Action

The most effective conservation actions focus on areas where conservation projects will provide a spectrum of benefits that support local conservation values and provide room to grow and recreate for local communities. By making strategic choices to conserve unprotected lands in multiple benefit areas where protection will leverage the role of currently protected lands, the basin's shared conservation values can be served – community identity, mission protection for the national park and the MCAGCC, preservation of community views and treasures, and maintenance of connectivity and habitat for wildlife. Additional benefits can include protection of water and watersheds, accessible recreational trail connections, and educational opportunities. The map shown at left locates the multiple benefit conservation priority areas that emerged from conservation priority setting.

Multiple Benefit Conservation Action Areas:

1. Pipes Wash

Profile: BLM and private lands in the Pipes Canyon and Chaparrosa Washes linkage branches and adjacent to MCAGCC. Possible conservation actions include acquisition or easements on vacant private lands (over 80% non-locally owned) and reclassification of BLM lands to more protected status.

Benefits: Protects military special use airspace; enhances effectiveness of adjacent protected public and private lands; provides habitat and connectivity for mountain lion, bighorn sheep, burrowing owl, and LeConte's thrasher; protects watershed and water infiltration processes.



2. Copper Mountain Checkerboard

Profile: BLM and private lands “checkerboard” south of MCAGCC and in Copper Mountain branches of linkage design. Fragmentation can be reduced via reclassification and/or land swaps or consolidation of BLM Unclassified parcels (average size 11 acres) and via conservation acquisition of or easements on vacant private parcels (average size 8 acres).

Benefits: Protection from incompatible land use against MCAGCC southern boundary; preserves movement habitat and connectivity for bobcat and desert tortoise, mitigates impacts of BLM off-highway vehicle routes in area; protects military special use air space; protects Coyote Dry Lake and water infiltration processes.

3. Community Gateways & Corridors

Profile: Mostly private lands zoned residential along state highway between local communities. Opportunities include land acquisitions of unprotected high-priority land parcels in the linkage design and implementation by the county and city of policies for scenic protection of these separators, corridors, and gateways.

Benefits: Maintains community identities; provides protection of iconic views to national park and community treasures from state highway; protects connectivity in linkage design branches; protects military special use air space.



4. Sand to Snow

Profile: Proposed national monument that includes Big Morongo Canyon Preserve and the San Gorgonio wilderness area. Conservation actions can target vacant private lands inside proposed boundary where average parcel size is nearly 40 acres and only 2 of 171 parcel owners are local.

Benefits: Reduces habitat fragmentation and enhances connectivity for mule deer, mountain lion, and Nelson’s bighorn sheep; protects military special use air space; enhances park mission; protects and enhances Big Morongo Canyon Preserve.

5. Pinto Mountains & Basin

Profile: BLM and state trust lands in the “saddle” of Joshua Tree National Park, currently classified by BLM as an Area of Critical Environmental Concern. Conservation actions include reclassification of 64,000 acres of BLM “Moderate” class lands in the Pinto Mountains Desert Wildlife Management Area to a more protected status, and land swaps with 4,400 acres of state trust lands.

Benefits: Connectivity and habitat for desert tortoise, bighorn sheep, and American badger; iconic views; national park habitat and mission protection.

6. Gateway Community Hillside

Profile: Hillside areas in county, town and city that buffer lower elevation development from precipitation runoff originating in higher lands in the national park. Includes lands in 8 linkage design branches, BLM lands proposed for transfer to national park, and 6,700 acres of undeveloped private lands in non-local ownership (average size 60 acres). Conservation actions for private lands include acquisition and, where appropriate, conservation development best practices.

Benefits: Watershed protection and mitigation of flash flood runoff; connectivity and habitat for bobcat, American badger, desert tortoise, and mule deer; national park mission protection; maintains iconic views; protects military special use air space.

7. Wonder Valley

Profile: Extensive BLM land holdings and some state trust lands in two focus areas: 1) adjacent to the MCAGCC and west of BLM Cleghorn Lakes wilderness, where reclassification to more protected status can avoid potential military encroachment issues (this area is also under consideration for base expansion); 2) smaller, scattered BLM Unclassified parcels in homestead areas north of state highway where reclassification to more protected status can help maintain historic cultural landscape.

Benefits: Protection of iconic views of early homesteads and landscapes; connectivity and habitat for desert tortoise, bighorn sheep, and American badger; mission protection for national park and the MCAGCC.

The results of the conservation priority setting analysis can guide a variety of actions on the part of governments and agencies, organizations, businesses, and citizens. Since 2006, the Open Space Group has promoted the kind of collaboration that can make such action more likely and more effective.

What Communities and Planning Partners Can Do

Maintain a Forum and Dialogue for Regional Conservation Planning

The conservation priorities detailed in this report, along with the findings from other regional inventories and assessments, can be used to support regional conservation goals developed by the Morongo Basin Open Space Group. These products, and subsequent ones, can be a guide for local policy makers and citizens' groups to embrace specific policies, strategies, and tools that support regional conservation goals.

Continue to Buy Land for Conservation Purposes

A "fee simple" purchase, an outright purchase leading to full ownership, can be the most straightforward way to maintain a critical parcel for conservation. For example, the Mojave Desert Land Trust and its conservation partners have successfully used this strategy to conserve 2,126 acres within a key wildlife corridor in Joshua Tree, while The Wildlands Conservancy is a key conservation landowner in the western areas of the basin whose holdings include the Pioneertown Mountains preserve. Depending on the location, this type of purchase may be appropriate for lands that may remain in private ownership as well as ones that might be transferred to public ownership.

Actively Establish Conservation Easements

Another option is to separate development rights from other rights of ownership to create a conservation or scenic easement that will be held in perpetuity by a land trust or a local government. Current landowners may choose this option over selling land in instances where they prefer to retain a stake in the land, or this may be appropriate when funds are not available for fee simple purchases but are for obtaining easements.



Support Conservation Management and Designations by Public Lands Managers

Public lands managers enjoy myriad opportunities to work collaboratively with owners and managers of adjacent lands to coordinate conservation efforts. The BLM is a major land manager in the region. Several parcels of BLM land on the northern boundary of Joshua Tree National Park have been proposed for transfer to the park, and these transfers can be supported at the local and national levels by public engagement and education. Maintaining a dialogue with the BLM and the other public lands managers ensures a coordinated approach to protecting linkage design areas and to consolidating publicly held lands into larger blocks of wilderness or into national monuments. This is the case with the proposed Sand to Snow National Monument. There is also an opportunity to work with the BLM and other public agencies to reclassify lands where appropriate and to consolidate lands or expedite transfers, where these actions fit with the plans and needs of local communities and jurisdictions.

Enact Incentives and Regulations for Wildlife-Sensitive Development

Local government land use policies and regulations provide the setting for on-the-ground actions to protect wildlife corridors and provide incentives for conservation-sensitive development. For example, adoption of local ordinances that allow developers more flexibility in site layout and design can reduce fragmentation of natural areas by allowing development to be clustered. With access to model ordinances and examples of successful implementation in other communities, local governments have additional resources from which to create appropriate local incentives and regulations.

Actively Pursue Alternative Funding for Conservation

Work collaboratively with local, regional, and national organizations to obtain funding for land purchases, stewardship endowments, and conservation easements. Explore funding options and programs that meet community needs and that can be supported by local ballot initiatives, including taxes, bonds, or special districts designed to meet specific conservation goals. One possibility is the establishment of a conservation district for the basin.



Taking Action

What You Can Do

Putting community values into action is in the hands of individual community members, not just elected officials or local conservation agencies. You, as the reader of this report, are the source of conservation action, and you can help in many ways.

- Find out about and attend meetings of the local governing body where you live. These include meetings of the Yucca Valley town council and planning commission, the Morongo Valley Community Services District, the Twentynine Palms city council and planning commission, or the Joshua Tree Municipal Advisory Council. Get involved with the local community groups that work to influence decisions about local land use projects. Make sure that your elected officials have the information they need to make development decisions that take conservation values seriously.
- Encourage your local decision makers to adopt land use codes that support conservation while encouraging development that is good for the local economy. New codes can incorporate conservation tools such as cluster development, transfer of development rights between areas, wildlife protection overlays, and dark night sky protections.
- Take ownership of your treasured places in the Morongo Basin. Contact the Mojave Desert Land Trust in Joshua Tree to find out which linkage design branch you live in, and spread the word to your neighbors about the importance of being good stewards for that branch. The Mojave Desert Land Trust has a linkage design brochure that will educate and inform you of the linkages where you live and what you can do to protect them. Work with neighborhood and community groups and schools to learn more about how their backyards connect to the base, to the park, and to desert areas beyond the basin. Join with the Mojave Desert Land Trust and The Wildlands Conservancy in stewardship of their protected lands, and participate in the activities they sponsor on locally protected lands.
- Get to know your own backyard. What wildlife do you see near your home or in your favorite place for hiking, star gazing, or enjoying a sunset? Keep a journal or a computer file with pictures. Learn what the special opportunities for conservation are in your neighborhood (see Map 11 on page 38). Add your





home to the National Wildlife Foundation's network of more than 140,000 Certified Wildlife Habitats (www.nwf.org). Once you qualify and enroll in the program, you can post a sign identifying your yard as a Certified Wildlife Habitat.

All who have a stake in the future of the Morongo Basin stand to benefit from the kind of development that promotes healthy economies while preserving the area's rural desert character. And the basin-wide community recognizes the conservation and economic benefits of creating a protected, regional open space network that links "room to roam" for native plants and animals with quality neighborhood and commercial development. By making good decisions about where and how growth occurs, the basin's citizens have the opportunity to:

- reduce health care costs and obesity by creating areas for exercise and recreation;
- create jobs by attracting businesses looking for the amenities and high quality of life that protected open space networks provide;
- decrease government expenditures for infrastructure and services by implementing more efficient development patterns;
- increase property values for parcels that enjoy open space benefits, raising overall tax revenues;
- enhance quality of life by keeping people in closer touch with nature;
- protect water quality and desert wash habitats; and
- boost the tourism industry and recreation spending.

The efforts of the Morongo Basin Open Space Group are building the foundation for a future where all in the basin experience these benefits. But the momentum for the decisions that will honor community values and preserve the basin's quality of life must come from all kinds of participants—builders and developers, water districts, businesspeople, homeowners, schoolteachers, and students alike. That momentum will be felt by the elected and appointed officials who respond to citizen input on land use and development issues.



Thank You

The conservation priority setting project could not have been completed without financial support from The Community Foundation Serving Riverside and San Bernardino Counties, the Lincoln Institute of Land Policy, the Sonoran Institute, and Joshua Tree National Park. The Wildlands Conservancy provided funding for "The Joshua Tree—Twenty-nine Palms Connection," an invaluable wildlife connectivity study, with additional funding provided by Joshua Tree National Park.





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Appendix A Parcel Features Used to Determine Conservation Priority Rankings

1 FEATURES USED TO IDENTIFY PRIORITY AREAS FOR JOSHUA TREE NATIONAL PARK MISSION

Location: Proximity to park. Parcels closer to park boundary score higher.

Location: Linkage design. Parcels within the linkage design score higher.

Habitat Quality: Road density. Parcels in lower road density class (considering surrounding road network) score higher.

Habitat Quality: Riparian habitat. Parcels with larger blue-line streams (larger washes) score higher.

Habitat Quality: Human activity. Parcels without improvements score higher.

Size of Parcel. Larger parcels score higher. Highest scores to parcels greater than 160 acres, or ¼ section.

Shape of Parcel Perimeter Contiguous with Park. Parcels with at least ¼ of perimeter adjacent to park boundary score higher.

Zoning Class: Intensity of development allowed. Higher scores to parcels zoned for types of development that could most negatively impact park mission if developed.

Adjacent Property Zoning Class: Parcels adjacent to land zoned for open space score higher, as do parcels adjacent to lands in zoning classes vulnerable to intensive development.

Development Pressure: Existing proposals. Parcels where development may be imminent as indicated by existing development proposals score higher.

Species Preservation Value: Parcels showing presence of wildlife from California Natural Diversity Database; in the ACEC or DWMA; or in the California Native Plant Society ranges score higher.

2 FEATURES USED TO IDENTIFY PRIORITY AREAS FOR MCAGCC MISSION

Location: Proximity to base. Parcels closer to Combat Center boundary score higher.

Size of Parcel: Larger parcels score higher. Highest scores to parcels of at least 320 acres, or ½ section.

Current Land Use: Improvements. Unimproved parcels score higher.

Development Potential: Ownership. Privately owned parcels score higher.

Species Preservation Value: Parcels showing presence of wildlife from California Natural Diversity Database score higher.

Location and Geography: Airspace/air corridors. Parcels in special use airspace or within 5 miles of air corridors score highest.

Parcel Assessed Value: Parcels with assessed value below \$100,000 score higher.

3 FEATURES USED TO IDENTIFY PRIORITY AREAS FOR WILDLIFE CONNECTIVITY AND HABITAT

Linkage Design: Parcels within the linkage design score higher.

Location & Proximity: Parcels adjacent to MCAGCC, the national park, or private (TWC) conservation lands score higher.

Impediments to Connectivity: Parcels without roads score higher.

Threats: Proposed development, energy proposals. Parcels with approved development proposals or BLM energy proposals score higher.

Streams: Parcels with larger blue-line streams (larger washes) score higher.

Barriers: Potential crossings. Parcels identified in SC Wildlands reports as potential locations for crossing structures score higher.

Size of Parcel: Larger parcels score higher. Highest scores to parcels of at least 640 acres, or 1 section.

Species Preservation Value. Parcels score higher if they overlap with areas where species from the California Natural Diversity Database are mapped.

4 FEATURES USED TO IDENTIFY PRIORITY AREAS FOR MAINTAINING COMMUNITY IDENTITY

Visual Quality. Parcels with lots of Joshua trees, large rocks, and yuccas (as determined by a “windshield survey”) score higher.

Separates Communities. Parcels located between the town of Yucca Valley and the census-designated place boundary of Joshua Tree, and between Copper Mountain College and Twentynine Palms, score higher.

Proximity. Parcels adjacent to State Route 62 or the boundaries of Yucca Valley or Joshua Tree score higher.

Land Use: Current zoning. Land zoned as open space or low-density residential (no more than one dwelling per 10 acres) score higher.

Size of Parcel & Ownership. Parcels, or assemblages of commonly owned parcels, larger than 20 acres and within view of SR 62 score higher.

Length of Highway Frontage & Ownership. Parcels with more than ½ mile of SR 62 frontage under common ownership score higher.

5 FEATURES USED TO IDENTIFY PRIORITY AREAS FOR PRESERVING COMMUNITY VIEWS AND TREASURES

Iconic Places. Parcels included in the MBOSG outreach project “community treasure mapping” score higher. Parcels overlapping Goat Mountain, the Poste Homestead, the Integratron, or Willie Boy’s Grave score higher.

Land Ownership. Privately owned parcels score higher.

Dark Night Sky. Parcels within or overlapping linkage design and with no development score higher. Parcels with no development that are adjacent to other parcels with no development score higher.

Iconic Views. Parcels in areas of no or low-density development score higher. Parcels with slope greater than 15 degrees score higher.

Ridgelines. Parcels along ridgetops with no development or roads score higher.

Scenic Highway/Byway. Parcels along routes designated as, or meeting criteria for, scenic byways, or along routes named in local government general plans as scenic roads, score higher.

Community Defined Scenic View Areas. Places identified in Open Space Group meetings and outreach score higher.

Appendix B Land Ownership Analyses

JOSHUA TREE NATIONAL PARK MISSION High-Priority Parcels: Summary											
Ownership	High-Priority Acres	% of Area Public or Private	Number of Parcels	% of Parcels Public or Private	Average Parcel Size (Acres)	Number of Protected Parcels	Protected Acres	% Protected of Total Priority Acres	Number of Unprotected Parcels	Unprotected Acres	% Unprotected of Total Priority Acres
All	149,358		1,404		106.4	167	54,353	36.4%	1,237	95,005	63.6 %
Public	95,166	63.7%	251	17.9%	379.1	90	32,847	22.0%	161	62,319	41.7%
Private	54,192	36.3%	1,153	82.1%	47.0	77	21,506	14.4%	1,076	32,686	21.9%

JOSHUA TREE NATIONAL PARK MISSION High-Priority Parcels: Analysis					
Ownership	High-Priority Acres	Land Use Status or Management Identification	Number of Parcels	Acres Protected	Acres Unprotected
PUBLIC	95,166		251	32,856	62,319
BLM	36,407	Pinto Mountain DWMA BLM Moderate	59	0	36,407
BLM	21,366	BLM Controlled (Wilderness)	41	21,366	0
BLM	10,874	BLM Moderate	20	0	10,874
BLM	7,076	Big Morongo Canyon Preserve BLM Limited	13	7,076	0
State Lands Commission	5,682		13	0	5,682
BLM	5,629	BLM Unclassified	33	0	5,629
BLM	2,400	BLM Intensive	5	0	2,400
CA Dept. Fish and Game	2,211		7	2,211	0
BLM	1,128	BLM Limited	26	1,128	0
CSA 20 Joshua Tree Parks Rec	605		2	605	0
Town of Yucca Valley	600		1	0	600
BLM	461	Big Morongo Canyon Preserve BLM Unclassified	1	461	0
San Bernardino County Flood	277		12	0	277
29 Palms Band Mission Indians	162	Tribal Lands	1	0	162
County of San Bernardino	108		4	0	108
Twentynine Palms Water Dist	81		1	0	81
City of Twentynine Palms	40		1	0	40
Hi-Desert Memorial Health	35		4	0	35
Morongo Basin Transit Authority	18		1	0	18
Joshua Basin Water District	6		6	0	6
PRIVATE	54,192		1,153	21,506	32,686
The Wildlands Conservancy	21,506	Conservation Lands	77	21,506	0
Private Land	32,686		1,076	0	32,686

MCAGCC MISSION High-Priority Parcels: Summary

Ownership	High-Priority Acres	% of Area Public or Private	Number of Parcels	% of Parcels Public or Private	Average Parcel Size (Acres)	Number of Protected Parcels	Protected Acres	% Protected of Total Priority Acres	Number of Unprotected Parcels	Unprotected Acres	% Unprotected of Total Priority Acres
All	94,398		2,758		34.2	78	41,991	44.5%	2680	52,407	55.6%
Public	57,836	61.3%	160	5.8%	361.5	55	31,258	33.1%	105	26,578	28.2%
Private	36,562	38.7%	2,598	94.2%	14.1	23	10,733	11.4%	2575	25,829	27.4%

MCAGCC MISSION High-Priority Parcels: Analysis

Ownership	High-Priority Acres	Land Use Status or Management Identification	Number of Parcels	Acres Protected	Acres Unprotected
PUBLIC	57,836		160	31,258	26,578
BLM	21,066	BLM Controlled (Wilderness)	37	21,066	0
BLM	12,665	BLM Moderate	21	0	12,665
BLM	8,003	Big Morongo Canyon Preserve (BLM Limited)	14	8,003	0
BLM	4,764	Pinto Mountain DWMA (BLM Moderate)	8	0	4,764
BLM	4,661	BLM Intensive	8	0	4,661
BLM	4,314	BLM Unclassified	66	0	4,314
BLM	1,108	Big Morongo Canyon Preserve (BLM Unclassified)	2	1,108	0
BLM	1,081	BLM Limited	2	1,081	0
County of San Bernardino	164		1	0	164
Morongo Unified School District	10		1	0	10
PRIVATE	36,562		2,598	10,733	25,829
The Wildlands Conservancy	10,733	Conservation Lands	23	10,733	0
Private Land	25,829		2,575	0	25,829

WILDLIFE CONNECTIVITY & HABITAT High-Priority Parcels: Summary

Ownership	High-Priority Acres	% of Area Public or Private	Number of Parcels	% of Parcels Public or Private	Average Parcel Size (Acres)	Number of Protected Parcels	Protected Acres	% Protected of Total Priority Acres	Number of Unprotected Parcels	Unprotected Acres	% Unprotected of Total Priority Acres
All	217,530		1,361		159.8	300	94,831	43.6%	1061	122,699	56.4%
Public	170,356	78.3%	548	40.3%	310.9	217	74,806	34.4%	331	95,550	43.9%
Private	47,174	21.7%	813	59.7%	58.0	83	20,025	9.2%	730	27,149	12.5%

WILDLIFE CONNECTIVITY & HABITAT High-Priority Parcels: Analysis

Ownership	High-Priority Acres	Land Use Status or Management Identification	Number of Parcels	Acres Protected	Acres Unprotected
PUBLIC	170,356		548	74,806	95,550
BLM	51,672	BLM Controlled (Wilderness)	122	51,672	0
BLM	50,796	Pinto Mountain DWMA (BLM Moderate)	91	0	50,796
BLM	24,135	BLM Moderate	88	0	24,135
BLM	9,799	BLM Intensive	17	0	9,799
BLM	11,152	Big Morongo Canyon Preserve (Limited)	49	11,152	0
U.S. Forest Service	5,704		9	5,704	0
State Lands Commission	5,047		9	0	5,047
BLM	4,312	BLM Unclassified	110	0	4,312
BLM	3,789	BLM Limited	27	3,789	0
CA Dept Fish and Game	2,211		7	2,211	0
Other Public	1,739		19	278	1,461
PRIVATE	47,174		83	20,025	27,149
The Wildlands Conservancy	20,025	Conservation Lands	83	20,025	0
Private Land	27,149		730	0	27,149

COMMUNITY IDENTITY High-Priority Parcels: Summary

Ownership	High-Priority Acres	% of Area Public or Private	Number of Parcels	% of Parcels Public or Private	Average Parcel Size (Acres)	Number of Protected Parcels	Protected Acres	% Protected of Total Priority Acres	Number of Unprotected Parcels	Unprotected Acres	% Unprotected of Total Priority Acres
All	57,699		1,576		36.6	178	19,710	34.1%	1,398	37,989	65.9%
Public	39,118	67.8%	699	44.4%	56.0	161	16,525	28.6%	538	22,593	39.2%
Private	18,581	32.2%	877	55.6%	21.2	17	3,185	5.5%	860	15,396	26.7%

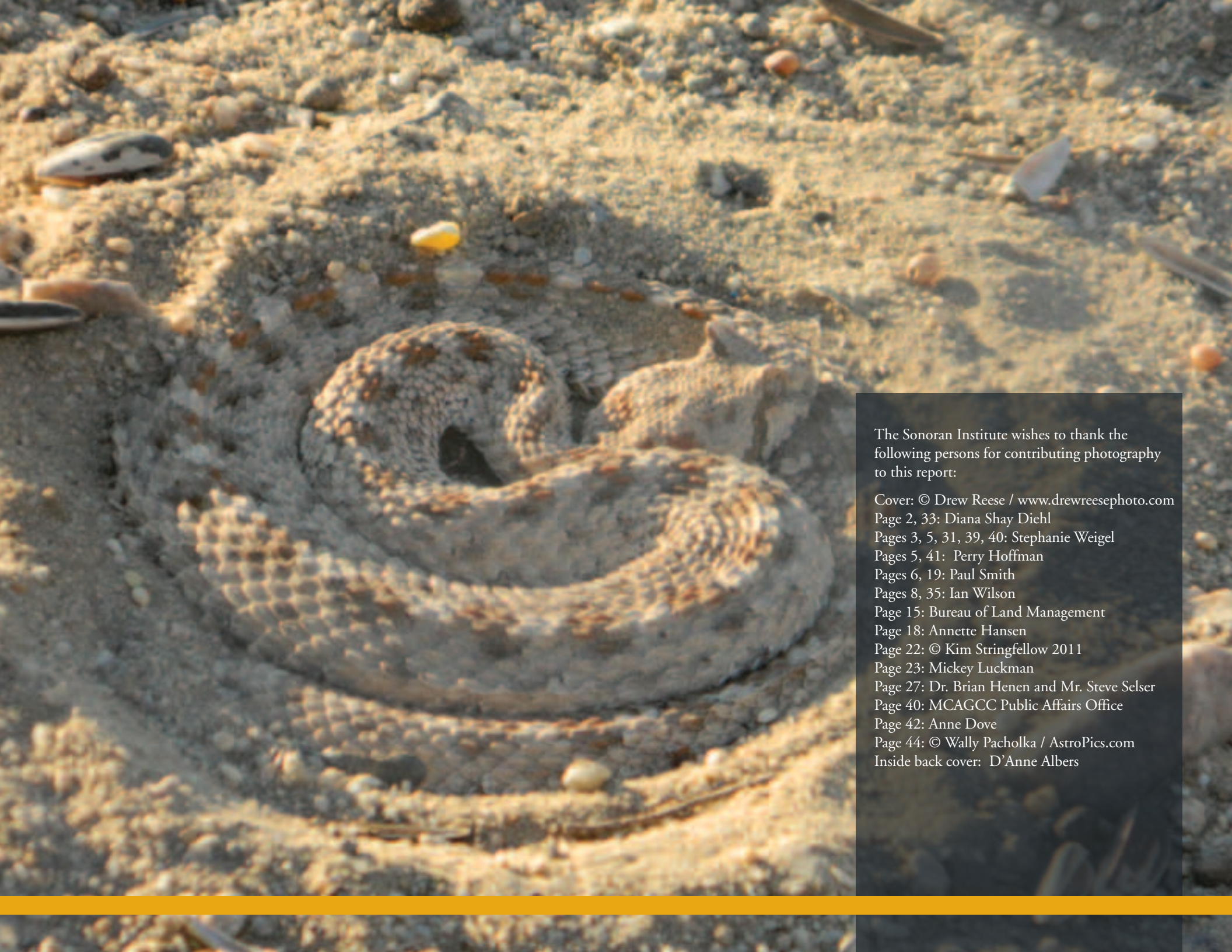
COMMUNITY IDENTITY High-Priority Parcels: Analysis

Ownership	High-Priority Acres	Land Use Status or Management Identification	Number of Parcels	Acres Protected	Acres Unprotected
PUBLIC	39,118		699	16,525	22,593
BLM	10,088	Pinto Mountain DWMA BLM Moderate	251	0	10,088
BLM	5,908	BLM Unclassified	173	0	5,908
BLM	5,302	BLM Controlled (Wilderness)	21	5,302	0
BLM	5,017	BLM Moderate	83	0	5,017
BLM	5,465	Big Morongo Canyon Preserve	70	5,465	0
U.S. Forest Service	2,560		4	2,560	0
BLM	1,872	BLM Limited	61	1,872	0
State Lands Commission	667		3	0	667
CA Dept Fish and Game	636		1	636	0
CSA 20 Joshua Tree Parks Rec	605		2	605	0
Other Public	998		30	85	913
PRIVATE	18,581		877	3,185	15,396
The Wildlands Conservancy	3,185	Conservation Lands	17	3,185	0
Private Land	15,396		860	0	15,396

COMMUNITY VIEWS & TREASURES High-Priority Parcels: Summary											
Ownership	High-Priority Acres	% of Area Public or Private	Number of Parcels	% of Parcels Public or Private	Average Parcel Size (Acres)	Number of Protected Parcels	Protected Acres	% Protected of Total Priority Acres	Number of Unprotected Parcels	Unprotected Acres	% Unprotected of Total Priority Acres
All	113,337		2,020		56.1	179	32,663	28.8%	1,841	80,674	71.2%
Public	65,342	57.7%	290	14.4%	225.3	78	12,218	10.8%	212	53,124	46.9%
Private	47,995	42.3%	1,730	85.6%	27.7	101	20,445	18.0%	1,629	27,550	24.3%

COMMUNITY VIEWS & TREASURES High-Priority Parcels: Analysis					
Ownership	High-Priority Acres	Land Use Status or Management Identification	Number of Parcels	Acres Protected	Acres Unprotected
PUBLIC	65,342		290	12,218	53,124
BLM	37,241	Pinto Mountain DWMA (BLM Moderate)	59	0	37,241
BLM	7,085	BLM Controlled (Wilderness)	12	7,085	0
BLM	5,399	BLM Unclassified	129	0	5,399
State Lands Commission	5,094	State Lands Commission	9	0	5,094
BLM	4,726	BLM Moderate	10	0	4,726
BLM	2,679	Big Morongo Canyon Preserve	38	2,679	0
BLM	1,692	BLM Limited	25	1,692	0
CSA #20	605	CSA 20 Joshua Tree Parks Rec	2	605	0
Town of Yucca Valley	600		1	0	600
Big Morongo Canyon Preserve	157	San Bernardino County	1	157	0
San Bernardino County	63	San Bernardino County Flood	2	0	63
San Bernardino County	1	San Bernardino County Fire	2	0	1
PRIVATE	47,995		1,730	20,445	27,550
The Wildlands Conservancy	20,445	Conservation Lands	101	20,445	0
Private Land	27,550		1,629	0	27,550

Notes



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