

# SUSTAINABILITY

# NATURAL & FARM LANDS

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS

2016  
2040 **RTPSCS**

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ADOPTED | APRIL 2016

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# NATURAL & FARM LANDS

## INTRODUCTION

Parallel to its diverse economy, population and increasing transportation options, the SCAG region is home to an enormous amount of natural biodiversity and agricultural richness. Host to desert, mountain and coastal habitats, some of the highest concentrations of endemic plant and animal species on the planet are found within our region. In fact, Southern California is part of the California Floristic Province, one of the planet's top twenty-five biodiversity hot spots.<sup>1</sup> Additionally, much of the SCAG region has a rich agricultural history, and Imperial County continues to be one of the main food suppliers for the entire nation: 20% of dairy products and an estimated two thirds of the nation's vegetables consumed during the winter months are from the Imperial Valley.<sup>2</sup>

However, as the SCAG region's population continues to grow, vital habitat and farm lands face severe development pressure. In addition to their respective roles in biodiversity and food production, both natural and farm lands help to reduce the impacts of climate change by acting as "carbon sinks," storing CO2 emissions in the soil, plants and trees instead of allowing them to concentrate in the atmosphere. Furthermore, urban, suburban and even rural development on previously undeveloped land results in increased greenhouse gas emissions. Finally, the conservation of natural<sup>3</sup> and farm lands on the edges of urban and suburban development is an integral aspect of the Sustainable Communities Strategy, because it incentivizes infill development and the concentration of different land uses, making it easier to travel shorter distances and thus reducing greenhouse gas emissions.

A planning approach that integrates land use and conservation strategies is paramount to protecting the environment and reducing greenhouse gas emissions while meeting the needs of current and future populations. The 2016 RTP/SCS points to an updated land use approach that prioritizes the concentration of development in areas that are frequently served by public transportation. A complementary piece of the transit-integrated land use strategy should ensure the protection of lands on the edge of existing urban development. Otherwise, development of previously open lands on the urban/suburban edge undermines the economics of building in transit-rich infill communities. If the direct costs of developing near transit outweigh the costs of development, the incentives to build sprawl-type communities increase, which leads to the consumption of the region's agricultural and natural lands.

Many counties and cities in Southern California have excelled in their work to protect these vulnerable lands, but few regional plans or policies have been enacted to preserve habitat and farm lands on a wider scale. With a population expected to increase by 17 percent by 2040, conservation decisions made now can safeguard the endurance of these lands, protecting threatened wildlife and the local agricultural economy and reducing carbon emissions, while also contributing to a high quality of life for future generations.

## NATURAL LANDS

A range of local conservation plans, habitat conservation agencies and state/federal park designated areas provide protection for a significant amount of natural and farm land in the SCAG region. However, the majority of these protected lands are in remote, desert areas far from incorporated areas. Therefore, a substantial amount of land on the urban and suburban fringe is vulnerable to development. Protected areas tend to not be distributed evenly across habitat types, leaving some habitat types largely unprotected. Many of the high-biodiversity habitats that play a key role in the region's ecosystem are adjacent to urban and suburban communities, and do not have protected status.<sup>4</sup>

In acknowledgement of this need for conservation, local agencies throughout the region have worked together to form Regional Conservation Plans (RCPs). These plans recognize that important habitats do not routinely line up with jurisdictional borders, so designation of conservation lands can span multiple jurisdictions. Additionally, RCPs efficiently address mitigation mandates from the California Environmental Quality Act (CEQA) by anticipating transportation projects and "banking" potentially threatened endangered-species habitats.

Currently, there are three adopted major conservation plans made up of multiple jurisdictions within SCAG's boundaries. Coachella Valley and Western Riverside are Multiple Species Habitat Plans (MSHCPs), which allow the county, its cities and special districts to more effectively make local land use decisions regarding development while adhering to state and federal endangered species acts regulations and environmental mandates. Under an MSHCP, wildlife agencies grant authorization for public and private development that is potentially detrimental to individual species, in return for assembling and managing a coordinated Conservation Area. Similar to the MSHCP, Natural Communities Conservation Plan/Habitat Conservation Plans (NCCP/HCP) acquire and manage large conservation areas that can be made up of several distinct jurisdictions. An NCCP/HCP takes a broad-based ecosystem approach, focusing on the long term protection of wildlife and plant species while also allowing for development.

The following RCPs have been formally approved and are in implementation:

### COACHELLA VALLEY MSHCP

The Coachella Valley MSCHP aims to preserve 240,000 acres of natural habitat and 27 plant and animal species in the Coachella Valley region of Riverside County. Since receiving its state and federal permits in 2008, about one third of the land (80,000 acres) has been acquired. Currently, a major amendment is in the works to have the entire City of Desert Hot Springs covered by the plan.

### ORANGE COUNTY CENTRAL-COASTAL NCCP/HCP

Approved in 1996, this plan was one of the first regional HCPs in the country. The planning area covers 208,000 acres, protecting habitats for 39 species, six of which are federally listed endangered species. Participating organizations include seven cities, the County of Orange, Irvine Company, Metropolitan Water District, the Transportation Corridor Agency and UC Irvine.

### WESTERN RIVERSIDE MSHCP

Half a million acres of land are designated for conservation under this plan. When the MSHCP was enacted in 2008, nearly 70 percent of the land already had public or quasi-public status. Since then, the Regional Conservation Authority (RCA), the plan's facilitating agency, has been active in acquiring the remaining 153,000 acres. To date, 27 percent of the total land has been acquired.

According to the California Department of Fish and Wildlife, the following RCPs are in the planning phase. While not yet formally approved, conservation and restoration efforts for most of them are well underway.

### DESERT RENEWABLE ENERGY CONSERVATION PLAN (DRECP)

Unlike many RCPs that focus on the environmental mitigation of transportation projects, this plan was devised for future renewable energy projects, such as windfarms and solar panels. The DRECP's boundaries include the desert regions of Imperial, Los Angeles, Riverside and San Bernardino County, as well as Inyo, Kern and San Diego. The total planning area includes 22.5 million acres.

### IMPERIAL IRRIGATION DISTRICT NCCP/HCP

Covering about 500,000 acres in Imperial County, this plan is anticipated to protect nearly 100 fish, wildlife and plant species for the next 75 years. The planning area includes the Salton Sea, which has become a refuge for birds and other wildlife species that live in the marsh-like habitat.

### OCTA MEASURE M2 NCCP/HCP

This plan will protect thirteen threatened plant and wildlife species and cover routine maintenance for preserve areas. It is funded by OCTA's Measure M2 Environmental Freeway Mitigation Program. An extension of 1990's Measure M, Measure M2 is a voter-approved half-cent sales tax increase to fund transportation improvements. Over thirty years, the Environmental Mitigation Program will allocate about \$300 million to acquire natural lands and fund habitat restoration projects, while enabling a more streamlined approval process for freeway improvement projects. Since the initial funding round in 2010, 1,300 acres of natural lands have been acquired and eleven restoration projects have been funded. The total land in the planning area is 510,000 acres.

### RANCHO PALOS VERDES NCCP/HCP

At 8,661 acres, this is the smallest regional conservation plan in the SCAG region. Despite its size, the planning area for the Rancho Palos Verdes NCCP/HCP has some of the richest biodiversity in the region. One of the protected species include the Palos Verdes Blue Butterfly, whose population is slowly rebounding after near-extinction in the 1980s.

### TOWN OF APPLE VALLEY MSHCP

Like the Rancho Palos Verdes NCCP/HCP, the Apple Valley MSHCP is currently made of only one jurisdiction, and the planning area includes a considerable amount of biodiversity. The plan will cover 227,000 acres, protecting the habitats of seven endangered species and twenty-six sensitive species.

## FARM LANDS

Farm lands make up 2.6 million acres in the SCAG region. The most common crops include alfalfa, strawberries, citrus fruits and ornamentals, which are exported throughout California and the rest of the country. Like natural habitat lands, farm and grazing lands are at risk. According to the California Department of Conservation's most recent data, 369,804 acres of farm and grazing land in the SCAG region has been developed since 1984. Moreover, the region lost 19 percent of farmland designated as "important" by the Department of Conservation.<sup>5</sup> This decline of agricultural land has implications for the economy and the environment, especially in the face of climate change. While many farming practices do contribute to greenhouse gas emissions, emissions from farmlands are far less than those from urban environments. Furthermore, when sustainably maintained, preserving rather than developing arable lands and pastures ensures carbon sequestration, in which CO<sub>2</sub> is absorbed by the soil instead of concentrating in the atmosphere.<sup>6</sup> Farm and grazing lands can also provide such co-benefits as wildlife habitats, flood control and groundwater recharge.

As with natural lands, there are notable farm land conservation strategies currently in place in the SCAG region. Also known as the "Williamson Act," the Land Conservation Act (LCA) is a voluntary land conservation program adopted by the California Legislature in 1965. The LCA incentivizes farm land conservation by providing lower tax rates to landowners who restrict their land to agricultural or open space uses for a minimum of 10 years. In the SCAG region, about 6.6 percent of farmland is protected under this policy. Participating SCAG counties include Los Angeles, Orange, Riverside, Ventura and San Bernardino and Ventura.

In addition to the Williamson Act, Ventura County has safeguarded its abundant agricultural assets by enacting the "Save Our Agricultural Resources" Initiative (SOAR). SOAR conserves farm land in Ventura County by establishing "City Urban Restriction Boundaries" (CURB) around cities. Development outside any designated CURB requires voter approval.

Participating jurisdictions include City of Ventura, Camarillo, Oxnard, Thousand Oaks, County of Ventura, Moorpark, Santa Paula and Fillmore.

## STATE AND LOCAL POLICIES

While there are many state policies related to the conservation of natural and farm lands, this appendix refers to the greenhouse gas reduction related policies from the state on natural and farm lands. The overarching framework that addresses this issue is in the AB 32 Scoping Plan Update. The AB 32 Scoping Plan and all subsequent updates are required to develop a plan at least every five years that outlines sector specific approaches for reducing statewide greenhouse gas emissions to 1990 levels by the year 2020, as outlined in AB 32.<sup>7</sup> In addition to addressing topics such as transportation, waste, energy and others, the state outlines a connection between natural/farm land conservation and greenhouse gas emissions mitigation. While the latest AB 32 Scoping Plan Update refers to the significance of maximizing greenhouse gas reduction benefits, it does not, for the purposes of the topics discussed in this appendix, establish any specific requirements of local governments or metropolitan planning organizations.

At the local and regional levels, SCAG and many municipalities have taken action to conserve natural and farm lands through policy and programs. SCAG, at its 2015 General Assembly, passed Resolution Number GA 2015-1 supporting the wildlife crossing over the Ventura Freeway at Liberty Canyon as an approach to a mitigation measure that minimizes the impacts of transportation infrastructure on wildlife, improves habitat linkages, and preserves wildlife corridors.<sup>8</sup> In early 2014, SCAG staff conducted a survey of all SCAG member cities and counties throughout the region to better understand the initial implementation of the 2012-2035 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) by local jurisdictions. Part of the survey was focused on open space conservation activities, which included natural lands, habitat lands and parks or conservation easement areas used for passive recreation like hiking, biking or equestrian uses. Example of survey questions and results can be found on [TABLE 1](#).

After distribution to local planning departments, SCAG received 145 completed surveys, or a 74 percent response rate. As of September 2014, 46 percent of respondents indicated that they have policies related to natural lands, and 14 percent have agriculture policies. Nearly half of respondents listed land use programs/policies for open space in their jurisdiction, which were primarily general plan elements, such as open space element, parks and recreation element, natural resources element or conservation element. Other prevalent programs/policies were mitigation programs such as Natural Community Conservation Programs and Habitat Conservation Programs (22 percent). Third party programs, such as those administered through non-profits, represent 9 percent and several jurisdictions have other programs related to open space (12 percent). 40 percent of jurisdictions have plans for

open space programs in the future. Over 1/4th (27 percent) of future plans are related to land use and general plans.

## DATA & ANALYSIS

### DATA

As a regional planning agency, SCAG's data gathering role is a key opportunity to work toward improved information sharing for stakeholders across the region. This is especially true for natural and farm lands where no other governmental agency covers the same wide geography with a focus on natural or farm lands. In response to the suggested steps to work toward improving regional conservation and mitigation planning from the 2012 RTP/SCS, SCAG hired a team to enhance its existing data. That effort included the development of a comprehensive database with resources for county transportation commissions, local governments and other planning agencies to use in their conservation and mitigation planning processes, along with a report to provide context.<sup>9</sup> The database includes more than 70 Geographic Information System (GIS) datasets covering vegetation, vertebrate species, boundaries of habitat plans, habitat connectivity, soil types and more from state, federal and other sources.<sup>10</sup> Each database was ranked by relevancy for assessing regional habitat or ecosystem conditions and functions in a spatial context as follows:

- **Rank 1: Databases from this "Directly Useful" category** can be used to assess habitat or ecosystem conditions or functions in a spatial context. Examples include vegetation maps, wildlife habitat maps, soil surveys and fire risk maps.
- **Rank 2: Databases from this "Indirectly Useful" category** can be used for land use planning or impact predictions related to habitats and ecosystems. Examples include planning boundaries related to natural resources, land use designations and management designations.
- **Rank 3: Databases from this "Little or No Use" category** are tangentially or not related to identification or assessment of impacts on natural resources. Examples include political boundaries, U.S. Census data, employment data and earthquake faults.

The databases in the inventory can be used in a variety of ways to describe the amount, location and function of biological resources in support of conservation and open space planning. Some databases in the inventory, especially those in relevancy Rank 2, are useful in the assessment of potential impacts of human activities on natural resources, though this was not the focal purpose of data gathering.

Databases that provide information on the distribution of different vegetation types are the primary source of information useful to regional conservation and mitigation planning. Wetlands mapping data provide greater resolution of these special vegetation types that often provide important habitat for sensitive wildlife species and for wildlife in general. Some agricultural crop types provide important habitat for sensitive wildlife species and maps of agricultural crops and cropping patterns are useful in understanding the distribution of habitat across the landscape. The inventory includes vegetation, wetlands and agricultural lands mapping databases from various federal and state agencies such as the U.S. Forest Service, the California Department of Fish and Wildlife, and the U.S. Fish and Wildlife Service.

The same report outlines data gaps. Most of the databases in the inventory are not useful at the scale of individual development project planning because projects cover relatively small areas and typically require site-specific natural resources information at a greater resolution than is provided in the regional databases in the inventory. Some of the databases in the inventory provide only partial coverage of the SCAG region and some are of such coarse resolution that they may not be suitable even for regional planning purposes. Such data gaps specific to each database in the inventory are described in the report. A number of regional HCPs and NCCPs are being implemented or are in development in the SCAG region that include valuable natural resources information. HCPs and NCCPs typically develop more uniform and sometimes higher-resolution vegetation GIS data, use regional databases (similar to the databases gathered for this inventory) to develop and apply habitat models for endangered and threatened species and other species addressed by the plan, identify species occurrences derived from other sources than the California Natural Diversity Database, and identify areas of important habitat proposed for future protection. That data will need to be gathered in the future.

## CONSERVATION FRAMEWORK AND ASSESSMENT REPORT

A habitat assessment tool was used to measure habitat quality both at the coarse, regional scale and also measured a more local, fine scale site as a pilot. In addition, an analysis was conducted to develop the Conservation Framework and Assessment Report. The assessment and framework are available in a combined report.<sup>11</sup> This report acts as a key step towards and encourages a regional open space conservation program and/or a regional advance mitigation plan. The strategy is flexible in that it could build off existing local plans and also be designed to meet the needs of individual stakeholders.

The report used the Combined Habitat Assessment Protocols (CHAP), which is an accounting and appraisal tool that is a simple yet advanced methodology used to spatially measure habitat quality to do both coarse-level and fine-level analysis. CHAP has been applied as a framework for conservation planning across the western US. Its methodology

establishes a habitat value based on assessment of species, habitat and functions. The methodology evaluates biodiversity within a habitat type and/or structural condition. The outcome of a CHAP evaluation is a Habitat and Biodiversity metric that gives a per-acre value for each homogeneous polygon delineated. CHAP accounts for species-habitats-functions at a site that is also joined to a peer-review Integrated Habitat and Biodiversity Information System to create appraised “values” between site(s) and different management activities.

The framework and assessment report provides substantial detail of the CHAP methodology for both the coarse-scale and fine-scale assessments. To summarize, CHAP is an accounting and appraisal tool that is a simple yet advanced methodology used to measure habitat quality spatially.

The coarse analysis of the Conservation Framework and Assessment Report included the entire SCAG region. The foundational blocks of the coarse-scale assessment were the ten watersheds in the SCAG region, rather than political boundaries or hexagons that have little relevance to biological systems. The watershed-based approach is appropriate at this regional planning scale because of common issues and solutions that impact watersheds. The ten watersheds in the SCAG region include: Ventura San Gabriel Coastal, Tulare Buena Vista Lakes, Southern Mojave, Santa Ana, Salton Sea, Northern Mojave, Lower Colorado, Laguna San Diego, Central Nevada Desert Basins, and Central California Coastal. The Prado Basin site include 479 small mapping areas, referred to as polygons, in 4,237 acres.

The CHAP approach provides SCAG with a replicable, data-driven technique for assessing habitat that provides a consistent look at the region that can also be used for mitigation and restoration actions at the local level. This assessment used the state Department of Fish and Wildlife’s California Wildlife Habitat Relationships database and its species range maps (included in the database inventory), ultimately identifying 550 vertebrate species that could occur in the SCAG region. Forty-three species, or eight percent of the total vertebrate, non-fish species in the region, have a state or federal listing status of threatened or endangered. See **EXHIBIT 1**, SCAG Region Habitat Evaluation Map, for the outcome for the CHAP coarse-level evaluation for the entire region. The lowest four ranges (Urban/Agricultural, Low, Medium, and High) on this map made up the area used in Policy B Scenario during the scenario planning process and growth was excluded from the highest (Very High) range.

The fine-level CHAP analysis of the SCAG region was completed as a pilot to demonstrate for local agencies this relatively simple methodology and also show the options for using the information upon completion of the assessment. The team conducted the pilot analysis at the Prado Basin, which is the largest riparian woodland habitat in the SCAG region. Located near the intersection of State Route 91 and State Route 71, the Prado Basin spans portions of Riverside, San Bernardino and Orange Counties. The site is made of 4,237 acres and is home to ten habitat types such as agricultural, annual grassland, coastal oak woodland,

coastal scrub, eucalyptus, fresh emergent wetland, unknown, urban, valley foothill riparian, and water/riverine. The CHAP analysis identified about 250 species and took into account the large influence of invasive species due to the site's location adjacent to urban conditions. See **EXHIBIT 2**, Prado Basin Habitat Evaluation Map, for a sample map of the CHAP fine-level evaluation for the pilot site. Key components of the Conservation Framework and Assessment address biodiversity, water resources, ecosystem services, and climate change resilience through:

- Protection of sensitive, rare, threatened and endangered species and essential, critical, rare and unique habitats, including wetlands, riparian areas, oak woodlands, coastal sage scrub and others;
- Ensuring that the full range of habitat types are identified and represented as important areas for conservation;
- Enhancing natural lands contiguity and maintaining critical landscape linkages;
- Ensuring watershed integrity and protecting groundwater and surface water sources;
- Protecting key habitats and landscapes that provide resilience to climate change; and
- Documenting the wide range of ecosystem services provided by open space lands.

The Conservation Framework and Assessment also mapped and analyzed the distribution of protected land in the SCAG region (see **EXHIBIT 3**, Protected Lands in SCAG Region). It analyzed the amount of protected habitat in each SCAG basin for each CWHR habitat type using GAP Statuses 1 and 2 lands and the CalFire land cover map (see **TABLE 2** Share of Protected Lands by Watershed). Excluding the non-natural land cover types (urban, agriculture, and eucalyptus), the habitat types with the lowest amount of protection in the SCAG region are valley foothill riparian, valley oak woodland and coastal scrub, all of which have less than ten percent of their total area in protected status according to the U.S. Geological Survey GAP Status 1 or 2. For example, only seven percent of the total area of the Santa Ana Basin is protected, with less than three percent of valley foothill riparian habitat and only four percent of coastal scrub habitat protected in that basin. These underrepresented habitat types also tend to have high per-acre habitat values and might serve as focal habitats for conservation action.

To build off of the data analysis and mapping, the Conservation Framework Assessment suggested some next steps to bridge the “research-implementation gap” and help lead to conservation action. The report suggested deciding how to use the information in the report and other supporting data to help inform and prioritize conservation actions. The report outlined six recommendations for moving forward with systematic conservation planning approach: representation, ecological integrity, connectivity, hydrologic connectivity,

climate change adaptation, and Environmentally Distributed Ecological Networks (EDENs)/citizen science.

## RECOMMENDED POLICIES

In the 2012 RTP/SCS, SCAG outlined suggested steps towards developing an Open Space Conservation Plan to mitigate planned activities. Since then, SCAG, in coordination with regional partners, have taken some key actions to make progress on those suggested steps. In addition to mitigation, this appendix outlines some other motivations for SCAG to undertake a cohesive natural land/farm land conservation plan. These strategies were developed by the Open Space Conservation Working Group and cover a variety of approaches to conserving natural and farm lands. These approaches are not listed in priority order. Participants in the Working Group included San Bernardino Association of Governments, LA Metro, Los Angeles County Department of Regional Planning, Friends of Harbors Beaches and Parks, Orange County Transportation Authority, City of Mission Viejo, City of Irvine, The Nature Conservancy, Building Industry Association, The Trust for Public Land, Town of Apple Valley, Endangered Habitats League, Amigos de Los Rios, Riverside County Transportation Commission, US Fish and Wildlife Service, and California Department of Fish and Wildlife. SCAG consulted, as appropriate, with federal, state and local land management agencies concerning the development of the regional transportation plan. This was done as part of SCAG's outreach/consultation activities and in convening the Open Space Conservation Working Group, in accordance with applicable federal planning requirements. These recommended policies enhance the land use strategies outlined in the RTP/SCS, and therefore were not included in the modeling assumptions. Their impacts were not quantified as part of the Scenario Planning Model Outputs.

## PROMOTE BEST PRACTICES

Support innovative land conservation tools that facilitate the exchange of information related to best practices amongst local governments, resource agencies, non-governmental agencies and other stakeholders in and outside of the SCAG region.

## FACILITATE PARTNERSHIPS AND COLLABORATION

Encourage, cultivate and facilitate partnerships and collaboration on natural/farm lands policies and programs between public, educational and non-profit agencies throughout the SCAG region.

## ENCOURAGE REGIONAL CONSERVATION PLANNING

Seek and expand engagement with resource and permitting agencies, County Transportation Commissions, Caltrans, California High Speed Rail Authority and other partners on regional advanced mitigation and integrated regional conservation planning.

## EXPAND DATA SHARING

Continue to gather spatial and other data to better inform regional policies regarding natural/farm lands, such as the 2014 data gathering efforts to provide coarse and fine scale habitat assessment data for the SCAG region. Coordinate and improve the Intergovernmental Review Process to provide or obtain enhanced data regarding mitigation opportunities.

## SUPPORT INNOVATIVE LAND USE POLICIES

Recognize the region's growth potential and its inherent connection between the conservation of existing natural/farm lands and strategies to promote infill, such as transfer of development rights and land banking, which relieve pressure to expand the urban footprint. Additionally, continue efforts to work toward identifying priority conservation areas, including habitat and farm land areas, to permanently protect as part of future regional plans.

## IMPROVE NATURAL CORRIDOR CONNECTIVITY

Encourage and facilitate research, programs and policies to identify, protect and restore natural habitat corridors, especially where corridors cross county boundaries. Additionally, continue support for preserving wildlife corridors and wildlife crossings to minimize the impact of transportation projects on wildlife species and habitat fragmentation.

## ENCOURAGE URBAN GREENING/GREEN INFRASTRUCTURE

Support planning and implementation efforts that improve the relationship between the urban built environment and the urban natural environment, such as urban forestry, urban greenways and trail systems, watershed management and expansion of green infrastructure systems.

## CONNECT TO PUBLIC HEALTH

Recognize and encourage policy development of the link between natural/farm lands conservation with opportunities to improve public health such as recreational access and active transportation investment.

## INCLUDE CLIMATE SMART CONSERVATION

Support the purposeful consideration of climate change in natural/farm lands management including linking actions to key climate impacts and vulnerabilities. Encourage and seek opportunities to quantify baseline greenhouse gas emissions and emissions reductions related to enhanced regional conservation efforts, especially modeling tools and Cap-and-Trade funding.

## SEEK FUNDING OPPORTUNITIES

Actively seek funding opportunities for SCAG, member jurisdictions and potential partners for programs that facilitate the conservation and restoration of natural/farm lands, including pilot program opportunities.

These approaches respond to the suggestion in the Conservation Framework and Assessment that the region explore goal setting in order to develop a robust conservation plan and align with recommendations from the AB 32 Scoping Plan Update calling for the local and regional planning to integrate and emphasize on land conservation and avoided conversion of croplands, forests, rangelands and wetlands. The Scoping Plan Update also suggests land conservation efforts be coordinated with the expansion and promotion of urban forestry, urban agriculture and green infrastructure.<sup>12</sup>

## STRATEGIES & NEXT STEP RECOMMENDATIONS

SCAG has demonstrated progress toward creating an Open Space Conservation Plan and simultaneously engaged numerous stakeholders through this process. Building on this effort has the potential to create a regional conservation program that CTCs, cities, agencies and non-profits can align with and support. This strategic and comprehensive approach allows for regional growth, while at the same time ensuring that important natural and working lands as well as water resources are protected in perpetuity. The 2012 RTP/SCS committed to a regional mitigation plan for inclusion in the 2016 RTP/SCS. With that as the foundation, the following next steps suggested for further development of a conservation policy could include the following:



- Expanding on the Natural Resource Inventory Database and Conservation Framework & Assessment by incorporating strategic mapping layers to build the database and further refine the priority conservation areas. Specifically:
  - Further investing in mapping and habitat and farmland data tracking.
  - Working with County Transportation Commissions to support their county-level efforts at database building.
- Encouraging CTCs to develop advance mitigation programs or include them in future transportation measures. Specifically:
  - Funding pilot programs that encourage advance mitigation including data and replicable processes
  - Participating in state level efforts that would support regional advanced mitigation planning in the SCAG region
  - Supporting the inclusion of advance mitigation programs at county level transportation measures
- Aligning with funding opportunities and pilot programs to begin implementation of the Conservation Plan through acquisition and restoration. Specifically:
  - Seeking planning funds, such as Cap-and-Trade auction proceeds that could help prepare for local action on acquisition and restoration.
  - Supporting county transportation commissions and other partners
  - Continuing support of the State Wildlife Action Plan 2015 Update<sup>13</sup> and its implementation.
  - Integrating greening strategies into regional planning efforts.
- Providing incentives to jurisdictions that cooperate across county lines to protect and restore natural habitat corridors, especially where corridors cross county boundaries. Specifically:
  - Working with stakeholders to identify incentives.
  - Considering providing sustainability planning grants that help protect habitat corridors, especially across county boundaries.

As recognized in the AB 32 Scoping Plan Update, funding is essential to address land conservation and maximize its related greenhouse gas benefits, yet it is traditionally underfunded.<sup>14</sup> Much like transportation, outcomes of actions on natural and farm lands often occur on a long range scale. The Scoping Plan Update suggests action within the next ten years is critical to ensure that long-term benefits begin materializing by 2050. Because of the greenhouse gas reduction connection between natural and farm land conservation, SCAG should seek out and leverage funds identified for greenhouse gas reduction as a

potential funding source. Several of the California Climate Investment programs specifically target natural resource conservation<sup>15</sup> and agricultural land conservation.<sup>16</sup>

As SCAG works toward implementing appropriate natural and farm land strategies to meet mitigation requirements and address regional goals, the approach should maximize co-benefits. As identified in the AB 32 Scoping Plan Update, efforts to maintain and enhance forests, rangelands/grazed lands and wetlands may offer a range of co-benefits. These co-benefits may include, but are not limited to, carbon storage; improving water quality and quantity; potentially providing safeguards against risks such as flood and erosion; providing habitat, refugia and corridors for species and natural communities that are increasingly stressed by climate change; offering enhanced recreational opportunities and tourism revenue; supporting bioenergy development; offering waste diversion opportunities; helping to reduce energy demand as a result of shading; improving air quality; and/or supporting job creation in rural communities.<sup>17</sup>

With local support, SCAG policies and strategies outlined in the RTP/SCS and in this appendix will help to reshape future land consumption. This regional plan includes a strategy that promotes a more compact growth pattern that will return many benefits, such as savings in water and energy, conservation of habitat lands, support for agriculture as both a key industry and a cornerstone of the region's economic history, more sustainable transportation investments, diversified housing options, and an urban form that supports a competitive economy. By committing to the strategies and recommendations in this appendix in the context of the other key RTP/SCS strategies, the SCAG region can anticipate the fruition of a better region for our residents, our ecosystems and our economy.

TABLE 1 Open Space Conservation Activity – Local Government Questionnaire

Overview of Results: September 2014	
Total Surveys Completed:	145
Total Surveys Remaining:	52
Response Rate:	74%

## QUESTION 1

Does your jurisdiction have any open space plans, a greenprint, programs, policies, mitigation, mitigation ratios, easements, or other tools and activities related to open space conservation, preservation, and restoration activities?

Category	Total	%
Natural Lands	66	46%
Agriculture	20	14%
Parks and Recreation	86	59%

## QUESTION 2

Please provide a list of open space conservation, restoration, mitigation or similar plans, programs, and/or policies (such HCPs, NCCPs, TDR, mitigation banking, conservation or agricultural easements, etc.) that have been adopted by your jurisdiction.

Classification	Total	%
Land Use	66	46%
Mitigation	31	21%
Revenue	7	5%
3rd Party*	13	9%
Other	16	11%
N/A or No Response	58	40%

\* Managed by an outside agency such as a non-profit

## Top Five Responses:

Classification		Category	Response Occurrence
1	Land Use Planning	General Plan: Open Space Element	20
2	Land Use Planning	General Plan	19
3	Land Use Planning	Parks and Recreation Program	16
4	Mitigation	Multi-Species Habitat Conservation Plan	15
5	NCCP	Natural Community Conservation Plan	12

## QUESTION 3

Are mitigation activities developed on a project-by-project basis or are there mitigation approaches, plans, policies, and/or procedures for comprehensively mitigating impacts to open space/natural lands in your jurisdiction?

Activity	TOTAL	%
Project by Project	63	43%
Comprehensive	7	5%
Both	27	19%
N/A or No Answer	48	33%

**TABLE 1** Open Space Conservation Activity – Local Government Questionnaire Continued**QUESTION 4**

If you have an HCP or NCCP or other conservation tool/mechanism in your county, describe how (if) it is related to current plans, programs, or policies in your agency.

Classification	Total	%
Land Use Planning	15	10%
Mitigation	24	17%
Revenue	1	1%
3rd Party*	7	5%
Other	7	5%
N/A or No Response	109	75%

\* Managed by an outside agency such as a non-profit

**Top Five Responses:**

Classification	Category	Response Occurrence	
1	Mitigation	Multi-Species Habitat Conservation Plan	11
2	Land Use	General Plan	8
3	Mitigation	Natural Community Conservation Plan/Habitat Conservation Plan	7
4	Land Use Planning	General Plan Open Space Element	5
5	3rd Party*	Conservation Authority	5

\* Managed by an outside agency such as a non-profit

**QUESTION 5**

What kinds of existing or historic funds (from your general fund, special allocations, or voter-approved taxes/bonds) or other funding mechanisms are available to implement open space conservation plans, greenprints, programs, and policies and/or mitigation activities?

Classification	Total	%
Land Use Planning	4	3%
Mitigation	18	12%
Internal Revenue	28	19%
3rd Party*	17	12%
Other	16	11%
N/A or No Response	94	65%

\* Managed by an outside agency such as a non-profit

**Top Five Responses:**

Classification	Category	Response Occurrence	
1	Internal Revenue	General Funds	13
2	3rd Party*	Grant Funds	11
3	Mitigation	Mitigation Fees	9
4	Internal Revenue	Development Impact Fee	6
5	Internal Revenue	Taxpayer Initiative Funds	6

\* Managed by an outside agency such as a non-profit

**TABLE 1** Open Space Conservation Activity – Local Government Questionnaire Continued**QUESTION 6**

Do you have any pending or plans to develop open space conservation plans, programs, or polices in your jurisdiction in the near future?

Classification	Total	%
Land Use Planning	40	28%
Mitigation	6	4%
Internal Revenue	0	0%
3rd Party*	3	2%
Other	14	10%
N/A or No Response	93	64%

\* Managed by an outside agency such as a non-profit

**Top Five Responses:**

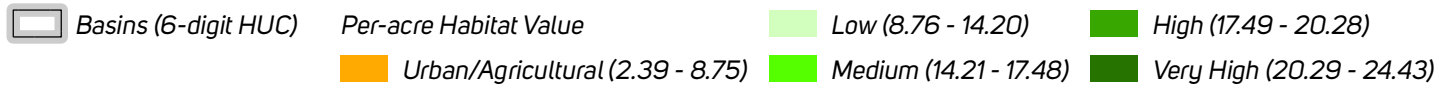
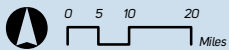
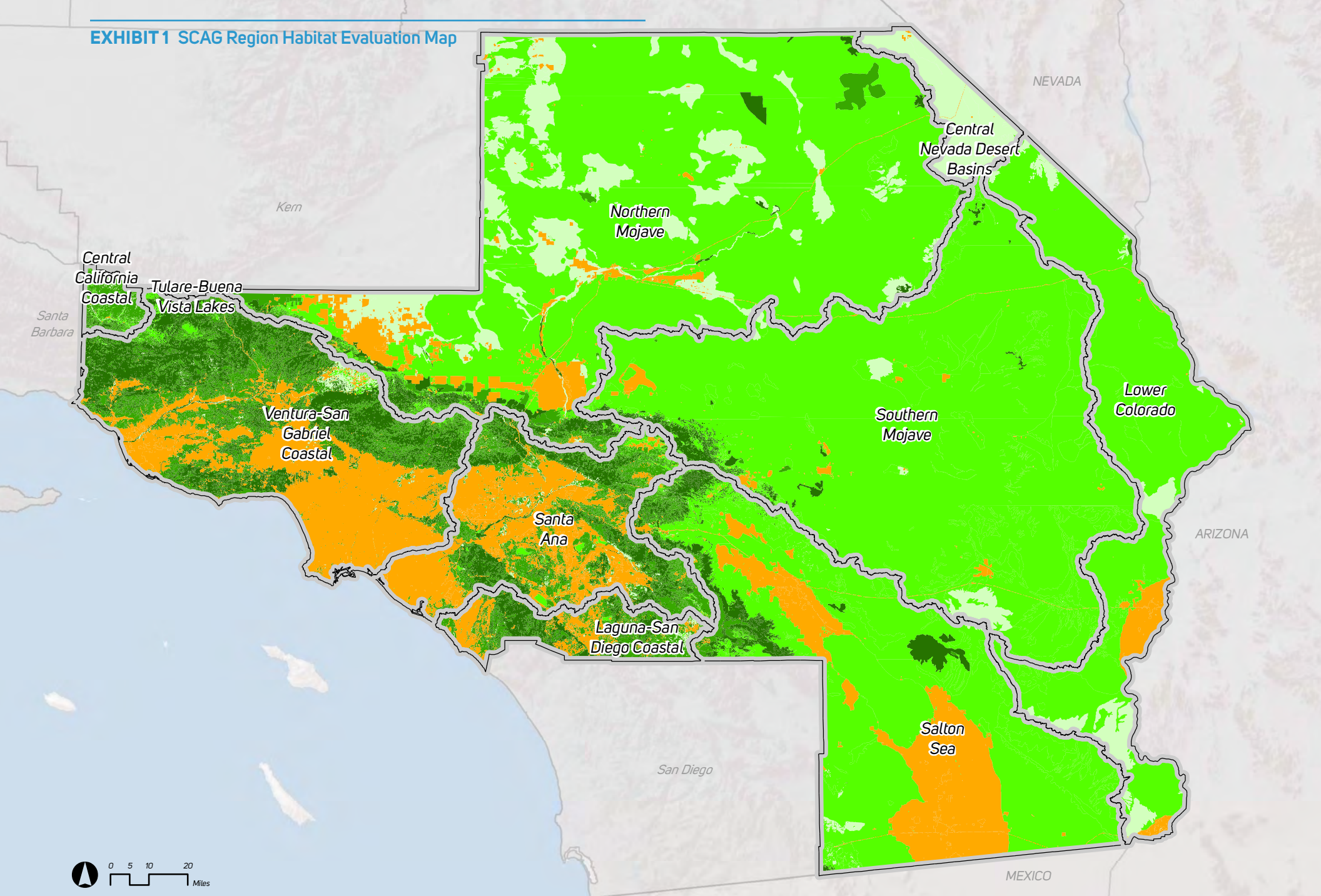
	Classification	Category	Response Occurrence
1	Land Use Planning	Parks and Recreation Plan	11
2	Land Use Planning	General Plan	10
3	Land Use Planning	General Plan-Open Space Element	8
4	Land Use Planning	Open Space Plan	5
5	Mitigation	Multi-Species Habitat Conservation Plan	4

**QUESTION 7**

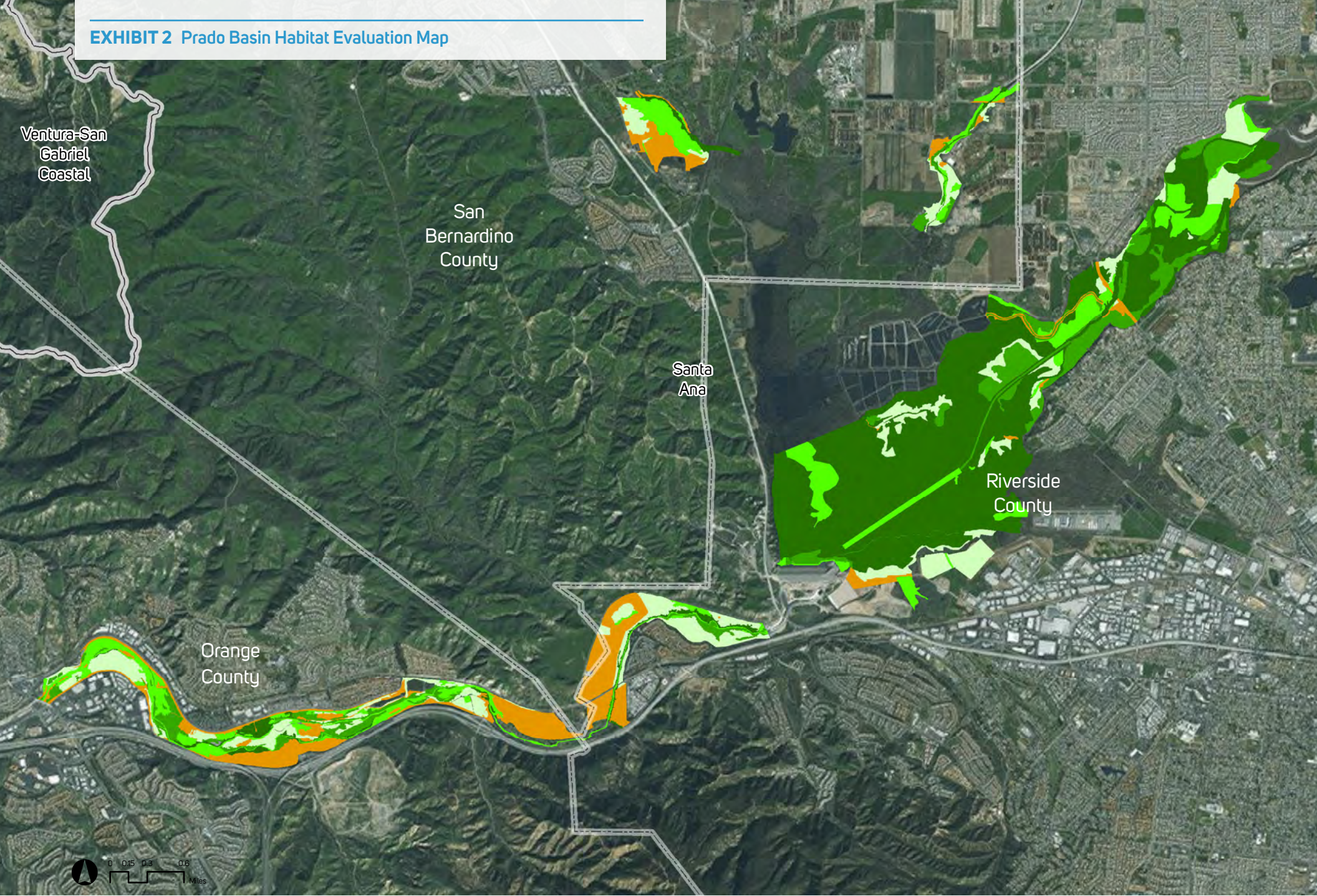
What data resources, tools, examples, or information do you need for considering open space conservation planning or mitigation? What types of data would be useful to have?

Categories	Total	%
Environmental Data (GIS)	27	19%
Land Use Data (GIS)	15	10%
Guidelines/Best Practices	18	12%
Funding	11	8%
Other	7	5%
N/A or No Response	79	54%

**EXHIBIT 1 SCAG Region Habitat Evaluation Map**



# EXHIBIT 2 Prado Basin Habitat Evaluation Map



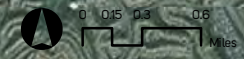
Ventura-San Gabriel Coastal

San Bernardino County

Santa Ana

Riverside County

Orange County



Basins (6-digit HUC)	County Boundary	Baseline Condition Corrected Per Acre Value	Low (8.25 - 13.58)	High (18.33 - 23.22)
		Urban/Agricultural (2.39 - 8.24)	Medium (13.59 - 18.32)	Very High (23.23 - 35.56)

**EXHIBIT 3 Protected Lands in the SCAG Region**

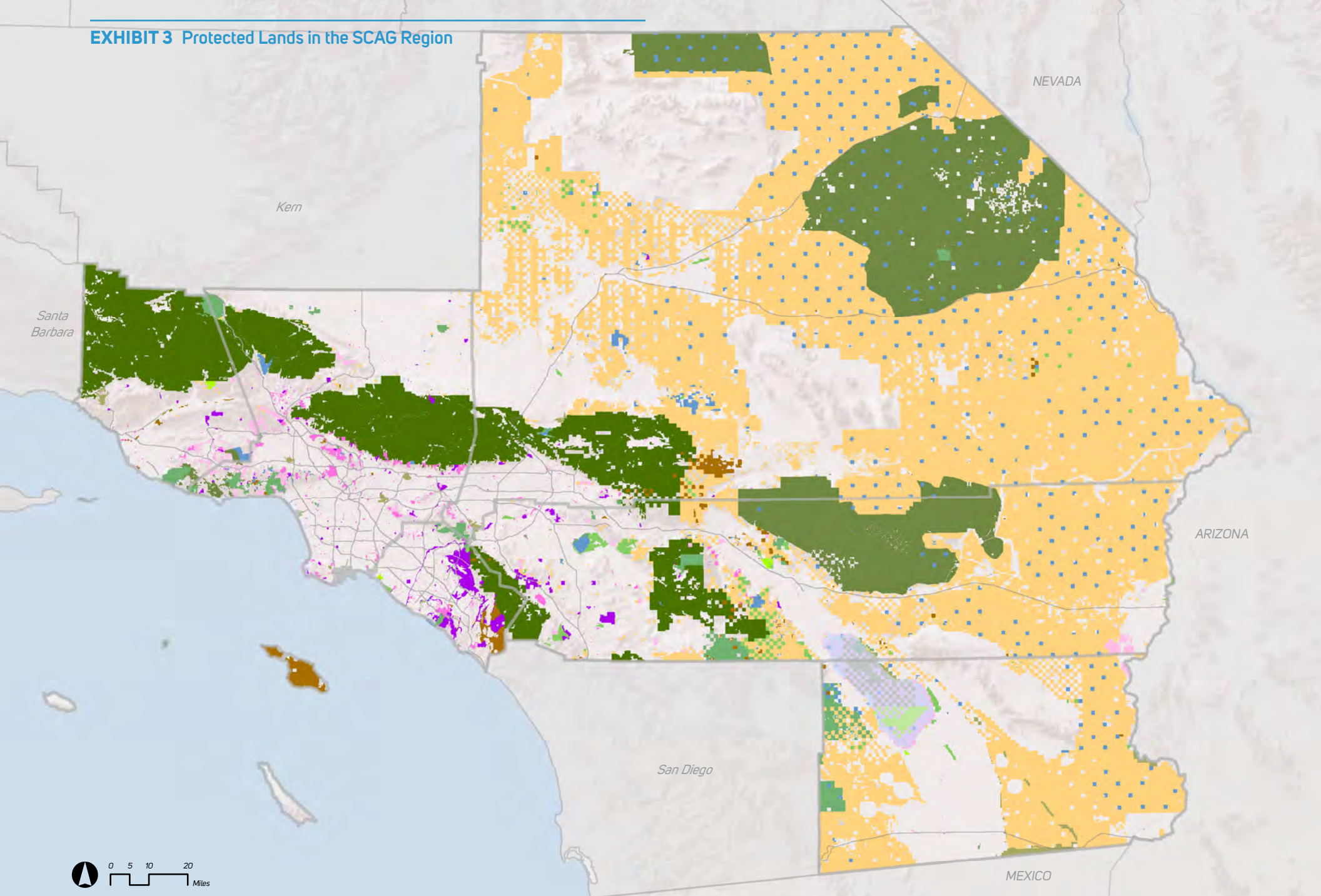


TABLE 2 Share of Protected Lands by Watershed

	Total Acres	Protected** Acres	% Protected
Ventura San Gabriel Coastal	2,794,092.35	440,347.27	16%
Tulare Buena Vista Lakes	9,865.00	84.06	1%
Southern Mojave	5,671,795.18	2,889,425.15	51%
Santa Ana	1,726,591.10	121,111.18	7%
Salton Sea	3,775,248.13	1,091,663.16	29%
Northern Mojave	7,038,791.08	2,496,261.45	35%
Lower Colorado	2,461,937.96	1,210,360.88	49%
Laguna San Diego	565,301.57	65,307.67	12%
Central Nevada Desert Basins	388,430.02	274,436.50	71%
Central California Coastal	154,450.51	61,900.99	40%
<b>Total</b>	<b>24,586,502.90</b>	<b>8,650,898.31</b>	<b>35%</b>

\*\* Defined as U.S. Geological Survey GAP 1 or 2 Status<sup>18</sup>



## NOTES

- <sup>1</sup> Myers, N., R.A. Mittermeier, C.G. Mittermeier, G.A.B. da Fonseca, J. Kent. 2000. Biodiversity hotspots for conservation priorities. *Nature*: 403:852-858.
- <sup>2</sup> Imperial County Farm Bureau. Imperial County Agriculture. Accessed at: <http://www.icfb.net/countyag.html>
- <sup>3</sup> For purposes of the 2016 RTP/SCS, the term “natural lands” includes habitat areas such as grasslands, wetlands, deserts, forests, shrub lands, riparian zones, and other types of natural environments. Natural lands are not intended to include agricultural croplands, grazing/rangeland, other working lands; or municipal parks serving primarily recreational purposes..’
- <sup>4</sup> Southern California Association of Governments. 2015. Conservation Framework and Assessment. Accessed at: [http://sustain.scag.ca.gov/Sustainability%20Portal%20Document%20Library/SCAG%20Final%20Conservation%20Framework%20%20Assessment\\_Feb.pdf](http://sustain.scag.ca.gov/Sustainability%20Portal%20Document%20Library/SCAG%20Final%20Conservation%20Framework%20%20Assessment_Feb.pdf)
- <sup>5</sup> Includes Prime Farmland, Farmland of Statewide Importance, Unique Farmland and Farmland of Local Importance
- <sup>6</sup> California Air Resources Board. 2008. AB 32 Scoping Plan. Accessed at: [http://www.arb.ca.gov/cc/scopingplan/document/adopted\\_scoping\\_plan.pdf](http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf)
- <sup>7</sup> ibid
- <sup>8</sup> Southern California Association of Governments. 2015. Resolution Number GA 2015-1. Accessed at: <http://www.scag.ca.gov/committees/CommitteeDocLibrary/ga050715fullagn.pdf>
- <sup>9</sup> Southern California Association of Governments. 2014. Existing Information and Data Gaps for Natural Resources in SCAG Region. Accessed at: [http://sustain.scag.ca.gov/Sustainability%20Portal%20Document%20Library/Final\\_Report-Existing-Information-Data-Gaps.pdf](http://sustain.scag.ca.gov/Sustainability%20Portal%20Document%20Library/Final_Report-Existing-Information-Data-Gaps.pdf)
- <sup>10</sup> Southern California Association of Governments. 2014. Natural Resources Database Inventory. Accessed at: <http://sustain.scag.ca.gov/Sustainability%20Portal%20Document%20Library/SCAG%20Inventory%20Natural%20Resources%20GIS%20Databases.pdf>
- <sup>11</sup> Southern California Association of Governments. 2015. Conservation Framework and Assessment Report. Accessed at: [http://sustain.scag.ca.gov/Sustainability%20Portal%20Document%20Library/SCAG%20Final%20Conservation%20Framework%20%20Assessment\\_Feb.pdf](http://sustain.scag.ca.gov/Sustainability%20Portal%20Document%20Library/SCAG%20Final%20Conservation%20Framework%20%20Assessment_Feb.pdf)
- <sup>12</sup> California Air Resources Board. 2014. AB 32 Scoping Plan Update. Page 59. Accessed at: <http://www.arb.ca.gov/cc/scopingplan/document/updatedscopingplan2013.htm>
- <sup>13</sup> California Department of Fish and Wildlife. 2015. California State Wildlife Action Plan 2015 Update. Accessed at: <https://www.wildlife.ca.gov/SWAP/Final>
- <sup>14</sup> California Air Resources Board. 2014. AB 32 Scoping Plan Update. Page 74. Accessed at: <http://www.arb.ca.gov/cc/scopingplan/document/updatedscopingplan2013.htm>
- <sup>15</sup> California Air Resources Board. 2015. Natural Resources and Waste Diversion Funding. Accessed at: <http://www.arb.ca.gov/cc/capandtrade/auctionproceeds/ggrfprogrampage.htm#ResourcesandWaste>
- <sup>16</sup> Strategic Growth Council. 2015. Sustainable Agricultural Lands Conservation Program Overview. Accessed at: [http://sgc.ca.gov/s\\_salcprogram.php](http://sgc.ca.gov/s_salcprogram.php)
- <sup>17</sup> California Air Resources Board. 2015. AB 32 Scoping Plan Update. Natural and Working Lands Working Paper (Appendix C) Page 3. Accessed at: [http://www.arb.ca.gov/cc/scopingplan/2013\\_update/naturalandworkinglands.pdf](http://www.arb.ca.gov/cc/scopingplan/2013_update/naturalandworkinglands.pdf)
- <sup>18</sup> US Geological Survey, Gap Analysis Program (GAP). November 2012. Protected Areas Database of the United States (PADUS), version 1.3 Combined Feature Class

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**APPENDIX**

**SCS BACKGROUND | NATURAL & FARM LANDS**

**ADOPTED | APRIL 2016**

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