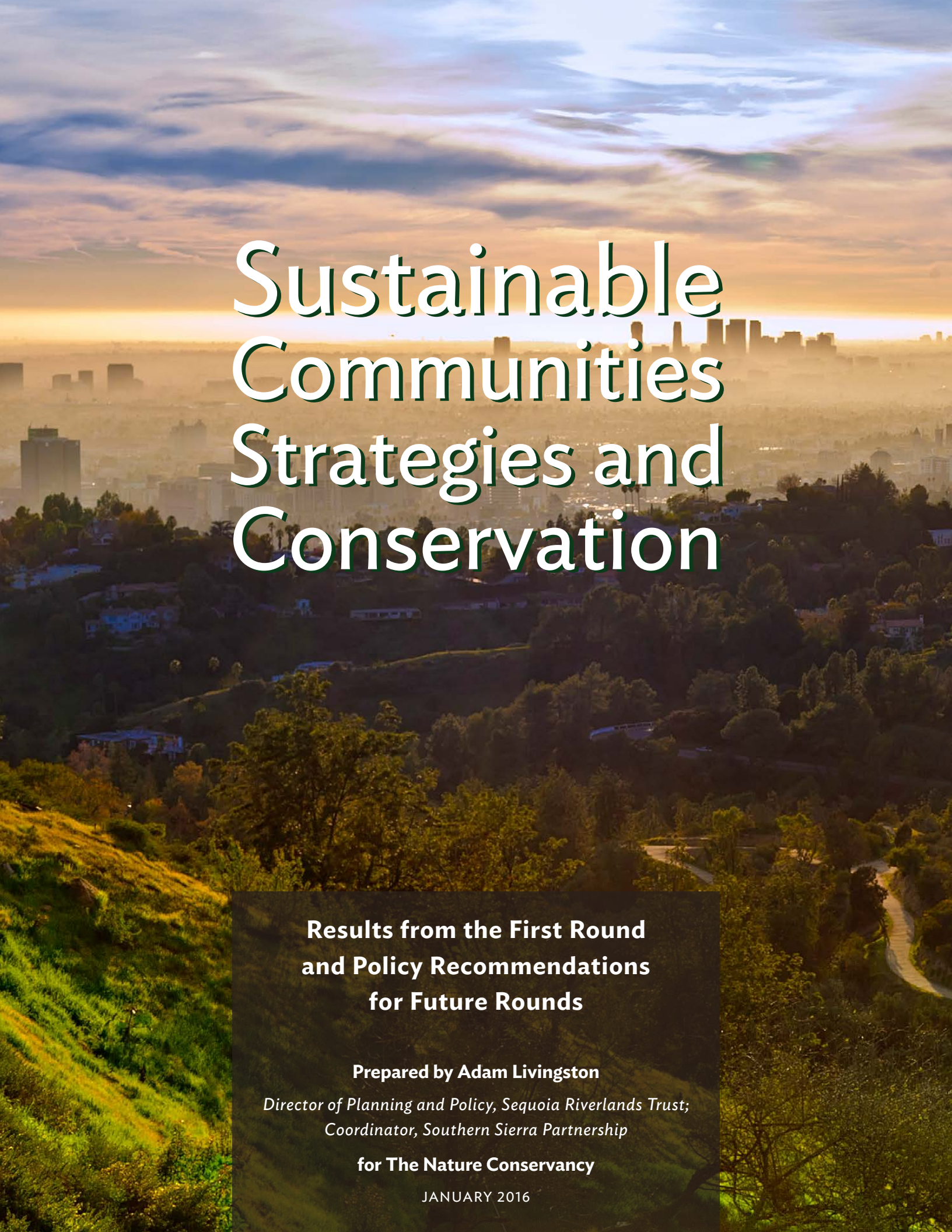

# Sustainable Communities Strategies and Conservation

## Results from the First Round and Policy Recommendations for Future Rounds

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## FIGURES & TABLES



## COMMONLY-USED ABBREVIATIONS

**Agencies**[1]

ABAG: Association of Bay Area Governments

AMBAG: Association of Monterey Bay Area Governments

ARB: California Air Resources Board

BCAG: Butte County Association of Governments

Fresno COG: Fresno Council of Governments

KCAG: Kings County Association of Governments

Kern COG: Kern Council of Governments

LAFCo: Local Agency Formation Commission (any)

MCAG: Merced County Association of Governments

MCTC: Madera County Transportation Commission

MPO: Metropolitan Planning Organization (any)

MTC: Metropolitan Transportation Commission

OCTA: Orange County Transportation Agency

SACOG: Sacramento Area Council of Governments

SANDAG: San Diego Association of Governments

SBCAG: Santa Barbara County Association of Governments

SCAG: Southern California Association of Governments

SJCOG: San Joaquin Council of Governments

SLOCOG: San Luis Obispo Council of Governments

SRTA: Shasta Regional Transportation Agency

StanCOG: Stanislaus Council of Governments

TCAG: Tulare County Association of Governments

TMPO: Tahoe Metropolitan Planning Organization

TRPA: Tahoe Regional Planning Agency

**Programs, Processes and Documents**

BRCP: Butte Regional Conservation Plan

EIR: Environmental Impact Report

EIS: Environmental Impact Statement

FMMP: Farmland Mapping and Monitoring Program

HCP: Habitat Conservation Plan

MHCP: Multiple Habitat Conservation Program

MRPP: Mitigation and Resource Protection Program

MSCP: Multiple Species Conservation Program

MTP: Metropolitan Transportation Plan

NCCP: Natural Community Conservation Plan

RTP: Regional Transportation Plan

SCS: Sustainable Communities Strategy

**Other Abbreviations**

CEQA: California Environmental Quality Act

CNDDB: California Natural Diversity Database

$CO_2$: Carbon Dioxide

GHG: Greenhouse Gas

PCA: Priority Conservation Area (as used in Plan Bay Area)

PDA: Priority Development Area (as used in Plan Bay Area)

RAMP: Regional Advance Mitigation Planning

RUCS: Rural-Urban Connections Strategy (as used in Sacramento MTP/SCS)

SOI: Sphere of Influence

TDR: Transferable Development Rights

VMT: Vehicle Miles Traveled

UPA: Urban Permit Area (as used in Butte MTP/SCS)

1 Abbreviations for individual MPOs are those used by the MPOs themselves.

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# Abstract

**Sustainable Communities Strategies (SCSs)**, which link land use, transportation and climate policy, are designed to reduce per capita greenhouse gas (GHG) emissions while providing benefits ranging from improved air quality and expanded transportation options to revitalization of city centers and investment in disadvantaged communities. Because conservation of natural and working lands is essential to achieving these goals, most SCSs include policies, objectives or implementation measures relating to conservation, and many take innovative approaches that may be of use to other regions. In order to build on these successes and help Metropolitan Planning Organizations (MPOs) achieve more robust results in future rounds, this report surveys conservation measures in existing SCSs, along with conservation-related proposals that were made but not adopted in each region, and then offers a set of model policies and best practices for future SCSs.

# Executive Summary

**The SCS process** provides an opportunity for eighteen regions representing a majority of California's population and much of its land area to reduce GHG emissions through "changed land use patterns and improved transportation."[2] Conservation of natural and working lands can help meet this goal while also supporting livelihoods, contributing to food and water security, improving public health, encouraging investment in disadvantaged communities and providing a host of additional benefits.

Perhaps most importantly, a growing body of research shows that conservation is essential to achieving GHG reductions. Recent studies indicate that per-acre GHG emissions from farmland in California are an average of 58 times lower than those from the state's urban areas, [3] that per-acre emissions from rangeland may be up to 217 times lower,[4] and that natural landscapes such as oak woodlands can sequester millions of tons of carbon.[5] Policies that direct new growth into existing communities without displacing current residents can prevent the conversion of natural and working lands to higher-emission uses and support compact development patterns that lower vehicle miles traveled (VMT).[6] Indeed, an American Farmland Trust study has found that reducing California's farmland conversion rate by half would prevent 55 million metric tons of GHG emissions over the next decade, which would be "equivalent to avoiding emissions from more than 129 billion vehicle miles traveled."[7]

2 2008 Cal. Stat. Ch. 728, § 1(c).

3 Shaffer and Thompson, 2015.

4 Jackson et al., 2012.

5 Gaman, 2008; Gaman and Firman, 2006.

6 See, e.g., Niemeier et al., 2011 (finding that more compact patterns of residential growth have the potential to lower VMT and emissions in the San Joaquin Valley).

7 Shaffer and Thompson, 2015.

Natural and working lands can also bring billions of dollars into our state's economy and contribute to food security, water availability and water treatment. California is home to some of the most productive farmland and rangeland on the planet, with crop receipts alone amounting to $54 billion in 2014.[8] Conserving the farms and ranches that make this bounty possible is essential for maintaining our state's economic vitality, as well as food security in a time of increasing worldwide food demand. Water security, in turn, is supported by watersheds that channel melted snowpack from high altitude areas to farms, ranches and cities and contribute to groundwater recharge,[9] and by wetlands and forested areas that remove toxic contaminants from water.[10] Given that many Californians lack access to clean, affordable drinking water,[11] development patterns that conserve California's natural water treatment infrastructure are essential not only as a matter of economics, but also as a matter of equity.

Conservation can contribute to public health as well. According to the American Lung Association, the five most polluted metropolitan areas by ozone, year round particulate matter and short term particulate matter are all in California and, with the exception of Los Angeles and Sacramento, all in the San Joaquin Valley.[12] The resulting economic, social and health burdens are borne disproportionately by poor communities of color, [13] making it imperative to change the land use patterns that impose these costs. Conserving natural and working lands and directing new development to existing communities can improve air quality, while also supporting more physically active lifestyles and contributing to public health in other ways. [14]

More broadly, conservation reinforces SB 375's underlying goals of encouraging compact growth and investing in disadvantaged communities. A transportation agency's decision whether to fund a highway to serve a new town or support transit for existing (and often disadvantaged) communities can shape its region's land use pattern for decades to come. Linking transportation investments to other land use and climate considerations, including conservation of natural and working lands, can support more equitable and sustainable patterns of development, as it is already beginning to do in places as diverse as the Bay Area, the San Joaquin Valley and Southern California.

8 CDFA, 2015a.

9 See, e.g., SSP, 2010 (quantifying water yield, mapping groundwater recharge potential and describing other ecosystem services provided by intact natural systems in the Southern Sierra).

10 Duffy and Kahara, 2011; Nowak et al., 2007.

11 Moore et al., 2011.

12 American Lung Association, 2015.

13 London et al., 2011.

14 Gies, 2006.

Given the close relationship between conservation, GHG reductions and other goals of the SCS process, the vast majority of SCSs adopted in the first round include policies, objectives or implementation measures relating to conservation, and many offer innovative strategies that may be of use in other regions. Plan Bay Area, for example, builds its land use pattern around a spatially explicit framework to channel conservation and development resources into appropriate areas, creates a new funding stream for land protection, and directs all new growth into its region's existing urban footprint.[15] The Sacramento region's first SCS is based in part on results from its Rural-Urban Connections Strategy (RUCS), a set of mapping and modeling tools that represent a major advance in understanding the rural agricultural economy.[16] Meanwhile, Tulare County's SCS treats natural resource layers from the San Joaquin Valley Greenprint as constraints to development in its land use pattern,[17] and Santa Barbara takes a similar approach using resource layers assembled by the Santa Barbara County Association of Governments. Elsewhere, Butte County's first SCS is built around a set of general plans designed to be consistent with the Butte Regional Conservation Plan.[18]

Other SCSs take innovative approaches to mitigation, project selection and land use in general. San Diego's first SCS, for example, incorporates a comprehensive regional advance mitigation planning (RAMP) program,[19] and Southern California's includes a commitment to develop a similar program for the next round.[20] The Kings County 2014 Regional Transportation Plan incorporates a scoring system to select highway projects, under which points are awarded for minimizing impacts to special status species and avoiding "disruption to natural beauty."[21] And Tahoe's first SCS endorses shrinking its region's development footprint using transferable development rights (TDR), while attributing a specific proportion of its claimed GHG reductions to changes in land use.[22]

In order to help MPOs, advocates and others build on these successes, this report examines conservation measures in existing SCSs, along with conservation-related proposals that were made but not adopted in each region. It then offers a set of model policies and best practices for future SCSs.

15 ABAG and MTC, 2013a.
16 SACOG, 2012a.
17 TCAG, 2014a.
18 BCAG, 2012.
19 SANDAG, 2011a.
20 SCAG, 2012.
21 KCAG, 2014.
22 TMPO et al., 2012.

# Background:
## SB 375, Metropolitan Planning Organizations and the SCS Process

### SB 375 and Conservation

The Sustainable Communities and Climate Protection Act of 2008 (SB 375) links land use and transportation planning to climate policy, authorizing the California Air Resources Board (ARB) to set GHG reduction targets for the state's eighteen MPOs. As part of its Regional Transportation Plan (RTP), each MPO is responsible for preparing an SCS showing how it will meet the targets through "changed land use patterns and improved transportation."[23] Though SB 375 does not grant MPOs direct control over local land use, it allows each MPO to create a nonbinding "land use allocation" in its RTP and to plan for transportation investments consistent with that scenario.[24] It also provides CEQA streamlining for projects consistent with an adopted SCS, an indirect incentive for "developers to submit applications and local governments to make land use decisions that will help the state achieve its climate goals."[25]

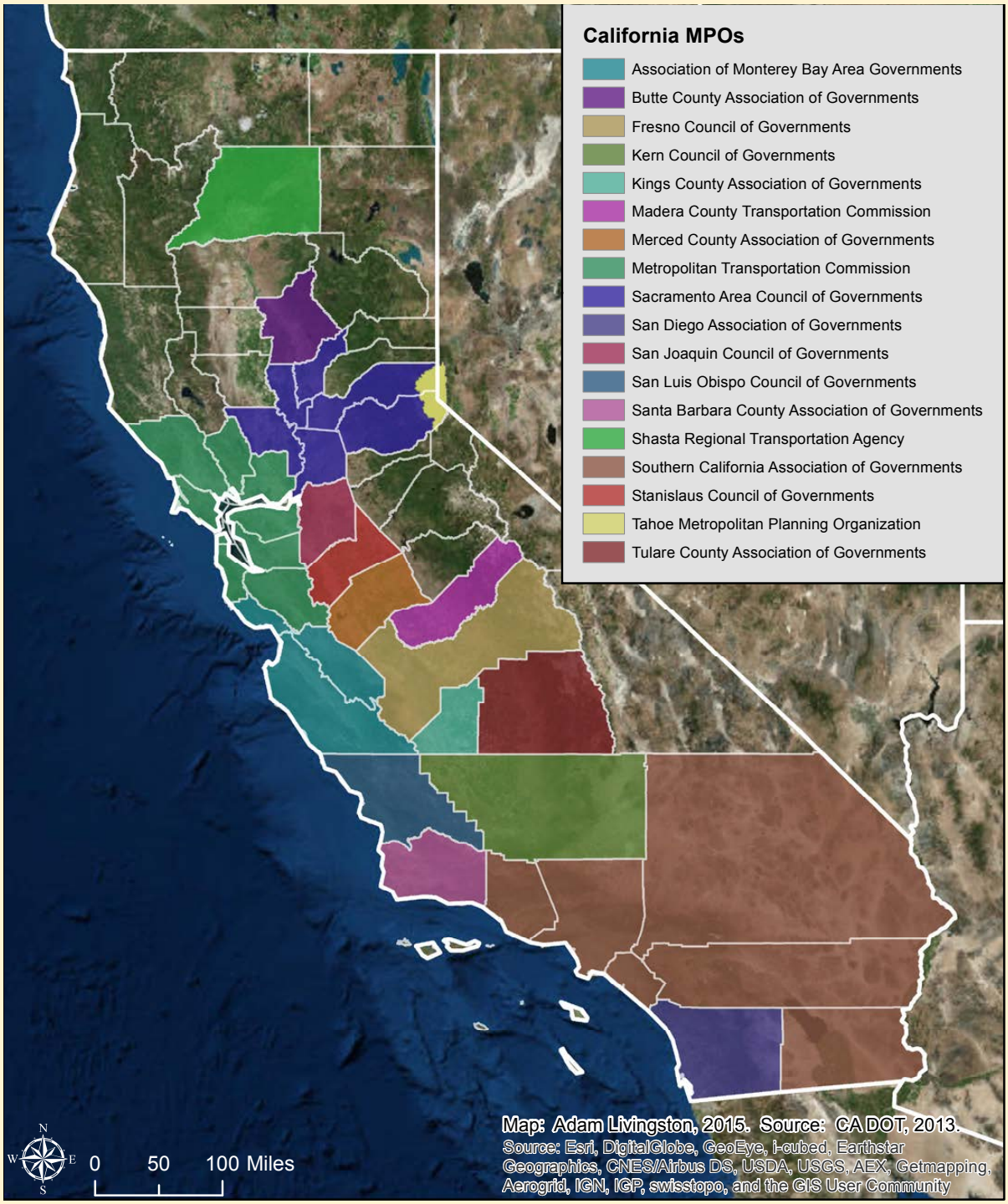
The framework established by SB 375 can contribute to regional conservation efforts—and thereby reduce GHG emissions and contribute to other goals of the SCS process—in at least three ways. First, each SCS is required to consider "the best practically available scientific information regarding resource areas and farmland in the region."[26] SB 375 provides a wide-ranging definition of "resource areas," including land already conserved (whether through public ownership, conservation easement or inclusion in an adopted natural resource protection plan), special status species habitat, areas designated for open space or agricultural use in local general plans, other biological resources and certain floodplains.[27] Farmland is defined as agricultural land that is 1) outside urban spheres of influence (SOIs) as they existed on January 1, 2008, and 2) classified by the state or a local agency as prime, of statewide importance or unique (collectively, "important farmland").[28] Of the eighteen regions covered by California's MPOs, all have SB 375-defined resource areas, and all but one have SB 375-defined farmland. To the extent that these areas are treated as constraints to development in MPOs' land use scenarios—or actively conserved as part of a regional mitigation program—SCSs can help direct growth away from habitat, farmland and open space.

More broadly, because SB 375 focuses on GHG emissions "for the automobile and light truck sector," targets can be met through compact development patterns that reduce VMT.[29] Channeling growth into existing communities while ensuring that current residents are not displaced can both lower per capita VMT and spare resource areas that might otherwise be lost to development, even if those areas are not specifically set aside for protection.

Finally, SB 375 calls upon MPOs or County Transportation Agencies to "consider financial incentives for cities and counties that have resource areas or farmland," such as transportation investments related to agriculture and "financial

23 2008 Cal. Stat. Ch. 728, § 1(c).
24 Cal. Gov. Code §§ 65080(b)(3) – (4); 2008 Cal. Stat. Ch. 728, §1(e).
25 Cal. Pub. Res. Code §§ 21155 et seq.; 2008 Cal. Stat. Ch. 728, § 1(f).
26 Cal. Gov. Code § 65080(b)(2)(B).
27 Cal. Gov. Code § 65080.01(a).
28 Cal. Gov. Code § 65080.01(b).
29 Cal. Gov. Code § 65080(b)(2)(A).

**Figure 1:** California MPO boundaries. Source: CA DOT, 2013.



assistance for counties . . . that contribute towards the [GHG] reduction targets by implementing policies for growth to occur within their cities."[30] This provision did not play a prominent role in the first round of the SCS process, but may support conservation-related funding in the future.

## Metropolitan Planning Organizations

Though all are composed of representatives from local jurisdictions, the agencies responsible for preparing SCSs vary widely in size and complexity. Four of the eighteen—the San Diego Association of Governments (SANDAG), Southern California Association of Governments (SCAG), Sacramento Area Council of Governments (SACOG) and Metropolitan Transportation Commission (MTC)—are responsible for regions housing more than three quarters of the state's population, with a single MPO (SCAG) representing nearly half.[31] The remaining fourteen cover areas with smaller populations, including individual counties from the San Joaquin Valley, the Central Coast and Northern California, as well as the multicounty Monterey Bay and Tahoe regions. MPO boundaries are shown in Figure 1.

## Timing of the SCS Process

The first round of the SCS process started in 2011 and ended in June 2015 (Table 1).[32] Because MPOs are required to complete an SCS every four years, however, the second round is already underway. SANDAG, for example, adopted its second RTP/SCS in October 2015.[33] Thus, while this report is intended to inform the second round in much of the state, it is designed with sufficient flexibility to be applicable to the third round for early-adopting MPOs.

## Importance of Local Implementation

Because SB 375 does not grant MPOs land use planning authority, and because some MPOs cover large regions with multiple counties, cities and other jurisdictions, the effectiveness of many SCS policies depends on implementation at the local level. Policies and best practices described below should therefore be taken as starting points, not final results, in realizing the potential of the SCS process.

**Table 1:** Regions by year of SCS adoption.

| YEAR | REGIONS ADOPTING SCSs |
|---|---|
| 2011 | Gateway Cities and Orange County *(subregions of Southern California)*<br>San Diego |
| 2012 | Butte<br>Sacramento<br>Southern California<br>Tahoe |
| 2013 | Bay Area<br>Santa Barbara |
| 2014 | Fresno<br>Kern<br>Kings<br>Madera<br>Merced<br>Monterey Bay<br>San Joaquin<br>Stanislaus<br>Tulare |
| 2015 | San Luis Obispo<br>Shasta |

30 Cal. Gov. Code § 65080(b)(4)(C).
31 Strategic Growth Council, 2014; U.S. Census Bureau, 2013.
32 SANDAG, 2011a; SRTA, 2015.
33 SANDAG, 2015a.

# The First Round:
## Conservation Provisions and Proposals

### Overview

From San Diego's commitment to comprehensive regional mitigation and Sacramento's Rural-Urban Connections Strategy to the Bay Area's network of Priority Conservation Areas and Tahoe's TDR program, first round SCSs contain a variety of policies, tools and programs to support conservation. Selected examples are summarized in Table 2 (policies, strategies and land use patterns), Table 3 (performance measures), Table 4 (mitigation measures) and Table 5 (other provisions).

As Table 2 indicates, most SCSs include policies, objectives or implementation strategies relating to conservation. A number of SCSs also incorporate Habitat Conservation Plans (HCPs) or other conservation planning work into their land use patterns, though with varying degrees of thoroughness. Butte, for example, bases its land use pattern on a subset of local general plans specifically designed to be consistent with the Butte Regional Conservation Plan,[34] while Kern notes the existence of multiple HCPs in its region but defers many conservation issues to an upcoming County General Plan Update.[35] In two nearby regions, Fresno notes the inclusion of data from the San Joaquin Valley Greenprint[36] but provides little detail as to how that information affects its land use pattern, while neighboring Tulare explicitly states that Greenprint layers acted as constraints to development in its model.[37] Monterey Bay and Santa Barbara, meanwhile, use the term "Greenprinting" to describe their own internal resource mapping efforts and, while the former is unclear about the role of some layers in its land use pattern, the latter treats all of its "Greenprint" layers as constraints to development in all modeled scenarios.[38]

Most SCSs include performance measures relating to farmland retention or loss, and some track habitat and other resource areas as well, but as Table 3 suggests, these indicators are framed in a variety of ways. Fresno, for example, tracks farmland conversion outside SOIs,[39] while Tulare and Monterey Bay measure conversion both inside and outside SOIs.[40] Meanwhile, Madera measures farmland and habitat loss together, and does not specify whether its projections include areas inside SOIs.[41] Selected performance measures are listed in the right-hand column of Table 3.

SCSs and accompanying EIRs are similarly varied in their approaches to mitigation, some examples of which are highlighted in Table 4. San Diego and Southern California, for example, incorporate existing RAMP programs or commit to develop new ones.[42] Other regions focus on project-specific mitigation, but differ on the type and amount of

34 BCAG, 2012.

35 Kern COG, 2014a.

36 Fresno COG, 2014. A Greenprint is a collaborative conservation vision that identifies and reveals the benefits of natural and working lands at a regional scale and is institutionalized in land use and infrastructure decisions. E. O'Donoghue (personal communication, September 28, 2015).

37 Fresno COG, 2014; TCAG, 2014.

38 AMBAG, 2014; SBCAG, 2013.

39 Fresno COG, 2014.

40 TCAG, 2014; AMBAG, 2014.

41 VRPA Technologies, 2014a.

42 SANDAG, 2011; SCAG, 2012a.

mitigation appropriate for biological and agricultural resources, and on whether certain measures should be mandatory or optional for implementing agencies.[43]

As shown in Table 5, SCSs differ in their treatment of other issues impacting conservation as well, including the extent to which claimed GHG reductions can or should be attributed to changes in land use. Kern, for example, published a sensitivity analysis indicating that the vast majority of its claimed GHG reductions were derived from assumptions about fuel prices and an economic downturn, but subsequently retracted it on the grounds that attributing reductions to specific strategies would be misleading.[44] But Tahoe announces in large blue circles at the center of the relevant SCS pages that it anticipates a 3% reduction in per capita GHG emissions due to land use policy and a 4% reduction due to transportation investments (see Figure 7).[45]

Table 5 also lists several innovative conservation mechanisms that MPOs have proposed for implementing agencies or future rounds of the SCS process. These range from TDR programs—ongoing in Tahoe and suggested as non-mandatory mitigation measures in Southern California, San Joaquin and Madera—to rolling easements to address sea level rise in the Bay Area.[46]

Beyond the provisions adopted or proposed by MPOs, a number of additional measures were put forward by conservationists, coalition partners ranging from public health and transit advocates to environmental justice and religious organizations, and private citizens. Bay Area conservation groups, for example, sought a "Greenprint" chapter for the region's SCS,[47] while their counterparts in Sacramento advocated for mapping and modeling tools that could treat habitat with the same level of sophistication as farmland.[48] In the San Joaquin Valley, conservationists, public health advocates and many others sought more compact land use scenarios and 1:1 farmland mitigation for multiple regions.[49] Elsewhere, proposals ranged from "land use incentives" to achieve SCS goals in Santa Barbara[50] to providing stronger mitigation measures for impacts to aquatic habitat in Lake Tahoe.[51] The proposals listed in Table 6, and others discussed below, provide possible next steps for a number of regions.

Based on adopted SCSs, conversations with leading conservation advocates and review of selected comment letters, the sections below survey conservation provisions in, and proposals made for, existing SCSs. The four large MPOs are covered first, followed by MPOs from the San Joaquin Valley, the Central Coast and Northern California. For all groups except the San Joaquin Valley, where SCSs were prepared roughly contemporaneously, MPOs are listed in order of SCS adoption.

43 Compare, e.g., AMBAG and Rincon Consultants, 2014 and SBCAG and Rincon Consultants, 2013 (some but not all measures mandatory) with SCAG, 2012b ("list of example measures . . . intended to function as a resource for lead agencies to consider").

44 Kern COG 2014b; Impact Sciences 2014b.

45 TMPO et al., 2012.

46 TMPO et al., 2012; SCAG, 2012b; SJCOG, 2014; VRPA Technologies, 2014a; ABAG and MTC, 2013a.

47 J. Madsen (personal communication, March 18, 2015).

48 M. Baker (personal communication, March 20, 2015).

49 See, e.g., Impact Sciences, 2014b (comment letter from Southern Sierra Partnership, American Farmland Trust, Council of Infill Builders and Natural Resources Defense Council).

50 SBCAG and Rincon Consultants, 2013 (comment letter from Community Environmental Council, Coalition for Sustainable Transportation, Santa Barbara County Action Network and Santa Barbara Bike).

51 See, e.g., Ascent Environmental, 2012 (comment letter from League to Save Lake Tahoe, Tahoe Area Sierra Club, Friends of the West Shore, Sierra Club Toiyabe Chapter, North Tahoe Preservation Alliance, Friends of Lake Tahoe, Nevada Conservation League and North Tahoe Citizens Action Alliance).

**Table 2:** Selected policies and land use provisions in existing SCSs.

| MPO | Policy, objective or implementing strategy re: habitat or farmland conservation | Spatially explicit framework for conservation vs. development | All new development within current urban footprint / SOIs | HCP/NCCP explicitly incorporated into land use pattern | Natural resource layers beyond HCP/NCCP identified as constraints to development in land use pattern |
|---|---|---|---|---|---|
| San Diego | ~ *described as "actions . . . [to] implement the SCS"* | | | ~ *MHCP and MSCP incorporated, but EIR indicates some conflict remains* | |
| Southern California | ● | | | ● | |
| Sacramento | ● | | | ● | |
| Bay Area | ~ *described as "target"* | ● | ● | | |
| San Joaquin | ● | | | | |
| Stanislaus | ● | | | | |
| Merced | ● | | | | |
| Madera | ● | | | | |
| Fresno | ● | | | | |
| Tulare | ● | | | | ● |
| Kings | | | | | |
| Kern | ● | | | ● | |
| Santa Barbara | ● | | | | ● |
| Monterey Bay | ● | | | | ~ *some, but possibly not all, "regional greenprint analysis" layers* |
| San Luis Obispo | ● | | | ~ *high-value landscape blocks identified in CalTrans Regional Wildlife Corridor and Habitat Connectivity Plan* | |
| Tahoe | | | | | |
| Butte | ● | ● | | ● | |
| Shasta | ● | | | | |

● means the policy, measure or provision is definitely present.

~ means it may be present.

Sources noted in sections on individual SCSs below.

**Table 3:** Selected performance measures in existing SCSs.

| MPO | Performance measure(s) re: habitat, farmland or open space retention or loss | Selected performance measures |
|---|---|---|
| San Diego | | |
| Southern California | ● | "[L]and needed for development that has not previously been developed . . . including agricultural land, forest land, desert land, and other virgin sites" (334 square miles by 2050) |
| Sacramento | ● | Acres of farmland to be lost (36,396 by 2035), average acres of farmland lost per additional resident (0.04) and acres of vernal pool complexes lost (4,480 by 2035) |
| Bay Area | ~ *described as "performance targets"* | "Performance targets" include "[d]irect all non-agricultural development within the urban footprint" |
| San Joaquin | ● | Reduction in prime farmland conversion compared to business as usual (10,707 acres) |
| Stanislaus | ● | Total land consumed by new development (11,920 acres as opposed to 16,000 under business as usual), prime farmland consumed by new development (9,400 acres, as opposed to 13,550 under business as usual) and acres consumed per 1,000 new residents (58, as opposed to 77 under business as usual) |
| Merced | ● | Farmland consumption (14,900 acres, as opposed to 18,100 under business as usual) |
| Madera | ● | Consumption of agricultural and other resource lands (136 acres, but unclear if this includes land inside SOIs) |
| Fresno | ● | Total land conversion (14,675 acres, as opposed to 22,308 acres under business as usual) and important farmland conversion outside SOIs (91.9 acres, as opposed to 345 acres under business as usual) |
| Tulare | ● | Important farmland consumed inside and outside SOIs (3,166 acres as opposed to 6,980 acres for business as usual), and critical habitat consumed (451 acres, as opposed to only 442 acres for business as usual) |
| Kings | ~ *qualitative measure* | "Preservation of Agricultural and Resource Lands" (no quantitative data given) |
| Kern | ● | Farmland consumed outside SOIs (1.43 square miles) |
| Santa Barbara | ● | Percentage of "agricultural land and open space retained per year" in incorporated and unincorporated areas (100% in incorporated areas, and all but a single 17.51-acre site in unincorporated areas) |
| Monterey Bay | ● | Open space consumed (2,556 acres, as opposed to 2,944 for business as usual) and farmland converted (14,316 acres—all within SOIs or Community Plan Areas—vs. 14,611 under business as usual) |
| San Luis Obispo | | |
| Tahoe | | |
| Butte | ● | Developed land per capita (0.25 acres as opposed to 0.27 currently), important farmland conversion avoided (231,541 acres under preferred scenario, out of 237,272 existing in 2010) and percentage of residential and non-residential development located within Urban Permit Areas (74% and 87%, respectively, as opposed to 68% and 86% currently) |
| Shasta | ● | "[P]rime agricultural land saved from conversion" (87 acres ) and "environmentally sensitive lands saved from conversion" (6,541 acres) |

● means the policy, measure or provision is definitely present.

~ means it may be present.

Sources noted in sections on individual SCSs below.

**Table 4:** Selected mitigation measures and ratios in existing SCSs and accompanying EIRs, along with committees promised or subsequently convened to address habitat or farmland mitigation.

| MPO | RAMP (pre-existing or commitment to develop new) | EIR presents habitat or farmland mitigation measures as mandatory ("will" or "shall") | 3:1 mitigation for wetland, riparian or other sensitive habitat (mandatory or recommended) | 2:1 mitigation for wetland, riparian or other sensitive habitat (mandatory or recommended) | 1:1 mitigation for farmland (mandatory or recommended) | Committee promised or subsequently convened to address habitat or farmland mitigation |
|---|---|---|---|---|---|---|
| San Diego | • | ~ *mandatory for MPO, but not implementing agencies* | | • | | |
| Southern California | • | | • | | | |
| Sacramento | | | | | • | |
| Bay Area | ~ *"Regional Advance Mitigation Planning . . . banking" presented as option but not required* | | | | • | |
| San Joaquin | | | | | • | ~ *Working Group to address community groups' concerns in general* |
| Stanislaus | | | | • | | |
| Merced | | | | | | |
| Madera | | | • | | | • |
| Fresno | | | • | | | • |
| Tulare | ~ *regional mitigation for some projects through existing sales tax measure, but little detail in SCS and no commitment to comprehensive RAMP* | ~ *mandatory for MPO, but not implementing agencies* | | • | • | |
| Kings | | ~ *mandatory for MPO, but not implementing agencies* | | • | • | |
| Kern | | | | | ~ *endorses ratios "such as" 1:1* | |
| Santa Barbara | ~ *MPO will "pursue development" of regional mitigation program, but no timetable* | • | | • | | |
| Monterey Bay | ~ *endorses RAMP, but does not commit to develop RAMP program* | • | | • | • | |
| San Luis Obispo | ~ *endorses aspects of RAMP, but does not commit to develop RAMP program* | • | | | | |
| Tahoe | | • | | | | |
| Butte | | ~ *mandatory for projects subject to Butte Regional Conservation Plan* | • | | | |
| Shasta | | • | | • | | |

• means the policy, measure or provision is definitely present. ~ means it may be present. Sources noted in sections on individual SCSs below.

**Table 5:** Additional conservation provisions in existing SCSs, along with innovative measures proposed for implementing agencies or future SCSs.

| MPO | New funding for conservation | Significant advance in mapping / modeling | Attribution of specific % of GHG reductions to land use | RTP/SCS or EIR proposes innovative conservation mechanisms for implementing agencies or future SCS rounds |
|---|---|---|---|---|
| San Diego | | | | |
| Southern California | | | | TDR (non-mandatory mitigation measure in EIR) |
| Sacramento | | ● | | |
| Bay Area | ● | | | Rolling easements to address sea level rise (noted in passing; unclear whether endorsed) |
| San Joaquin | | | | TDR (non-mandatory mitigation measure in EIR) |
| Stanislaus | | | | |
| Merced | | | | |
| Madera | | | | TDR (non-mandatory mitigation measure in EIR) |
| Fresno | | | | |
| Tulare | | | | |
| Kings | | | | Scoring system for highway projects that awards points for minimizing impacts to special status species and minimizing "disruption of natural beauty" (in RTP). |
| Kern | | | ~ *subsequently retracted* | |
| Santa Barbara | | | | |
| Monterey Bay | | | | |
| San Luis Obispo | ● | | | Equal weight for conservation plans and general plans in selecting transportation investments; leveraging regional funding to secure additional federal funding for conservation |
| Tahoe | | | ● | TDR for development rights as well as removal of existing development |
| Butte | | | | |
| Shasta | | | | |

● means the policy, measure or provision is definitely present.

~ means it may be present.

Sources noted in sections on individual SCSs below.

**Table 6:** Selected proposals made by conservationists but not adopted in SCSs.

| MPO | Selected proposals made by conservationists but not adopted in SCSs |
|---|---|
| San Diego | Adopt land use pattern that avoids projected backsliding on GHG reductions, promote conservation-friendly general plan updates, decline to permit specific projects that conflict with HCPs, and address depleted wetland mitigation banks. |
| Southern California | Provide greater detail about adapting to increased wildfire risk and other impacts of climate change, limit road construction in proximity to natural lands, set higher bar for consistency with SCS to receive CEQA streamlining benefits, and avoid projecting growth in resource areas. |
| Sacramento | Expand capabilities of Rural-Urban Connections Strategy in order to analyze impacts to habitat and agriculture at comparable levels of sophistication. |
| Bay Area | Include "Greenprint" SCS chapter, provide more detailed mapping and analysis of biological resources and stronger mitigation measures for impacts to these resources, distinguish between urban footprints, urban growth boundaries and city limits, and address the imbalance in funding between Priority Conservation Areas and Priority Development Areas. |
| San Joaquin | Provide greater transparency regarding modeling methods, offer funding incentives for local jurisdictions to adopt policies consistent with SCS and commit to implement mitigation measures for biological, agricultural and open space resources. |
| Stanislaus | Provide greater transparency regarding modeling methods and adopt stronger farmland protection and mitigation policies. |
| Merced | Meet GHG reduction targets. |
| Madera | Meet GHG reduction targets. |
| Fresno | Adopt alternate land use pattern (Scenario D) that would consume 1,200 fewer acres than Fresno COG's most compact scenario and 4,700 fewer acres than preferred scenario, and remove new towns from land use pattern. |
| Tulare | Require mitigation as condition of project funding and consistency with SCS, and develop policies to address large new town projects not included in SCS land use scenario. |
| Kings | Little conservation advocacy beyond input included in SCS. |
| Kern | Establish that all claimed GHG reductions are from changes in land use and transportation, require mitigation as condition of consistency with SCS, and adopt alternate land use pattern (Balanced Growth Scenario) with specific measures to limit land conversion (or, alternatively, adopt 33% Housing Mix Alternative). |
| Santa Barbara | Apply "land use incentives" to meet SCS goals, and make more modest assumptions about ability of mitigation measures to address impacts of population growth on habitat, farmland and other natural resources. |
| Monterey Bay | Address GHG emissions associated with loss of natural resources, make more realistic assumptions about growth-inducing impacts of new highways in rural areas, and adopt GHG reduction targets in line with aggregate, year-by-year reductions necessary to avoid worst impacts of climate change. |
| San Luis Obispo | No evidence of extensive advocacy by conservation groups. |
| Tahoe | Reexamine assumptions relating to population growth and focus on reducing total (as opposed to per capita) VMT, limit exceptions to conservation-oriented land use policies, and provide stronger mitigation measures to address impacts to aquatic ecosystems. |
| Butte | No evidence of extensive advocacy by conservation groups, but public agency sought "Resources and Farmland Preservation Transportation Incentive Fund" to support farmland conservation and local food production by funding improvements on farm-to-market routes. |
| Shasta | No evidence of extensive advocacy by conservation groups. |

Sources noted in sections on individual SCSs below.

# Large MPOs

## San Diego

- First regional SCS adopted in California
- Incorporates conservation plans into land use pattern
- **Provides mitigation through RAMP program funded by transportation sales tax**
- Performance measures do not address habitat or farmland conservation
- MPO sued by conservation, equity and affordable housing groups for backsliding on per capita GHG reductions

### *Conservation Provisions*

The first Regional Transportation Plan to include an SCS was adopted by SANDAG in 2011. San Diego's 2050 Regional Transportation Plan incorporates two HCPs plus other natural resource criteria into its land use pattern, supports comprehensive regional mitigation funded by a previously-passed sales tax measure, and commits to pursue additional funding for habitat conservation. As discussed below, however, its land use pattern backslides on GHG reductions after 2035 due to assumed additional development in rural areas, a result that led to a lawsuit and a ruling that the EIR "directly contravene[d]" California climate policy.[52]

San Diego's RTP/SCS describes the 1997 Multiple Species Conservation Program (MSCP) and the 2003 Multiple Habitat Conservation Program (MHCP) as "a 'greenprint' for the region," and notes that two other MSCPs (North County and East County) and six jurisdiction-specific HCPs (the Cities of Carlsbad, Chula Vista, La Mesa, Poway, San Diego and the southern portion of San Diego County) are expected in the future.[53] Its land use pattern incorporates data from the two finalized HCPs, as well as steep slopes, wetlands and floodplains reflected in local general plans, a SANDAG database of conserved lands, and Farmland Mapping and Monitoring Program (FMMP) data on important farmland.[54] But the 2050 Regional Transportation Plan does not appear to have performance measures related to habitat or farmland conservation,[55] and the EIR indicates that land use changes and transportation projects are still expected to conflict with HCP requirements.[56]

The 2050 Regional Transportation Plan also includes a commitment "to satisfy the mitigation requirements for [transportation] . . . projects comprehensively, rather than on a project by project basis, to maximize opportunities for acquiring land early and restoring habitats."[57] SANDAG's $850 million Environmental Mitigation Program, funded through the half-cent TransNet sales tax measure approved in 2004, provides funding for acquisition, management and monitoring of habitat to implement the MSCP and MHCP. While the RTP/SCS does not provide a year-by-year projection of how the $850 million will be spent, it notes that the TransNet tax will be in effect until at least 2048, and that funding to implement the conservation plans is linked to mitigation requirements for projects in the RTP/SCS.[58] It also notes that the TransNet ordinance includes a commitment by SANDAG "to act on additional regional funding

52 Cleveland National Forest Foundation et al. v. San Diego Association of Governments et al., 2014 Cal. App. LEXIS 1070, at *7 (petition for review granted by California Supreme Court).

53 SANDAG, 2011a.

54 SANDAG, 2011a. As many subsequent SCSs do, the 2050 Regional Transportation Plan provides maps depicting conserved land, wetlands, farmland and other natural resources.

55 SANDAG, 2011a (Table 2.2).

56 SANDAG, 2011b (Impact BIO-4).

57 SANDAG, 2011a.

58 SANDAG, 2011a.

measures (a ballot measure and/or other secure funding commitments) to meet the long-term requirements for implementing habitat conservation plans in the San Diego region" by 2008,[59] though SANDAG has not yet done so.[60] As of November 2015, the Environmental Mitigation Program has provided $121.8 million to protect nearly 3,800 acres.[61]

SANDAG's EIR, which is the subject of a lawsuit described in more detail below, includes several mitigation measures relevant to conservation. It presents these measures as mandatory for SANDAG, but not for other implementing agencies. For example, "SANDAG shall and other implementing agencies can and should avoid impacting jurisdictional wetlands and other waters," and unavoidable permanent impacts are to be mitigated at a 2:1 ratio to ensure no net loss[62] Similarly, SANDAG is required and other agencies encouraged to provide compensatory mitigation for impacts to sensitive natural communities in accordance with MSCPs, MHCPs and other conservation plans, and to ensure that mitigation sites are protected in perpetuity.[63] Unlike the EIRs for most subsequent SCSs, SANDAG's EIR emphasizes that mitigation should be integrated with larger conservation goals. Mitigation sites outside an adopted HCP or Natural Community Conservation Plan (NCCP) should be "connected to existing conserved open space," with special consideration for establishing "large blocks of habitat or lands which are otherwise critical for covered species and/or providing for biological core areas and habitat linkages consistent with current regional conservation planning goals." [64] The EIR also notes that beaches, wetlands and other coastal habitats could be impacted by sea level rise and calls on local jurisdictions to incorporate sea level rise into their climate action plans.[65]

### *Conservation Proposals*

Conservation advocates proposed several measures that were ultimately not adopted, including working proactively with local jurisdictions to promote conservation-friendly general plan updates,[66] declining to permit specific projects that could conflict with HCPs,[67] avoiding reliance on weak or nonexistent local farmland protection policies,[68] incorporating more realistic assumptions about funding for HCPs,[69] and addressing depleted wetland mitigation banks.[70] For many, however, the main concern was a land use pattern that met the 2020 and 2035 GHG reduction targets set by ARB, but was projected to backslide on these reductions by 2050 (Figure 2) and ultimately to set the region on a trajectory toward increasing emissions.[71]

This trajectory was based on SANDAG's expectation that "after the urbanized areas have been developed according to current local general plans, development could gradually move toward more remote areas where fewer transportation options are available," though the RTP/SCS noted that these general plans could be updated.[72] A number of constituencies urged SANDAG to develop more aggressive land use scenarios to reverse the backsliding,[73] and the

59 SANDAG, 2011a.

60 Keatts, 2014.

61 SANDAG, 2015b.

62 SANDAG, 2011b.

63 SANDAG, 2011b.

64 SANDAG, 2011b. Elsewhere, the EIR calls for local jurisdictions to "acquire parkland concurrent with forecasted development." SANDAG, 2011b.

65 SANDAG, 2011b.

66 SANDAG, 2011b (Appendix G – comment letter from Endangered Habitats League).

67 SANDAG, 2011b (Endangered Habitats League).

68 SANDAG, 2011b (Appendix G – comment letter from Preserve Calavera).

69 SANDAG, 2011b (Preserve Calavera).

70 SANDAG, 2011b (Preserve Calavera). According to Preserve Calavera, conservation plans in San Diego County have faced a "funding shortfall . . . in the billions of dollars" since 2008, when a ballot measure was to have provided funding for habitat management. SANDAG, 2011b (Preserve Calavera).

71 SANDAG, 2011a and 2011b.

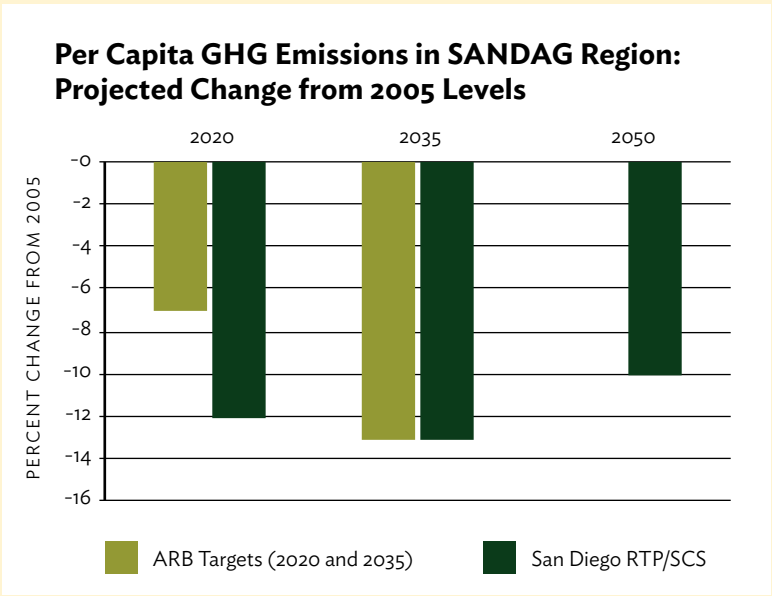
72 SANDAG, 2011a.

73 See, e.g., NRDC et al. 2011.

anticipated shift toward development in rural areas was of particular concern to conservationists. Cleveland National Forest Foundation and the Center for Biological Diversity filed a lawsuit challenging the EIR on multiple grounds, including inconsistency with California climate policy,[74] failure to consider feasible alternatives that could reduce VMT, and failure to provide accurate information on impacts to agricultural lands.[75] A Superior Court invalidated the EIR for failing to address inconsistencies with California climate policy, and this holding was affirmed by the Fourth District Court of Appeal in 2014.[76] In March 2015, the California Supreme Court accepted SANDAG's petition for review.

**Figure 2:** Change from 2005 per capita GHG emissions projected by SANDAG (adapted from Table 3.1 in SANDAG, 2011a).

As this graph illustrates, SANDAG projects a 14% reduction by 2020, but only 13% by 2035 and 10% by 2050.




## Southern California

- **Commits to develop RAMP program for next round**
- **Incorporates two subregional SCSs, one of which already includes RAMP program funded by transportation sales tax**
- Subregional RAMP program reduces GHG emissions through both carbon sequestration and avoided land conversion
- Conservation-related performance measure: 334 square miles of "land needed for development that has not previously been developed . . . including agricultural land, forest land, desert land, and other virgin sites" to be converted by 2050
- Mitigation measures in EIR set higher standards than those of most other regions, but are not mandatory for implementing agencies

74 In particular, they alleged that the EIR failed to address the inconsistency between SANDAG's land use pattern and California Executive Order S-3-05, which sets a goal of reducing GHG emissions to 80% below 1990 levels by 2050. Cleveland, 2014 Cal. App. LEXIS 1070 at *2; Executive Order S-3-05. The Legislature "effectively endorsed the Executive Order and its overarching goal of ongoing greenhouse gas emissions reductions as state climate policy" with the passage of AB 32 the following year, Cleveland, 2014 Cal. App. LEXIS 1070 at *10, and linked this goal to "changed land use patterns and improved transportation" by passing SB 375 in 2008. 2008 Cal. Stat. Ch. 728 § 1(c).

75 This lawsuit was consolidated with a similar action from CREED-21 and the Affordable Housing Coalition, and joined by the Sierra Club and the Attorney General of California. Cleveland, 2014 Cal. App. LEXIS 1070, at *1-2.

76 The Court of Appeal held that the EIR failed to comply with the California Environmental Quality Act (CEQA) in other ways as well, including "failing to analyze a reasonable range of project alternatives, failing to adequately analyze and mitigate the transportation plan's air quality impacts, and understating the transportation plan's impacts on agricultural lands." Cleveland, 2014 Cal. App. LEXIS 1070 at *2-3.

### *Conservation Provisions*

SCAG's 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (Southern California RTP/SCS) adopts a strategy of supporting "projects, programs, policies, and regulations to protect resources areas, such as natural habitats and farmland, from future development," integrates resource areas and farmland into its land use pattern, and includes a commitment to develop a regional mitigation plan for the following SCS. It also incorporates two subregional SCSs,[77] one of which contains an advance mitigation program and specific limits on development affecting certain types of habitat and agricultural land.

Drawing on sources such as the California Natural Diversity Database (CNDDB), HCPs and NCCPs in effect in the region and FMMP data on important farmland, the Southern California RTP/SCS emphasizes that resource areas are "to be protected from development" in its land use pattern.[78] It is unclear how thorough this protection is, however, as comments from organizations such as the Santa Monica Mountains Conservancy suggest that growth is still projected in some resource areas.[79] Moreover, one of SCAG's performance measures—"land needed for development that has not previously been developed . . . including agricultural land, forest land, desert land, and other virgin sites"—indicates that 334 square miles of greenfield growth are expected by 2035.[80]

While the Southern California RTP/SCS does not establish a RAMP program for the entire region, SCAG promises to prepare one for the next SCS:

> SCAG is . . . developing a natural lands acquisition and open space conservation by designated conservancies strategy that encourage[s] acquisition and management of important habitat lands to mitigate impacts, including greenhouse gas emissions, related to future transportation projects. The strategy will identify appropriate agencies to collaborate with to develop a regional conservation plan based on identified priority areas. SCAG will include a regional mitigation plan for inclusion in the 2016 RTP. [81]

No commitments are made about funding levels, however, and it remains to be seen whether the program will be tied to a revenue stream analogous to SANDAG's TransNet.[82]

The Southern California RTP/SCS also incorporates subregional SCSs from the Gateway Cities and Orange County (Figure 3). The Gateway Cities Subregional SCS, which covers a predominantly low density, residential area of Los Angeles County, contains limited data on natural resources and no specific conservation measures.[83] It notes that the subregion does not have any state-designated important farmland outside city SOIs, and that most other resource land—parks, aquifer recharge areas, habitat and "an integrated system of flood control facilities"—is already designated as open space in member jurisdictions' general plans and zoning codes.[84]

The Orange County SCS is more explicit about limits on development affecting habitat, farmland and other natural resources, and it incorporates already-active regional mitigation programs. Limits on development in Orange County's land use pattern are linked to specific, mapped resources. For example, "areas that fall within a category of the CNDDB would most likely be protected as a natural resource or habitat, so they would not support residential development

77 SB 375 provides that in SCAG's region, and only in this region, "a subregional council of governments and the county transportation commission may work together to propose a sustainable communities strategy . . . for that subregional area." 2008 Cal. Stat. Ch. 728; Cal. Gov. Code §65080(b)(2)(D); Cal. Pub. Util. Code § 130004.

78 SCAG, 2012a.

79 SCAG, 2012b (comment letter from Santa Monica Mountains Conservancy).

80 SCAG, 2012a. 742 square miles would be developed under business as usual. SCAG, 2012a.

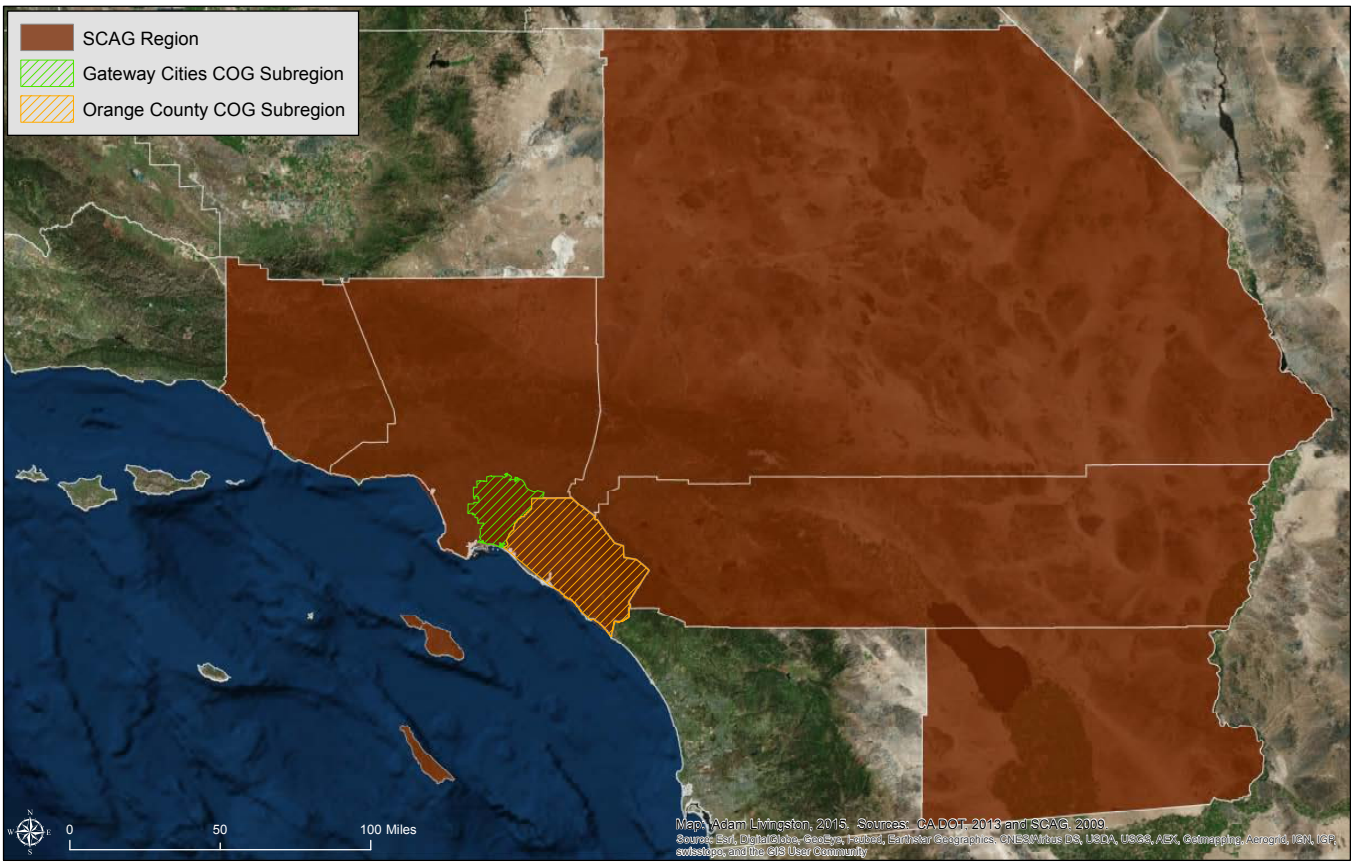
81 SCAG, 2012a.

82 SCAG, 2012a; SANDAG, 2011a.

83 Cambridge Systematics, 2011.

84 Cambridge Systematics, 2011.

**Figure 3:** Regional and subregional SCS coverage within SCAG region. Source: SCAG, 2012a.




under SB 375,"[85] and the same would be true of "NCCP reserves and/or special linkages," certain floodplains and critical habitat.[86]

Two active regional mitigation programs are integrated into the Orange County SCS. The Mitigation and Resource Protection Program (MRPP), administered by the Orange County Transportation Authority (OCTA) and modeled in part on SANDAG's TransNet Environmental Mitigation Program,[87] is designed to provide landscape level mitigation using 5% of the funding from a sales tax measure for 13 freeway projects.[88] As of November 2015, it has made $42 million available to conserve more than 1,300 acres, and provided $10 million for restoration projects covering 400 acres.[89] A separate open space mitigation program associated with Orange County's toll road network has protected 2,200 acres and includes both active management and habitat restoration.[90] The SCS emphasizes that both programs can be leveraged to reduce GHG emissions (both by sequestering carbon and by limiting land conversion), and encourages local jurisdictions "to align their planning priorities and land use decisions together with funds necessary to purchase and preserve natural lands."[91] It does not commit to expanding these programs beyond existing funding levels, however.[92]

85 Burke Consulting et al., 2011.
86 Burke Consulting et al., 2011.
87 M. Schlotterbeck (personal communication, March 30, 2015).
88 Burke Consulting et al., 2011.
89 OCTA, 2015.
90 Burke Consulting et al., 2011.
91 Burke Consulting et al., 2011.
92 Burke Consulting et al., 2011.

The EIR for the Southern California RTP/SCS provides a set of sample mitigation measures to be considered by implementing agencies. While these measures are not mandatory, some would set higher standards than those put forward by most other MPOs, including the following:

- Establish funding mechanisms for conservation, such as mitigation fees and voter-approved taxes to fund the purchase of development rights;
- Adopt a TDR program to provide a market incentive to direct growth away from important agricultural land;
- Require 3:1 mitigation ratios for permanent impacts to sensitive habitat; and
- Require 3:1 mitigation ratios for impacts to endangered or threatened species habitat in general, and for specific species such as the blunt-nosed leopard lizard, Coachella Valley fringe-toed lizard, desert tortoise, two-striped garter snake and Bell's least vireo.[93]

The EIR originally endorsed a 1:1 mitigation ratio for important farmland, but this language was removed in the final version.[94] It says little about sea level rise, merely noting that implementing agencies "may" prepare climate action plans addressing this impact.[95]

### *Conservation Proposals*

The primary conservation proposal made in Southern California was to establish a RAMP program. Conservationists were largely successful in ensuring that the Orange County SCS incorporated the MRPP, and are now contributing to the development of SCAG's regional mitigation program.[96] Many of their comments on the Southern California RTP/SCS and EIR focused on making SCAG's approach to mitigation as robust and inclusive as possible, through measures such as mitigating impacts to undeveloped natural areas outside HCP/NCCP lands, incorporating input from land trusts, and requiring that habitat affected by transportation projects realize a net environmental benefit.[97] Since the program is still being developed, it may ultimately reflect some or all of these proposals.

Separate conservation proposals that were not adopted included providing greater detail about how SCAG and local jurisdictions will adapt to the impacts of climate change, such as greater wildfire risk along the wildland-urban interface, and shifting to a preventative approach by limiting road construction in proximity to natural lands.[98] Conservationists also encouraged SCAG to set a higher bar for compliance with the SCS in order to receive SB 375 streamlining benefits, and to avoid projecting growth in resource areas because doing so could become a self-fulfilling prophesy.[99]

93 SCAG, 2012b (Appendix G).

94 SCAG, 2012b (Appendix G – see strikethrough text in Measure LU20).

95 SCAG, 2012b (Appendix G). The Southern California RTP/SCS points out that sea level rise may affect biodiversity, but does not commit to any specific action to address this impact. SCAG, 2012a.

96 M. Schlotterbeck (personal communication, March 30, 2015).

97 See, e.g., SCAG, 2012b (Appendix H – comment letters from Hills for Everyone, Santa Monica Mountains Conservancy, and Wildlife Corridor Conservation Authority).

98 SCAG, 2012b (Appendix H – comment letter from Hills for Everyone).

99 SCAG, 2012b (Appendix H – comment letter from NRDC and Endangered Habitats League; comment letters from Santa Monica Mountains Conservancy and Wildlife Corridor Conservation Authority).

## Sacramento

- **Bases land use pattern on results from Rural-Urban Connections Strategy, which represents major advance in mapping and measuring rural agricultural economy**
- Incorporates multiple HCPs
- Supports, but does not commit to, seeking "funding to acquire conservation easements accompanying specific regional connector road projects"
- Conservation-related performance measures: 36,396 acres of farmland and 4,480 acres of vernal pool complexes converted by 2035, with farmland conversion averaging 0.04 acres per additional resident
- 1:1 mitigation for certain types of habitat and for farmland, but mitigation not mandatory

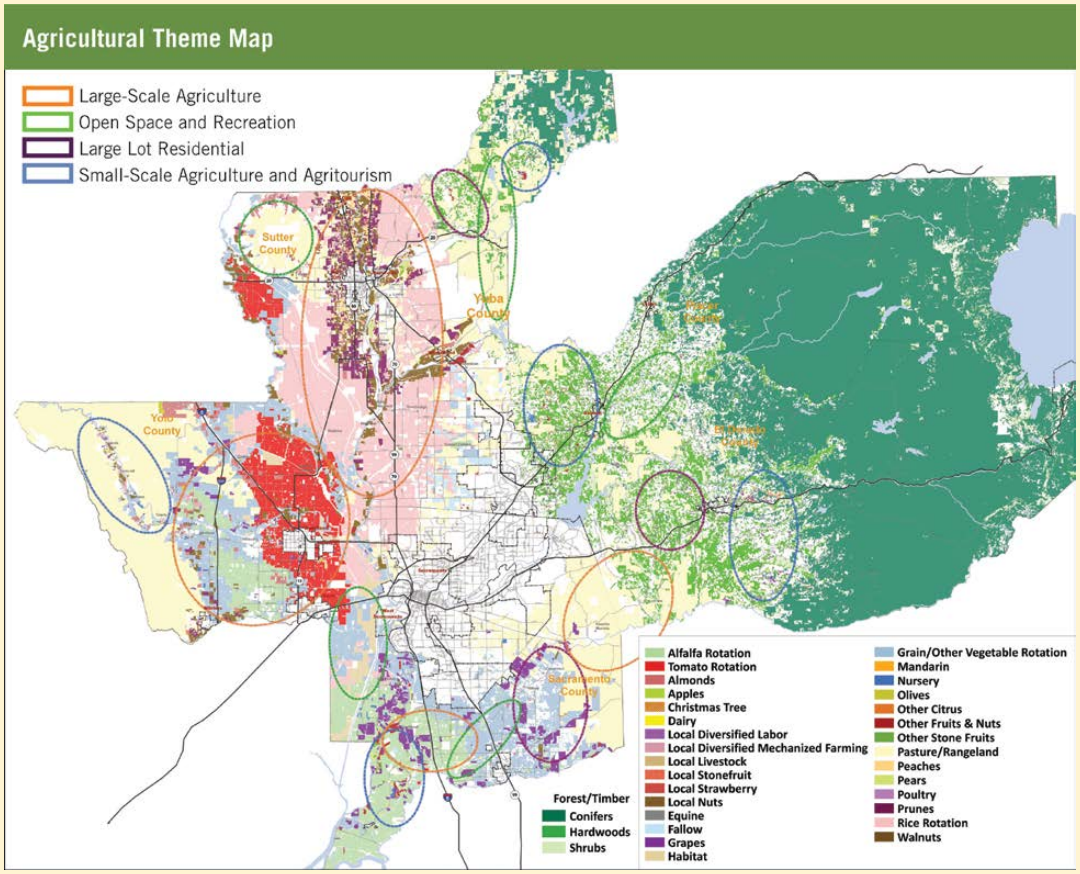
### *Conservation Provisions*

SACOG's Metropolitan Transportation Plan/Sustainable Communities Strategy (Sacramento MTP/SCS), which covers the four counties around Sacramento, plus portions of Placer and El Dorado,[100] incorporates innovative mapping and modeling tools, integrates multiple HCPs into its land use pattern, and endorses a policy of securing future funding for conservation.[101]

A central policy in the Sacramento MTP/SCS is to implement SACOG's Rural-Urban Connection Strategy (RUCS), a set of tools designed to map and measure the rural agricultural economy.[102] RUCS, which SACOG began developing shortly after adopting its 2008 MTP, includes parcel-level data on 120 crops apportioned into 33 landscape types, with yields, prices and input costs for each (Figure 4).[103] It also incorporates an econometric model that analyzes factors ranging from soil type, water access and transportation infrastructure to crop type, growing method and labor demand.[104] Combining this data and model with a mapping tool called I-PLACE3S, RUCS can model the rural agricultural economy at scales ranging from individual parcels to the entire region.[105] For example, it can map how a doubling of fuel prices would affect the likelihood that tomatoes will be grown on specific properties, or how a particular transportation project is likely to affect water demand, farmers' return on investment, and the distribution of truck trips in rural areas.[106] This level of sophistication—at least as to impacts on agricultural resources—appears to be unmatched in any other SCS. Based on conclusions from RUCS, Sacramento's land use pattern and transportation investments seek to "ensure good rural-urban connections and promot promote the economic viability of rural lands while also protecting open space resources."[107]

100 The easternmost portions of Placer and El Dorado are covered in the Tahoe SCS.
101 SACOG, 2012a.
102 SACOG, 2012a.
103 SACOG, 2012b.
104 SACOG, 2012b.
105 SACOG, 2012b.
106 SACOG, 2012b.
107 SACOG, 2012a.

**Figure 4:** Sample RUCS map of land use and crop types in Sacramento region. Image: SACOG, 2012b.




The Sacramento MTP/SCS incorporates several additional conservation strategies, including ensuring that RUCS data is consistent with the region's multiple HCPs[108] and providing "technical analysis and education" to inform decisionmakers about the economic and environmental benefits of conserving open space. It also endorses seeking "funding to acquire conservation easements accompanying specific regional connector road projects."[109] In addition, it provides some analysis of how HCPs are reconciling habitat and agricultural conservation.[110]

While the Sacramento MTP/SCS addresses the Sacramento-San Joaquin Delta Reform Act, it does not commit to consistency with the then-forthcoming Delta Plan.[111] It notes that SACOG has consulted with the Delta Stewardship Council and considered the Act's "coequal goals" of ensuring a reliable water supply and protecting, enhancing and restoring Delta ecosystems.[112] But it also emphasizes that programs determined by SACOG to be consistent with its SCS are not required to be consistent with the Delta Plan.[113]

108 Current and future conservation plans discussed in the MTP/SCS include the Natomas Basin HCP, the Yuba-Sutter NCCP/HCP, the South Sacramento HCP, the Yolo Natural Heritage Program, the El Dorado County Integrated Natural Resources Management Plan, and the Placer County Conservation Plan. Together, they cover much of the region. SACOG, 2012a.

109 SACOG, 2012a.

110 SACOG, 2012a.

111 SACOG, 2012a.

112 SACOG, 2012a.

113 SACOG, 2012a, citing Cal. Water Code § 85057.5.

Conservation-related performance measures include total farmland conversion, farmland conversion per new resident of the region, and total conversion of vernal pool complexes. According to the Sacramento MTP/SCS, 36,396 acres of farmland are expected to be lost by 2035, an average of 0.04 acres for each additional resident.[114] 4,480 acres of vernal pool complexes are projected to be lost.[115]

The EIR suggests 1:1 mitigation ratios for resources ranging from wetlands, oak woodlands and riparian areas to farmland, forest land and special status species habitat.[116] To achieve the 1:1 ratio for farmland, it proposes that implementing agencies participate in HCPs that protect agricultural areas.[117] It also provides a table of ratios for habitat occupied by specific special-status species.[118] As with SCAG's proposed measures, however, these are not mandatory, and implementing agencies retain discretion about what mitigation (if any) to require.

### *Conservation Proposals*

Conservationists made several proposals that were not adopted in the final MTP/SCS, including asking SACOG to provide more realistic estimates of demand for large lot, single family housing, and requesting that it set a clearer standard for consistency with the SCS by providing more detailed parameters for the preferred land use scenario.[119] The major conservation proposal, however, was to enable RUCS to analyze impacts to habitat with a level of sophistication comparable to its treatment of agriculture.[120] RUCS was not built out this way for the 2012 SCS, but conservationists are working with SACOG to expand its capabilities for future rounds.[121]

## Bay Area

- **Builds land use pattern around complementary networks of Priority Conservation Areas and Priority Development Areas**
- **Provides $10 million in new funding for conservation planning and land protection**
- **Commits to "performance target" of directing all new growth into 2010 urban footprint**
- Addresses impacts of sea level rise in more detail than any other coastal region's SCS
- EIR offers RAMP as option, but not requirement, for mitigating impacts to riparian areas, wetlands and other sensitive habitats

### *Conservation Provisions*

Plan Bay Area, the RTP/SCS for the nine-county Bay Area region, includes a spatially explicit framework to channel conservation and development resources into appropriate areas, creates a new funding stream for land protection, and directs all new growth into the region's existing urban footprint.[122] Its land use pattern is built around complementary

114 SACOG, 2012a.

115 SACOG, 2012a.

116 SACOG, 2012c.

117 SACOG, 2012c. Because agencies could use "'stacked' mitigation," however, this approach could result in less land conserved overall. SACOG, 2012c.

118 SACOG, 2012c.

119 SACOG, 2012c (Appendix G-7 – comment letter from ECOS, Habitat 2020 and the California Heartland Project).

120 SACOG, 2012c (Appendix G-7 – ClimatePlan letter co-signed by conservation groups including ECOS, Endangered Habitats League, Sierra Club Mother Lode Chapter, National Parks Conservation Organization, Sierra Nevada Conservancy and The Nature Conservancy, as well as partners from other sectors).

121 M. Baker (personal communication, March 20, 2015).

122 ABAG and MTC, 2013a.

**Figure 5:** Priority Conservation Areas and Priority Development Areas as depicted in Plan Bay Area.
Image: ABAG and MTC, 2013a.

networks of Priority Conservation Areas (PCAs) and Priority Development Areas (PDAs), with locations for both based largely on recommendations from local governments.[123] PCAs are over 100 "regionally significant open spaces for which there exists broad consensus for long-term protection but nearer-term development pressure."[124] PDAs, of which there are nearly 200, are designed in part to lower this pressure by directing development into existing communities.[125] As illustrated in Figure 5, PCAs are represented in less detail than PDAs, with the former appearing as points and the latter as shapes. But Plan Bay Area includes a commitment to develop more detailed guidelines for PCA adoption, which has since happened, and conservationists have been working with the Association of Bay Area Governments (ABAG) and Metropolitan Transportation Commission (MTC) to clarify the spatial extent of the existing network.[126]

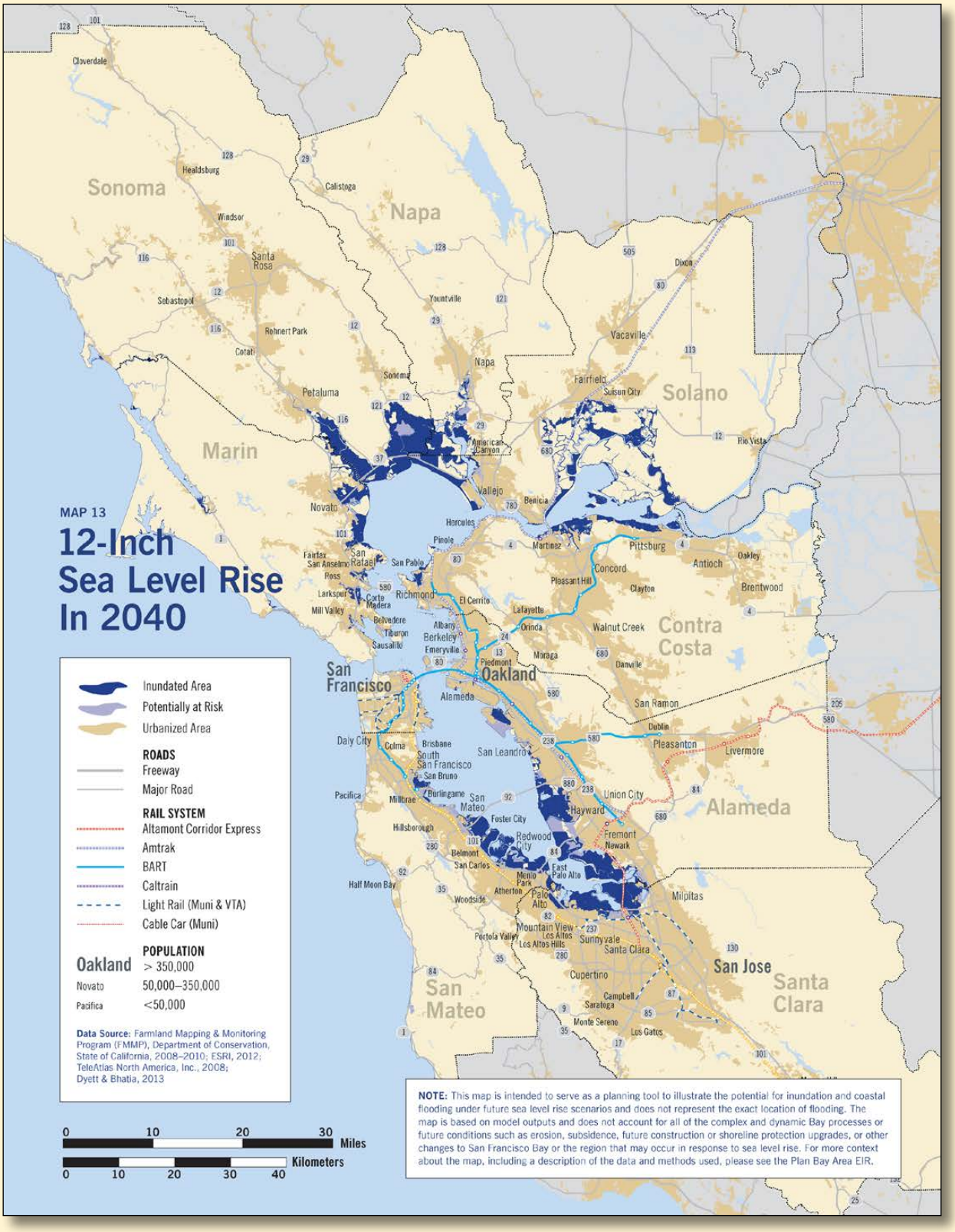
To reinforce the PCA/PDA framework, Plan Bay Area establishes the OneBayArea Grant Program. This program offers $10 million to support conservation of PCAs, including planning and acquisition work, and $310 million to incentivize development in PDAs.[127] While the former is dwarfed by the latter, it does represent a new funding stream for land protection.[128]

In addition, Plan Bay Area commits to "direct[] 100 percent of the region's growth inside the year 2010 urban footprint," such that "all growth occurs as infill development or within established urban growth boundaries or urban limit lines."[129] While this language leaves open the possibility of greenfield development within existing urban growth boundaries, Plan Bay Area makes an explicit assumption that these boundaries will not change before 2040, and states that "no sprawl-style development is expected to occur on the region's scenic or agricultural lands."[130]

Plan Bay Area also contains a more detailed discussion of sea level rise than any other SCS prepared for a coastal region. It maps areas likely to be inundated by 2040 (Figure 6), and commits to a collaborative planning effort to study risks and mitigation strategies.[131] Although it does not explicitly tie sea level rise to establishing or conserving PCAs, the EIR notes that mitigation strategies for the loss of coastal habitat could include "rolling easements."[132] These would "establish a boundary from the shoreline that moves inland as sea levels rise, allowing wetlands and beaches to migrate inland," and transfer the risk of new development to property owners, who would be required to remove certain structures as sea levels rise.[133]

123 ABAG and MTC, 2013a.
124 ABAG and MTC, 2013a.
125 ABAG and MTC, 2013a.
126 ABAG and MTC, 2013a; ABAG, 2014; J. Madsen (personal communication, March 18, 2015).
127 ABAG and MTC, 2013a.
128 ABAG and MTC, 2013a.
129 ABAG and MTC, 2013a.
130 ABAG and MTC, 2013a.
131 ABAG and MTC, 2013a.
132 Dyett & Bhatia et al., 2013.
133 Dyett & Bhatia et al., 2013.

**Figure 6:** Areas affected by 12-inch sea level rise in 2040 as depicted in Plan Bay Area.
Image: ABAG and MTC, 2013a.



Beyond rolling easements, the EIR is notable for offering RAMP as an option, but not a requirement, for mitigating impacts to riparian areas, wetlands and other sensitive natural communities. It proposes a number of measures to protect biological and agricultural resources, including but not limited to the following:

- For riparian areas, wetlands and other sensitive natural communities, avoid impacts to begin with, provide compensatory mitigation where this is infeasible (which may be achieved through restoration, creation or enhancement of habitat, purchase of mitigation credits or "Regional Advance Mitigation Planning . . . banking, as deemed appropriate by the permitting agencies"), and ensure that all mitigation areas are preserved in perpetuity;[134]
- Establish a no-net-loss policy for wetlands and compensate for impacts to forest land and protected open space through "conservation easements on land at least equal in quality and size" to that impacted;[135]
- Require project sponsors to provide "detailed analyses for specific projects affecting Essential Connectivity Area[s] . . . to determine what wildlife species may use these areas and what habitats those species require," and implement measures to maintain or restore connectivity;[136] and
- For projects that consume farmland, fund conservation easements and require a 1:1 mitigation ratio for land subject to Williamson Act contracts (i.e., 1 acre permanently preserved for each acre taken out of Williamson Act protection).[137]

### *Conservation Proposals*

The primary conservation proposal not included in Plan Bay Area was a "Greenprint" chapter specifically focused on habitat, farmland and open space.[138] This chapter would have provided additional data on the region's natural resources, a clearer explanation of their importance, and a set of three conservation strategies:

- An updated network of PCAs linked to regional conservation initiatives, and customized for specific types of open space, including habitat and agricultural land;
- A regional farmland protection plan with conservation elements tied to the PCA network and policy elements such as model zoning and regulatory codes; and
- A RAMP program similar to those adopted by SANDAG and OCTA.[139]

Much of the first strategy is reflected in Plan Bay Area and subsequently-approved guidelines for PCAs,[140] and funding for PCAs combined with RAMP as an option for mitigation could be viewed as steps toward a regional mitigation program. The second strategy, however, was not adopted and the "Greenprint" itself was published as a "Supplementary Report" instead of an SCS chapter.[141]

Additional proposals reflected in comment letters on Plan Bay Area and the EIR, but not ultimately adopted, included but were not limited to the following:

- Address the funding imbalance between PCAs ($10 million) and PDAs ($310 million);[142]

134 Dyett & Bhatia et al., 2013.
135 Dyett & Bhatia et al., 2013.
136 Dyett & Bhatia et al., 2013; see also CA DFW, 2015.
137 Dyett & Bhatia et al., 2013.
138 J. Madsen (personal communication, March 18, 2015).
139 ABAG and MTC, 2013b.
140 ABAG and MTC, 2013a; ABAG, 2014.
141 ABAG and MTC, 2013b.
142 Dyett & Bhatia et al., 2013 (comment letter from Sierra Club).

- Provide more detailed mapping and analysis of biological resources, including migratory corridors and linkages, and incorporate maps of reservoir catchment areas and open space policy protections;[143]
- Distinguish between urban footprints, urban growth boundaries and city limits;[144]
- Extend the sea level rise analysis to 2100, consider sea level rise when locating PDAs, and take greater responsibility for enforcing measures to reduce risk to these areas;[145] and
- Adopt stronger mitigation policies and higher mitigation ratios for impacts to endangered species and other biological resources.[146]

In addition, conservation groups and allied organizations supported elements of the "Environment, Equity and Jobs" scenario identified as environmentally superior in the EIR but not adopted in Plan Bay Area.[147]

143 Dyett & Bhatia et al., 2013 (comment letter from Greenbelt Alliance, Bay Area Open Space Council and The Nature Conservancy).

144 Dyett & Bhatia et al., 2013 (Greenbelt Alliance et al.).

145 Dyett & Bhatia et al., 2013 (comment letters from Earthjustice, Marin Conservation League and Sierra Club).

146 Dyett & Bhatia et al., 2013 (comment letters from Marin Audubon Society and Natural Resources Defense Council).

147 See, e.g., Dyett & Bhatia et al., 2013 (comment letter cosigned by Greenbelt Alliance, Natural Resources Defense Council, The Nature Conservancy and 24 other organizations).

# The San Joaquin Valley

## San Joaquin

- Claims second-highest GHG reductions by 2020 (24.4%) and highest by 2035 (23.7%) of any SCS
- No significant mapping of resource areas in SCS
- Conservation-related performance measure: 10,707 fewer acres of prime farmland consumed than under business as usual
- MPO subsequently formed interagency committee to identify mitigation measures for biological, agricultural and open space resources, but has not committed to any specific measures so far

### *Conservation Provisions*

The San Joaquin Council of Governments' (SJCOG's) Regional Transportation Plan/Sustainable Communities Strategy for San Joaquin County (San Joaquin RTP/SCS) claims to achieve the second-highest GHG reductions by 2020 (24.4%) and the highest by 2035 (23.7%) of any region that has adopted an SCS so far.[148] It describes the San Joaquin Valley Blueprint as "[f]oundational" to its own policymaking process, discusses the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP), and claims that local agency climate plans "had a direct influence on growth location[s]."[149] In addition, it includes a stated strategy of encouraging development patterns that maintain agricultural viability and conserve natural resources, and projects that 10,707 fewer acres of prime farmland will be consumed than under business as usual.[150] But the San Joaquin RTP/SCS contains no significant mapping of resource areas and no spatially explicit conservation priorities, making it difficult to assess how the Blueprint, the SJMSCP or SJCOG's strategies influenced the region's land use pattern.

The Delta Plan is addressed in the EIR, which commits to avoiding significant impacts to opportunities to restore Plan-designated priority habitat, and endorses (but does not require) a "target ratio of 1:1" for impacts to farmland in the Plan area.[151] For implementing agencies that choose to comply with this measure, the EIR emphasizes that mitigation would be provided "through acquisition of an agricultural conservation easement, or contributing funds to a land trust or other entity qualified to preserve farmland in perpetuity."[152] It also encourages agencies to avoid fragmentation or isolation of farmland in the Delta Plan area, and to ensure that the non-impacted areas are large enough for agriculture to continue to be viable. [153]

In addition to measures applicable in the Delta Plan area, the EIR contains non-mandatory mitigation measures for biological and agricultural resources in general. These include avoiding and minimizing impacts to special status species habitat, agricultural land and other natural resources, 1:1 mitigation ratios for farmland and forest land, and site-specific (but no lower than 1:1) ratios for riparian habitat. For implementing agencies that participate in the SJMSCP, the EIR calls for a minimum 1:1 ratio and compliance with SJMSCP mitigation requirements. In addition, it recommends facilitating development in urban areas and "allow[ing] these [urban] areas to serve as receiver sites for transfer of

148 SJCOG, 2014.

149 SJCOG, 2014.

150 SJCOG, 2014.

151 Impact Sciences, 2014a. As noted above, the Delta Plan also impacts the Sacramento region, but had not yet been adopted when SACOG prepared its MTP/SCS. SACOG, 2012a.

152 Impact Sciences, 2014a.

153 Impact Sciences, 2014a.

development rights away from environmentally sensitive lands and rural areas outside established urban growth boundaries." It also calls for avoiding growth in groundwater recharge areas and wildfire zones.[154]

### *Conservation Proposals*

In light of San Joaquin's unusually high GHG reductions and relatively modest changes to land use and transportation patterns, conservationists and others sought greater transparency regarding SJCOG's modeling methods, including the role played by interregional trips.[155] Additional conservation proposals included the following:

- Establish goals for, and quantify GHG reductions achieved by, avoided conversion of habitat, farmland and open space;[156]
- Provide funding incentives for local governments to adopt policies consistent with the SCS, and establish benchmarks to track their progress in avoiding land conversion;[157]
- Include a commitment in the RTP/SCS to implement mitigation measures for biological, agricultural and open space resources;[158]
- Use SJCOG's control over transportation projects to reduce GHG emissions; and[159]
- Form an interagency committee to identify mitigation measures for biological, agricultural and open space resources.[160]

The last request was partially successful, as SJCOG has convened a 2014 RTP Working Group to follow up on community groups' proposals. The Working Group has discussed the SJMSCP, but has not committed to any further measures to address habitat and farmland conversion so far.[161]

154 Impact Sciences, 2014a.

155 See, e.g., Impact Sciences, 2014a (comment letter from Sierra Club). The Air Resources Board is currently examining the technical methodology used in each of the eight San Joaquin Valley SCSs.

156 Impact Sciences, 2014a (comment letter from Defenders of Wildlife).

157 Impact Sciences, 2014a (Defenders of Wildlife).

158 Impact Sciences, 2014a (Defenders of Wildlife).

159 Impact Sciences, 2014a (Sierra Club).

160 Impact Sciences, 2014a (Defenders of Wildlife).

161 K. Roedner Sutter (personal communication, March 20, 2015).

## Stanislaus

- Claims highest GHG reductions by 2020 (26%) and second-highest by 2035 (22%) of any SCS
- Discusses growth control measures already enacted by local jurisdictions
- Conservation-related performance measures include total land consumed by new development (11,920 acres as opposed to 16,000 under business as usual), prime farmland consumed by new development (9,400 acres, as opposed to 13,550 under business as usual) and acres consumed per 1,000 new residents (58, as opposed to 77 under business as usual)

### *Conservation Provisions*

The Regional Transportation Plan/Sustainable Communities Strategy – Stanislaus County (Stanislaus RTP/SCS), claims to achieve the highest GHG reductions by 2020 (26%) and second-highest by 2035 (22%) of any SCS adopted so far.[162] It includes objectives of "reduc[ing] the amount of Prime Farmland and new land consumed by development in the region" and supporting "compact development where appropriate to preserve agricultural lands and natural resources," as well as three conservation-related performance measures:

- Total land area consumed by new development (11,920 acres, as opposed to 16,000 under business as usual);
- Prime farmland consumed by new development (9,400 acres, as opposed to 13,550 under business as usual); and
- Acres consumed per 1,000 new residents (58, as opposed to 77 under business as usual).[163]

Though the Stanislaus RTP/SCS discusses pre-existing growth control policies adopted by the County, Stanislaus LAFCo and the City of Hughson,[164] the measures of aggregate and per capita land conversion described above appear to be the primary means of integrating conservation into the preferred land use scenario.[165]

The EIR states that the Stanislaus Council of Governments (StanCOG) does not have the authority to require mitigation from implementing agencies, but proposes several mitigation measures for biological and agricultural resources.[166] In addition to avoiding and minimizing impacts, these measures include requiring 2:1 mitigation ratios for wetlands, riparian habitat and special status plant species, as well as "purchasing agricultural conservation easements . . . or funding the acquisition of agricultural mitigation lands through an appropriate land trust (including, but not limited to the Central Valley Farmland Trust)."[167]

### *Conservation Proposals*

The primary conservation-related proposal—one that was made by groups from other sectors, such as Catholic Charities, Diocese of Stockton, as well as a number of private citizens—was to adopt stronger farmland protection and mitigation policies.[168] As with San Joaquin, the unusually high GHG reductions claimed by StanCOG also led to requests for greater transparency regarding modeling methods.[169]

162 StanCOG, 2014; StanCOG and Rincon Consultants, 2014.

163 StanCOG, 2014.

164 These include 1) a 2007 ballot initiative that amended the Stanislaus County General Plan to require voter approval for any rezoning of agricultural or open space land in the unincorporated areas of the County, 2) a 2012 Agricultural Preservation Policy adopted by Stanislaus LAFCo that requires applicants for SOI expansion to show how they will minimize loss of agricultural lands and offers 1:1 mitigation as a strategy for doing so, and 3) a 2:1 farmland mitigation ratio adopted by the City of Hughson in 2013. StanCOG, 2014.

165 StanCOG, 2014.

166 StanCOG and Rincon Consultants, 2014.

167 StanCOG and Rincon Consultants, 2014.

168 See, e.g., StanCOG and Rincon Consultants, 2014 (comment letter from Catholic Charities Diocese of Stockton; comment letters from Rhett Calkins, Juan Orosoc and Bradley Barker).

169 StanCOG and Rincon Consultants, 2014 (comment letter from California Rural Legal Assistance).

## Merced

- Does not meet ARB's targets
- Provides limited discussion of resources areas and no explanation of how these areas are integrated into land use pattern
- Conservation-related performance measure: preferred scenario consumes 14,900 acres of farmland, as opposed to 18,100 under business as usual
- Mitigation measures for biological and agricultural resources are non-mandatory and unchanged from 2004 Program EIR

### *Conservation Provisions*

In contrast to San Joaquin and Stanislaus, Merced and Madera adopted SCSs that did not meet ARB's targets. The Merced County Association of Governments (MCAG) and Madera County Transportation Commission (MCTC) are currently preparing Alternative Planning Strategies.[170]

MCAG's Regional Transportation Plan/Sustainable Communities Strategy for Merced County (Merced RTP/SCS) states that its land use strategies and policies include protecting "productive farmland and land that provides habitat for rare, endangered or threatened species" and "consider[ing]" impacts to resource land, but does not explain how these areas are integrated into the preferred land use pattern. Information on natural resources is limited, with a single, undifferentiated map of farmland in the SCS and a statement elsewhere in the RTP that Merced has 40,000 acres of wetlands.[171] Merced's one conservation-related performance measure credits the preferred scenario with consuming 18% fewer acres of farmland than business as usual (14,900 acres for Scenario B vs. 18,100 for Scenario A).[172]

MCAG's EIR is a "Supplemental EIR" addressing only air quality, GHG emissions and transportation.[173] According to this document, implementing agencies are responsible for determining whether the effects of their projects were adequately analyzed in the 2004 Program EIR.[174] The 2004 Program EIR, in turn, offers non-mandatory mitigation measures for biological and agricultural resources, including avoidance and minimization, purchasing land to compensate for habitat loss or limit impacts to habitat corridors, and selling "remnant" agricultural parcels left after a transportation project to neighboring farms.[175]

### *Conservation Proposals*

The primary proposal from conservationists (and others) was to adopt a plan that would meet the targets.[176] In addition, the Sierra Club sought stronger farmland mitigation requirements for transportation projects, and emphasized that these requirements could be met through acquisition of conservation easements by land trusts.[177]

170 See Cal. Gov. Code § 65080(b)(2)(H).
171 MCAG, 2014.
172 MCAG, 2014.
173 De Novo Planning Group, 2014.
174 De Novo Planning Group, 2014.
175 MCAG, 2004.
176 See, e.g., De Novo Planning Group, 2014 (comment letter from Sierra Club Tehipite Chapter).
177 De Novo Planning Group, 2014 (Sierra Club).

## Madera

- Does not meet ARB's targets due to stated assumption that large lot residential growth will continue in Sierra foothills
- Resource areas and farmland included in land use model and preserved from development "to the extent possible"
- Conservation-related performance measure: preferred scenario consumes 136 acres of agricultural and other resource lands, but SCS is unclear as to whether this includes land inside SOIs
- EIR includes commitment to form subcommittee to consider agricultural mitigation, as well as non-mandatory measure encouraging implementing agencies to establish TDR programs

### *Conservation Provisions*

MCTC's Regional Transportation Plan and Sustainable Communities Strategy (Madera RTP/SCS) does not meet the targets, but its land use pattern appears at first glance to incorporate resource areas and farmland. According to MCTC, "protected parklands . . . open space, natural resource areas, and farmland" were included in a UPLAN land use model and preserved from development "to the extent possible."[178] The Madera RTP/SCS also identifies an objective of "[p]rotect[ing] and conserv[ing] existing agricultural land . . . and promot[ing] the environmental and economic benefits of rural agricultural lands," maps growth on important farmland for each of its three scenarios, and claims in its performance measures that the preferred scenario will consume only 136 acres of agricultural and other resource lands.[179]

It is unclear, however, whether this is the total throughout the County, or just the total outside SOIs. Moreover, MCTC's rationale for not meeting the targets—the expectation that large lot residential growth will continue in the Sierra foothills, including construction on currently vacant parcels and the addition of new parcels in the future—suggests that low density greenfield development will remain the default in at least the eastern third of the County.[180]

Madera's EIR contains two relatively unusual mitigation measures: 1) a commitment that the MCTC Policy Board will form a subcommittee to consider agricultural mitigation, including methods of quantifying farmland conversion and appropriate preservation ratios, and 2) a non-mandatory measure encouraging implementing agencies to prepare specific plans for mixed-use areas and "allow these areas to serve as receiver sites for transfer of development rights away from environmentally sensitive lands and rural areas outside established urban growth boundaries."[181] It also encourages implementing agencies to contribute to offsite habitat restoration to compensate for unavoidable habitat losses, mitigate permanent impacts to certain types of sensitive habitat at a 3:1 ratio and use conservation easements or Williamson Act enrollments to mitigate transportation projects' impacts on farmland.[182]

178 VRPA Technologies, 2014a.
179 VRPA Technologies, 2014a.
180 VRPA Technologies, 2014a.
181 VRPA Technologies, 2014b.
182 VRPA Technologies, 2014b.

### *Conservation Proposals*

As with Merced, the primary proposal made but not adopted was to meet the targets.[183] Additional measures proposed by conservationists included stronger farmland mitigation requirements,[184] denial of transportation funding for growth-inducing projects proposed by jurisdictions that do not adopt mitigation measures set forth in the EIR,[185] and avoiding construction of new towns that would place additional strain on water supplies.[186]

## Fresno

- Acknowledges San Joaquin Valley Greenprint, but is unclear as to how Greenprint layers were incorporated into land use pattern
- Conservation-related performance measures include total land conversion (14,675 acres, as opposed to 22,308 acres under business as usual) and important farmland conversion outside SOIs (91.9 acres, as opposed to 345 acres under business as usual)
- Committee to develop agricultural mitigation policy recommended that Fresno COG ensure "that the construction of transportation projects minimize the loss of farmland," but did not adopt policy on mitigation ratios

### *Conservation Provisions*

Fresno's 2014 Regional Transportation Plan and Sustainable Communities Strategy (Fresno RTP/SCS) contains policies of "[p]rotect[ing] productive and potentially productive agricultural land from urban encroachment . . . thereby maintain[ing] the region's agriculturally based economy" and "[p]reserv[ing] and enhanc[ing] the character and inherent values of natural, scenic and open space resource land."[187] Its performance measures include total land and important farmland consumed by new development, though the latter is limited to farmland outside SOIs.[188] The preferred land use scenario consumes less land than business as usual (14,675 acres vs. 22,308 acres), but more than the other three scenarios modeled.[189] Farmland consumption outside SOIs is lower than business as usual (91.9 acres vs. 345 acres), but higher than two of the three other scenarios.[190] This is only a fraction of the total agricultural land lost inside and outside SOIs, however, which the EIR estimates to be 9,853 acres.[191]

According to the SCS, layers representing resource areas and farmland were provided by the San Joaquin Valley Greenprint, a stakeholder-driven natural resource inventory in progress in 2014 and 2015.[192] Like most other San Joaquin

183 See VRPA Technologies, 2014b (comment letter from Sierra Club Tehipite Chapter; comment letter cosigned by Revive the San Joaquin, Fresno Metro Ministry, Central California Environmental Justice Network, Sierra Nevada Alliance, Latinos United for Clean Air, Leadership Council for Justice and Accountability, Madera Coalition for Community Justice, Sierra Club, San Joaquin Valley Latino Environmental Advancement Project, Safe Routes to School National Partnership and American Farmland Trust; comment letters from Ruth Afifi, Elizabeth Leone, Don Manro, Theresa Moss-Currier and others).

184 VRPA Technologies, 2014b (Sierra Club).

185 VRPA Technologies, 2014b (Sierra Club).

186 VRPA Technologies, 2014b (Revive the San Joaquin et al.; Theresa Moss-Currier).

187 Fresno COG, 2014. It also identifies open space and farmland conservation as a co-benefit of reducing the footprint of new development. Fresno COG, 2014.

188 Fresno COG, 2014.

189 Fresno COG, 2014.

190 Fresno COG, 2014.

191 VRPA Technologies, 2014c.

192 Fresno COG, 2014; see also Thorne et al., 2014 (subsequently-released State of the Valley Report incorporating much of the same data).

Valley regions that acknowledge the Greenprint, however, Fresno provides little detail on how this data was integrated into its adopted land use pattern.[193]

The Fresno RTP/SCS also contains a commitment to develop avoidance and mitigation strategies for impacts on natural lands, including "potential policies and actions to minimize the loss of farmland associated with the construction of transportation facilities."[194] In response to comments from conservation groups,[195] the EIR provides more detail, stating that the Fresno Council of Governments (Fresno COG) will form a committee to do the following:

> Develop a methodology to help implementing agencies quantify the conversion of prime farmland, unique farmland, farmland of statewide importance, and farmland of local importance associated with their proposed projects. Develop a methodology for implementing agencies to consider preservation ratios to minimize loss of prime, unique, and statewide importance farmland; and coordinate efforts to provide a mechanism for preservation activities.[196]

To address these issues, Fresno COG subsequently formed the Transportation Project Agricultural Mitigation Ad-hoc Committee, a group of stakeholders, community organization representatives (including the author of this report) and COG staff. The Ad-hoc Committee recommended that Fresno COG adopt a policy "that the construction of transportation projects minimize the loss of farmland," but took no action on farmland mitigation ratios beyond recommending that COG staff present information to two COG committees and facilitate consideration by member agencies.[197]

In addition to providing a more detailed mandate for the Ad-hoc Committee, the EIR offers non-mandatory mitigation measures such as avoiding encroachment on agricultural lands to the extent possible, "establish[ing] inclusion into a conservation easement program," and arranging for Williamson Act enrollment.[198] It provides additional measures for unavoidable impacts to biological resources, such as a 3:1 mitigation ratio for permanent impacts to sensitive habitats and special status plant species.[199]

### *Conservation Proposals*

Before obtaining a commitment to form the Ad-hoc Committee, as well as reconsideration of project selection criteria in future rounds, a needs assessment, and a sustainable planning and infrastructure grant program,[200] conservationists

193 Fresno COG, 2014; see also StanCOG, 2014; VRPA Technologies, 2014a; KCAG, 2014; and Kern COG, 2014. As discussed below, the sole exception is Tulare. TCAG, 2014.

194 Fresno COG, 2014.

195 See, e.g., VRPA Technologies, 2014c (comment letter from Southern Sierra Partnership and American Farmland Trust).

196 VRPA Technologies, 2014c.

197 Personal observation, July 22, 2015.

198 VRPA Technologies, 2014c.

199 VRPA Technologies, 2014c.

200 VRPA Technologies, 2014c (Southern Sierra Partnership and American Farmland Trust).

and allied groups put forward Scenario D. This land use pattern would have consumed over 1,200 fewer acres than the most compact scenario developed by Fresno COG, and over 4,700 fewer than the preferred scenario.[201] Fresno COG included Scenario D as an alternative, but ultimately declined to adopt it.[202] Community groups also sought removal of new towns from the land use pattern, which Fresno COG declined to do on the grounds that the projects had already been approved.[203]

## Tulare

- Includes, but provides little discussion of, regional mitigation banking program funded by transportation sales tax measure
- **Incorporates San Joaquin Valley Greenprint layers as constraints to development in land use pattern, and bases overall pattern on Tulare County Regional Blueprint**
- Conservation-related performance measures include acres of important farmland inside and outside of SOIs consumed from 2010 to 2040 (3,166, as opposed to 6,980 for business as usual), and acres of critical habitat consumed during the same period (451, as opposed to only 442 for business as usual).
- EIR requires MPO (but not implementing agencies) to provide 2:1 mitigation for certain types of habitat and 1:1 farmland mitigation with easements to be held by land trusts

### *Conservation Provisions*

The Tulare County Regional Transportation Plan & Sustainable Communities Strategy (Tulare RTP/SCS) adopts a goal of "protect[ing] sensitive habitat and natural resource areas," along with policies of encouraging "projects that support the preservation of farmland and open space" and assisting agencies with mitigation using funds from a voter-approved sales tax for transportation projects.[204] According to an expenditure plan appended to the Tulare RTP/SCS, the funds available for mitigation under Tulare County's Measure R include $2 million for regional mitigation banking and $1 million for a separate program in Woodlake.[205] But there is little discussion of either program in the SCS itself, and no equivalent of SANDAG's overall policy of comprehensive mitigation or OCTA's emphasis on the role regional mitigation can play in meeting SCS land use goals.[206]

The Tulare RTP/SCS is clearer about how it incorporates other land use planning efforts. Its preferred scenario, which would increase density by 25% from 2005 levels, is based on the Tulare County Regional Blueprint.[207] Moreover, it actively integrates resource data from the San Joaquin Valley Greenprint, using a model that treats layers such as important farmland and groundwater recharge areas as "constraints to the development of land."[208]

Tulare's two conservation-related performance measures—acres of important farmland consumed from 2010 to 2040, and acres of critical habitat consumed during the same period—suggest mixed results. The preferred scenario consumes 3,166 acres of important farmland inside and outside SOIs (as opposed to 6,980 for business as usual), but 451 acres of critical habitat (as opposed to only 442 for business as usual).[209]

201 ClimatePlan et al., 2013; Fresno COG, 2014 (performance measures comparing Scenario D with other modeled alternatives).
202 Fresno COG, 2014.
203 VRPA Technologies, 2014c (comment letter from California Rural Legal Assistance).
204 TCAG, 2014a.
205 TCAG, 2014a (Appendix M).
206 TCAG, 2014a; see also SANDAG, 2011a; Burke Consulting et al., 2011.
207 TCAG, 2014a; see also TCAG, 2009.
208 TCAG, 2014a.
209 TCAG, 2014a.

In response to input from conservation groups, the EIR endorses agricultural mitigation "at a minimum ratio of 1:1," with conservation easements to be held by land trusts.[210] It also states that the Tulare County Association of Governments (TCAG) "shall" and other agencies "can and should" provide 2:1 mitigation for impacts to riparian habitat, wetlands, certain trees and other special status plant species.[211]

### *Conservation Proposals*

In addition to 1:1 farmland mitigation and clearer language about appropriate holders of easements, conservation proposals included the following:

- Provide a sensitivity analysis breaking down the proportion of claimed GHG reductions coming from land use and transportation strategies;[212]
- Require mitigation as a condition of funding, and acknowledge TCAG's authority over transportation funding in general, Measure R funds in particular, and the list of approved projects for the RTP;[213]
- Require mitigation for transportation projects as a condition of consistency with the SCS;[214] and
- Develop policies to address large new town projects, such as Yokohl Ranch, which have been proposed by developers but are not included in the SCS land use scenario.[215]

TCAG declined to provide a sensitivity analysis, claimed that it had no authority to condition Measure R projects on mitigation[216] and, in the RTP/SCS itself, stated that "the lead agency, not TCAG, will be responsible for making the determination of consistency for CEQA streamlining purposes."[217] While it added Yokohl Ranch to the list of "probable projects," it declined to incorporate this project into any of the alternatives considered for the SCS on the grounds that it was not part of the Tulare County General Plan and that it would not have changed the overall population and housing projections.[218]

## Kings

- **Includes impacts to special status species and outdoor aesthetics as criteria in scoring system to select highway projects**
- Provides no other specific strategy to support conservation
- Conservation-related performance measure ("Preservation of Agricultural and Resource Lands") is not accompanied by any quantitative data
- EIR requires MPO, but not implementing agencies, to provide 2:1 mitigation for certain types of habitat and 1:1 farmland mitigation

210 TCAG and Rincon Consultants, 2014; TCAG, 2014b (resolution adopting SCS and changing language about appropriate holder of conservation easements from "the municipality in which the project is proposed, or an authorized agent thereof," to "a local, regional, or statewide organization or agency whose purpose includes the acquisition and stewardship of agricultural conservation easements").

211 TCAG and Rincon Consultants, 2014.

212 TCAG and Rincon Consultants, 2014 (comment letter from Tulare County Citizens for Responsible Growth).

213 TCAG and Rincon Consultants, 2014 (comment letter from Tulare County Citizens for Responsible Growth).

214 TCAG and Rincon Consultants, 2014 (comment letter from Southern Sierra Partnership).

215 TCAG and Rincon Consultants, 2014 (Tulare County Citizens for Responsible Growth).

216 TCAG and Rincon Consultants, 2014.

217 TCAG, 2014a.

218 TCAG and Rincon Consultants, 2014.

### *Conservation Provisions*

The Kings County 2014 Regional Transportation Plan (Kings County RTP) contains extensive language on the importance of agricultural conservation and appears to endorse land use recommendations from American Farmland Trust, including avoiding growth on high quality farmland, minimizing rural residential development and using agricultural conservation easements to mitigate for farmland loss.[219] It cites conservation-oriented principles from the Kings County Blueprint, such as the use of agricultural open space buffers between communities and the importance of protecting wetlands, the Kings River corridor and other habitat.[220] But with the exception of a scoring system to select highway projects, under which points are awarded for minimizing impacts to special status species and avoiding "disruption to natural beauty,"[221] the Kings County RTP does not commit to any specific policy or implementation strategy to support conservation.[222] Its one conservation-related performance measure—"Preservation of Agricultural and Resource Lands"—appears to be qualitative, as it is not accompanied by any quantitative data.[223]

Mitigation measures proposed in the EIR, which are mandatory for the Kings County Association of Governments (KCAG) but only recommended for implementing agencies, include avoidance and minimization of impacts to biological resources, 2:1 mitigation ratios for wetlands, riparian habitat and special status plant species, and the creation of "species appropriate mitigation bank(s)."[224] In addition, the EIR proposes a 1:1 ratio for mitigation of impacts to important farmland, and notes that easements could be acquired directly or by "donating mitigation fees to a local, regional, or statewide organization or agency whose purpose includes the acquisition and stewardship of agricultural conservation easements."[225]

### *Conservation Proposals*

Beyond the input of conservation groups such as American Farmland Trust and Tulare Basin Wildlife Partners in the context of a Stakeholder Working Group, much of which was incorporated into the RTP, there appear to have been few conservation proposals.[226]

## Kern

- Notes that highway projects are expected to provide funding for mitigation, but defers treatment of comprehensive mitigation to upcoming Kern County General Plan Update
- Conservation-related performance measures include farmland consumed outside SOIs, but more detailed table of total farmland conversion states that land use pattern is expected to consume 26 square miles of important farmland between 2010 and 2040
- Draft SCS raised questions about role of economic assumptions in meeting GHG reduction targets, but subsequent ARB analysis found that assumptions played limited role in meeting targets
- **EIR includes language linking mitigation requirements to CEQA streamlining benefits**

219 KCAG, 2014, citing American Farmland Trust, 2013.

220 KCAG, 2014, citing KCAG, 2011.

221 Possible scores on these criteria range from 1 (for a project within 1,000 feet of special status species habitat, or one that "[d]estroys natural beauty") to 5 (for a project located further away from special status species habitat, or one that "[o]pens up new vistas or restores natural beauty"). KCAG, 2014.

222 KCAG, 2014.

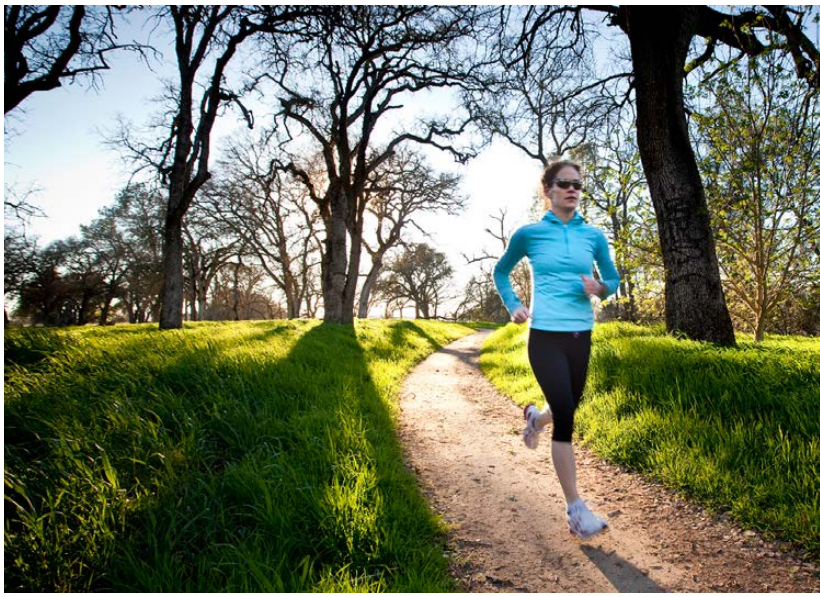
223 KCAG, 2014.

224 KCAG and Rincon Consultants, 2014.

225 KCAG and Rincon Consultants, 2014.

226 KCAG, 2014; KCAG and Rincon Consultants, 2014; D. O'Connell (personal communication, April 7, 2015).

### *Conservation Provisions*



The 2014 Regional Transportation Plan/Sustainable Communities Strategy (Kern RTP/SCS) identifies "conservation of natural resources and undeveloped land" as a goal, incorporates areas designated for conservation in existing HCPs into its land use pattern, and notes that the Kern Council of Governments (Kern COG) previously "provided $300,000 in planning funds to the Metropolitan Bakersfield HCP and Valley Floor HCP in an effort to streamline mitigation . . . in the region."[227] Based on the assumption that 3% of highway capital costs will be devoted to mitigation, it projects that $77 million will be available for conservation easements by 2040.[228] It does not commit these funds to a RAMP program, however, and any "comprehensive" approach to conservation is deferred to an upcoming Kern County General Plan Update.[229]

The Kern RTP/SCS includes as a performance measure the percentage of farmland consumed outside SOIs, as well as a more detailed table of projected farmland conversion (both inside and outside SOIs) through 2040.[230] According to the latter, Kern's land use pattern is expected to consume 26 square miles of important farmland between 2010 and 2040.[231]

Beyond its treatment of conservation issues, the Kern RTP/SCS is notable for raising questions about the use of economic assumptions to achieve GHG reduction targets, and for going further than most in linking mitigation to CEQA streamlining benefits. A sensitivity analysis published in the Draft RTP/SCS indicated that the two greatest factors in Kern's claimed GHG reductions were 1) an anticipated 2/3 increase in fuel prices and 2) decreasing economic activity due to a recession.[232] "Land use" rated a distant third, reducing 2040 per capita $CO_2$ emissions by only 2.53%, and every other factor had an effect of less than 1%.[233] Kern COG subsequently retracted this analysis, stating that it would be "misleading . . . to attribute GHG reductions to individual assumptions and strategies in the SCS."[234] A July 2015 technical review by ARB staff found that fuel prices accounted for a significantly lower proportion of Kern's reductions than initially estimated.[235]

227 Kern COG, 2014a. It also notes that the County has begun work on an NCCP to combine two HCPs. Kern COG, 2014a.
228 Kern COG, 2014a.
229 Kern COG, 2014a. As of November 2015, the General Plan Update has not yet begun.
230 Kern COG, 2014a.
231 Kern COG, 2014a.
232 Kern COG, 2014b.
233 Kern COG, 2014b.
234 Kern COG, 2014a.
235 ARB, 2015.

Another outcome of the Kern SCS process is EIR language linking mitigation to CEQA streamlining benefits. In response to concerns expressed by conservationists and others,[236] Kern COG added the following preface to each EIR subsection listing mitigation measures:

> Mitigation measures in this Program EIR that include the language, "Kern COG through its Environmental Review Program/Intergovernmental Review process will facilitate and encourage implementing and local agencies to . . ." are intended to be used by projects seeking to use this Program EIR for CEQA streamlining (under SB 375 and SB 226 . . .) and tiering. For projects seeking to use CEQA streamlining and/or tier from the 2014 RTP Program EIR, mitigation measures included in this Program EIR (or equivalent) should be required by the lead agency as appropriate and applicable.[237]

Among the measures that Kern COG commits to "facilitate and encourage" are implementing 1:1 mitigation ratios for riparian and wetland habitat, forest land and trees.[238] The EIR also calls for avoiding and minimizing impacts on agricultural land and establishing mitigation ratios for important farmland "such as . . . 1 acre of agricultural land . . . permanently conserved for each acre of agricultural land developed."[239] In addition, the EIR notes that tools to implement farmland mitigation "may include" conservation easements and mitigation fees.[240]

### *Conservation Proposals*

The primary proposal from conservationists (and others) was to establish that all claimed GHG reductions were from changes in land use and transportation.[241] Along with transit advocates, infill builders and others, conservationists also proposed a "Balanced Growth Scenario" with specific measures to limit land conversion, including 1) no expansion of SOIs, 2) no new growth outside SOIs, and 3) no new towns that increase per capita VMT in the region or consume priority agricultural, habitat or groundwater recharge resources. Kern COG responded by adding two new scenarios—the 33% Housing Mix Alternative and the 100% Infill Alternative—to its modeling.[242] A number of community groups supported the 33% Housing Mix Alternative,[243] but it was not adopted as the preferred land use scenario.[244]

236 Impact Sciences, 2014b (comment letter from Southern Sierra Partnership, American Farmland Trust, Council of Infill Builders and Natural Resources Defense Council).

237 Impact Sciences, 2014b.

238 Impact Sciences, 2014b.

239 Impact Sciences, 2014b.

240 Impact Sciences, 2014b.

241 Impact Sciences, 2014b (Southern Sierra Partnership, et al.).

242 Kern COG, 2014a; Impact Sciences, 2014b.

243 See, e.g., Impact Sciences, 2014b (comment letters from Southern Sierra Partnership, et al.; American Farmland Trust; Sierra Club Kern-Kaweah Chapter).

244 Kern COG, 2014a; Impact Sciences, 2014b.

# The Central Coast

## Santa Barbara

- **Incorporates "Regional Greenprint" of GIS layers representing biological, agricultural and open space areas as constraint to development for all land use scenarios**
- Conservation-related performance measures include percentage of "agricultural land and open space retained per year" in incorporated and unincorporated areas (100% in incorporated areas, and all but a single 17.51-acre site in unincorporated areas)
- EIR uses mandatory language for mitigation measures, including but not limited to 2:1 mitigation ratios for impacts to wetland and riparian habitat, protected tree species and other special status plant species

### *Conservation Provisions*

Santa Barbara's 2040 Regional Transportation Plan and Sustainable Communities Strategy (Santa Barbara RTP/SCS) contains policies committing to "[p]reserve open space, agricultural land and areas of special biological value," maintain an up-to-date regional database of resource lands, and "pursue development of a coordinated regional approach to advance mitigation of impacts from transportation projects on sensitive habitat areas."[245] It notes that the latter "may include designation of priority conservation areas within the region where advance mitigation should be targeted," though the Santa Barbara RTP/SCS itself does not establish a RAMP program or designate PCAs.[246] Elsewhere, it suggests that the Santa Barbara County Association of Governments (SBCAG) is interested in mitigation banking for large projects if funding becomes available in the future.[247]

The Santa Barbara RTP/SCS also provides an unusually clear explanation of how resource areas are incorporated into its land use pattern, noting that SBCAG used a "Regional Greenprint" of GIS layers representing biological, agricultural and open space areas as a constraint to development for each scenario in UPLAN. These layers include the following:

- Special status species habitat;
- Lands already subject to conservation, including Coastal Zone areas, USFS lands and areas subject to easement or Williamson Act contract;
- Areas designated as open space or agricultural land in local general plans, including important farmland;
- Vernal pools, floodplains and other biological or hydrological resources;
- Areas of significant habitat connectivity; and
- Areas recovering from recent wildfires.[248]

Two performance measures—the percentage of "agricultural land and open space retained per year" in incorporated and unincorporated areas—suggest that these layers were thoroughly integrated into the land use pattern.[249] For

245 SBCAG, 2013.

246 SBCAG, 2013.

247 SBCAG, 2013.

248 SBCAG, 2013. Sources for these layers range from U.S. Fish and Wildlife Service, FMMP and County of Santa Barbara data to the CNDDB, the California Protected Areas Database and California Department of Fish and Wildlife data on large-scale conservation planning areas. SBCAG, 2013 (Appendix D).

249 SBCAG, 2013.

incorporated areas, the preferred scenario retains 100%; for unincorporated areas, it retains all but a single 17.51-acre site.[250] These measures show nearly identical results for the business as usual scenario, which would retain 100% of agricultural and open space land in both incorporated and unincorporated areas, though the Santa Barbara RTP/SCS states elsewhere that business as usual would consume 4,307 acres more than the preferred scenario.[251]

Although the Santa Barbara RTP/SCS goes further than many to incorporate resource protection into its land use pattern, it also emphasizes SBCAG's lack of land use planning authority and the limited ability of modeling tools to predict land use patterns.[252] In light of these limitations, it states, "the 2040 RTP-SCS should be understood more as aspirational, than as predictive or prescriptive."[253]

The EIR, however, uses mandatory language for a number of mitigation measures, including but not limited to 2:1 mitigation ratios for impacts to wetland and riparian habitat, protected tree species and other special status plant species.[254] It also calls upon project sponsors to select from lists of avoidance and minimization measures for impacts to special status species, provides specific (though non-mandatory) measures to avoid impacts to monarch butterflies, and suggests measures to reduce conflict between agricultural land and neighboring uses.[255] Like the EIR for Plan Bay Area, it discusses risks associated with sea level rise, though it does not focus on how these risks apply to resource areas along the coast or suggest conservation-related measures to address them.[256] The EIR does not address consistency with an HCP or NCCP, as Santa Barbara County had neither in 2013.[257]

### *Conservation Proposals*

Conservation-related proposals that SBCAG declined to adopt included using "land use incentives" to achieve SCS goals [258] and making more modest assumptions about the ability of mitigation measures to address the impacts of population growth on habitat, farmland and other natural resources.[259]

250 SBCAG, 2013.

251 SBCAG, 2013.

252 SBCAG, 2013.

253 SBCAG, 2013.

254 SBCAG and Rincon Consultants, 2013.

255 SBCAG and Rincon Consultants, 2013.

256 SBCAG and Rincon Consultants, 2013. The Santa Barbara RTP/SCS discusses this issue as well, but not in the context of risks to habitat or farmland. SBCAG, 2013.

257 SBCAG and Rincon Consultants, 2013.

258 SBCAG and Rincon Consultants, 2013 (comment letter from Community Environmental Council, Coalition for Sustainable Transportation, Santa Barbara County Action Network and Santa Barbara Bike).

259 SBCAG and Rincon Consultants, 2013 (comment letter from Californians for Population Stabilization).

## Monterey Bay

- Incorporates "regional greenprint analysis" of GIS layers representing biological, agricultural and open space areas, but does not state that these areas acted as constraints to development in preferred land use scenario
- Endorses, but does not commit to, RAMP program
- Conservation-related performance measures include open space consumed by 2035 (2,556 acres, as opposed to 2,944 for business as usual) and farmland converted by 2035 (14,316 acres—all within SOIs or Community Plan Areas—vs. 14,611 under business as usual)
- EIR uses mandatory language for mitigation measures, including but not limited to 2:1 mitigation ratios for impacts to wetland and riparian habitat, protected tree species and other special status plant species, and 1:1 mitigation for prime farmland

### *Conservation Provisions*

Moving Forward: Monterey Bay 2035, the MTP/SCS for Monterey, Santa Cruz and San Benito Counties, contains a vaguely-stated policy of "protect[ing] the natural environment," a "regional greenprint analysis" of resource areas and an endorsement of regional advance mitigation.[260] The "regional greenprint analysis" is based on GIS layers of biological, agricultural and open space resources, including the following:

- Protected, sensitive or special status species;
- Conserved lands, including areas under easement or Williamson Act contract;
- Areas designated for open space and agriculture in local general plans;
- Important farmland;
- Areas important for habitat connectivity; and
- Land containing other biological resources.[261]

Unlike the Santa Barbara RTP/SCS, Moving Forward does not state that all of these areas acted as constraints to development in the preferred land use scenario.[262] It does note, however, that the land use pattern incorporates adopted habitat plans, already-conserved areas and "other sensitive resource lands . . . as reflected in plans by local jurisdictions."[263] In addition, it would keep 96% of the region's agricultural land in solely agricultural use.[264]

260 AMBAG, 2014.

261 AMBAG, 2014.

262 AMBAG, 2014; SBCAG, 2013.

263 AMBAG, 2014. Though the region had no HCPs or NCCPs in 2014, Moving Forward discusses the Fort Ord Habitat Management Plan, which is expected to become an HCP in the future. AMBAG and Rincon Consultants, 2014; AMBAG, 2014.

264 AMBAG, 2014. "Agricultural land" appears to include categories beyond just important farmland. AMBAG, 2014.

Moving Forward also endorses—but does not commit to—a RAMP program, noting that "[r]egional mitigation efforts rather than the traditional project-specific mitigation" can conserve resources across a larger area, protect multiple resources at once and allow for greater habitat connectivity.[265] It states that the Association of Monterey Bay Area Governments (AMBAG) is gathering data on mitigation opportunities and that the Strategic Highways Research Program's Regional Ecological Framework Project has already mapped "sensitive resource areas near planned regional transportation projects."[266] Moving Forward offers a number of implementation strategies, including data-sharing, "exploring a mitigation banking program" and participating in resource management planning, but does not commit AMBAG to funding or developing a RAMP program.[267]

Like Plan Bay Area and the Santa Barbara RTP/SCS, Moving Forward discusses sea level rise and other expected impacts of climate change.[268] It notes that climate change may lead to "the loss of native plant and animal species," though it does not commit to any specific action to address this risk.[269]

Moving Forward's performance measures include open space consumed by 2035 (2,556 acres under the preferred scenario as opposed to 2,944 under business as usual) and farmland converted by 2035 (14,316 acres under the preferred scenario as opposed to 14,611 under business as usual).[270] All farmland consumption occurs within SOIs or Community Plan Areas designated by local general plans.[271]

Although the EIR does not add to Moving Forward's discussion of regional mitigation,[272] it does use mandatory language for several conservation-related mitigation measures. These include, but are not limited to, 2:1 minimum mitigation ratios for impacts to wetland and riparian habitat, protected trees and other special status plant species, as well as 1:1 mitigation for impacts to prime farmland.[273] For the latter, the EIR specifies that mitigation is to be provided by easement, deed restriction or other perpetual conservation mechanism.[274] In addition to mandatory mitigation ratios, the EIR calls for avoidance and minimization of impacts to special status species and agricultural lands, and directs project sponsors to choose from a variety of measures to avoid impacts to endangered and threatened species.[275] It also discusses sea level rise and ocean acidification, noting that the latter "may impact the success of California's $318 million per year fishing industry and $17 billion per year tourism/recreation industry."[276] But it provides no mitigation measures specifically directed at protecting coastal wetlands, marine ecosystems or other natural resources from these impacts.[277]

### *Conservation Proposals*

Conservation-related proposals made but not adopted included addressing "declines in [carbon] sequestration resulting from the loss of biological resources"[278] and making more realistic assumptions about the growth-inducing

265 AMBAG, 2014.

266 AMBAG, 2014.

267 AMBAG, 2014.

268 AMBAG, 2014; ABAG and MTC, 2013; SBCAG, 2013.

269 AMBAG, 2014.

270 AMBAG, 2014.

271 AMBAG, 2014.

272 AMBAG and Rincon Consultants, 2014. The EIR notes the Regional Ecological Framework Project in a list of programs that AMBAG supports, but does not explain how this relates to any of its mitigation measures or otherwise expand on Moving Forward's discussion of regional advance mitigation. AMBAG and Rincon Consultants, 2014.

273 AMBAG and Rincon Consultants, 2014.

274 AMBAG and Rincon Consultants, 2014.

275 AMBAG and Rincon Consultants, 2014.

276 AMBAG and Rincon Consultants, 2014.

277 AMBAG and Rincon Consultants, 2014.

278 AMBAG and Rincon Consultants, 2014 (comment letter from Land Watch Monterey County).

effects of new highways in predominantly rural areas.[279] In addition, one commenter proposed adopting significantly higher GHG reduction targets in line with aggregate, year-by-year $CO_2$ reductions necessary to avoid significant "disruption of civilization and natural systems due to climate change."[280]

## San Luis Obispo

- Endorses use of "regional funds as seed money to help leverage state and federal funding to protect and purchase important open space and agricultural lands," and maps areas this approach has already conserved
- **Includes $6.5 million regional investment in "open space acquisitions"**
- **Proposes to give conservation plans same weight as general plans in selecting transportation investments**
- Does not have performance measures relating to habitat or farmland conservation
- Environmental review document (Addendum to 2010 EIR) includes mandatory mitigation for impacts to certain types of habitat

### *Conservation Provisions*

San Luis Obispo's Regional Transportation Plan/Sustainable Communities Strategy (San Luis Obispo RTP/SCS) builds on the "Preliminary Sustainable Communities Strategy" that accompanied the San Luis Obispo Council of Governments' (SLOCOG's) 2010 RTP. It includes as a "key element" "[d]iscourag[ing] future rural development projects in agricultural and natural resource lands," and offers goals, strategies and policies in support of farmland and habitat conservation.[281] Unlike most other MPOs, SLOCOG endorses the use of "regional funds as seed money to help leverage state and federal funding to protect and purchase important open space and agricultural lands,"[282] and the San Luis Obispo RTP/SCS maps areas that have already been conserved with SLOCOG funding. While the SCS states that there is little federal funding left for these programs, a list of projects in the RTP section on active transportation includes a $6.5 million regional investment in "open space acquisitions."[283]

The San Luis Obispo RTP/SCS is also notable for proposing to "[g]ive conservation plans as much weight as general plans when planning transportation investments,"[284] and for endorsing aspects of regional mitigation, such as the use of parcel maps to identify large, undivided properties in specific areas as future mitigation sites, and the development of mitigation banks for transportation projects.[285] It does not, however, commit to a comprehensive RAMP program covering all transportation projects, and does not appear to include habitat or farmland conservation in its list of performance measures.[286]

279 AMBAG and Rincon Consultants, 2014 (Land Watch Monterey County).

280 AMBAG and Rincon Consultants, 2014 (comment letter from Jack Nelson). ARB's targets for the Monterey Bay region are 0% by 2020 and 5% by 2035; Moving Forward projects a 3% reduction by 2020 and 6% by 2035. AMBAG, 2014. As noted in a statement signed by more than 500 climate scientists in 2013 and cited by Nelson, stabilizing atmospheric $CO_2$ at 450 parts per million—a level that would offer a 50% chance of avoiding a global temperature increase of more than 2°C—would require annual, aggregate reductions of over 5% a year for 38 years. See Consensus for Action, 2013.

281 SLOCOG, 2015.

282 SLOCOG, 2015. Similarly, the SCS includes a strategy of "[m]aintain[ing] and expand[ing] open space acquisition and mitigation program[s] to protect environmentally sensitive areas and enhance community separators." SLOCOG, 2015.

283 SLOCOG, 2015.

284 SLOCOG, 2015. While it does not list conservation plans that would be accorded this status, it maps high-value landscape blocks identified in the CalTrans Regional Wildlife Corridor and Habitat Connectivity Plan (CTRWCHCP), notes the potential for road retrofits to improve habitat connectivity in these areas, and includes the CTRWCHCP as an Appendix. SLOCOG, 2015 (Appendix K).

285 SLOCOG, 2015. It is unclear whether these are intended to be binding commitments, because they appear in a list of strategies prefaced by a statement that "[t]he SCS supports avoidance and minimization of impacts . . . by *proposing* to:" (emphasis added). SLOCOG, 2015.

286 SLOCOG, 2015.

SLOCOG's environmental review document—an "Addendum" to the EIR for the 2010 RTP— includes mandatory 1:1 mitigation for trees lost to road construction, as well as mandatory mitigation for impacts to wetlands and riparian habitat.[287] This requirement can be satisfied by in-kind, on-site mitigation "with no net destruction of habitat value," or by purchasing credits from a mitigation bank.[288] The Addendum also requires lead agencies to minimize impacts to foliage, landscape architecture and viewsheds in scenic view areas, and to consider alternatives that reduce or avoid impacts to agricultural or forest lands, though it does not appear to require compensatory mitigation for conversion of these lands.[289]

### *Conservation Proposals*

The public record does not include extensive evidence of advocacy by conservation groups. The main conservation-related comment published in SLOCOG's environmental review documents was a 2010 letter requesting that a particular highway receive a State Scenic Route designation.[290] The 2015 RTP/SCS states that the highway is eligible for the designation, but provides no further detail.[291]

287 PMC, 2015.
288 PMC, 2015.
289 PMC, 2015.
290 PMC, 2010 (comment letter from Patchett, H. and Patchett, R. in original EIR).
291 SLOCOG, 2015.

# Northern California

## Tahoe

- **Endorses shrinking its region's current development footprint through TDR program**
- Prepared by entity with regional land use planning authority and adopted contemporaneously with 2012 Regional Plan Update
- **Attributes specific proportions of its greenhouse gas reductions to changes in land use and transportation**
- No performance measures related to habitat conservation, and no land in region zoned for agricultural use
- EIR notes that many mitigation measures are mandatory under Tahoe Regional Planning Agency Code of Ordinances

### *Conservation Provisions*

The Lake Tahoe Regional Transportation Plan & Sustainable Communities Strategy: Mobility 2035 (Mobility 2035), prepared by the Tahoe Metropolitan Planning Organization (TMPO) and Tahoe Regional Planning Agency (TRPA) under the Bi-State Tahoe Regional Planning Compact, [292] is the only SCS to endorse shrinking its region's current development footprint, which it proposes to do through an innovative TDR program.[293] It also proposes (but does not fund) large-scale restoration work to address the impacts of multiple projects at once, and provides an unusually clear statement of the proportions of GHG reductions attributable to land use and transportation strategies.[294]

Under the Bi-State Compact, TRPA has regional land use planning authority, and Mobility 2035 is designed in part "to support an update of the Transportation Element of the TRPA Regional Plan."[295] Based on a TDR program contemporaneously incorporated into the 2012 Regional Plan Update, Mobility 2035 proposes allocations for the use of existing development rights, as well as "Bonus Units" awarded for transfer of development rights from outlying areas to town centers (i.e., set ratios of additional units in a town center for each foregone unit in an outlying area).[296] These incentives also apply to the removal of existing development from ecologically sensitive areas.[297] For example, "a developed parcel which is in a stream environment zone and is more than 1.5 miles from a town center would have the highest transfer ratio, of 1 to 6–that is, for transferring one unit of existing development, a property owner would receive 5 bonus units."[298] As TMPO and TRPA emphasize, this program has the potential to "reduc[e] the development footprint in the Lake Tahoe region," as opposed to merely slowing its growth.[299]

Mobility 2035 endorses, but not does not provide new funding for, an acquisition program to retire excess development rights, and suggests the exploration of "large-scale restoration projects that can serve to mitigate the impacts of more than one project at a time."[300] It notes that restoration work is already occurring through the Environmental Improvement Program, which has used over $1.5 billion in government and private funding for watershed

292 See Public Law 96-551.
293 TMPO et al., 2012.
294 TMPO et al., 2012.
295 TMPO et al., 2012.
296 TMPO et al., 2012; see also TRPA, 2012.
297 TMPO et al., 2012.
298 TMPO et al., 2012 (emphasis added).
299 TMPO et al., 2012.
300 TMPO et al., 2012.

**Figure 7:** Graphics in Mobility 2035 attributing specific impacts on GHG emissions to land use (full page, top) and transportation (close-up, lower). Images: TMPO et al., 2012.

3. SUSTAINABLE COMMUNITIES STRATEGY DECEMBER 2012

**Forecast distribution of development**

*California Government Code 65080(b)(2)(B)(i): Identify the general location of uses, residential densities, and building intensities within the Region.*

*California Government Code 65080(b)(2)(B)(vii): Set forth a forecasted development pattern for the Region, which, when integrated with the transportation network, and other transportation measures and policies, will reduce the greenhouse gas emissions from automobiles and light trucks to achieve, if there is a feasible way to do so, the greenhouse gas emission reduction targets approved by the state board.*

In the TRPA *Regional Plan* update draft, the staff proposal provides allocations for use of existing development rights for new residential units to Tahoe communities at a rate of 130 per year, Region-wide over the 20-year life of the plan. These residential units may be used on remaining developable parcels in each jurisdiction. In addition, the *Regional Plan* update draft makes available a total of 600 new "Bonus Units" (dedicated to multi-family, affordable, or moderate-income housing), over the life of the plan, plus 874 Bonus Units left over from the 1987 Regional Plan. These Bonus Units may be distributed to any jurisdiction for qualifying development, and may only be used in plan areas designated as town centers.

In addition, Bonus Units may be used to incentivize transfers of development rights and existing development from sensitive parcels and parcels far from town centers. Transfer ratios vary based on the distance from the town center and the level of sensitivity, and whether the transferring parcel has existing development or not. For instance, a developed parcel which is in a stream environment zone and is more than 1.5 miles from a town center would have the highest transfer ratio, of 1 to 6–that is, for transferring one unit of existing development, a property owner would receive 5 bonus units. (For more details on transfer ratios, see the Modeling Methodology in the Appendix.)

Residential densities will be up to 25 units per acre in town centers. An additional 342 tourist accommodation units and 583,600 square feet of commercial floor area (CFA)[1] could also be built, almost all of which will be built in town centers.

The possibility of reducing the development footprint in the Lake Tahoe region through an innovative development rights transfer program could provide for significant reductions in per capita GHG emissions from private vehicles and can be complemented by the development of a land acquisition program that retires, or in some cases transfers, excess development rights. TMPO supports the development of such a program by partners, including the consideration of necessary commodities to support proposed transportation investments. Acquisition programs have had past success in the Tahoe region, increasing public land ownership from 50% in 1982 to 90% in 2010 and resulting in environmental improvement. This type of program would be an ideal candidate for various potential revenue sources such as California "Cap and Trade" funding, private sector, and other sustainability funding programs.

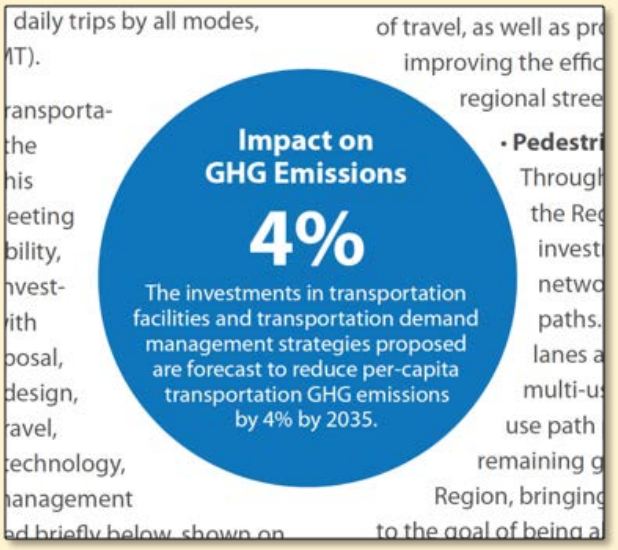
**Impact on GHG Emissions**

**3%**

The land use approach proposed in this section is forecast to reduce per-capita GHG emissions by 3% by 2035.

1 342 Tourist Accommodation Units and 383,000 square feet of commercial floor area are already permitted under existing regulations. An additional 200,000 square feet of CFA would be permitted under Alternative 3.

3-4



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**Impact on GHG Emissions**

**4%**

The investments in transportation facilities and transportation demand management strategies proposed are forecast to reduce per-capita transportation GHG emissions by 4% by 2035.

protection, restoration and other projects aimed at restoring the clarity of Lake Tahoe.[301] In addition, although 85% of the region's land is in public ownership and most special status species are located on this land,[302] the SCS includes maps of protected land and buffer zones for sensitive species, as well as chapters of the TRPA Code of Ordinances that provide habitat protections specific to Lake Tahoe.[303] It does not, however, offer any performance measures related to habitat conservation.

Mobility 2035 is also notable for attributing specific proportions of its GHG reductions to land use and transportation strategies in large blue circles on the relevant SCS pages (Figure 7).[304] If these claims are supported by an accurate sensitivity analysis, they may represent a model for how other MPOs can approach this issue.

The EIR/EIS provides a variety of mitigation measures relating to biological resources, and notes that many of them are mandatory under the TRPA Code of Ordinances. These include avoidance and minimization of impacts to old growth forests, prime aquatic habitat and other biological resources, mandatory TRPA environmental review requirements for projects that could impact wetlands, riparian areas and other sensitive habitat, and compensatory replacement of native trees where avoidance is impossible. The EIR/EIS also provides a variety of mitigation measures for aquatic habitat, such as "fish rescue/relocation, BMPs specifically designed to protect aquatic habitats and species, habitat enhancement, invasive species control and management, and providing funding or otherwise contributing to aquatic habitat restoration projects."[305] Since no land in the Tahoe region is zoned for agricultural use, the EIR/EIS does not address agricultural mitigation.[306]

### *Conservation Proposals*

A number of community organizations commented on the EIR/EIS. While some supported the "Low Development/ Highly Incentivized Redevelopment" land use scenario that

301 TMPO et al., 2012.
302 Ascent Environmental, 2012.
303 TMPO et al., 2012.
304 TMPO et al., 2012.
305 Ascent Environmental, 2012.
306 Ascent Environmental, 2012.

was ultimately adopted,[307] other proposals included, but were not limited to, the following:

- Reexamine assumptions relating to population growth and focus on reducing total (as opposed to per capita) VMT;[308]
- Make non-mandatory mitigation measures mandatory;[309]
- Limit exceptions to conservation-oriented land use policies;[310] and
- Provide stronger mitigation measures to address impacts to aquatic ecosystems ranging from sediment loading to algae growth and place a greater overall emphasis on maintaining the health, clarity and ecological functioning of Lake Tahoe.[311]

Because TRPA's Regional Plan was updated contemporaneously with the Tahoe RTP, many conservation proposals were related to both documents.[312]

## Butte

- **Builds land use pattern around general plans developed in coordination with MPO and designed to be consistent with Butte Regional Conservation Plan (BRCP)**
- **Avoids allocating new development to areas mapped as open space, parks and forest lands in BRCP and uses BRCP data to direct most new development into network of Urban Permit Areas**
- Conservation-related performance measures include developed land per capita (0.25 acres as opposed to 0.27 currently), important farmland conversion avoided (231,541 acres under the preferred scenario, out of 237,272 existing in 2010) and percentage of residential and non-residential development located within Urban Permit Areas (74% and 87%, respectively, as opposed to 68% and 86% currently)
- EIR mandates compliance with Butte Regional Conservation Plan mitigation measures and calls for 3:1 mitigation for impacts to wetland and riparian habitat

### *Conservation Provisions*

The Butte County Metropolitan Transportation Plan & Sustainable Communities Strategy (Butte MTP/SCS) includes an objective of preserving productive farmland and special status species habitat, and a policy of encouraging participation

307 See, e.g., Ascent Environmental, 2012 (comment letter from Sierra Business Council).

308 Ascent Environmental, 2012 (comment letter from League to Save Lake Tahoe, Tahoe Area Sierra Club and Friends of the West Shore).

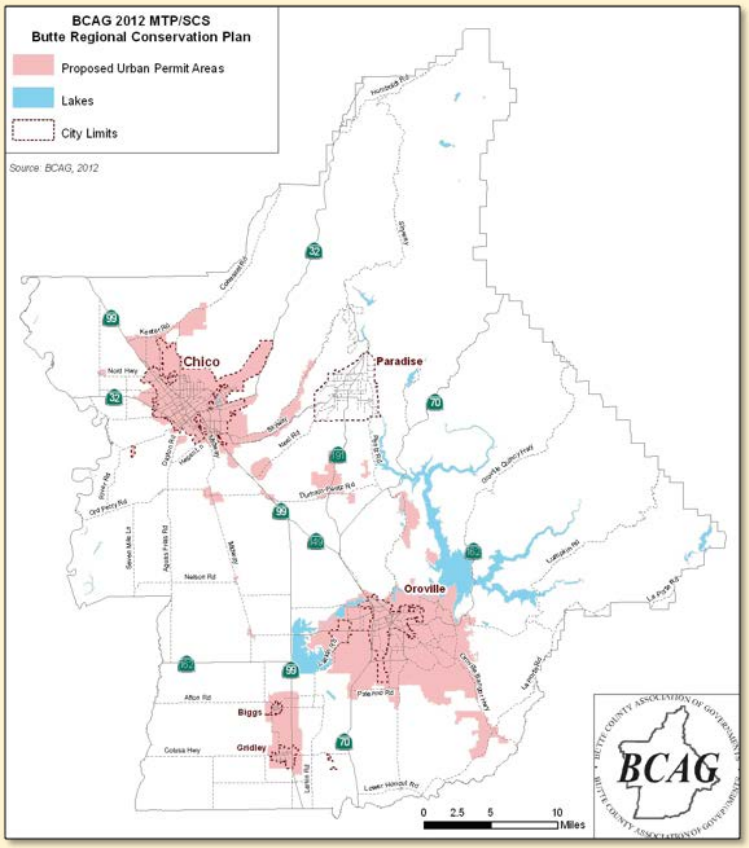
309 Ascent Environmental, 2012 (comment letter from Friends of Tahoe Vista).

310 Ascent Environmental, 2012 (comment letter from Friends of the West Shore).

311 See, e.g., Ascent Environmental, 2012 (comment letter from League to Save Lake Tahoe, Tahoe Area Sierra Club and Friends of the West Shore; additional comment letter from same organizations plus Sierra Club Toiyabe Chapter, North Tahoe Preservation Alliance, Friends of Lake Tahoe, Nevada Conservation League and North Tahoe Citizens Action Alliance).

312 Ascent Environmental, 2012.

**Figure 8:** Urban Permit Areas as depicted in Butte MTP/SCS.
Image: BCAG, 2012.




in the future Butte Regional Conservation Plan (BRCP).[313] Its land use pattern is based in part on general plans recently developed in coordination with the Butte County Association of Governments (BCAG) as part of a Blueprint Planning Program.[314] These general plans, which cover four of the region's six local jurisdictions, are integrated with each other and designed to be consistent with the BRCP. [315]

Though the BRCP had not yet been adopted, BCAG incorporated it into the Butte MTP/SCS in two ways. First, BCAG avoided allocating development to areas that had been mapped as open space, parks and forest lands in the BRCP.[316] Second, it used BRCP data to direct most future development into a network of Urban Permit Areas (UPAs), thereby minimizing impacts to habitat and special status species elsewhere in the BRCP area (Figure 8).[317]

Performance measures in the Butte MTP/SCS include developed land per capita (0.25 acres under the preferred scenario as opposed to 0.27 currently), important farmland conversion avoided (231,541 acres under the preferred scenario, out of 237,272 existing in 2010) and the percentage of residential and non-residential development located within UPAs (74% and 87%, respectively, as opposed to 68% and 86% currently).[318] Though not defined as performance measures, the Butte MTP/SCS also notes that 1.4% of the County's migratory deer herd habitat and 0.6% of its Williamson Act acreage are likely to be impacted.[319]

The EIR calls for avoiding and minimizing impacts to biological resources and important farmland.[320] For projects subject to the BRCP, it mandates compliance with BRCP mitigation measures, including paying mitigation fees or providing land in lieu of fees.[321] It also requires mitigation for impacts to wetland and riparian habitat at a 3:1 ratio "unless otherwise determined by the regulatory/permitting agency," as well as mitigation for impacts to farmland "at an appropriate ratio."[322]

313 BCAG, 2012. When adopted, the BRCP will cover 53% of Butte County, including the areas with the greatest conflict between development and special status species habitat. BCAG, 2012.
314 BCAG, 2012.
315 BCAG, 2012.
316 BCAG, 2012.
317 BCAG, 2012.
318 BCAG, 2012.
319 BCAG, 2012.
320 De Novo Planning Group, 2012.
321 De Novo Planning Group, 2012.
322 De Novo Planning Group, 2012.

### *Conservation Proposals*

Comment letters published by BCAG provide little evidence of advocacy by conservation groups. The main conservation-related proposal appears to have come from the Butte County Department of Public Works, which sought a "Resources and Farmland Preservation Transportation Incentive Fund" to support farmland conservation and local food production by funding improvements on farm-to-market routes.[323]

## Shasta

- Final SCS adopted in first round
- Provides little detail on resource areas and farmland, and does not explain how conservation-related goals are to be accomplished
- Conservation-related performance measures include "prime agricultural land saved from conversion" (87 acres ) and "environmentally sensitive lands saved from conversion" (6,541 acres)
- EIR mandates 2:1 mitigation for impacts to certain biological resources, including jurisdictional wetlands and riparian areas
- Wide-ranging public outreach effort involved one out of every seventy adults in Shasta County

### *Conservation Provisions*

The first round of the SCS process ended on June 30, 2015 with the adoption of the 2015 Regional Transportation Plan for Shasta County (Shasta RTP) by the Shasta Regional Transportation Agency (SRTA). The Shasta RTP includes as a stated goal "[p]ractic[ing] and promot[ing] environmental and natural resource stewardship," and commits to consider climate action plans, conservation plans and park, trail and open space plans.[324] One of its objectives is to "[i]dentify and minimize the direct and indirect adverse impacts of transportation on the environment, including but not limited to: climate change, air quality, healthy watersheds, and essential wildlife habitat," and one strategy in support of this objective is to "[s]eek funding for environmental impact mitigation and enhancement activities."[325]

But the Shasta RTP includes little detail on how these goals are to be accomplished, and the discussion of resource areas and farmland in its SCS is limited to the following:

> Scientific information regarding resource areas and farmland in Shasta County was gathered and considered in the development of the SCS. The region has approximately 1.3 million acres of resource land and 12,600 acres of farmland. Land development assumptions in the travel demand model show that approximately 2,600 acres of resource areas and approximately 8 acres of farmland would not be developed as a result of the SCS land use forecast. The location of resource[] areas and the increase/decrease of households and employment as a result of the SCS is illustrated [below].[326]

A map is provided to illustrate the effect of the SCS land use pattern on conversion of resource areas and farmland, but the map is of limited use because "resource areas" and "farmland" are each treated as an undifferentiated category.[327]

323 BCAG, 2012 (Appendix 4 – comment letter from Butte County Department of Public Works, not printed in EIR); see also Cal. Gov. Code § 65080(b)(4)(C).

324 SRTA, 2015.

325 SRTA, 2015.

326 SRTA, 2015.

327 SRTA, 2015.

The Shasta RTP includes as performance measures "prime agricultural land saved from conversion" (87 acres) and "environmentally sensitive lands saved from conversion" (6,541 acres).[328]

Shasta's EIR provides mandatory 2:1 mitigation ratios for several impacts to biological resources, including the following:

- Jurisdictional wetland and riparian habitat;
- Special status plant species;
- Trees protected by local agencies; and
- Non-listed special status animal species.[329]

It also notes specific measures to avoid and minimize impacts to threatened and endangered species, and select non-listed species such as the American badger.[330] In addition, while it does not specify a mitigation ratio for agricultural land, it calls for implementing agencies to "[c]ompensate for conversion impacts to [p]rime [f]armland by purchasing agricultural conservation easements . . . or funding the acquisition of agricultural mitigation lands through an appropriate land trust."[331]

### *Conservation Proposals*

While SRTA engaged in a wide-ranging public outreach effort, with one out of every seventy adults in Shasta County participating at some point in the process,[332] the public record does not include evidence of extensive advocacy by conservation groups. The primary conservation-related proposal in the EIR came from the California Department of Fish and Wildlife, which sought and received stronger language in mitigation measures for biological resources.[333]

328 SRTA, 2015.
329 SRTA and Rincon Consultants, 2015.
330 SRTA and Rincon Consultants, 2015.
331 SRTA and Rincon Consultants, 2015.
332 SRTA, 2015.
333 SRTA and Rincon Consultants, 2015.

# Model Policies and Best Practices

A review of conservation provisions included in existing SCSs, combined with input from community organizations, MPO planning staff and others, suggests a number of ways that conservation can be advanced in future rounds of the SCS process, but no one-size-fits-all policy prescription for the state's eighteen MPOs. Instead, this report offers a selection of policies and best practices—many of which are drawn from what MPOs did in the first round—in seven issue areas relating to conservation. As summarized in Table 5 and discussed in more detail below, these seven topics are relevant not only for the treatment of resource areas and farmland, but also for GHG reductions, investment in disadvantaged communities and other goals of the SCS process. MPOs are encouraged to select policies and best practices from each for future SCSs.

## Conservation

Protecting natural and working lands can reduce GHG emissions while providing co-benefits ranging from food, jobs and water to wildlife habitat, access to the outdoors and improved public health. Because more compact patterns of development are often associated with lower per capita VMT,[334] directing new growth into existing urban areas (including both incorporated and unincorporated disadvantaged communities) instead of habitat and agricultural land can make it easier to meet GHG reduction targets.

Conservation can also reduce overall emissions and sequester carbon: A recent report comparing per-acre GHG emissions from farmland and urban areas throughout California found that per-acre emissions from farmland were an

**Table 7:** Seven issue areas for model policies and best practices (left) and the relevance of each to the SCS process (right).

| | |
|---|---|
| **Conservation** | Conserving natural and working lands can help reduce GHG emissions while providing co-benefits ranging from food, jobs and water to wildlife habitat, access to the outdoors and improved public health. |
| **Compact Growth** | Directing new development to existing communities can lower per capita VMT, infrastructure costs and transportation expenses, while revitalizing downtowns and supporting investment in disadvantaged communities. |
| **Access to Clean and Affordable Water** | Development patterns that allow for an abundant supply of clean and affordable water help communities build resilience to future droughts while ensuring the long term effectiveness of transportation investments. |
| **Climate Resilience** | While planning for the expected impacts of climate change, MPOs can help communities adapt to these impacts and minimize climate-related harm to transportation systems. |
| **Mitigation** | Effective mitigation can create a more predictable project approval process, save taxpayer dollars and improve outcomes on the ground. |
| **Transparency and Public Participation** | The effectiveness and legitimacy of the SCS process depend on transparency and public participation. |
| **Funding** | While MPOs lack land use planning authority, they can and should make transportation funding decisions that support GHG-reducing development patterns and the broader goals of the SCS process. |

334 Niemeier et al., 2011.

average of 58 times lower than those from urban areas,[335] and other studies have shown that natural landscapes such as oak woodlands can sequester millions of tons of carbon.[336] Moreover, given that 8% of the U.S. food supply by value is produced in the Central Valley[337] and that crop receipts alone bring billions of dollars a year into many MPO regions,[338] working landscapes play a critical role in both food security and job creation. Additional benefits of conservation include groundwater recharge, water treatment and wildlife habitat.[339] Access to open space also makes communities more livable[340] and contributes to public health.[341] In short, conservation of natural and working lands can contribute both directly and indirectly to the goal of reducing GHG emissions, while providing a host of additional co-benefits. The policies and best practices below offer several ways that future SCSs can help realize these benefits.

### ► Priority Conservation Areas and Priority Development Areas

- **Sample Language:** "Conservation and compact growth play complementary roles in reducing per capita GHG emissions, strengthening our region's economy and providing a host of additional benefits. To maximize these benefits, the land use pattern and funding allocations in this RTP/SCS [or MTP/SCS] are designed to support the protection of habitat, agricultural land and open space in Priority Conservation Areas (PCAs) and to direct growth and transportation investments to Priority Development Areas (PDAs). During the term of this RTP/SCS, $ __ million in new funding will be provided for the conservation of PCAs, and $ __ million in new funding will be devoted to incentives for growth in PDAs."
- **Implementation:** Adopt a land use pattern structured around a spatially explicit framework of PCAs and PDAs, with funding for protection of PCAs and incentives to direct new development to PDAs. This framework should be designed with 1) an emphasis on habitat connectivity and maintaining the integrity of human communities (i.e., not dividing established communities or displacing their residents),[342] 2) attention to the needs of both rural areas and urban centers, and 3) a focus on conserving areas that will still be viable in light of expected impacts of climate change, water availability and other factors.
- **Performance Measures:** 1) Presence of spatially explicit framework of PCAs and PDAs in RTP/SCS; 2) levels of funding for protection of PCAs and growth incentives in PDAs; 3) factors used to select PCAs; 4) percentage

335 Shaffer and Thompson, 2015; see also Jackson et al., 2012 (finding that annual per-area GHG emissions from rangeland and cropland in Yolo County were "orders of magnitude lower than [emissions from] urbanized land," with emissions from rangeland up to 217 times lower). American Farmland Trust's results indicate that reducing California's farmland conversion rate by half within the next decade "would avoid the emission of a cumulative total of 55 million metric tons of greenhouse gases, equivalent to avoiding emissions from more than 129 billion vehicle miles traveled." Shaffer and Thompson, 2015.

336 Gaman, 2008; Gaman and Firman, 2006. Whether or not carbon sequestration is directly applicable to SB 375 targets, it is another way that conservation can contribute to the overall goal of reducing GHG emissions through better land use and transportation planning.

337 USGS, 2013.

338 The eight San Joaquin Valley MPOs had combined 2013 crop receipts of over $35 billion, with individual MPO regions producing as much as $7.3 billion (Tulare), $6.8 billion (Kern) and $6.4 billion (Fresno). Elsewhere in the state, crop receipts in SCAG's region amounted to nearly $6.3 billion and those in AMBAG's region totaled more than $5.3 billion. A number of other regions, including but not limited to the Bay Area, Sacramento and San Diego, brought in over $1 billion. CDFA, 2015b.

339 See, e.g., SSP, 2010 (showing how conservation can contribute to groundwater recharge and wildlife habitat connectivity, while providing a host of additional benefits, in the areas served by Fresno COG, TCAG and Kern COG); see also Livingston, 2013 (exploring the long-term economic benefits of conservation and compact growth in the Southern Sierra and Southern San Joaquin Valley).

340 See, e.g., StanCOG, 2014 (adopting as a "quality of life" performance measure "[p]ercent of housing within one-half mile of parks and open space"); Fresno COG, 2014 (stating that "this RTP recognizes the value of equestrian and hiking trail systems . . . for their contribution to an improved quality of life"); ABAG and MTC, 2013 (declaring that "[t]he Bay Area's greenbelt of agricultural, natural resource and open space lands is a treasured asset that contributes to residents' quality of life and supports regional economic development"); TMPO et al., 2012 (emphasizing that "the quality of life" in the Tahoe region "depends heavily on the health of the lake, forests and snowpack"); and SANDAG, 2011a (predicting that the San Diego RTP will "significantly improve the quality of life in the region," and offering as support the fact that "[m]ore than half the region will be maintained as open space").

341 See, e.g., Gies, 2006 (discussing public health benefits of open space, including but not limited to more physically active lifestyles, improved air quality and greater psychological wellbeing).

342 In addition to ensuring connectivity within their own borders, MPOs should coordinate with neighboring jurisdictions and conservation organizations to support connectivity across broader regions.

of PCA land permanently protected during term of RTP/SCS; and 5) percentage of PCA land converted to development or otherwise degraded during term of RTP/SCS (ideally zero).

- **MPOs Adopting This or Similar Policies in First Round:** ABAG and MTC. See ABAG and MTC, 2013 (building land use pattern around network of PCAs and PDAs, and providing $10 million for conservation of PCAs).[343]

### ▶ Resource Areas and Farmland as Constraints to Development

- **Sample Language:** "Conservation of natural and working lands supports development patterns that reduce GHG emissions, while providing co-benefits ranging from food security and a robust agricultural economy to wildlife habitat and access to the outdoors. In order to realize these and other benefits, the land use pattern in this RTP/SCS treats all categories of 'resource areas' listed in Cal. Gov. Code § 65080.01(a), as well as all prime farmland, farmland of statewide importance and unique farmland, as constraints to development."
- **Implementation:** Comprehensively map resource areas and farmland, including but not limited to 1) lands identified in HCPs/NCCPs and all other categories of 'resource areas' listed in Cal. Gov. Code § 65080.01(a), 2) all areas needed to maintain connectivity within and between the region's habitats and habitat types, and 3) all prime farmland, farmland of statewide importance and unique farmland in the MPO region according to the most recent data available from the California Department of Conservation's Farmland Mapping and Monitoring Program. Include maps of all categories of resource areas and farmland in the RTP/SCS, and treat these areas as constraints to development when designing a land use pattern, such that the final adopted land use pattern excludes resource areas and farmland from development.
- **Performance Measure:** Absence of new development on resource areas and farmland during term of RTP/SCS.
- **MPOs Adopting This or Similar Policies in First Round:** TCAG and SBCAG.[344]

### ▶ Greenprinting

- **Sample Language:** "Conservation planning helps to identify natural and working lands that reduce GHG emissions while providing co-benefits ranging from food, jobs and water to wildlife habitat, access to the outdoors and improved public health. For this reason, [MPO] has developed a regional Greenprint analyzing resource areas, agricultural land, the results of existing analyses including _____, and input from the region's leading conservation organizations, including _____. The Greenprint offers a spatially explicit set of conservation priorities, which are incorporated into the land use pattern in the RTP/SCS as follows: [explanation]."
- **Implementation:** Develop a "Greenprint" resource analysis, including at a minimum 1) lands identified in HCPs/NCCPs and all other categories of 'resource areas' listed in Cal. Gov. Code § 65080.01(a), 2) all prime farmland, farmland of statewide importance, unique farmland and grazing land in the MPO region according to the most recent data available from the California Department of Conservation's Farmland Mapping and Monitoring Program, 3) resource areas in any local or regional "Greenprint" (such as the San Joaquin Valley Greenprint), and 4) input from leading conservation organizations. Incorporate Greenprint conservation priorities into the land use pattern by treating them as constraints to development, designating them as PCAs or taking other steps to ensure their protection.

343 See ABAG and MTC, 2013 (building land use pattern around network of PCAs and PDAs, and providing $10 million for conservation of PCAs).

344 Cf. TCAG, 2014 (explaining that resource maps produced for the San Joaquin Valley Greenprint "were compiled as GIS layers that acted as constraints to development of land in the SCS preferred scenario"); SBCAG, 2013 (adopting a land use pattern that incorporates "a 'regional greenprint' cataloguing open space, habitat, farmland and other resource areas as constraints to development").

- **Performance Measures:** 1) Presence of Greenprint in RTP/SCS; 2) extent to which Greenprint addresses all categories of resource areas and agricultural land noted above, while incorporating existing resource analyses and input from conservation organizations; and 3) whether and how Greenprint conservation priorities are incorporated into land use pattern.
- **MPOs Adopting This or Similar Policies in First Round:** AMBAG and SBCAG.[345]

### ▶ Incorporation of Resource Areas and Farmland into Scenario Modeling and Decision-Making

- **Sample Language:** "The land use scenarios modeled for this RTP/SCS take into account the effects of land use decisions and transportation investments on urban areas, agriculture and wildlife habitat at comparable levels of sophistication, and the preferred scenario minimizes harmful impacts to agriculture and habitat as follows: [explanation of modeling, scenarios and how preferred scenario minimizes impacts]."
- **Implementation:** Using standardized, open source tools for scenario modeling and decision-making, 1) incorporate the capabilities of tools such as SACOG's Rural-Urban Connection Strategy (RUCS), which combines sophisticated land use mapping and econometric modeling to assess the economic impacts of land use decisions and transportation investments on agriculture,[346] 2) develop or incorporate tools that bring a similar level of sophistication to analyzing the economic impacts of land use decisions and transportation investments that affect wildlife habitat and the ecosystem services provided by natural lands, and 3) incorporate into the analysis conservation priorities identified in any Greenprint prepared for the RTP/SCS. Based on the results of this modeling, as well as incorporation of conservation concerns into transportation and GHG models, ensure that the adopted land use pattern and transportation investments reflected in the RTP/SCS minimize harmful impacts to both agricultural land and habitat.
- **Performance Measures:** 1) Ability of modeling tool(s) to address impacts to urban areas, agriculture and habitat at comparable levels of sophistication; and 2) selection of land use pattern and transportation investments that minimize harmful impacts to agricultural land and habitat based on results of this modeling.

### ▶ Urban Greening Program

- **Sample Language:** "Parks and green infrastructure make cities healthier and more livable by improving air quality, increasing access to the outdoors, providing habitat for wildlife, reducing the 'heat island' effect, and making neighborhoods more beautiful. These benefits can improve quality of life in all communities, and many are urgently needed in the most disadvantaged communities. Green infrastructure can also perform a wide range of services more cost-effectively than built infrastructure,[347] and has been identified as the preferred

345 See AMBAG, 2014 (compiling a "Greenprint" composed of layers on biological, agricultural and open space resources but not committing to use these layers as constraints to development); SBCAG, 2013 (adopting a land use pattern that incorporates "a 'regional greenprint' cataloguing open space, habitat, farmland and other resource areas as constraints to development"); see also TCAG, 2014 (explaining that resource maps produced for the San Joaquin Valley Greenprint "were compiled as GIS layers that acted as constraints to development of land in the SCS preferred scenario"); Fresno COG, 2014 (noting resource areas mapped by San Joaquin Valley Greenprint, but not committing to use Greenprint layers as constraints to development).

346 SACOG, 2012a; SACOG, 2012b.

347 See Dow Chemical et al., 2013 (joint industry study conducted by Dow Chemical Company, Swiss Re, Shell, Unilever and The Nature Conservancy finding that green infrastructure approaches "often demonstrate financial advantages compared to [grey] infrastructure due to a reduction of initial capital expenses and ongoing operational expenses" and that regenerative processes associated with green infrastructure "consume less energy and are thus less sensitive to power loss and fluctuations in the cost of energy" than grey infrastructure); see also American Rivers et al., 2012 (finding that green infrastructure can provide more cost-effective stormwater management than built infrastructure, and that it also "improve[s] air quality, increase[s] habitat and green space, enhance[s] human health and reduce[s] flooding").

approach for climate adaptation in California.[348] In order to realize the benefits of parks and green infrastructure, this RTP/SCS will 1) commit $ __ million in new funding to acquire and restore open space in urban areas underserved by city or regional parks, and 2) wherever feasible, plan for services to be provided through green infrastructure instead of additional built infrastructure. Where built infrastructure is necessary, projects that incorporate 'greening' features, such as living roofs, bioswales, permeable pavement, expansion of the urban canopy, restoration of urban rivers and streams, and extensive but drought-tolerant vegetation, will be given preference over those that do not."

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- **Implementation:** Provide funding for an urban greening program, including the acquisition and restoration of riparian corridors, woodlands and other open space in urban areas that are underserved by city or regional park systems (including but not limited to disadvantaged communities), and provide services through green rather than additional built infrastructure wherever feasible. Where built infrastructure is necessary, provide a preference in the project selection system for projects that incorporate living roofs, bioswales, permeable pavement, expansion of the urban canopy, restoration of urban rivers and streams, extensive but drought-tolerant vegetation and other "greening" features.
- **Performance Measures:** 1) Increase in percentage of population who a) live within city limits (or highest density development category if city limits do not correspond to highly urbanized areas) and b) live within a quarter mile of an urban park or other green space; 2) change in ratio of funding for green infrastructure to funding for grey infrastructure; 3) number and type of "greening" features incorporated into built infrastructure projects; and 4) change in area covered by urban canopy in specific cities due to trees planted in connection with RTP/SCS projects.

### ▶ Documenting Co-Benefits of Conservation

- **Sample Language:** "Conservation of natural and working lands is an essential part of [MPO's] GHG reduction strategy and has co-benefits ranging from food, jobs and water to wildlife habitat, access to the outdoors and improved public health. These co-benefits are documented in more detail below . . ."
- **Implementation:** Prepare and publish as part of the RTP/SCS a section documenting and quantifying the co-benefits of conserving natural and working lands (from urban areas to wildlands) throughout the region.
- **Performance Measures:** Presence, thoroughness and accuracy of RTP/SCS section documenting co-benefits of conservation.
- **MPOs Adopting This or Similar Policies in First Round:** ABAG and MTC published a paper documenting the benefits of conservation in the Bay Area, but did not include it as a chapter in Plan Bay Area.[349]

348 See Executive Order B-30-15 (stating that "[n]atural infrastructure solutions should be prioritized" by state agencies planning and investing in response to climate change).

349 See ABAG and MTC, 2013b.

## Compact Growth

Because SB 375 focuses in part on reducing per capita GHG emissions "for the automobile and light truck sector," targets can be met through development patterns that reduce vehicles miles traveled (VMT).[350] Channeling growth into existing urban areas can lower per capita VMT,[351] while also reducing infrastructure costs and household transportation expenses.[352] Moreover, bringing people and jobs together in dense, thriving town centers—and doing so in a way that does not displace current residents—can help build a complex, diversified and resilient economy,[353] and provide opportunities for much-needed investment in disadvantaged communities. The policies and best practices below can help regions realize these benefits.

### ▶ Transferable Development Rights

- **Sample Language:** "Transferable development rights (TDR) allow developers to trade entitlements to build in outlying areas for more generous entitlements to build in existing communities. By supporting and accelerating compact growth, this voluntary, market-based mechanism can help reduce per capita GHG emissions while revitalizing our region's urban centers. [MPO] therefore supports and will actively facilitate the development of a TDR program to redirect development from resource areas, farmland and other outlying areas to existing communities, including but not limited to disadvantaged communities, while avoiding displacement of current residents."
- **Implementation:** Work with MPO members to design and implement a TDR system to actively redirect development from the periphery to existing communities while avoiding displacement of current residents.
- **Performance Measures:** 1) Adoption of TDR program (ideally covering most or all jurisdictions in MPO) within term of SCS; 2) units of development directed away from resource areas and farmland and into existing communities through TDR program; and 3) current residents not displaced from communities that receive additional units.
- **MPOs Adopting This or Similar Policies in First Round:** TMPO and TRPA.[354]

### ▶ 100% Infill Policy

- **Sample Language:** "Given our region's strong commitment to conserving natural and working lands, reducing GHG emissions and revitalizing existing communities, it is the policy of this RTP/SCS to direct all new non-agricultural development into the existing urban footprint. The following measures will be taken to avoid displacement of current residents: [measures to avoid displacement]."
- **Implementation:** Adopt a land use pattern that directs 100% of new development into existing urban growth boundaries or SOIs (or, for a tighter footprint, existing city limits), and select transportation investments accordingly. For purposes of implementing this policy, unincorporated disadvantaged communities should

350 Cal. Gov. Code § 65080(b)(2)(A).

351 Niemeier et al., 2011.

352 See Calthorpe Associates, 2011 (finding that compact growth scenarios could save California taxpayers $18 billion in infrastructure costs by 2035 and $32 billion by 2050 compared to business as usual scenario); Center for Neighborhood Technology, 2010 (examining role of transportation costs in housing affordability and finding that "[c]ompact, walkable mixed-use communities with convenient access to public transit and employment centers . . . can often make for more affordable living than less dense exurban communities because households can own fewer cars—the single biggest expense in a household transportation budget—and still maintain a high quality of life").

353 Frenken et al., 2007; Izraeli and Murphy, 2003.

354 See TMPO et al., 2012 (discussing a TDR system that allows developers to build additional units in a town center for each foregone unit in an outlying area, and also provides incentives for the removal of existing development from ecologically sensitive areas).

be treated as within the existing urban footprint. In addition, the policy should identify measures to avoid displacement of current residents.

- **Performance Measures:** 1) Absence of new development outside existing urban footprint (as measured by urban growth boundaries, SOIs or city limits/unincorporated community boundaries); 2) all funded transportation projects designed exclusively to serve existing communities; and 3) current residents not displaced.
- **MPOs Adopting This or Similar Policies in First Round:** ABAG and MTC.[355]

### ▶ Increased Infill Policy

- **Sample Language:** "Given our region's interest in conserving natural and working lands, reducing GHG emissions and revitalizing existing communities, this RTP/SCS directs __% of new non-agricultural development into the existing urban footprint, an increase of __% over the land use pattern in the previous RTP/SCS. The following measures will be taken to avoid displacement of current residents: [measures to avoid displacement]."
- **Implementation:** Adopt a land use pattern that directs a significantly higher percentage of new development into existing urban growth boundaries or SOIs (or, for a tighter footprint, city limits) than the previous RTP/SCS, and select transportation investments accordingly. For purposes of implementing this policy, unincorporated disadvantaged communities should be treated as within the existing urban footprint. In addition, the policy should identify measures to avoid displacement of current residents.
- **Performance Measures:** 1) Increase in percentage of new development inside existing urban footprint during term of new RTP/SCS; 2) decline in percentage of transportation funding for projects to serve new communities during term of RTP/SCS; 3) if applicable, specific transportation projects designed to serve new communities are dropped or scaled back significantly in new RTP/SCS; and 4) current residents not displaced.
- **MPOs Adopting This or Similar Policies in First Round:** Many MPOs adopted land use patterns increasing the proportion of new development going into infill, but not all provided a specific percentage.[356]

### ▶ Increased Density as Criterion for Selecting Land Use Pattern

- **Sample Language:** "Because a more compact pattern of development can reduce GHG emissions, help conserve natural and working lands and revitalize town centers, the land use pattern in this RTP/SCS was selected based in part on its ability to direct new growth to existing urban areas. The adopted land use pattern would result in a density of __ units per acre in urbanized areas, an increase of __% over the scenario reflected in the previous RTP/SCS. The following measures will be taken to avoid displacement of current residents: [measures to avoid displacement]."
- **Implementation:** Model the average number of units per acre in urbanized areas that would result from each land use scenario. Adopt a scenario that increases density per acre compared to the land use pattern in the previous RTP/SCS, with measures to avoid displacement of existing residents.
- **Performance Measures:** 1) Residential density (average number of units per acre) in urbanized areas in adopted land use pattern; 2) actual residential density in urbanized areas during term of RTP/SCS; and 3) current residents not displaced.

355 See ABAG and MTC, 2013 (committing to "direct[] 100 percent of the region's growth inside the year 2010 urban footprint").

356 See, e.g., Kern COG, 2014 (adopting land use pattern with 21% of new residential development going into infill, as opposed to 1% under 2011 RTP); SBCAG, 2013 (adopting land use pattern with 30% of new residential development going into infill, as opposed to 12% under business as usual scenario); see also StanCOG, 2014 (adopting land use pattern "focusing more infill development into urban centers"); SCAG, 2012a (adopting land use pattern with "greater share of urban infill").

- **MPOs Adopting This or Similar Policies in First Round:** Many MPOs adopted land use patterns that would increase residential density, but few provided a specific percentage or number of units per acre.[357]

## Access to Clean and Affordable Water

In California, land use is inseparable from water use. Many communities and businesses have been hard-pressed to adapt to the current drought, and recent research suggests that climate change could lead to severe, multi-decade droughts in California during the second half of the 21st century.[358] Moreover, many of the poorest Californians already lack access to clean and affordable drinking water.[359] By supporting land use patterns that conserve water and contribute to water quality, the policies and best practices below can help communities build resilience to future droughts, make water more available for those who need it most, and ensure the long term effectiveness of transportation investments.

### ▶ "Show Me the Water" Policy

- **Sample Language:** "Because access to clean and affordable water is essential to the long term viability of development in the [MPO] region, this RTP/SCS does not fund, and is not consistent with, any project that involves or facilitates development outside the existing urban footprint if that development will not have access to water for at least the next 100 years, or if that development would use water needed by existing communities, including but not limited to rural disadvantaged communities."
- **Implementation:** As a condition of transportation funding and consistency with the SCS, require each project that involves or facilitates development outside current urban growth boundaries or SOIs (or, for a tighter footprint, city limits) to 1) establish via an independent, scientifically credible hydrological study that the development will have access to water for at least 100 years, and 2) establish that all existing communities in the MPO region, including but not limited to rural disadvantaged communities, already have access to clean and affordable water.
- **Performance Measures:** 1) Absence of funding for projects that do not comply with "show me the water" policy; 2) absence from land use pattern of projects that do not comply with "show me the water" policy; and 3) duration beyond 100 years that projects outside the existing urban footprint can show water availability.

### ▶ Water Conservation as Criterion for Selecting Land Use Pattern

- **Sample Language:** "Because access to clean and affordable water is essential to the long term viability of development in the [MPO] region, the land use pattern in this RTP/SCS was selected based in part on its ability to conserve water. By [horizon year], it is projected to reduce per capita water use by __% and total residential water use by __% compared to the land use scenario reflected in the previous RTP/SCS."
- **Implementation:** Using a standardized, open-source scenario planning tool, model the per capita and total residential water use associated with each land use scenario. Adopt a scenario that reduces per capita and total residential water use compared to the land use pattern in the previous RTP/SCS.
- **Performance Measures:** 1) Per capita and total residential water use in adopted land use pattern; and 2) actual per capita and total residential water use during term of RTP/SCS.

357 For specific increases in density, see SACOG, 2012a (adopting land use pattern under which overall residential density increases by 27%) and StanCOG, 2014 (adopting land use pattern under which residential density reaches 11.4 units per acre, as compared to 7.8 units per acre under business as usual).

358 Cook et al., 2015.

359 Moore et al., 2011.

### Groundwater Recharge Areas as Constraints to Development

- **Sample Language:** "Because groundwater is an essential part of the [MPO] region's water supply, the land use pattern in this RTP/SCS includes no new development in groundwater recharge areas."
- **Implementation:** Treat groundwater recharge areas as constraints to development when modeling land use scenarios and adopt a land use pattern in which there is no new development in groundwater recharge areas.
- **Performance Measures:** 1) Adopted land use pattern includes no new development in groundwater recharge areas; and 2) actual absence of new development in groundwater recharge areas during term of RTP/SCS.

### Alignment with Water Conservation Plans

- **Sample Language:** "Given the importance of clean and affordable water to the long term viability of development in the [MPO] region, this RTP/SCS includes a land use pattern consistent with the protection of water resources identified in [specific water conservation plan]."
- **Implementation:** As part of the development of a land use pattern, examine existing water conservation plans, including but not limited to Groundwater Sustainability Plans (GSPs) prepared under the Sustainable Groundwater Management Act of 2014 and Integrated Regional Water Management Plans (IRWMPs), and ensure that the adopted land use pattern does not conflict with these plans.
- **Performance Measure:** Consistency between adopted land use pattern and water conservation plans, including but not limited to GSPs and IRWMPs.

### Water Quality as Criterion for Selecting Land Use Pattern

- **Sample Language:** "In order to protect water quality, the land use pattern in this RTP/SCS specifically prioritizes the protection of wetlands, forested areas and other natural systems that remove contaminants from water. It is anticipated to maintain or improve standard measures of drinking water quality in [MPO] region."
- **Implementation:** As part of the development of a land use pattern, model not only effects on water quantity (e.g., per capita and total water use), but also effects on water quality. By treating natural systems such as wetlands and forested areas as constraints to development, design a land use pattern that minimizes adverse impacts on water quality. If this issue is already addressed in water conservation plan(s) incorporated into the RTP/SCS, ensure that land use patterns and transportation investments are consistent with maintaining water quality as provided in the water conservation plan(s).
- **Performance Measures:** 1) Percentage of wetlands, forested areas and other water-filtering natural systems conserved in adopted land use pattern; and 2) standard measures of water quality that can be estimated by existing models.

## Climate Resilience

Beyond a potential increase in long term drought risk, climate change is expected to have significant effects on transportation infrastructure, developed areas (including disadvantaged communities) and natural and working lands. Fresno COG, for example, has noted that impacts on transportation infrastructure may include "more frequent/severe flooding of low-lying infrastructure . . . due to more intense precipitation events," higher maintenance costs due to increased temperatures, "increased thermal expansion of bridge joints and paved surfaces," and shorter replacement times for asphalt surfaces.[360] Mapping by ABAG and MTC suggests that a 12-inch rise in sea level would inundate portions of some communities on the San Francisco Bay.[361] Other coastal MPOs have begun grappling with the damage sea level rise is likely to do to infrastructure in their regions,[362] and AMBAG has pointed out the danger to native species that rely on coastal habitat.[363] But no first-round RTP/SCS includes a thorough assessment of the likely impacts of climate change and systematically incorporates the results into its land use pattern and transportation investments. By implementing the policies and best practices below, MPOs can begin to change this, and help build communities that are sustainable even in a time of rapid climate change.

### ▶ Rolling Easements to Address Sea Level Rise (Coastal MPOs)

- **Sample Language:** "As mapped in Figure __, sea level rise is expected to have significant impacts on this region in the coming decades, and even greater impacts by the end of the century. In addition to the loss of transportation infrastructure, inundation of coastal areas poses a significant threat to natural and working lands that are critical to the region's economy, environment and quality of life. The land use pattern and transportation investments reflected in this RTP/SCS therefore incorporate estimated sea level rise through 2100 [or later]. [MPO] will work with member agencies to facilitate mitigation for the inundation of resource areas and farmland through the use of rolling conservation easements."
- **Implementation:** Incorporate sea level rise through at least 2100 into resource and farmland protection and land use patterns, and work with member agencies to mitigate for inundation of resource areas and farmland through the use of rolling conservation easements.
- **Performance Measures:** 1) Resource and farmland maps and land use pattern incorporating sea level rise through at least 2100; 2) successful establishment of rolling easement program; and 3) acreage and quality of resource areas and farmland protected by rolling easement program (as compared to resource areas and farmland lost to sea level rise).

360 Fresno COG, 2014.
361 ABAG and MTC, 2013.
362 See, e.g., SBCAG, 2013 (discussing risks of sea level rise but not focusing on resource areas and farmland).
363 AMBAG, 2014.

- **MPOs Adopting This or Similar Policies in First Round:** No MPO has adopted this policy, but Plan Bay Area maps expected sea level rise through 2040 (see Figure 6 above) and its EIR discusses rolling easements as a possible option for the future.[364]

### ▶ Incorporation of Climate Change Impacts into Land Use Scenarios and Transportation Investments

- **Sample Language:** "Climate change is expected to have significant impacts on the [MPO] region during the term of this RTP/SCS and more severe effects by the end of the century. In order to avoid preventable harm to communities, transportation infrastructure and natural resources, the land use pattern and transportation investments reflected in this RTP/SCS incorporate expected impacts of climate change through 2100 [or later]. These impacts, along with avoidance, minimization and mitigation measures, are described below . . ."
- **Implementation:** Model all land use scenarios and transportation investments in light of expected impacts of climate change, with a timescale extending until at least 2100, and explain in the RTP/SCS how expected impacts will be avoided, minimized or mitigated.
- **Performance Measures:** 1) Avoidance, minimization or mitigation of expected impacts of climate change in adopted land use scenario; and 2) transportation investments consistent with expected impacts of climate change (for example, not placing key infrastructure in areas expected to be inundated by 2100).

### ▶ Natural Infrastructure as Preferred Tool to Address Climate Impacts

- **Sample Language:** "Natural infrastructure is the preferred approach for climate adaptation in California.[365] It can also provide many services more cost-effectively than additional built infrastructure, while contributing to air quality, access to the outdoors and public health. For these reasons, it is the policy of [MPO] to use natural rather than built infrastructure to address climate impacts to transportation projects wherever feasible."
- **Implementation:** Wherever feasible, use natural infrastructure (as opposed to additional built infrastructure) to address climate impacts to transportation projects.
- **Performance Measure:** Type of infrastructure (natural vs. built) used to address climate impacts.

### ▶ Explicit Commitment to Climate Adaptation

- **Sample Language:** "In order to support the long term viability of this region and maximize the effectiveness and longevity of transportation investments, it is an objective of this RTP/SCS to build greater resilience to the effects of climate change."
- **Implementation:** Explicitly incorporate climate adaptation as an SCS objective, and develop policies and performance measures to address expected climate impacts.
- **Performance Measure:** Presence of objectives, policies and performance measures relating to climate adaptation.

364 See Dyett & Bhatia et al., 2013 (noting in Plan Bay Area EIR that rolling easements would "establish a boundary from the shoreline that moves inland as sea levels rise, allowing wetlands and beaches to migrate inland," and transfer the risk of new development to property owners, who would be required to remove certain structures as sea levels rise).

365 See Executive Order B-30-15 (stating that "[n]atural infrastructure solutions should be prioritized" by state agencies planning and investing in response to climate change).

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## Mitigation

Mitigating the impacts of transportation projects on natural and working lands is both a legal requirement[366] and a significant investment of taxpayer funds. SANDAG, for example, has committed $850 million in sales tax revenue to provide mitigation for transportation projects in a single county.[367] Moreover, well-planned mitigation can benefit agencies and developers by making the approval process more predictable and less costly, while helping to maintain habitat function, agricultural productivity and public access to open space. The policies and best practices below can help MPOs realize these benefits by maximizing the effectiveness of their mitigation investments.

### ▶ Comprehensive Regional Mitigation

- **Sample Language:** "Mitigating the impacts of transportation projects on natural and working lands is both a legal requirement and a significant expenditure of taxpayer funds. In order to maximize the predictability, connectivity and ultimate effectiveness of mitigation investments, it is the policy of [MPO] to require science-based, comprehensive regional mitigation for all transportation projects. To make this possible, [MPO] has developed a regional Greenprint analyzing resource areas, agricultural land, the results of existing analyses including _____, and input from the region's leading conservation organizations, including _____. The Greenprint offers a spatially explicit set of conservation priorities for a regional advance mitigation planning (RAMP) program. As a condition of transportation funding and consistency with this RTP/SCS, all transportation projects are required to provide mitigation in accordance with RAMP priorities, including any advance acquisitions and restoration work necessary to avoid temporal gaps in habitat function. This mitigation will also meet the following requirements:
  - Mitigation ratios of at least one-to-one for farmland and higher ratios as necessary for other natural resources;
  - Adherence to the mitigation hierarchy (avoidance first, minimization second and offsets third) in all cases; and
  - Mitigation for each project that addresses the specific conservation values impacted by that project within the framework of RAMP priorities.

  Any conservation easements acquired as part of this program will be held by organizations whose mission includes the acquisition and stewardship of conservation easements."
- **Implementation:** Develop a "Greenprint" resource analysis, including at a minimum 1) lands identified in HCPs/NCCPs and all other categories of 'resource areas' listed in Cal. Gov. Code § 65080.01(a), 2) all prime farmland, farmland of statewide importance, unique farmland and grazing land in the MPO region according to the most recent data available from the California Department of Conservation's Farmland Mapping and Monitoring Program, 3) resource areas in any local or regional "Greenprint" (such as the San Joaquin Valley Greenprint), and

366 See Cal. Pub. Res. Code §21002.1(b) ("Each public agency shall mitigate or avoid the significant effects on the environment of projects that it carries out or approves whenever it is feasible to do so.").

367 SANDAG, 2011a.

4) input from leading conservation organizations. Use this analysis to set priorities for RAMP and require, as a condition of transportation funding and consistency with the SCS, that projects provide mitigation accordingly. To ensure the effectiveness of this approach, require that mitigation meet the following standards as well:

- Mitigation ratios of at least one-to-one for farmland and higher ratios as necessary for other natural resources;
- Adherence to the mitigation hierarchy (avoidance first, minimization second and offsets third) in all cases; and
- Mitigation for each project that addresses the specific conservation values impacted by that project within the framework of the RAMP program described above.

Any conservation easements acquired as part of this program should be held by organizations whose mission includes the acquisition and stewardship of conservation easements.[368] Such organizations can also help to create a mitigation repository and to restore areas acquired for future mitigation in order to avoid any temporal gap in habitat function.

- **Performance Measures:** 1) Presence of comprehensive regional mitigation policy (including Greenprinting and RAMP) in RTP/SCS; 2) extent to which Greenprint and resulting RAMP priorities address all categories of resource areas and agricultural land noted above, while incorporating existing resource analyses and input from conservation organizations; 3) connectivity of areas selected as RAMP priorities; 4) compliance with RAMP program and other mitigation standards (e.g., ratios, mitigation hierarchy and relevance to conservation values impacted by specific project) for all projects approved during term of RTP/SCS; and 5) maintenance of habitat function, agricultural productivity and other conservation values impacted by transportation projects during and after term of RTP/SCS.
- **MPOs Adopting This or Similar Policies in First Round:** SANDAG has established a comprehensive regional mitigation program, and SCAG has committed to develop one for the next round.[369]

### ▶ Alternative Mitigation

- **Sample Language:** "In order to increase the effectiveness of mitigation investments, it is the policy of [MPO] that mitigation for transportation projects include the following:
  - Mitigation ratios of at least one-to-one for farmland and higher ratios as necessary for other natural resources;
  - Adherence to the mitigation hierarchy (avoidance first, minimization second and offsets third) in all cases; and
  - Mitigation for each project that addresses the specific conservation values impacted by that project.

  Conservation easements acquired to provide mitigation will be held by organizations whose mission includes the acquisition and stewardship of conservation easements."
- **Implementation:** If a RAMP program is not possible, mitigation should include at least the following:
  - Mitigation ratios of at least one-to-one for farmland and higher ratios as necessary for other natural resources;
  - Adherence to the mitigation hierarchy (avoidance first, minimization second and offsets third) in all cases; and
  - Mitigation for each project that addresses the specific conservation values impacted by that project.

  As under a RAMP program, conservation easements should be held by organizations whose mission includes the acquisition and stewardship of conservation easements.

368 Cf. TCAG, 2014b (resolution adopting Tulare RTP/SCS and stating that the appropriate holder of agricultural easements is "a local, regional, or statewide organization or agency whose purpose includes the acquisition and stewardship of agricultural conservation easements"). In many MPO regions, this service can be provided by a locally-based, Land Trust Alliance-accredited land trust.

369 SANDAG, 2011a; SCAG, 2012a.

- **Performance Measures:** 1) Presence of alternative mitigation policy in RTP/SCS; 2) compliance with mitigation standards (e.g., ratios, mitigation hierarchy and relevance to conservation values impacted by specific project) for all projects approved during term of RTP/SCS; and 3) maintenance of habitat function, agricultural productivity and other conservation values impacted by transportation projects during and after term of RTP/SCS.

### ▶ Mitigation for GHG Emissions from Disturbance of the Landscape

- **Sample Language:** "It is the policy of [MPO] to account and mitigate for GHG emissions caused by disturbance of the landscape due to the land use pattern and transportation investments reflected in this RTP/SCS, including but not limited to GHG emissions from the biological impacts of transportation projects. These emissions are estimated to be __ metric tons carbon equivalent during the term of the RTP/SCS, and will be mitigated as follows: [mitigation measures]."
- **Implementation:** Account and mitigate for GHG emissions from disturbance of the landscape, including but not limited to GHG emissions from the biological impacts of transportation projects. Possible mitigation approaches include, but are not limited to, carbon sequestration (for example, funding reforestation projects not otherwise required by law).
- **Performance Measure:** Accuracy of accounting and thoroughness of mitigation for GHG emissions from disturbance of landscape.

### ▶ Mitigation Tracking

- Sample Language: "In order to maximize the transparency and effectiveness of mitigation investments, [MPO] will provide a publicly available database that tracks mitigation funding, as well as compliance with the [comprehensive regional or alternative] mitigation program described in this RTP/SCS."
- Implementation: Provide a frequently updated, publicly available database of where mitigation funding is going to track compliance with RAMP or any alternative mitigation program.
- Performance Measures: Existence, ease of access and accuracy of database.

## Transparency and Public Participation

SB 375 includes extensive requirements for incorporating public input into the SCS process,[370] and many MPOs have gone above and beyond these requirements. In some regions, however, the implications of regional transportation planning under SB 375 are not widely known beyond a small circle of MPO officials, land use and transportation experts and community organization leaders. Incomplete disclosure of modeling methods and assumptions can create opacity even for those who are otherwise knowledgeable about the process, and acts as an additional barrier to public understanding, participation and support. The policies and best practices below are designed to address these issues by providing greater transparency and more thorough incorporation of public input.

### ▶ Transparency Regarding GHG Reductions

- **Sample Language:** "The land use approach in this RTP/SCS is forecast to reduce GHG emissions __% by [horizon year]. The transportation investments [or changes in the management of existing transportation infrastructure] in this RTP/SCS are forecast to reduce GHG emissions __% by [horizon year]."
- **Implementation:** Attribute all claimed GHG reductions to specific strategies, and meet targets entirely through changes in land use and transportation that go beyond the baseline of business as usual.
- **Performance Measures:** 1) Accurate attribution of all GHG reductions to specific strategies; 2) reductions attributable to changes in land use and transportation that go beyond business as usual and are at least equal to targets.
- **MPOs Adopting This or Similar Policies in First Round:** TMPO and TRPA.[371]

### ▶ Transparency Regarding Progress toward SCS Goals

- **Sample Language:** N/A (specific to goal or performance measure).
- **Implementation:** Associate every goal related to land use or GHG reductions with a specific performance measure and provide ongoing, public tracking of all performance measures throughout the term of the SCS. Further increase transparency by consulting with other MPOs, as well as conservation, public health, environmental justice and other community organizations, to standardize performance metrics related to land use.
- **Performance Measures:** 1) Existence of performance measure for every goal related to land use or GHG reductions; 2) existence, ease of access and accuracy of database tracking performance measures in real time; and 3) extent to which metrics are standardized with those of other MPOs.

### ▶ Transparency Regarding Data and Assumptions Reflected in Draft RTP/SCS and Draft EIR

- **Sample Language:** N/A (specific to dataset or modeling process).
- **Implementation:** Make data and assumptions used to model land use scenarios publicly available as soon as possible. Data and assumptions that inform land use scenarios in a Draft RTP/SCS or Draft EIR should be released contemporaneously with those documents, or earlier if possible.
- **Performance Measure:** Data and assumptions used to model land use scenarios made publicly available by the time Draft RTP/SCS and Draft EIR are released.

370 See Cal. Gov. Code § 65080(b)(2)(E) (elements of public participation plan for development of an SCS or APS).

371 See TMPO et al., 2012 (attributing a 3% reduction in per capita GHG emissions to changes in land use and a 4% reduction to changes in transportation).

### ▶ Expanded Public Outreach

- **Sample Language:** N/A (best practice re: public outreach).
- **Implementation:** In addition to the public outreach required by SB 375 and CEQA, use news media, additional workshops and other venues to inform as broad a cross-section of the public as possible what the SCS process is and why it matters. Incorporate public views about the meaning of sustainability (perhaps through asking workshop participants "what is the risk of not addressing sustainability in your community?") into development of land use scenarios, and seek further input based on the modeled results of those scenarios.
- **Performance Measures:** 1) Number and diversity of non-insiders who attend workshops, submit comments on Draft RTP/SCS or otherwise participate in SCS process; 2) extent to which ideas from members of public relating to sustainability are incorporated into development of land use scenarios for initial modeling; 3) extent to which land use scenario selected by majority of workshop participants (or measuring highest in terms of definition of sustainability provided by majority of workshop participants) is reflected in final adopted land use pattern; and 4) extent to which transportation investments are consistent with definition of sustainability provided by majority of workshop participants.

## Funding

MPOs are not granted land use planning authority by SB 375 and are understandably reluctant to infringe on member agencies' local control.[372] But because an RTP/SCS must include a financial element that "contains[s] recommendations for the allocation of funds" and is consistent with objectives and policies adopted elsewhere in the RTP/SCS,[373] MPOs have an unavoidable role in deciding which transportation projects are programmed for funding and under what conditions. While respecting the land use planning authority of member agencies, MPOs can and should use their power over transportation funding to support development patterns that reduce GHG emissions, invest in existing communities (including disadvantaged communities), and conserve natural and working lands. The policies and best practices below offer legitimate ways for MPOs to do so.

### ▶ SB 375 Incentives for Cities and Counties that Support Conservation

- **Sample Language:** "Consistent with SB 375's mandate to 'consider financial incentives for cities and counties that have resource areas or farmland,' including 'financial assistance for counties . . . that contribute towards the [GHG] reduction targets by implementing policies for growth to occur within their cities,' [374] [MPO] will commit $ __ million in funding to help member agencies update their general plans and zoning codes to 1) designate additional resource areas and farmland for long term conservation, 2) lower permitting barriers to infill development, and 3) reduce the overall footprint of future development. [MPO] will also provide incentives for member agencies that voluntarily request (and are granted) smaller spheres of influence (SOIs) or urban growth boundaries."
- **Implementation:** Provide incentives for cities and counties that help meet GHG reduction targets through conservation of resource areas and farmland, including 1) jurisdictions that update their general plans to conserve resource areas and farmland, streamline the permitting process for infill projects and reduce the overall footprint of development, and 2) jurisdictions that pull back their SOIs or urban growth boundaries.

372 Cal. Gov. Code § 65080(b)(2)(J)

373 Cal. Gov. Code §§ 65080(b)(4)(A) and 65080(b)(1).

374 Cal. Gov. Code § 65080(b)(4)(C).

- **Performance Measures:** 1) Amount of funding provided by MPO; and 2) actions taken by cities and counties in exchange for funding during term of RTP/SCS.

### ▶ Funding for Rural Investment Zones

- **Sample Language:** "In order to reduce per capita VMT in rural areas and promote access to services in our region's most disadvantaged communities, [MPO] will provide $ __ million in funding for rural investment zones. This funding will be awarded to projects that improve the jobs-housing balance while minimizing the loss of resource areas and farmland in areas designated as rural investment zones."
- **Implementation:** Based on land use modeling, identify rural areas, including but not limited to unincorporated disadvantaged communities, where an improved jobs-housing balance could significantly reduce per capita VMT while minimizing the loss of resource areas and farmland. Provide incentives for projects that improve the jobs-housing balance in these areas (e.g., projects that support additional housing in jobs-rich but housing-poor areas, projects that bring additional employers to housing-rich but jobs-poor areas, and projects that support mixed use development where possible).
- **Performance Measures:** 1) Total funding for rural investment zones during term of RTP/SCS; 2) change in ratio of housing units to jobs in rural investment zones; and 3) change in per capita VMT in rural investment zones.

### ▶ Commitment to Active Role in Securing Funding for Conservation

- **Sample Language:** "Conservation of natural and working lands and support for infill development play complementary roles in [MPO's] GHG reduction strategy while providing a host of additional co-benefits. For this reason, [MPO] will actively solicit funding to support conservation and incentivize infill development, and will include conservation in any transportation measure brought to the voters pursuant to this RTP/SCS."
- **Implementation:** Commit to actively solicit funding to support conservation and incentivize infill development, and include conservation in any transportation measure brought to the voters pursuant to an RTP/SCS.

- **Performance Measures:** 1) Funding for conservation and infill incentives obtained due to MPO's efforts during term of RTP/SCS; and 2) inclusion of conservation in any transportation measure brought to voters pursuant to RTP/SCS.
- **MPOs Adopting This or Similar Policies in First Round:** SRTA.[375]

### ▶ Incorporation of Conservation Concerns into Project Selection Process

- **Sample Language:** "Conservation of natural and working lands helps reduce GHG emissions while providing co-benefits ranging from food, jobs and water to wildlife habitat, access to the outdoors and improved public health. For this reason, [MPO's] scoring system for transportation project selection incorporates impacts to habitat and agricultural land as follows: [explanation]."
- **Implementation:** To select transportation projects for funding, use a scoring system that incorporates impacts to habitat and agricultural land, with numerical values for these factors that carry significant weight in the final results.
- **Performance Measure:** Percentage of available points in scoring system dependent on avoiding or minimizing impacts to habitat and agricultural land.
- **MPOs Adopting This or Similar Policies in First Round:** KCAG.[376]

### ▶ Consistency with RTP/SCS Land Use Pattern as Condition for Transportation Funding

- **Sample Language:** "Except where required to do so by law, [MPO] will not fund transportation projects that are inconsistent with the land use pattern reflected in this RTP/SCS, including but not limited to projects that undermine long term water availability for the region."
- **Implementation:** Eliminate funding for projects inconsistent with the RTP/SCS land use pattern, including but not limited to projects that undermine long term water availability for the region.
- **Performance Measures:** 1) Absence of funding for transportation projects inconsistent with SCS; and 2) absence of funding for projects that do not comply with "show me the water" policy.

375 See SRTA, 2015 (committing to "[s]eek funding for environmental impact mitigation and enhancement activities").

376 See KCAG, 2014 (including a scoring system for highway projects under which points are awarded for minimizing impacts to special status species and avoiding "disruption to natural beauty").

# Table of Authorities and References

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### SCSs

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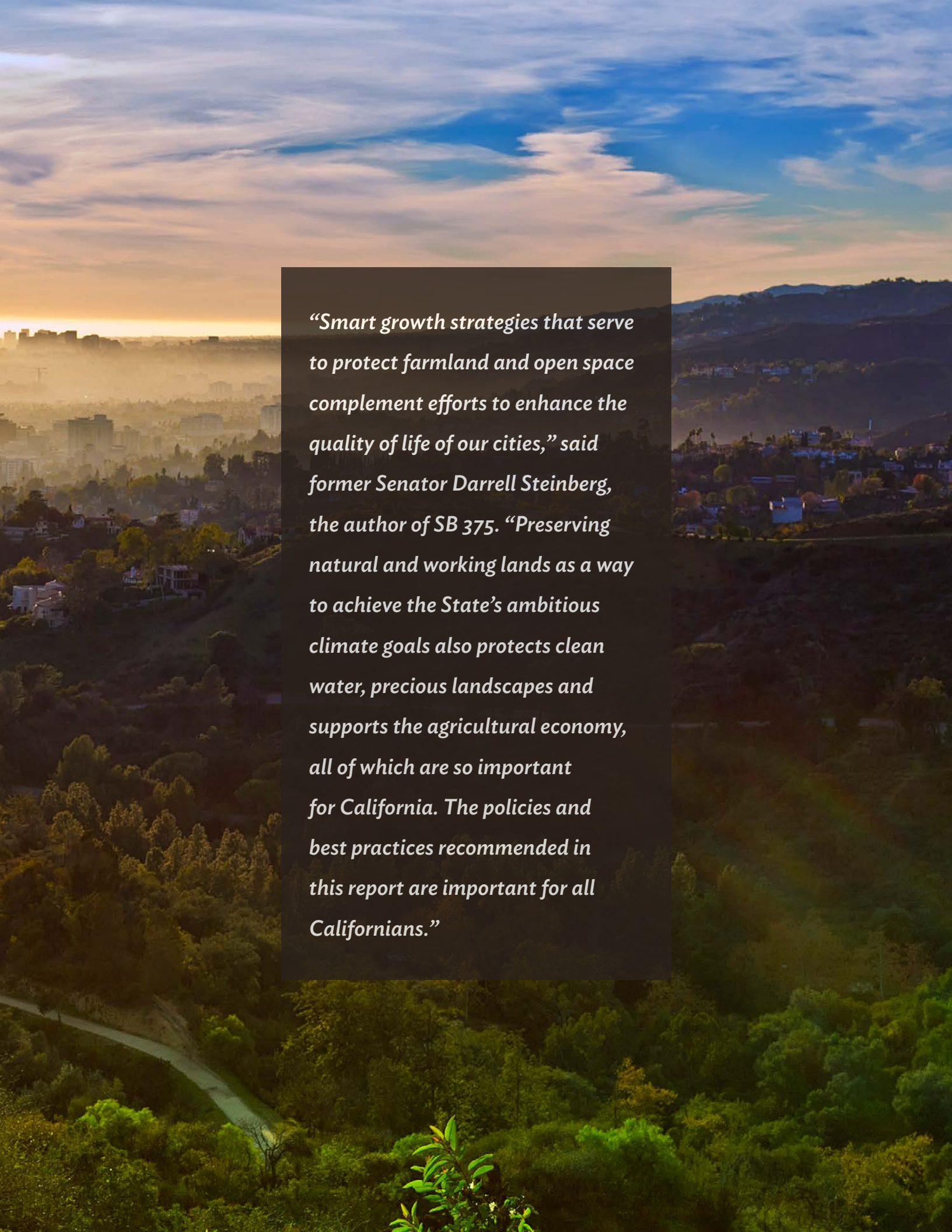

*"Smart growth strategies that serve to protect farmland and open space complement efforts to enhance the quality of life of our cities," said former Senator Darrell Steinberg, the author of SB 375. "Preserving natural and working lands as a way to achieve the State's ambitious climate goals also protects clean water, precious landscapes and supports the agricultural economy, all of which are so important for California. The policies and best practices recommended in this report are important for all Californians."*