

MEETING DATE: September 11, 2019

AGENDA ITEM: 5.D

**ATTACHMENT: 4** 

# **REPORT TO GENERAL PLAN 2040 STEERING COMMITTEE**

# Subject: Draft Open Space and Conservation Element Policies

#### **EXECUTIVE SUMMARY**

Draft goals, policies and programs for the 2040 General Plan Open Space and Conservation Element are attached to this cover memo. The General Plan Steering Committee will review this document at its September 11 meeting, breaking out into four groups with each group discussing one of the four major topic areas covered. Group 1 will discuss the Open Space policies, Group 2 will discuss Conservation policies, Group 3 will discuss Air and Water Quality policies, and Group 4 will discuss Sustainability and Climate Change policies. Assignments will be made at the meeting. Approximately 80 minutes has been set aside for the breakout group exercise. Steering Committee members are encouraged to prepare their own comments and mark-ups of the Draft policies. A matrix (similar to the matrices prepared for the prior policies on Land Use and Environmental Hazards) will be provided before the meeting on Wednesday.

#### REPORT

The attached document consolidates four of the elements of General Plan 2020 into a single element, to be known as the Open Space and Conservation Element (OSC). This Element includes goals, policies and programs addressing:

- Open Space
- Conservation
- Air and Water Quality
- Sustainability and Climate Change

Each of these topics is currently treated by a separate element of the General Plan. In an effort to avoid redundancy and streamline compatible topics, the elements are being combined.

This is the third set of Draft General 2040 policies the Steering Committee has reviewed. The Draft Land Use policies were reviewed in February 2019 and the Draft Environmental Hazards policies were reviewed in April 2019. Additionally, the Steering Committee has reviewed "audits" of all other elements of the Plan, including Open Space, Conservation, Air/Water Quality, and Sustainability. Committee member comments on the audits have been taken into consideration in the attached draft----many of the proposed revisions to General Plan 2020 policies are a direct result of Steering Committee feedback.

The revisions also reflect the integration of the 2030 Climate Change Action Plan (CCAP) into the General Plan. The most recent CCAP was adopted by the San Rafael City Council on May 20, 2019. Whereas General Plan 2020 incorporated policies and programs from a CCAP adopted in April, 2009, General Plan 2040 incorporates the recently adopted CCAP. The document includes many new programs, most of which replace programs that were in the prior plan.

The attached document has been formatted to identify the origin of each goal, policy, and program. This information is provided in a red subscript after each statement. In most cases, the statement is derived from an existing policy in General Plan 2020. We have not repeated the full text of the 2020 Plan goal, policy, and program in the document. To facilitate a comparison of the two documents, we have included a link to the <u>2020 General Plan elements</u> along with this staff report.

At the end of the attached document (pages 22-25), we have also identified a "landing place" for sustainability or climate-change policies and programs that do not fit in the Conservation Element. Some of the policies currently in the Sustainability Element (or in the new Climate Action Plan) will be placed in the Land Use, Transportation, Economic Vitality, Infrastructure, and Environmental Hazards Element. Cross-referencing will be included throughout the General Plan to link the subjects and avoid repeating the same policy (or similar policies) in multiple places.



# **Open Space and Conservation Element**

Draft Goals, Policies, and Programs

# GOAL OSC-1: OPEN SPACE PROTECTION AND MANAGEMENT

**Manage San Rafael's open spaces for all to enjoy.** Preservation of open space and the natural environment have been priorities for San Rafael residents for many years. Open space should be carefully managed to conserve and enhance its intrinsic value for recreation, habitat, hazard mitigation, climate change resilience, food production, scenic beauty, and community character. Whenever possible, the natural terrain and vegetation of the community should be preserved, maintained, and enhanced.

[replaces Goal 32. The sentence beginning with "Open space should..." is new]

# Policy OSC-1.1: Open Space Framework

Retain and protect San Rafael's open space framework, including open space on the city's perimeter and the open spaces that define and connect the City's neighborhoods. [Replaces OS-1. Also, Appendix I – the 30+ year old Inventory of Potential Open Space Sites that pre-dates GIS--is being deleted. Most of the sites have been acquired, developed, or are no longer viable for acquisition.]

**Program OSC-1.1A: Criteria for Open Space Protection.** Use the following criteria for identifying and prioritizing open space parcels for future protection (the criteria are not listed in any particular order):

- a. Environmental health and safety issues and potential geologic and seismic hazards.
- b. Aesthetics (visual backdrop or edge, unique site features, shoreline, ridgelines).
- c. Resource value (Wetlands, creeks and riparian areas, wildlife habitat and movement corridors, and habitat for special status species).
- *d.* Ability to mitigate potential climate-related impacts, including reduction of wildfire hazard, drought resilience, and protection from sea-level rise.
- e. Importance to the community as a whole and/or adjoining neighborhoods.
- f. Ability to serve economically disadvantaged communities.
- g. Merits of alternative uses.
- h. Ability to connect existing open spaces.
- *i.* Potential for recreational uses and/or environmental education.
- *j.* Availability of outside (non-City) financial assistance.
- k. Potential maintenance and management costs and liability exposure for the city.
- *l. Feasibility of protection through zoning, easements, development agreements, and other tools rather than through acquisition.*

[This replaces Program OS-1a and adds several new criteria (d, f, l)]

**Program OSC-1.1B:** Open Space Opportunities in New Development. Pursue opportunities to expand the City's open space network when new development is proposed. This can be achieved through such strategies as clustering development, providing buffers and fuel breaks along site perimeters, dedicating on-site parkland, and mitigating project impacts through wetlands restoration. When potential open space is not contiguous to existing public open space, the preference is to retain it in private ownership. Maintenance agreements for such areas should be developed through the development review process. [Combines former Programs OS-1b and OS-1c] **Program OSC-1.1C: Priority Conservation Areas.** Explore the feasibility of Priority Conservation Areas (PCA) designations for large areas of contiguous private open space in the San Rafael Planning Area. The PCA designation recognizes the significance of these areas as open space and provides support for their long-term conservation. Owner consent should be obtained before an application for a PCA is submitted to ABAG. [New Program]

#### Policy OSC-1.2: Balancing the Uses of Open Space

Protect and preserve the natural resource value of open space while permitting compatible recreational and educational uses. Open space areas should be maintained in a natural state and regarded as a resource for enjoyment by all residents of San Rafael. Recreational and educational uses, where permitted, should be limited to activities with minimal impacts on the environment and locations where such activities will not create hazards or have adverse effects on sensitive natural resources. [Replaces Policy OS-3 (reorganized and moved forward)]

#### Policy OSC-1.3: Open Space Management

Maintain and manage City-owned open space lands to reduce natural hazards and wildfire risks, enhance recreational opportunities, maximize ecological value, support climate resilience, and preserve aesthetics. Work with other public open space owners to support similar objectives on their properties within the San Rafael Planning Area. [Replaces Policy OS-2]

**Program OSC-1.3A: Open Space Management Plan.** Work collaboratively with residents, environmental organizations, fire departments, and land management agencies such as Marin Municipal Water District, Marin County Parks and Open Space District, and California State Parks to develop an Open Space Management Plan. The Plan should address appropriate uses of open space in the Planning Area, along with provisions for ongoing maintenance and improvement. It should include four areas of focus:

- (1) Recreation, including appropriate access points, parking and staging areas, wayfinding signage, existing and future trail alignments, and guidelines for the location of amenities such as picnic tables and benches.
- (2) Hazard reduction, including removal of highly flammable invasive species, emergency access, and erosion control. This should be closely coordinated with ongoing efforts by the San Rafael and Marin County Fire Departments, CalFIRE, and non-profit organizations such as FireSafe Marin.
- (3) Green infrastructure, including the capacity of open space areas to sequester carbon, absorb runoff, maintain water quality, mitigate climate change impacts, enhance biodiversity, and improve resilience.
- (4) Funding, including operating costs and capital projects, and options for covering those costs such as assessment districts, interagency agreements, volunteer programs, and private funding. [replaces Program OS-2a]

See also Policy OSC-2.15 and for policies and programs related to the control of invasive species, and the Environmental Hazards Element for additional policies on open space management.

# Policy OSC-1.4: Open Space Impediments

Address activities that impair the value of open space or create hazardous conditions on open space, including illegal camping and campfires, erosion and landslides, plant pathogens or diseases, disruption of special status species, and unauthorized activities that can cause environmental harm.

[New Policy, was part of Policy OS-2 before]

Program OSC-1.4A: Diseased Vegetation. Work with resource agency experts to address tree pathogens and to remove diseased, dying, or hazardous vegetation. [Replaces Program OS-2c]

**Program OSC-1.4B: Illegal Encampments.** Continue to work with private and public property owners to identify and remove illegal encampments in open space areas. [Carries find, Program OS-2d with no edits]

#### **Policy OSC-1.5: Private Open Space**

Encourage the long-term stewardship of privately-owned open space in a manner that conserves natural resource and aesthetic values, provides opportunities for food and energy production, and reduces hazards to life and property. [New Policy]

**Program OSC-1.5A:** Appropriate Use of Private Open Space. When land is set aside as permanent open space in a private development or is dedicated to a public agency as open space, identify use limitations such as restrictions on structures, plant materials, and fences. [replaces Program OS-3a]

#### **Policy OSC-1.6: Access to Open Space**

Encourage access to open space areas in the design of development on adjacent sites and in existing developed areas as shown on Exhibit OSC-1 (formerly Exhibit 34). Access should be secured as part of subdivision approval and through coordination with affected property owners. Access paths should be designed to minimize neighborhood and user conflicts and avoid conflicts with sensitive wildlife habitat. [Replaces Policy OSC-4]

**Program OSC-1.6A:** Access Points. Use the development review process to identify open space access points and required features such as signage, trailheads, and parking. [Replaces Program OSC-4A]

#### **Policy OSC-1.7: Coordinated Open Space Planning**

Coordinate the planning and management of San Rafael's open space system with adjacent cities, Marin County, the State of California, and regional and private open space systems. [carries forward Policy OS-5 as is]

**Program OSC-1.7A: Coordination with Other Jurisdictions.** Continue to work with the public agencies managing open space within the San Rafael Planning Area to coordinate and implement City and County wildfire action plans, habitat conservation programs, and recreation improvements. [Replaces Program OS-5a]

#### **Policy OSC-1.8: Trails**

Encourage the development and maintenance of trails within and between open space areas. Trails should be designed in an environmentally sensitive manner and should provide safe and secure routes for a variety of users. [New Policy, closes gap in existing Plan]

**Program OSC-1.8A: Trails Master Plan.** Develop a Trails Master Plan. This can be an independent document or a component of a citywide Parks Master Plan, multi-jurisdictional Open Space Management Plan, or similar plan. The Master Plan should include recommendations for new and enhanced trails, use guidelines, signage, surface materials, maintenance, and staging areas. [New Program]

#### **Policy OSC-1.9: Utilities in Open Space**

Discourage large-scale utility infrastructure such as electric transmission lines and cellular phone towers in open space areas. Where such facilities already exist, or where there are no other siting options, utilities should be located and designed to minimize harm to the area's environmental and visual quality. [Replaces Policy OS-6]

**Program OSC-1.9A: Wireless Facilities**. Develop criteria and/or guidelines for the siting of wireless communication facilities in open space areas. [New, responds to current issue]

# Policy OSC-1.10: Public Education

Provide education programs to residents about the importance of open space to wildfire prevention, watershed protection and water quality, climate resilience and carbon sequestration, and habitat conservation. [Replaces Policy OS-7]

**Program OSC-1.10A: Public Education.** Continue outreach and public education on open space management, including wildfire prevention, stormwater management requirements, predatory animal control, and climate change. [Replaces Program OS-7a]

**Program OSC-1.10B: Interpretive Facilities.** Encourage the development of interpretive trails, nature centers, signage, and similar features that educate San Rafael youth and adults about the natural environment and the value of open space. [New Program]

#### **Policy OSC-1.11: Food Production**

Recognize the importance of open space for local production of food and other agricultural products. Encourage the use of open space for agricultural activities that are compatible with surrounding urban and suburban uses, while also supporting natural resource conservation goals. [New Policy]

See the JEDI Element for additional policies and programs on food production.

# GOAL OSC-2: NATURAL RESOURCE PROTECTION

**Protect and enhance San Rafael's environment and natural resources.** San Rafael is defined by natural features such as hillsides, ridgelines, creeks, shorelines, and open water. It includes diverse ecosystems such as woodlands, grasslands, chaparral, wetlands, and riparian areas. These areas provide habitat for plants and animals, some of which are threatened and endangered. The City is committed to careful management of its environment and natural resources so that they are sustained for future generations.

[Combines former Goal 33 and Policy CON-1 into a single statement]

#### **Policy OSC-2.1: Wetlands Preservation**

Require public and private wetlands preservation, restoration and/or rehabilitation. Support and promote acquisition of fee title and/or easements on wetlands from willing property owners. [Replaces Policy CON-2]

**Program OSC-2.1A: Wetlands Overlay District.** Continue to implement wetlands policy through a Wetlands Overlay zoning district and the development review process. [Replaces Program CON-2a, minimal change]

**Program OSC-2.1B: Tiscornia Marsh Restoration.** Implement restoration plans for Tiscornia Marsh adjacent to Pickleweed Park in the Canal neighborhood. The project will raise and improve a degraded levee to stabilize and potentially restore an eroding tidal marsh, reducing the community's vulnerability to rising tides and flooding. [New Program]

**Program OSC-2.1C: McInnis Marsh Restoration.** Implement restoration plans for McInnis Marsh, providing improved habitat for protected species, flood protection for McInnis Park Golf Course, and improved trail connections along the San Pablo Bay Shoreline. [New Program]

#### Policy OSC-2.2: Wetlands and Sea Level Rise

Recognize the role of wetlands in buffering the San Rafael shoreline against the future impacts of sea level rise. Horizontal levees, which are restored wetlands that reduce the destructive impact of coastal storms and wave action, should be incorporated in future sea level rise adaptation plans where feasible. [new Policy]

#### **Policy OSC-2.3: Mitigation of Wetland Impacts**

When it is demonstrated that wetland preservation it is not possible or practical due to conditions such as location, configuration, and size, compensatory mitigation shall be required. Lost wetland area shall be replaced on-site and in-kind at a minimum ratio of 2:1 (e.g., 2 acres for each acre lost). If on-site mitigation is not possible or practical, off-site mitigation shall be required, preferably in the same drainage basin, at a minimum replacement ratio of 3:1. The City may waive this policy on a case by case basis for fill of wetlands that are less than 0.1 acres in size, provided that all of the following conditions are met: (1) the wetland is isolated (e.g., it is not within, part of, or directly connected or hydrologically linked by natural flow to a creek, drainageway, wetland, or submerged tidelands); (2) it is demonstrated by a wetland expert that preservation would not result in a functioning, biological resource; (3) the City has determined that filling would result in a more appropriate and desirable site plan for the project; and (4) the City consults with and considers comments received from resource agencies with wetland oversight.<sup>1</sup>

[Replaces Policy CON-3, part one. Edited but the intent and meaning are unchanged]

<sup>&</sup>lt;sup>1</sup> State Department of Fish and Wildlife and the Regional Water Quality Control Board.

**Program OSC-2.3A: Project Mitigation.** Continue the City's practice of requiring mitigation for projects that would affect wetlands, in conjunction with recommendations of State and Federal agencies. [Replaces Program CON-3a—no change]

#### **Policy OSC-2.4: Wetland Creation**

Require that any wetlands created to mitigate losses as described in Policy OSC-2.3 are similar in habitat type and at least equal in functional quality to the wetlands being filled. Restoration of former filled, drained, or diked wetland habitat is preferred over creation of wetlands on lands that were historically uplands. Wetland plans shall be prepared by a qualified wetland restoration ecologist in consultation with appropriate federal and state resource agencies. Such plans shall require annual monitoring for a specified period of time to determine mitigation success. Contingency measures to deal with the potential for lack of success should be included in the plan.

Restoration or creation of wetlands should be completed prior to construction of new development. Where construction activities would adversely impact wetland restoration or creation, the restoration or creation may be completed after construction of the development, as determined through development review. [Replaces Policy CON-3, part two (a, b). Edited but the intent and meaning are unchanged]

**Program OSC-2.4A: Mitigation Banking.** Consider the use of mitigation banks wherein project applicants pay fees rather than constructing small compensatory wetlands on or near each development site. Mitigation fees from multiple projects may be combined to construct or restore larger, more viable wetlands in designated locations. [New program, from Steering Committee]

# Policy OSC-2.5: Wetland Setbacks

Maintain a minimum 50-foot development-free setback from wetlands, including, but not limited to, paving or structures. Setbacks of greater than 50 feet may be required on lots of two or more acres as determined through development review. The City may waive this requirement for minor encroachments if it can be demonstrated that the proposed setback protects the functions of the wetland to the maximum extent feasible and is satisfactory to the appropriate regulatory agencies.<sup>1</sup> [formerly Policy CON-4, no change]

#### Policy OSC-2.6: Diked Baylands

Protect seasonal wetlands and associated upland habitat contained within undeveloped diked baylands, or restore such areas to tidal action. The management of diked baylands and other shoreline properties should be consistent with an overall adaptation plan for responding to sea level rise.

[formerly Policy CON-5. Second sentence is new]

See Policy EH-2.2 (and associated programs) in the Environmental Hazards Element regarding the monitoring and reinforcement of shoreline levees

#### Policy OSC-2.7: Creek Protection

Protect and conserve creeks as an important part of San Rafael's identity, natural environment, and green infrastructure. Except for specific access points approved per Policy OSC-2.8 (Public Access to Creeks), development-free setbacks shall be required along designated creeks and drainageways to help maintain their function and habitat value. Erosion control and habitat restoration measures are encouraged within the setbacks, and roadway crossings are permitted.

The following specific provisions shall apply to creeks and drainageways, which are mapped in Exhibit OSC-2:

- (a) Creek Setback: A minimum 25-foot development-free setback shall be maintained from the top of creek banks for all new development (including but not limited to paving and structures), except for Miller Creek and its tributaries, where a minimum 50-foot setback shall be maintained. Setbacks up to 100 feet may be required on lots or development projects that are two or more acres in size where development review determines that a wider setback is needed to maintain habitat values, and in areas where high-quality riparian habitat exists. The City may waive the setback requirement for minor encroachments if it can be demonstrated that the proposed setback adequately protects the functions of the creek to the maximum extent feasible and the results are acceptable to appropriate regulatory agencies.
- (b) Drainageway Setback: Drainageway setbacks shall be established through individual development review, taking into account existing habitat function and values. [Replaces Policy CON-6]

EDITOR'S NOTE: Exhibit 37 in the 2020 General Plan will be amended to show Drainageways as well as Creeks, per the GIS data available through MarinMaps (this was done in General Plan 2000 but not in General Plan 2020).

**Program OSC-2.7A: Municipal Code Compliance.** Ensure that the San Rafael Municipal Code complies with local, state, and federal regulatory agency requirements for erosion control and natural resource management and is amended as needed when these regulations change. [Replaces Program CON-6a; the clause after "erosion control" is new]

**Program OSC-2.7B: Creek Mapping.** Work collaboratively with local environmental organizations and institutions to prepare updated maps of creeks and drainageways based on current conditions. Evaluate the potential for restoration of creeks that have been compromised by past urbanization as part of this effort. [New, from Steering Committee]

#### Policy OSC-2.8: Public Access to Creeks

Provide pedestrian access to creeks and along creeks where such access will not adversely affect habitat values. [replaces Policy CON-7]

**Program OSC-2.8A: Creek Access on Public Land.** Proactively identify and create access points to creeks on public lands [carries forward Program CON-7a, no edits]

**Program OSC-2.8B: Public Access in Development Along Creeks.** Use the development review process to identify and secure areas appropriate for creek access. [replaces Program CON-7b]

#### Policy OSC-2.9: Creek Education and Awareness

Increase awareness of San Rafael's creeks and their role as green infrastructure supporting local climate resilience and flood protection initiatives. [New, from Steering Committee]

**Program OSC-2.9A: Publicity.** Use the City's website to publicize information about creek and waterway protection and access. Where appropriate, partner with local schools, conservation and environmental groups, business organizations, and others to produce informational brochures and other tools that increase awareness of the City' creeks and waterways.

[Replaces and expands Program CON-7c. Second sentence is new.]

**Program OSC-2.9B: Creek Signage.** Develop attractive signage and/or educational displays identifying local creeks and describing native habitat. [Replaces Program CON-7d]

#### Policy OSC-2.10: Enhancement of Creeks and Drainageways

Improve the habitat value of creeks and drainageways so they may better function as wildlife corridors, buffers for carbon sequestration and greenhouse gas reduction, and green infrastructure to improve stormwater management and reduce flooding. Require creek enhancement and associated riparian habitat restoration/ creation for projects adjacent to creeks to reduce erosion, maintain storm flows, improve water quality, and improve habitat value.

[Was Policy CON-8. Has been edited to address climate and green infrastructure]

**Program OSC-2.10A: Watercourse Protection Regulations.** Maintain watercourse protection regulations in the San Rafael Municipal Code. These regulations should be periodically revisited to ensure that they adequately protect creeks and drainageways. Consider adding specific measures or guidelines to mitigate the destruction or damage of riparian habitat from roads, development, and other encroachments. [New Program, incorporates Steering Committee input]

**Program OSC-2.10B: Creek Restoration.** Encourage and support efforts by neighborhood associations, environmental organizations, and other interested groups to fund creek enhancement, restoration, and daylighting projects, as well as creek clean-ups and ongoing maintenance programs. [replaces Program CON-8a]

**Program OSC-2.10C: Upper Gallinas Watershed Restoration.** Support implementation of creek restoration projects in the Upper Gallinas Creek Watershed, consistent with the Restoration Opportunities Report prepared in December 2016. Pursue grants and other funding sources to restore natural creek conditions and native vegetation on the portion of the creek in the Freitas Parkway median. [New, from Steering Committee]

**Program OSC-2.10D: Mahon Creek and Irwin Creek Restoration.** Pursue opportunities for creek restoration and beautification along Mahon Creek and Irwin Creek, building on past efforts supporting restoration and water quality improvements along these waterways. [New, from Steering Committee]

See also Policies OSC-2.17 and OSC-2.18 on tree preservation and urban forestry

#### Policy OSC-2.11: Hillside Preservation

Encourage preservation of hillsides, ridgelines, and other open areas that serve as habitat and erosion protection as well as visual backdrops to urban areas. Hillside preservation and management efforts should be compatible with City programs to reduce fuel loads, wildfire risks, and landslide hazards.

[Replaces Policy CON-12. Second sentence is new]

See the Environmental Hazards Element for policies addressing protection of steep slopes and the Community Design Element for policies on hillside and ridgeline protection.

**Program OSC-2.11A: Hillside Design Guidelines.** Continue to implement Hillside Design Guidelines. [Replaces Program CON-12a. No changes made.]

# Policy OSC-2.12: Wildlife Corridors

Preserve and protect areas that function as wildlife corridors, particularly those areas that provide natural connections permitting wildlife movement between designated sensitive habitats. [Replaces Policy CON-11. No changes.]

# Policy OSC-2.13: Native or Sensitive Habitats

Protect habitats that are sensitive, rare, declining, unique, or represent a valuable biological resource. Potential impacts to such habitats should be minimized through careful planning and compliance with applicable laws and regulations. [Combines Policy CON-9 and CON-10. No changes.]

**Program OSC-2.13A: Invasive Predators.** Support efforts by non-profit conservation groups, state and federal agencies, the Marin Humane Society and other organizations to reduce conflicts between human settlement and native wildlife. This includes protecting the habitat of birds and small mammals from invasive predators. [Replaces Program CON-9b]

**Program OSC-2.13B: Oak Savanna Habitat Protection.** Require proposed developments with the potential to impact oak savanna habitat to either avoid, minimize, or compensate for the loss of such habitat. Avoidance is the preferred measure where feasible. If an impact is deemed unavoidable, require that direct and indirect impacts be mitigated through habitat restoration, creation, or enhancement. [Replaces Program CON-10a]

See also Policy OSC-3.10 on the conservation of nearshore waters, including the Canal and San Francisco Bay.

# Policy OSC-2.14: Special Status Species

Conserve and protect special status plants and animals, including those formally listed as threatened and/or endangered, those considered to be candidate species for listing by state and federal agencies, and other species that have been assigned special status by the California Native Plant Society and the California Fish and Game Code. [combines Policy CON-13 and CON-14]

**Program OSC-2.14A: List of Species.** Maintain current California Natural Diversity Data Base digital (GIS) maps and data tables listing threatened, endangered, and special status species in the San Rafael Planning Area. [Replaces Program CON-13a]

**Program OSC-2.14B: Surveys.** Require that sites be surveyed for the presence or absence of relevant special status species prior to development approval. [Replaces Program CON-14a]

**Program OSC-2.14C: Mitigating Impacts on Special Status Species.** Require that potential unavoidable impacts to special status species are minimized through design, construction, and project operations. If such measures cannot adequately mitigate impacts, require compensation measures such as on-site set asides, off-site land acquisition (conservation easements, deed restrictions, etc.), and specific restoration efforts for the mitigation lands. [Replaces Program CON-14b]

**Program OSC-2.14D: Steelhead Habitat.** Support efforts to restore, preserve or enhance Central California Coast Steelhead habitat in Miller Creek and other creeks. [Replaces Program CON-9a]

#### Policy OSC-2.15: Control of Invasive Plants

Remove and control undesirable invasive plant species from City-owned open space and road rights-ofway and encourage the removal and control of these species from non-City owned ecologically sensitive or fire-prone areas. [Replaces Policy CON-15. "Fire-prone areas" added]

**Program OSC-2.15A: Integrated Pest Management Policy.** Maintain and periodically update an Integrated Pest Management Policy (IPMP) that minimizes the application of pesticides in the city and encourages more natural methods to control vegetation. The IPMP should be modified as needed to reflect changes in regional stormwater control requirements, data on pesticide toxicity, and the feasibility of new and less toxic methods for controlling invasive plants. Changes to the IPMP should be made through a transparent public process and should ensure that the use of any chemicals of concern is publicly noticed. [New program. replaces former CON-15a]

**Program OSC-2.15B: Removal of Invasive Species.** Support partnerships and multijurisdictional efforts to remove invasive plant species, reduce fire hazards, and improve habitat on public properties. Consider using volunteers, private organizations, and other work crews to assist in such efforts, as well as the use of funding sources such as Measure A, state wildfire prevention funds, utility funds, and other conservation program funds. [Replaces former CON-15b and Program OS-2b]

**Program OSC-2.15C: Wildfire Action Plan Implementation.** Implement the provisions of San Rafael's 2019 Wildfire Action Plan relating to the control of invasive plants, including limiting the sale or planting of highly flammable non-native plants, supporting volunteer activities to remove Scotch and French broom, revising standards for Eucalyptus, expanding fuel breaks on public property, and educating the public on fire-safe landscaping.

[New program, from Wildfire Action Plan]

#### Policy OSC-2.16: Landscaping with Native Plant Species

Encourage landscaping with native and compatible non-native plant species, especially drought-resistant species. [Carries forward Policy CON-16 with no change]

**Program OSC-2.16A: Education on Desirable Plant Species.** Leverage the educational and website materials on "water-wise" plants developed by the Marin Municipal Water District and fire-prone plants from FireSafe Marin as resources for San Rafael property owners. The City should also create Resilient Landscape Templates (RLTs) that offer suggestions for homeowners to achieve beautiful, fire-resistant, drought tolerant landscaping. [Replaces Program CON-16a]

#### Policy OSC-2.17: Urban Forestry

Protect, maintain, and expand San Rafael's tree canopy. Trees create shade, reduce energy costs, absorb runoff, support wildlife, create natural beauty, and absorb carbon, making them an essential and valued part of the city's landscape and strategy to address global climate change. Tree planting and preservation should be balanced with programs to reduce fire hazards and ensure public safety, resulting in a community that is both green and fire-safe. [replaces Policy SU-7, also reflects CCAP initiatives]

**Program OSC-2.17A: Street Tree and Urban Forestry Plan.** Consider development of a comprehensive street tree plan, including guidelines for species selection and maintenance, and provisions for funding to support increased tree planting and maintenance. [New, from Committee discussion]

**Program OSC-2.17B: Expanding the Tree Canopy.** Implement measures to expand the tree canopy, as outlined in the City's Climate Change Action Plan. These measures include tree planting on city-owned land, reviewing parking lot landscaping standards to maximize tree cover, minimizing tree removal, controlling invasive species that threaten the health of the urban forest, and integrating trees and natural features into the design of development projects. [incorporates CCAP SA-CI, replaces Program SU-7a]

**Program OSC-2.17C: Tree City USA.** Maintain San Rafael's status as a "Tree City USA" community by following best practices in urban forestry management and regularly applying for recertification. [new, from Steering Committee]

**Program OSC-2.17D: Tree Preservation.** Continue to consider ordinances and standards that limit the removal of significant trees and require replacement when trees must be removed. Site plans should indicate the location of trees and include measures to protect them where feasible and consistent with wildfire protection goals. [replaces Program SU-7b]

#### Policy OSC-2.18: Mineral Resource Management

Work with the County of Marin to enable the continued use of property in the San Rafael sphere of influence for mineral resource extraction, subject to permitting procedures and mitigation requirements that reduce potential adverse impacts on the natural environment and surrounding uses. [New, State law]

See also Neighborhoods Element Policy N-# regarding the San Rafael Rock Quarry

#### **Policy OSC-2.19: Light Pollution**

Reduce light pollution and other adverse effects associated with night lighting from streets and urban uses. [New Policy, from Steering Committee]

**Program OSC-2.19A: Dark Sky Ordinance.** Evaluate adoption of a dark sky ordinance, including lighting standards and enforcement provisions that reduce light pollution. [New Program, from Steering Committee]

See the Community Design Element for additional policies about protecting natural features, hillsides, ridgelines, and bayfront areas, and the visual quality of San Rafael's environment and landscapes.

# GOAL OSC-3: CLEAN AIR AND WATER

**Reduce air and water pollution.** San Rafael will work collaboratively with jurisdictions throughout the Bay Area to achieve and maintain clean air and water standards. While air and water quality are regional issues, the City will do its part to reduce air and water pollution and create a safe, healthful environment for all San Rafael residents. [replaces Goal 35]

# Policy OSC-3.1: State and Federal Standards

Continue to comply with state and federal air quality standards. [Replaces Policy AW-1]

**Program OSC-3.1A: Cooperation with Other Agencies.** Work with the Bay Area Air Quality Management District (BAAQMD) and other agencies to ensure compliance with air quality regulations and proactively address air quality issues. [Replaces Program AW-1a]

#### Policy OSC-3.2: Land Use Compatibility

Consider air quality conditions when making land use and development decisions. Buffering, landscaping, setback standards, filtration systems, and similar measures should be used to minimize future health hazards. *[Replaces Policy AW-2]* 

**Program OSC-3.2A: Protection of Sensitive Receptors.** Use the development review process to require adequate buffering when a sensitive receptor (a use with occupants sensitive to the effects of air pollutants, such as children and the elderly) is proposed near an existing source of air contaminants or odors. For proposed receptors within 500 feet of Highway 101 or Interstate 580, an analysis of mobile source toxic air contaminant health risks should be performed. The analysis should evaluate the adequacy of the setback from the highway and, if necessary, identify design mitigation measures to reduce health risks to acceptable levels. Mitigation standards and requirements should be periodically updated as air quality conditions and pollution control technology change. [Replaces Program AW-2a]

**Program OSC-3.2B:** New Sources of Air Pollution. Use the development review process to ensure that potential new local sources of air pollution or odors provide adequate buffering and other measures necessary to comply with health standards. [Replaces Program AW-2b]

See the JEDI Element for additional policies and programs on reducing exposure to air pollution within lower income and vulnerable populations.

**Policy OSC-3.3: Improving Air Quality Through Land Use and Transportation Choices** Recognize the air quality benefits of reducing dependency on gasoline-powered vehicles. Implement land use and transportation policies that support alternatives to driving and a shift to electric and cleaner-fuel vehicles. *[Replaces Policy AW-3]* 

**Program OSC-3.3A: Air Pollution Reduction Measures.** Implement air pollution reduction measures as recommended by BAAQMD's Clean Air Plan and supporting documents to address local sources of air pollution in community planning. This should include Transportation Control Measures (TCM) to reduce emissions associated with gasoline-powered vehicles. [Replaces Program AW-3a]

See the Transportation Element for additional policies and programs to reduce GHG emissions.

#### Policy OSC-3.4: Particulate Matter Pollution Reduction

Promote the reduction of particulate matter from roads, parking lots, construction sites, agricultural lands, wildfires, and other sources. [Replaces Policy AW-4]

**Program OSC-3.4A: Particulate Matter Exposure**. Through development review, require that Best Available Control Technology (BACT) measures such as setbacks, landscaping, paving, soil and dust management, and parking lot sweeping are used to protect sensitive receptors from particulate matter. This should include control of construction-related dust and truck emissions as well as long-term impacts associated with project operations. [Replaces Program AW-4a]

**Program OSC-3.4B: Wildfire Smoke.** Support efforts to reduce health hazards associated from wildfire smoke, such as limits on outdoor activities during wildfire events, access to respirators and air filtration systems, and public education. [New Program, from Steering Committee]

#### **Policy OSC-3.5: Indoor Air Pollutants**

Reduce exposure to indoor air pollutants such as mold, lead, and asbestos through the application of State building standards, code enforcement activities, and remediation measures. [New]

#### Policy OSC-3.6: Education and Outreach

Support public education regarding air pollution prevention and health hazards. [replaces Policy AW-6]

**Program OSC-3.6A:** Air Quality Education Programs. Support and participate in the air quality education programs of the BAAQMD, such as "Spare the Air" days. [Replaces Program AW-6a]

**Program OSC-3.6B: Benefits of Transit-Oriented Development.** Seek ways to quantify and monitor the air quality benefits of focusing new development around transit stations and shifting trips from cars to active (non-car) transportation modes, including commute surveys of those living and working near SMART stations. [Replaces Program AW-6b]

**Program OSC-3.6C: Equipment and Generators.** Explore actions to encourage the use of nongasoline powered leaf blowers and electric yard maintenance equipment, as well as cleanpowered generators rather than diesel generators. [New, from Climate Change Action Plan]

# Policy OSC-3.7: Local, State and Federal Standards

Continue to comply with local, state and federal water quality standards. [Replaces Policy AW-7]

**Program OSC-3.7A: Interagency Coordination**. Coordinate with the local, state, and federal agencies responsible for permitting discharges to San Rafael's creeks and surface waters, monitoring water quality, and enforcing adopted water quality standards and laws. [Replaces Program AW-7a]

#### Policy OSC-3.8: Reduce Pollution from Urban Runoff

Require Best Management Practices (BMPs) to reduce pollutants discharged to storm drains and waterways. Typical BMPs include reducing impervious surface coverage, requiring site plans that minimize grading and disturbance of creeks, and using vegetation to absorb and filter runoff. [Replaces Policy AW-8] **Program OSC-3.8A: Countywide Stormwater Program.** Continue to participate in the Countywide stormwater program and comply with its performance standards. [Replaces Program AW-7a]

**Program OSC-3.8B: Reducing Pollutants in Runoff.** Continue to reduce the discharge of harmful materials to the storm drainage system through inspections, enforcement programs, reduced use of toxic materials, and public education. [Replaces Program AW-8a]

**Program OSC-3.8C: Construction Impacts.** Continue to incorporate measures for stormwater management in construction projects and require contractors to comply with best practices for pollution prevention and post-construction stormwater management. [Replaces Programs AW-7b and AW-8b]

**Program OSC-3.8D: System Improvements.** Improve storm drainage performance through regular maintenance and clean-out of catch basins, installation of trash capture devices, street sweeping, and improvements to the existing system. When existing lines are replaced, design changes should be made to respond to expected sea level rise impacts and increase capacity as needed. [Replaces Program AW-8c]

**Program OSC-3.8E: Pesticide and Fertilizer Management**. On City property, reduce the use of pesticides and fertilizers to the maximum extent feasible. Ensure that the application of pesticides follows all applicable rules and regulations and is performed through a transparent process in which the public receives adequate notification. [Replaces Program AW-8d]

See also Program OSC-2.15A on Integrated Pest Management.

**Program OSC-3.8F: Monitoring.** Support ongoing water quality testing in San Rafael's creeks and waterways to evaluate the effectiveness of existing programs and determine where additional pollution control measures may be needed. [New Program]

#### **Policy OSC-3.9: Low Impact Development**

Encourage construction and design methods that retain stormwater on-site and reduce runoff to storm drains and creeks. [New Policy—reflects best practices]

**Program OSC-3.9A: Development Review.** Provide guidance to developers, contractors and builders encouraging the use of rain gardens, bioswales, permeable pavers, grass parking lots, and other measures to absorb stormwater and reduce runoff rates and volumes. [New Program, from Steering Committee]

**Program OSC-3.9B: Non-Traditional Gardens.** Evaluate best practices in the use of roof gardens, vertical gardens/ green walls, pollinator gardens and other measures that increase the City's capacity to sequester carbon and enhance environmental quality. Encourage the incorporation of such features in new development. [New, from Steering Committee]

#### **Policy OSC-3.10: Green Streets**

Design streets and infrastructure so they are more compatible with the natural environment and have fewer negative impacts on air and water quality, flooding, climate, and natural habitat.

[New, from Steering Committee]

**Program OSC-3.10A: Green Streets Planning.** Develop a Green Streets Plan that includes policy guidance, tools, analytics, and funding mechanisms to create more sustainably designed street and storm drainage systems. [New, from Steering Committee]

**Program OSC-3.11B: Funding.** Identify and apply for grants and federal, state, and regional funds to upgrade stormwater facilities, rehabilitate roads, and implement other Green Streets initiatives. [New, from Steering Committee]

See the Infrastructure Element for additional policies and programs on green infrastructure

# Policy OSC-3.11: Groundwater Protection

Protect San Rafael's groundwater from the adverse effects of urban uses. [New Policy]

#### Program OSC-3.11A: Underground Tank Remediation

Continue efforts to remediate underground storage tanks and related groundwater hazards. [New]

#### **Policy OSC-3.12: Nearshore Waters**

Ensure the protection of Canal and Bay water quality from the potential adverse effects of boats, liveaboards, and other marine facilities and activities. [Replaces Policy AW-10]

**Program OSC-3.12A: Water Quality Improvements.** Collaborate with the Bay Conservation and Development Commission, State and Regional Water Quality Control Boards, and other agencies to support water quality improvement efforts and the removal of plastics and other trash from the Canal and Bay. [Replaces Program AW-7c]

**Program OSC-3.12B: Boat Sanitation and Enforcement.** Require consistent enforcement and inspection of sanitation facilities in boats berthed in the San Rafael Canal and elsewhere in Bay waters within the City limits. [Replaces Program AW-10a]

**Program OSC-3.12C:** Sewage Pump Out Facilities. Support marina owners in providing on-site sewage pump-out facilities. Require marinas to install such facilities when major improvements are made. [Replaces Program AW-10b]

**Program OSC-3.12D: Education of Boaters**. Educate boaters about good sanitation practices and measures to reduce invasive species with the potential to harm local marine life. [Replaces Program AW-10c]

#### Policy OSC-3.13: Education and Outreach

Promote greater public awareness of the causes and effects of water pollution and how to reduce it. [Replaces Policy AW-11]

**Program OSC-3.13A: Stenciling of Storm Drains**. Continue to stencil storm drains so that the consequences of polluted runoff are better understood by the public. [Replaces Program AW-11a]

**Program OSC-3.13B Outreach.** Support and participate in efforts by the Marin County Stormwater Pollution Program to raise awareness of the effects of water pollution and ways the public can help improve water quality. [Replaces Program AW-11b]

**Program OSC-3.13C Car Wash Facilities**. Require the use of recycled water at new commercial car washing facilities. [Replaces Program AW-11d]

# Policy OSC-3.14: Climate Impacts on Air and Water Quality

Incorporate climate change considerations into air and water quality planning, including the need for emission reductions and cleaner fuels, the effects of wildfire smoke and extreme heat events, and water quality issues associated with increased risk of flooding and sea level rise. [new, from CCAP]

See Program OSC-4.# regarding periodic updates of the Climate Change Action Plan

# GOAL OSC-4: ENERGY AND WATER CONSERVATION

Manage energy and water in a way that protects the environment, addresses climate change, and achieves more equitable outcomes for all residents. San Rafael will use water and energy resources more sustainably, taking into consideration the carrying capacity of natural systems, the impacts of climate change, and the economic and social consequences of local decisions. We will meet our needs without compromising the ability of future generations to enjoy the quality of life we know today. [New]

# Policy OSC-4.1: Renewable Energy

Support increased use of renewable energy, including energy that is locally generated and energy that is transported to San Rafael from renewable sources elsewhere. [replaces Policy SU-4]

**Program OSC-4.1A: Marin Clean Energy Targets.** Support Marin Clean Energy (MCE) efforts to reach the goal of providing energy that is 100 percent GHG free by 2025. [replaces Program SU-4A and incorporates CCAP Measure RE-C2]

**Program OSC-4.1B: Property Assessed Clean Energy (PACE) Financing.** Participate in assessment district financing (PACE) programs to fund installation of renewable energy systems and energy efficiency upgrades to existing buildings. [Replaces Program SU-4B]

**Program OSC-4.1C: Regulatory Barriers.** Continue efforts to remove regulatory barriers to small scale solar energy installations, such as residential rooftop solar and wind energy systems. The installation of small-scale renewable energy systems that are consistent with the Climate Change Action Plan should be encouraged and accelerated. [Replaces Programs SU-4d and SU-4f, adds in CCAP Measure RE-C1]

**Program OSC-4.1D: Reducing Natural Gas Use.** Promote electrification of building systems and appliances that currently use natural gas. [New, incorporates CCAP Measure RE-C3]

**Program OSC-4.1E: Municipal Buildings.** Wherever feasible, incorporate renewable energy technology such as solar, cogeneration, and fuel cells, in the construction or retrofitting of City facilities. [Replaces Program SU-14d, also incorporates CCAP Measure RE-M1]

# Policy OSC-4.2: Energy Conservation

Support construction methods, building materials, and home improvements that improve energy efficiency in existing and new construction. [replaces Policy SU-5]

**Program OSC-4.2A: Energy Efficiency Outreach.** Continue to inform businesses and residents of programs and rebates to conserve energy and weatherize their homes. [replaces Program SU-4c].

**Program OSC-4.2B: Green Building Standards.** Implement State green building and energy efficiency standards for remodeling projects and new construction. [New]

**Program OSC-4.2C: Energy Efficiency Incentives.** Explore incentives, technical assistance, streamlined permitting processes, and partnerships to encourage energy-efficiency upgrades in

existing buildings. Typical improvements include the use of energy-efficient windows, lighting, and appliances, insulation of roofs and exterior walls, higher-efficiency heating and air conditioning, and other projects that lower electricity and natural gas consumption. [incorporates CCAP Measure EE-C1]

**Program OSC-4.2.D: Time-of-Sale Energy Audits.** Investigate requiring energy audits for residential and commercial buildings prior to property sales, including identification of cost savings from energy efficiency measures and potential rebates and financing options for buyers. [incorporates CCAP Measure EE-C2]

**Program OSC-4.2E: Cool Roofs and Pavement.** Encourage the use of high albedo (reflectivity) materials for future outdoor surfaces such as parking lots, roadways, roofs and sidewalks. [carried forward as is from Program SU-5e]

# Policy OSC-4.3: Managing Energy Demand

Reduce peak demands on the electric power grid through development of local sources, exploration of "smart" energy systems that use technology to manage energy use, and public education. [New]

**Program OSC-4.3A: Innovative Technologies**. Pursue innovative technologies such as microgrids, battery storage, and demand response programs that improve the electric grid's resilience and ability to meet demand during high use periods [Replaces SU-4g and incorporates CCAP Measure RE-C4.]

#### **Policy OSC-4.4: Sustainable Building Materials**

Encourage the use of building materials that reduce environmental impacts and the consumption of non-renewable resources. [new]

**Program OSC-4.4A: Recyclable Use of Alternative Building Materials.** Evaluate opportunities to amend the City's building codes and zoning ordinances to allow the use of resource-efficient alternative building materials and methods. [replaces Program SU-5b]

# Policy OSC-4.5: Resource Efficiency in Site Development

Encourage site planning and building designs that reduce energy demand and incorporate resource- and energy-efficient infrastructure. [Replaces Policy SU-6]

**Program OSC-4.5A: Passive Solar Site Planning.** Use the development review process to protect solar access and achieve site plans that maximize energy-efficiency and opportunities for shade and passive cooling. [Replaces Program SU-6a]

# Policy OSC-4.6: Water Conservation

Encourage water conservation and increased use of recycled water in businesses, homes, and institutions. Local development and building standards should require the efficient use of water. [New]

**Program OSC-4.6A: Water Conservation Programs.** Work with Marin Municipal Water District and other organizations to promote water conservation programs and incentives and ensure compliance with state and MMWD regulations. [incorporates CCAP Measures WC-C1a and WC-C1c]

**Program OSC-4.6B: Public Education.** Expand programs to educate residents and businesses about the need of water conservation. [Incorporates CCAP Measure WC-CIb]

**Program OSC-4.6C: Reclaimed Water Use.** Support the extension of recycled water distribution infrastructure. Require the use of recycled water where it is available. [Carries forward Program SU-5e]

**Program OSC-4.6D:** Graywater and Rainwater. Encourage the installation of graywater and rainwater collection systems. Explore revisions to building codes that would facilitate such projects where obstacles currently exist. [Incorporates CCAP Measure WC-C1d]

**Program OSC-4.6E: Reducing Municipal Water Use.** Reduce water use for municipal operations through water-efficient landscaping, regular maintenance of irrigation equipment, and replacement of inefficient plumbing fixtures. [Incorporates CCAP Measure WC-M1]

#### Policy OSC-4.7: Water-Efficient Landscaping

Encourage the use of native vegetation and water-efficient landscaping in a manner that is compatible with fire-prevention and climate preparedness goals. [New]

**Program OSC-4.7A: Demonstration Gardens.** Develop demonstration gardens that illustrate xeriscaping principles and drought-tolerant plant materials. [new]

# GOAL OSC-5: GREENHOUSE GAS EMISSIONS

Achieve a 40 percent reduction in 1990 greenhouse gas emission levels by 2030 and a 60 percent reduction by 2040. The City of San Rafael will implement the measures outlined in this General Plan and in its Climate Change Action Plan to achieve the 2030 targets. The City will also work to achieve the longer-term State goal of achieving an 80 percent reduction in 1990 GHGs by 2050, pursuing more aggressive measures to reduce greenhouse gas emissions as they become technologically and financially viable. [New]

# Policy OSC-5.1: Climate Change Action Plan (CCAP)

Maintain and periodically update a Climate Change Action Plan (CCAP) that includes programs to reduce greenhouse gas emissions and metrics for monitoring success. [replaces Policy SU-13 and Program SU-13a]

**Program OSC-5.1A:** Future Development and Capital Improvements. Evaluate future development applications and the City's Capital Improvement Program for consistency with the CCAP. [replaces Program SU-13b]

**Program OSC-5.1B: Progress Reports.** Prepare annual CCAP progress reports, including a list of priority actions [replaces Program SU-13c and incorporates CCAP Measure IM-C1]

**Program OSC-1C: Quarterly Forum.** Continue to hold the CCCAP Quarterly Forum, which provides oversight on the implementation progress of sustainability programs. [replaces Program SU-13d]

**Program OSC-5.1D: Funding**. Identify funding sources for recommended actions, and pursue local, regional, state, and federal grants. Investigate creation of a local carbon fund or other permanent source of revenue to implement CCAP programs. [incorporates CCAP Measure IM-C4]

# Policy OSC-5.2: Consider Climate Change Impacts

Ensure that decisions regarding future development, capital projects, and resource management consider consistency with San Rafael's climate goals. [New]

# Policy OSC-5.3: Advocacy

Support state and federal legislation and initiatives to reduce GHG emissions. [Replaces Program SU-14h and incorporates CCAP CE-C3]

> **Program OSC-5.3A: Local Government Agency Involvement.** Continue to provide a leadership role with other local governmental agencies to share best practices and successes. [carries forward Program SU-14g as is]

**Program OSC-5.3B:** Support State and federal actions to update renewable energy portfolio standards, amend state building codes, and modify motor vehicle standards to reduce GHG emissions. [Incorporates CCAP Measure]

**Program OSC-5.3.C: Regional Collaboration.** Participate in regional collaborations with other public agencies to enact new programs or improvements that promote renewable energy sources or reduce energy demand. [replaces Program SU-14k]

#### **Policy OSC-5.4: Municipal Programs**

Implement municipal programs to demonstrate the City's commitment to sustainability and greenhouse gas reduction. [Carries forward Program SU-14]

**Program OSC-5.4A: Low Carbon Municipal Vehicles.** Continue to shift the City's vehicle fleet to zero emission vehicles. Use low carbon fuels as an interim measure until gasoline-powered vehicles are replaced. [replaces Program SU-14b and incorporates CCAP Measure LCT-M1]

**Program OSC-5.4B: Monitoring Best Practices.** Monitor best practices in sustainability and the transition to GHG-free energy sources and evaluate the feasibility of applying such measures at the local level. [incorporates CCAP Measure CE-C3]

#### **Policy OSC-5.5: Unintended Consequences**

Ensure that climate action measures minimize the potential to disproportionately impact lower income communities or drive up the cost of doing business in San Rafael. The City is committed to balancing climate-related goals with the goal of being an equitable, just city that strives for a more prosperous future for all residents. It is also committed to measures that do not deter innovation or place a disproportionate burden on small local businesses. [from CCAP]

#### Policy OSC-5.6: Climate Change Education.

Educate and motivate community members on ways to live more sustainably and reduce greenhouse gas emissions in their homes, businesses, travel modes, and other activities. [replaces Policy SU-11 and CCAP Measure CE-CI]

**Program OSC-5.6A: Public Outreach Campaign.** As recommended by the Climate Change Action Plan, implement a communitywide public outreach and behavior change campaign to engage residents, businesses, and consumers around the impacts of climate change and the ways individuals and organizations can reduce their GHG emissions and create a more sustainable, resilient community. [Incorporates CCAP Measure CE-C2]

**Program OSC-5.6B: Financial Incentives.** Continue to raise awareness of savings, rebates and other financial incentives to conserve and recycle. [replaces Program SU-11a]

**Program OSC-5.6C: Resilient Neighborhoods.** Continue participating in the Resilient Neighborhoods program and expand the program to include local businesses. [replaces Program SU-11b]

**Program OSC-5.6D: Promote Sustainability Efforts.** Promote sustainability and climate change awareness through education, publications, the City's website, and special events such as Earth Day and an annual Green Festival. [replaces Program SU-11c and -11d]

See the JEDI Element for additional policies and programs on climate change and equity.

# PROPOSED POLICIES AND ACTIONS IN OTHER GENERAL PLAN ELEMENTS TO REFLECT SUSTAINABILITY AND CLIMATE CHANGE MEASURES

# Land Use Element

# Policy LU-#: Reducing Greenhouse Gas Emissions

Focus new housing and office development in areas where alternatives to driving are most viable and shorter trip lengths are possible. Such development should take place at densities that make the most of the limited supply of available land, support active transportation, and encourage walking or bicycling between different uses. [Incorporates CCAP Measure LCT-9, and replaces Policy SU-1]

ADD X-REFERENCE: See the Mobility Element for additional policies and programs to reduce dependence on fossil fuel vehicles and encourage more active travel modes such as walking and cycling

# **Mobility Element**

#### **GOAL M-#: Reducing Transportation-Related Emissions**

Reduce greenhouse gas emissions from transportation sources. A combination of technology, transportation improvements, and demand management measures will be implemented to reduce greenhouse gas emissions from motor vehicles. While the greatest gains are expected to come from a shift to electric vehicles, other programs are recommended to reduce vehicle miles traveled and improve active transportation modes such as walking and bicycling. [CCAP]

#### Policy M-#: Reducing VMT

Reduce vehicle miles traveled (VMT) by San Rafael residents by making it more feasible to travel without a gasoline-powered car, live near one's workplace, and obtain goods and services locally. [Replaces Policy SU-2 and also reflects CCAP direction]

**Program M-#.A: Bike-Share and E-Scooters.** Facilitate creation of a bike share and/or electric scooter program, particularly in Downtown San Rafael. [replaces Program SU-2a]

**Program M-#B: Car-Sharing**. Facilitate the introduction of car-sharing services and a fleet of shared vehicles, particularly in Downtown San Rafael. [replaces Program SU-2b]

**Program M-#C: Active Transportation Improvements.** Implement the recommendations of the Bicycle and Pedestrian Master Plan to encourage cycling and walking as safe, convenient alternatives to driving. [replaces Program SU-2e]

**Program M-#D: Reducing Commute Lengths.** Encourage transportation demand management (TDM) measures that result in reduced vehicle commute lengths, along with housing programs that enable more of the San Rafael workforce to live within the city. [CCAP Measure LCT-C6]

#### Policy M-#: Low-Carbon Transportation

Reduce transportation-related emissions by encouraging electric and other low-carbon vehicles, and providing the infrastructure needed to support these vehicles. [Replaces Policy SU-3, also reflects CCAP]

**Program M-#A: Zero Emission Vehicle Plan.** Consistent with the San Rafael CCAP, develop a Zero Emission Vehicle Plan that will result in 25% of the passenger vehicles in San Rafael being zero emission vehicles (ZEVs) by 2030. The Plan should provide for additional charging stations, preferential parking for ZEVs, and other programs that incentivize ZEV use by San Rafael residents. [Replaces Program SU-3a and incorporates CCAP Measure LCT-C1]

**Program M-#B: City Vehicle Fleet.** Continue to shift the City's vehicle fleet to zero-emission vehicles and use low-carbon fuels as an interim measure until gasoline-powered City vehicles are replaced. [from CCAP]

**Program M-#C: Cleaner Public Transit.** Work with transit providers, local employers, and the Transportation Authority of Marin to create a less carbon-intensive public transit system. [Incorporates CCAP Measure LCT-S5]

**Program M-#D: Electric Charging Infrastructure.** Expand electric vehicle charging infrastructure throughout the City. [Replaces Program SU-3a]

# **Policy M-#: Reducing Idling**

Support transportation network improvements to reduce vehicle idling and related emissions, including synchronized signal timing and roundabouts.

# Justice, Equity, Diversity, and Inclusion (JEDI) Element

# **Policy J-#: Food Production**

Provide opportunities for residents to produce and harvest food on their properties, in shared spaces, and on public lands. [replaces Policy SU-8]

**Program J-#.A: Urban Agriculture Ordinance.** Adopt an urban agriculture ordinance that addresses the right to garden and includes provisions to advance local food production activities. [new, from stakeholders]

**Program J-#B: Home and Community Gardens.** Encourage the creation of home and community gardens, including possible use of surplus City properties for community gardens. Encourage the owners of multi-family rental properties to provide communal gardening space for tenants, where suitable space exists. [replaces Program SU-8b]

# **Policy J-#: Farmers Markets**

Continue to promote local farmers markets and other venues where locally produced food may be sold and purchased. [Replaces Program SU-8a]

# Policy J-#: Planning for Climate Change Adaptation

Ensure fair and robust inclusion of lower-income households in the planning and response to climate change impacts. Adaptation planning should consider not only rising sea levels, but also issues associated with clean water, clean air, safe housing, and public health. [Incorporates CCAP Measures SA-5c and 5d]

#### **Infrastructure Element**

#### Policy I-#: Reducing Landfilled Waste Disposal

Reduce landfilled waste disposal and related greenhouse gas emissions by reducing material consumption; increasing recycling, resource recovery, and composting; and encouraging the use of recyclable goods and materials. [Replaces Policy SU-10]

**Program I-#.A: Waste Reduction.** Implement waste reduction programs consistent with the San Rafael Climate Change Action Plan and Zero Waste Goal. These include partnerships with Zero Waste Marin, Marin Sanitary Service, and other organizations; promotion of home composting; requirements for construction and demolition debris recycling; increased monitoring of waste diversion targets; waste audits; and additional infrastructure for removal of recoverable materials from the waste stream. [incorporates WR-C1 through C6 of CCAP, replaces Programs SU-10a, b, and c) – potentially break into multiple programs?]

**Program I-#B: Recyclable Receptacles.** Support efforts by Marin Sanitary to install waste receptacles for recyclables in areas of heavy pedestrian traffic. [replaces Program SU-10f]

**Program I-#C: Expanding Recycling.** Expand recycling facilities and programs for apartments and non-residential buildings, consistent with State law and Marin Sanitary programs. [replaces Program SU-10e and -10g]

**Program I-#D: Education Programs**. Encourage Marin Sanitary to continue its recycling education programs and to expand awareness of "reduce, reuse, and recycle" principles among residents and local employees. [replaces Program SU-10i]

#### Policy I-#: Energy Reliability

Work with local energy service providers and other public agencies to ensure the safety and reliability of the local power grid, and to ensure rapid restoration in the event service is interrupted. [new, from LHMP]

**Program I-#.A: Backup Energy Provision.** Evaluate backup energy provisions for critical city facilities and upgrade as needed. Encourage the use of fuel cell and solar generator backups rather than the sustained use of gasoline-powered generators. [replaces Program SU-141]

#### Policy I-#: Retrofitting Infrastructure for Sea Level Rise

Incorporate sea level rise forecasts in the planning and design of all infrastructure projects located in areas with the potential to be impacted by 2050.

**Program I-#.A: Infrastructure Guidance Document.** Prepare a guidance document for incorporating sea level rise into the City's capital planning process. [incorporates CCAP Measure SA-C4b]

**Program I-#.B: Coordination with Service Providers.** Coordinate with water, sewer, drainage, energy, solid waste, and telecommunication service providers, as well as local regulatory agencies, in the preparation of a plan for retrofitting critical infrastructure and utilities for rising sea levels. Keep local stakeholders and property owners apprised of such efforts. [incorporates CCAP Measure SA-4c]

# **Economic Vitality Element**

#### **Policy EV-#: Green Economy**

Support environmentally beneficial "green" businesses and job creation in the green business sector. [replaces Policy SU-12 and Program SU-12a]

**Program: Green Business Certification Program.** Encourage local businesses to participate in the Marin County Green Business Program [replaces Program SU-12b and incorporates CCAP Measure CE-C5]

**Program: Green Jobs.** Support the creation of environmentally beneficial jobs for persons of all skill and education levels. [replaces Program SU-12]

**Program: Low Carbon Economy Working Group.** Convene an economic development and innovation working group to explore ways to move toward a low-carbon economy while fostering business success. [Incorporates CCAP CE-4]

#### **Environmental Hazards Element**

**Program EH-#.A: GIS Data on Sea Level Rise.** Update GIS (Geographic Information System) maps to include new data as it becomes available; utilize GIS as a tool for tracking sea level rise and flooding and make available to the public. [Incorporates CCAP Program SA-C4e]