ENVIRONMENTAL RESOURCES

The City of Sacramento values environmental resources and is committed to the protection of its water, biological species and habitat, urban forest, agricultural land, mineral resources, air, and scenic amenities. Preservation of these environmental resources and maintenance of their quality is not only beneficial to current residents but is crucial to the welfare of future generations.







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Water Resources

Policies in this section guide development and infrastructure practices to ensure protection of surface water and groundwater quality from runoff and pollution. Clean water is essential in sustaining present and future generations, as well as, fisheries, plants, and animals that are a part of the ecosystem.



The confluence of the American River and Sacramento River.

GOAL ER 1.1

Water Quality Protection. Protect local watersheds, water bodies and groundwater resources, including creeks, reservoirs, the Sacramento and American Rivers, and their shorelines.

Policies

ER 1.1.1

Conservation of Open Space Areas (5). The City shall conserve and where feasible create or restore areas that provide important water quality benefits such as riparian corridors, buffer zones, wetlands, undeveloped open space areas, levees, and drainage canals for the purpose of protecting water resources in the city's watershed, creeks, and the Sacramento and American rivers. (RDR/MPSP)

ER 1.1.2

Regional Planning. The City shall continue to work with local, State, and Federal agencies and private watershed organizations to improve water quality. *(IGC/JP)*







See U4, Stormwater Drainage, for additional policies on stormwater collection and conveyance.

ER 1.1.3

Stormwater Quality. The City shall control sources of pollutants and improve and maintain urban runoff water quality through storm water protection measures consistent with the City's National Pollution Discharge Elimination System (NPDES) Permit. (RDR/MPSP)

ER 1.1.4

New Development. The City shall require new development to protect the quality of water bodies and natural drainage systems through site design (e.g., cluster development), source controls, storm water treatment, runoff reduction measures, best management practices (BMPs) and Low Impact Development (LID), and hydromodification strategies consistent with the city's NPDES Permit. (RDR/MPSP/SO)



ER 1.1.5

ER 1.1.6

all new development to contribute no net increase in stormwater runoff peak flows over existing conditions

Limit Stormwater Peak Flows. The City shall require

associated with a 100-year storm event. (RDR)

Stream habitat.

Post-Development Runoff. The City shall impose requirements to control the volume, frequency, duration, and peak flow rates and velocities of runoff from development projects to prevent or reduce downstream erosion and protect stream habitat. (RDR/MPSP)

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ER 1.1.7

Construction Site Impacts. The City shall minimize disturbances of natural water bodies and natural drainage systems caused by development, implement measures to protect areas from erosion and sediment loss, and continue to require construction contractors to comply with the City's erosion and sediment control ordinance and stormwater management and discharge control ordinance. (RDR/MPSP)

ER 1.1.8

Clean Watershed • The City shall continue ongoing Sacramento and American River source water protection efforts (e.g., Keep Our Waters Clean), based on watershed sanitary survey recommendations. (MPSP/SO)

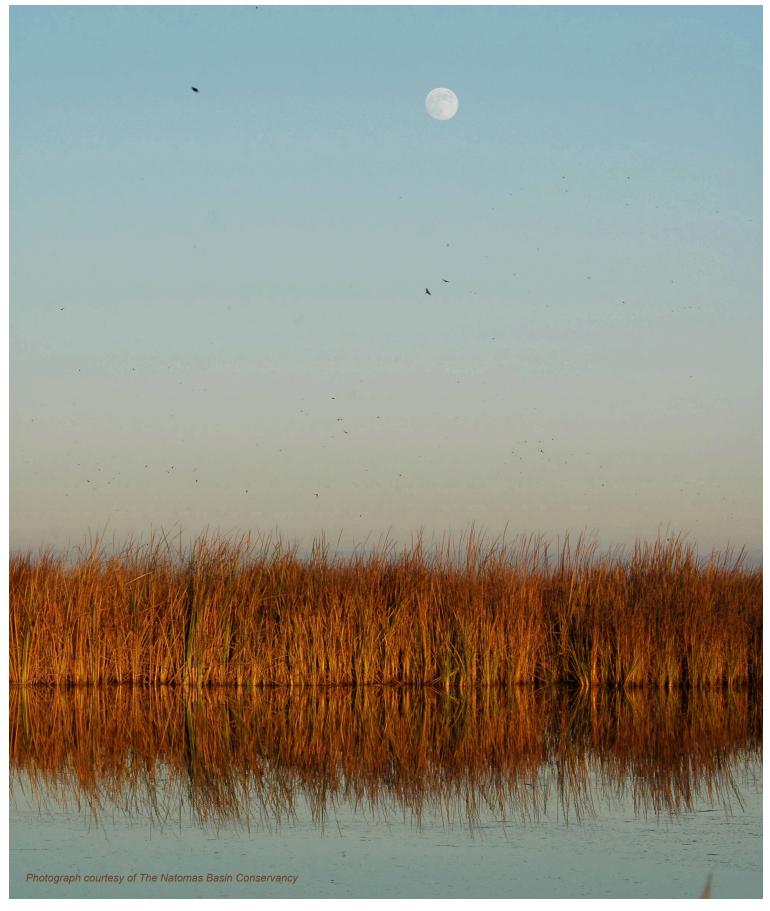
ER 1.1.9

Groundwater Recharge . The City shall protect open space areas that are currently used for recharging groundwater basins, have the potential to be used for recharge, or may accommodate floodwater or stormwater. (RDR/MPSP)

ER 1.1.10

Watershed Education. The City shall implement watershed awareness and water quality educational programs for City staff, community groups, the public, and other appropriate groups. (PI)





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Biological Resources

Policies in this section guide the location, design, and quality of development to protect important biological resources such as wildlife habitat, open space corridors, and ecosystems. Conservation and protection of important biological resources are integral to a healthy human population and contribute to regional economic advantages such as quality of life.

GOAL ER 2.1

Natural and Open Space Protection. Protect and enhance open space, natural areas, and significant wildlife and vegetation in the city as integral parts of a sustainable environment within a larger regional ecosystem.

Policies

ER 2.1.1 Resource Preservation . The City shall encourage new development to preserve on-site natural elements that contribute to the community's native plant and wildlife species value and to its aesthetic character. (RDR/MPSP)

ER 2.1.2 Conservation of Open Space . The City shall continue to preserve, protect, and provide appropriate access to designated open space areas along the American and Sacramento Rivers, floodways, and undevelopable floodplains, provided access would not disturb sensitive habitats or species. (MPSP/IGC)

ER 2.1.3 Natural Lands Management (§). The City shall promote the preservation and restoration of contiguous areas of natural habitat throughout the city and support their integration with existing and future regional preserves. (RDR/IGC)

Retain Habitat Areas . The City shall retain plant and wildlife habitat areas where there are known sensitive resources (e.g., sensitive habitats, special-status, threatened, endangered, candidate species, and species of concern). Particular attention shall be focused on retaining habitat areas that are contiguous with other existing natural areas and/or wildlife movement corridors. (RDR/IGC)





Retention of wetland habitat within a residential neighborhood.





American River riparian habitat.

ER 2.1.5

Riparian Habitat Integrity ③. The City shall preserve the ecological integrity of creek corridors, canals, and drainage ditches that support riparian resources by preserving native plants and, to the extent feasible, removing invasive nonnative plants. If not feasible, adverse impacts on riparian habitat shall be mitigated by the preservation and/or restoration of this habitat in compliance with State and Federal regulations or at a minimum 1:1 ratio, in perpetuity. (RDR/IGC)



ER 2.1.6

Wetland Protection • The City shall preserve and protect wetland resources including creeks, rivers, ponds, marshes, vernal pools, and other seasonal wetlands, to the extent feasible. If not feasible, the mitigation of all adverse impacts on wetland resources shall be required in compliance with State and Federal regulations protecting wetland resources, and if applicable, threatened or endangered species. Additionally, the City shall require either on- or off-site permanent preservation of an equivalent amount of wetland habitat to ensure no-netloss of value and/or function. (RDR/IGC)

ER 2.1.7

Annual Grasslands (5). The City shall preserve and protect native grasslands and vernal pools that provide habitat for rare and endangered species. If not feasible, the mitigation of all adverse impacts on annual grasslands shall comply with State and Federal regulations protecting foraging habitat for those species known to utilize this habitat. (RDR/IGC)

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ER 2.1.8

Oak Woodlands (5). The City shall preserve and protect oak woodlands, heritage oaks, and/or significant stands of oak trees in the city that provide habitat for common native, and special-status wildlife species, and shall address all adverse impacts on oak woodlands in accordance with the City's Heritage Tree Ordinance. (RDR)



ER 2.1.9

Wildlife Corridors (§). The City shall preserve, protect, and avoid impacts to natural, undisturbed habitats that provides movement corridors for sensitive wildlife species. If corridors are adversely affected, damaged habitat shall, be replaced with habitat of equivalent value or enhanced to enable the continued movement of species. (RDR/MPSP)

ER 2.1.10

Habitat Assessments. The City shall consider the potential impact on sensitive plants and wildlife for each project requiring discretionary approval. If site conditions are such that potential habitat for sensitive plant and/or wildlife species may be present, the City shall require habitat assessments, prepared by a qualified biologist, for sensitive plant and wildlife species. If the habitat assessment determines that suitable habitat for sensitive plant and/or wildlife species is present, then either (1) protocol-level surveys shall be conducted (where survey protocol has been established by a resource agency), or, in the absence of established survey protocol, a focused survey shall be conducted consistent with industry-recognized best practices; or (2) suitable habitat and presence of the species shall be assumed to occur within all potential habitat locations identified on the project site. Survey Reports shall be prepared and submitted to the City and the California Department of Fish and Wildlife (CDFW) or the United States Fish and Wildlife Service (USFWS) (depending on the species) for further consultation and development of avoidance and/ or mitigation measures consistent with state and federal law. (RDR)



ER 2.1.11

Agency Coordination. The City shall coordinate with State and Federal resource agencies (e.g., California Department of Fish and Wildlife (CDFW), U.S. Army Corps of Engineers, and United States Fish and Wildlife Service (USFWS) to protect areas containing rare or endangered species of plants and animals. (IGC)





Natomas Basin habitat conservation area.

Photograph courtesy of The Natomas Basin Conservancy ER 2.1.12

Natomas Basin Habitat Conservation Plan. The City shall continue to participate in and support the policies of the Natomas Basin Habitat Conservation Plan for the protection of biological resources in the Natomas Basin. (RDR/IGC)

ER 2.1.13

Support Habitat Conservation Plan Efforts. The City shall encourage and support regional habitat conservation planning efforts to conserve and manage habitat for special-status species. New or amended Habitat Conservation Plans should provide a robust adaptive management component sufficient to ensure that habitat preserves are resilient to climate change effects/impacts and to ensure their mitigation value over time. Provisions should include, but are not limited to: greater habitat ranges and diversity; corridors and transition zones to accommodate retreat or spatial shifts in natural areas; redundant water supply; elevated topography to accommodate extreme flooding; and flexible management and fee structure. (RDR/IGC)

ER 2.1.14

Climate Change-related Habitat Shifts . The City shall support the efforts of The Natomas Basin Conservancy and other habitat preserve managers to adaptively manage wildlife preserves to ensure adequate connectivity, habitat range, and diversity of topographic and climatic conditions are provided for species to move as climate shifts. (IGC)

ER 2.1.15

Climate Change-related Habitat Restoration and Enhancement ⑤. The City shall support active habitat restoration and enhancement to reduce impact of climate change stressors and improve overall resilience of habitat within existing parks and open space in the city. The City shall support the efforts of Sacramento County to improve the resilience of habitat areas in the American River Parkway.

ER 2.1.16

Public Education. The City shall support educational programs for residents and visitors about the uniqueness and value of the natural resources, plants, and wildlife in the region, and how to manage development to preserve native wildlife populations, to the extent they are consistent with habitat protection requirements. (PI)

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ER 2.1.17 Community Involvement. The City shall encourage community volunteerism and stewardship to help protect and rehabilitate the area's natural resources. *(JP/PI)*





Page 2-320 Adopted March 3, 2015

Urban Forest

Policies in this section sustain and enhance the city's urban forest, a valuable environmental resource that distinguishes Sacramento as a "City of Trees" and greatly benefits city residents. Extensive tree canopies reduce the urban heat island effect and make streets and sidewalks more pleasant places to walk. Trees also absorb carbon dioxide and pollution and produce oxygen, which contributes to improved air quality and human health.



GOAL ER 3.1

Urban Forest §. Manage the city's urban forest as an environmental, economic, and aesthetic resource to improve Sacramento residents' quality of life.

Policies

ER 3.1.1

Urban Forest Management Plan (§). The City shall maintain and implement an Urban Forest Management Plan. *(MPSP)*

See the Land Use and Urban Design Element and ERC 2, Parks and Recreation, for additional policies on expansion, preservation, and maintenance of the urban forest.





Volunteers plant new trees in a park.

ER 3.1.2

Manage and Enhance the City's Tree Canopy (§).

The City shall continue to plant new trees, ensure new developments have sufficient right-of-way width for tree plantings, manage and care for all publicly owned trees, and work to retain healthy trees. The City shall monitor, evaluate and report, by community plan area and city wide, on the entire tree canopy in order to maintain and enhance trees throughout the City and to identify opportunities for new plantings. (RDR/MPSP/SO)

ER 3.1.3

Trees of Significance \(\bar{\star} \). The City shall require the retention of City trees and Heritage Trees by promoting stewardship of such trees and ensuring that the design of development projects provides for the retention of these trees wherever possible. Where tree removal cannot be avoided, the City shall require tree replacement or appropriate remediation. (RDR/MPSP)

ER 3.1.4

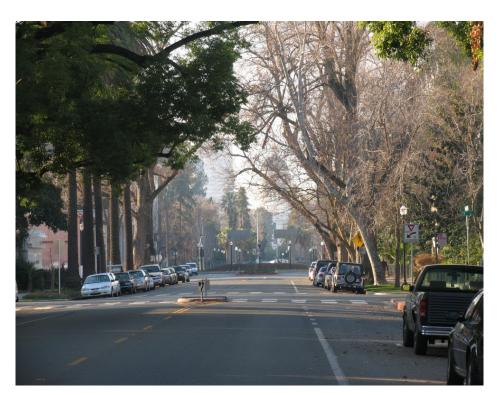
Visibility of Commercial Corridors (5). The City shall balance the tree canopy of the urban forest with the need for visibility along commercial corridors, including the selection of tree species with elevated canopies. (RDR)

ER 3.1.5

Solar Access (§). The City shall promote plantings and tree placement recognizing solar access for alternative energy systems may be limited. (RDR/PI)

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- **ER 3.1.6 Urban Heat Island Effects (§).** The City shall continue to promote planting shade trees with substantial canopies, and require, where feasible, site design that uses trees to shade rooftops, parking facilities, streets, and other facilities to minimize heat island effects. (RDR/PI)
- **ER 3.1.7 Shade Tree Planting Program (§).** The City shall continue to provide shade trees along street frontages within the city. (MSPS)
- **Public Education** The City shall promote the importance and benefits of trees and of the urban forest through awareness, partnerships, and efforts that educate residents on the best methods of planting and maintaining trees. (IGC/JP/PI)
- **ER 3.1.9** Funding •• The City shall provide adequate funding to manage and maintain the city's urban forest on City property, including tree planting, training, maintenance, removal, and replacement. (SO/FB)



View of the California State Capitol through the tree canopy at 18th and Capitol in midtown Sacramento.





Page 2-324 Adopted March 3, 2015

Agriculture

Policies in this section promote access to locally grown and organic food through urban agriculture, the creation and continuation of Sacramento's community and rooftop gardens, and the City's collaboration with surrounding jurisdictions and agencies to protect and preserve agricultural lands and operations outside of the city. Urban agriculture within the city can make use of vacant land, reconnect residents with the land, and improve access to fresh healthy foods. Viable local food sources contribute to the long-term sustainability of Sacramento by supporting local farms, improving public health, and providing food security in a future challenged by global climate change and uncertain energy supplies. Agricultural land also provides other benefits such as habitat, open space, and flood protection as well as aesthetic value.

GOAL ER 4.1

Urban Agriculture and Access to Locally Grown Foods ③. Expand urban agriculture and food production and increase the distribution and sale of locally grown fresh food.

See LU 8, Open Space, Parks, and Recreation, for additional policies on urban agriculture.

Policies

ER 4.1.1

Community and Rooftop Gardens . The City shall provide incentives for developers to include community gardens and rooftop gardens in new development projects. (RDR/PI)

ER 4.1.2

Local Food Production, Distribution, and Sale. The City shall promote urban agriculture with zoning provisions that support means for production, distribution, and sale of locally grown foods, such as market gardens, farmer's markets, community markets, and farm stands, particularly in areas that have vacant or underutilized land.



Fremont Community Garden is an example of urban agriculture in downtown Sacramento.





Agricultural operations.

GOAL ER 4.2

Growth and Agriculture ③. Support preservation and protection of agricultural lands and operations outside of the city for their value for open space, habitat, flood protection, aesthetics, and food security by working with surrounding jurisdictions.

Policies

ER 4.2.1

Protect Agricultural Lands ①. The City shall encourage infill development and compact new development within the existing urban areas of the city in order to minimize the pressure for premature conversion of productive agricultural lands for urban uses. (RDR)

ER 4.2.2

Permanent Preservation . The City shall work with the County, Natomas Basin Conservancy, and other entities to protect and permanently preserve a one-mile buffer outside of the 2009 City Limits to preserve viable agricultural activities and as a community separator between Sutter and Sacramento Counties and along the Sacramento River. (IGC/JP)

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ER 4.2.3 Coordinate to Protect Farmland ①. The City shall continue to work with the County and other adjacent jurisdictions to implement existing conservation plans to preserve prime farmland and critical habitat outside the city. (RDR/IGC)

ER 4.2.4 Development Adjacent to Agriculture. The City shall require open space or other appropriate buffers for new development abutting productive agricultural areas to protect the viability of active agricultural operations outside of the city and ensure compatibility of uses with residents in adjacent areas. (RDR)

ER 4.2.5 Homeowner Notification. The City shall require that purchasers of homes located in the vicinity of agricultural operations be provided notification of such activities by way of their deeds and/or escrow documentation. (RDR/PI)



Compatible residential development adjacent to active agriculture lands.





Page 2-328 Adopted March 3, 2015

Mineral Resources

Policies in this section provide for the protection of mineral resource zones, require that ongoing mineral resource extraction activities are compatible with and minimize impacts on adjoining uses, and support mineral extraction activities within the city until these resources are depleted or extraction is no longer economically viable.

GOAL ER 5.1

Conservation and Compatibility. Conserve existing and newly discovered aggregate deposits for environmentally and community-sensitive extraction and reclamation, while ensuring compatibility between extraction activity and surrounding uses.

Policies

ER 5.1.1

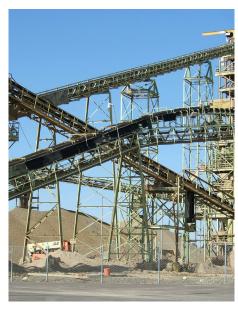
Mineral Resource Zones. The City shall protect lands designated MRZ-2, as mapped by the California Geological Survey, and continue to regulate activities consistent with the *Surface Mining and Reclamation Act*, mineral land classification information, and the *California Environmental Quality Act. (RDR)*

ER 5.1.2

Compatible Operations. The City shall require that current and future mineral extraction operations in areas designated MRZ2 be compatible with and minimize impacts on adjoining uses. (RDR)

ER 5.1.3

Ongoing Extraction Activities. The City shall continue to support ongoing environmentally sensitive mineral extraction activities within the city until these resources are depleted or extraction is no longer economically viable. (RDR)



Aggregate mining extraction operations.

Adopted March 3, 2015





Page 2-330 Adopted March 3, 2015

Air Quality and Climate Change

Policies in this section provide for air quality improvements and the reduction of greenhouse gases, which are fundamental objectives that underlie policies throughout the 2035 General Plan. These policies provide land use, mobility, energy conservation, and similar strategies that reduce automobile trips, energy consumption, and pollution. Air quality policies provide for the management of commercial and industrial uses as well as human activities to reduce emissions and pollution, while improving human health.

Sacramento recognizes the importance of reducing greenhouse gas emissions. The implementation of policies in ER 6, and throughout this Plan will help minimize the City's contribution to global climate change.

GOAL ER 6.1

Improved Air Quality ⑤. Improve the health and sustainability of the community through improved regional air quality and reduced greenhouse gas emissions that contribute to climate change.

Policies

ER 6.1.1

Maintain Ambient Air Quality Standards (§). The City shall work with the California Air Resources Board and the Sacramento Metropolitan Air Quality Management District (SMAQMD) to meet State and Federal ambient air quality standards in order to protect residents, regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location, from the health effects of air pollution. (RDR/IGC)

ER 6.1.2

New Development ①. The City shall review proposed development projects to ensure projects incorporate feasible measures that reduce construction and operational emissions for reactive organic gases, nitrogen oxides, and particulate matter (PM10 and PM2.5) through project design. (RDR)

See Appendix B, 2035 General Plan: Addressing Climate Change, for policies that reduce greenhouse gas emission from new development.

ER 6.1.3

Emissions Reduction . The City shall require development projects that exceed SMAQMD ROG and NOX operational thresholds to incorporate design or operational features that reduce emissions equal to 15 percent from the level that would be produced by an unmitigated project. (RDR)

See the Mobility Element for additional policies that reduce emissions and air pollution.

Adopted March 3, 2015





Mixed-use urban infill development in midtown Sacramento at 18th and L Streets.

ER 6.1.4

ER 6.1.5

ER 6.1.6





ER 6.1.8

ER 6.1.9

Sensitive Uses. The City shall coordinate with SMAQMD in evaluating exposure of sensitive receptors to toxic air contaminants, and will impose appropriate conditions on projects to protect public health and safety. (RDR)

Community Greenhouse Gas Reductions ③. The City shall reduce community GHG emissions by 15 percent below 2005 baseline levels by 2020, and strive to reduce community emissions by 49% percent and 83% percent by 2035 and 2050, respectively. (RDR)

Municipal Greenhouse Gas Reductions ①. The City shall maintain and implement its Phase 1 Climate Action Plan to reduce municipal GHG emissions by 22 percent below 2005 baseline level by 2020, and strive to reduce municipal emissions by 49 percent and 83 percent by 2035 and 2050, respectively. (SO)

Greenhouse Gas Reduction in New Development \\$\\$.

The City shall reduce greenhouse gas emissions from new development by discouraging auto-dependent sprawl and dependence on the private automobile; promoting water conservation and recycling; promoting development that is compact, mixed use, pedestrian friendly, and transit oriented; promoting energy-efficient building design and site planning; improving the jobs/housing ratio in each community; and other methods of reducing emissions. (RDR)

Additional GHG Emission Programs ③. The City shall continue to evaluate the feasibility and effectiveness of new policies, programs, and regulations that contribute to achieving the City's long-term GHG emissions reduction goals. (MPSP)

Climate Change Assessment and Monitoring (§). The City shall continue to assess and monitor performance of GHG emissions reduction efforts beyond 2020, progress toward meeting long-term GHG emission reduction goals, the effects of climate change, and the levels of risk in order to plan a community that can adapt to changing climate conditions and be resilient to negative changes and impacts. (PSR)

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ER 6.1.10 Coordination

Coordination with SMAQMD The City shall coordinate with SMAQMD to ensure projects incorporate feasible mitigation measures to reduce GHG emissions and air pollution if not already provided for through project design. (RDR/IGC)

ER 6.1.11

Reduced Emissions for City Operations (§). The City shall promote reduced idling, trip reduction, routing for efficiency, and the use of public transportation, carpooling, and alternate modes of transportation for City operations. (SO)

ER 6.1.12

Fleet Operations (5). The City shall continue to purchase low-emission vehicles for the City's fleet and to use available clean fuel sources for trucks and heavy equipment. (SO)

ER 6.1.13

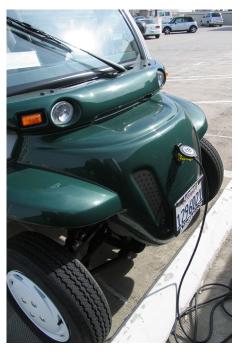
Zero-Emission and Low-Emission Vehicle Use (5). The City shall encourage the use of zero-emission vehicles, low-emission vehicles, bicycles and other non-motorized vehicles, and car-sharing programs by requiring sufficient and convenient infrastructure and parking facilities in residential developments and employment centers to accommodate these vehicles. (RDR/PI)

ER 6.1.14

Preference for Reduced-Emission Equipment . The City shall give preference to contractors using reduced-emission equipment for City construction projects and contracts for services (e.g., garbage collection), as well as businesses that practice sustainable operations. (SO/JP)

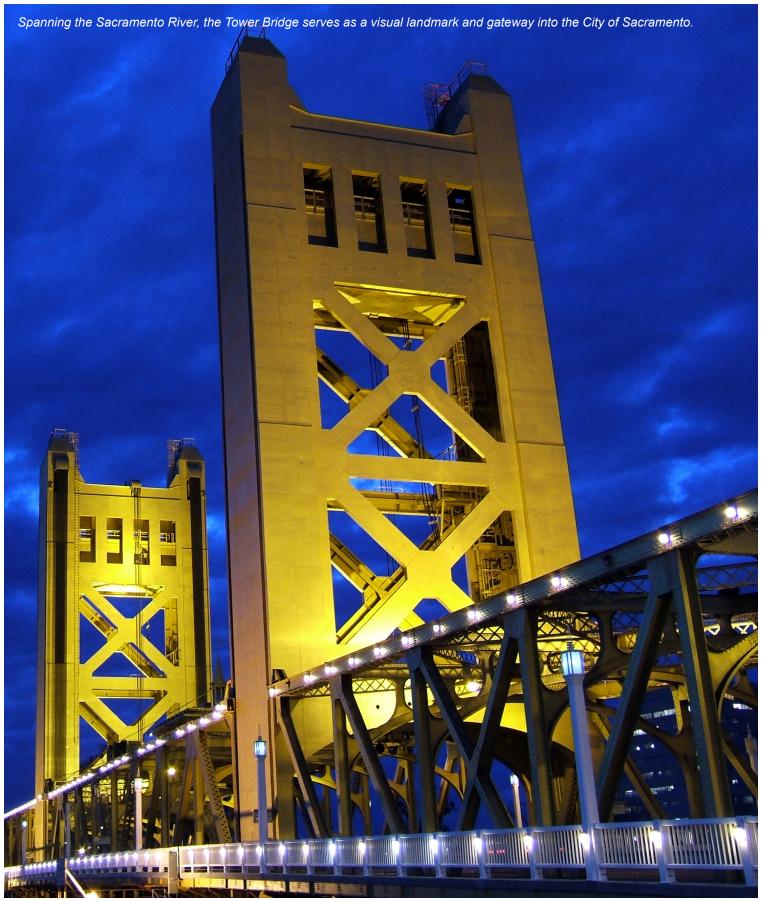
ER 6.1.15

Air Quality Education • The City shall educate the public about air quality standards, health effects, and efforts they can make to improve air quality and reduce greenhouse gas emissions in the Sacramento region. (PI)



Zero emission electric vehicle plugged into an electrical recharge outlet at a City of Sacramento parking garage.





Page 2-334 Adopted March 3, 2015

Aesthetic Resources

Policies in this section provide for the maintenance and protection of significant visual and aesthetic resources, which contribute to the identity and character of Sacramento through sensitive planning and design, maintenance, and code enforcement efforts.



Scenic view from the Jibboom Street Bridge of the American River and Discovery Park.

GOAL ER 7.1

Visual Resource Preservation. Maintain and protect significant visual resources and aesthetics that define Sacramento.

Policies

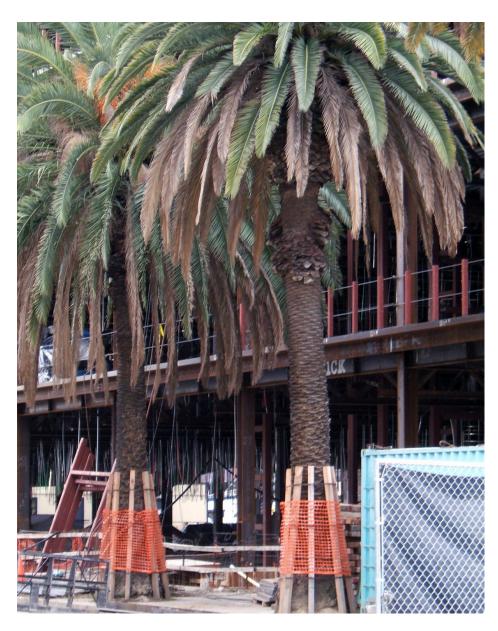
ER 7.1.1

Protect Scenic Views. The City shall avoid or reduce substantial adverse effects of new development on views from public places to the Sacramento and American Rivers and adjacent greenways, landmarks, and the State Capitol along Capitol Mall. (RDR)

ER 7.1.2

Visually Complimentary Development. The City shall require new development be located and designed to visually complement the natural environment/setting when near the Sacramento and American Rivers, and along streams. (RDR)





Preservation of existing palm trees in right-of-way adjacent to construction site.

ER 7.1.3

Lighting. The City shall minimize obtrusive light by limiting outdoor lighting that is misdirected, excessive, or unnecessary, and requiring light for development to be directed downward to minimize spill-over onto adjacent properties and reduce vertical glare. (RDR)

ER 7.1.4

Reflective Glass. The City shall prohibit new development from (1) using reflective glass that exceeds 50 percent of any building surface and on the bottom three floors, (2) using mirrored glass, (3) using black glass that exceeds 25 percent of any surface of a building, (4) using metal building materials that exceed 50 percent of any street-facing surface of a primarily residential building, and (5) using exposed concrete that exceeds 50 percent of any building. (RDR)

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ER 7.1.5

Scenic Resources at River Crossings. The City shall require the style, scale, massing, color, and lighting of new bridges to complement the natural and/or community setting. Design considerations for river crossings will include the degree to which bridges minimize obstruction of scenic views of the river and riparian areas from publically accessible open space areas, including from the river, and enhance the scenic setting by incorporating design features that complement the surrounding area and/or provide high quality and visually interesting design. (RDR)



26-story building at 9th and J Streets in downtown Sacramento with windows that are designed to have reduced glare and reflection.