8

Resource Conservation

Resource Conservation

The purpose of the Resource Conservation Element is to preserve, protect, and enhance the natural and historical resources that make Union City a unique place. The Element addresses a broad range of topics, including habitat and open space, water resources, historic and cultural resources, air quality, energy conservation, and the reduction of greenhouse gas emissions.

Nearly 60 percent of Union City is designated as parks, open space, and agriculture, which includes the wetland ecosystems of the bay shoreline to the west and the vast hillside open space lands to the east. These open space areas are important habitat for wildlife and provide quiet retreats and recreation opportunities for residents. This Element seeks to preserve and enhance open space and wildlife habitat.

Goals & Policies

This Element also seeks to preserve Union City's historic and cultural resources. Union City has a rich history that is told through its historic buildings and neighborhoods. Preserving the city's heritage can create a strong "sense of place", promote civic pride, and produce economic benefits as well.

Another goal of this Element is to improve water and air quality and to conserve energy through programs that reduce consumption and promote sustainable alternatives. This Element provides a framework for reducing greenhouse gas (GHG) emissions by establishing targets for GHG reduction. Several other elements in the General Plan provide support for reducing GHG emissions, including the Land Use and Community Design Elements, which emphasize transit-oriented development; the Mobility Element, which aims to reduce reliance on automobiles; and the Public Facilities and Services Element, which encourages sustainable practices in City operations.

Open Space Preservation

Open space includes undeveloped areas designated as such for the preservation of natural resources, the managed production of natural resources, passive recreation, and public infrastructure. Major open space areas include the eastern Hillside Area, which covers roughly 6,100 acres; the wetland areas along the shoreline, which forms the western boundary; and the flood control channels, which include creeks that meander through the city.

There are three major landowners in the Hillside Area including approximately 2,800 acres owned by East Bay Regional Park District. The Hillside Area is subject to the Hillside Area Plan, which was established through a voter-initiative process and emphasizes the preservation of open space (see the Land Use Element for more information on the Hillside Area). Major portions of the wetland areas, as well as the open space areas along the flood control channels, are owned by the Alameda County Flood Control and Water Conservation District.

The policies in this section call for protecting and enhancing open space areas. The Community Design Element has additional policies that recognize the role of open space in shaping the city identity and seek to protect and enhance visual and physical access to open space areas. The Health and Quality of Life Element contains additional policies on parks and recreation resources in Union City.

GOAL RC-1

To provide for a continuous system of open spaces for the preservation, enhancement and protection of open space land.

POLICIES

RC-1.1
Provide for a Variety of Open Spaces

The City shall provide a variety of open spaces including open space for public use and enjoyment and for the protection of agricultural uses including grazing, wildlife habitats, and scenic vistas.

RC-1.2
Protect Scenic Views

The City shall strive to protect areas of outstanding natural scenic qualities and outstanding views of natural or manmade significance, such as ridgelines and valley sides in the eastern hillsides and the critical wetland areas at the western end of the city through regulation, public acquisition, or dedication of development rights or scenic easements.

Hillside Area Plan

The Hillside Area Plan was prepared under the mandate of Measure B, which was passed by Union City voters in November 1989 to allow for development in the Hillside Area while balancing the protection of natural resources. Measure B set forth several planning goals that provided a framework for the preparation of the Hillside Area Plan. This was followed by Measure II in 1996 that ensures the development policies of the Hillside Area Plan may not be changed without a public debate and a vote of the people of Union City. A Specific Plan is required prior to any development allowed by the Hillside Area Plan. The Plan implements the goals of Measure B, which include: establishing a density limit for development; preserving the area's natural appearance; encouraging the continuation of agricultural uses; preserving critical natural ecological systems; protecting the watershed; identifying and preserving archaeological, historical, and cultural resources; providing a continuous flow of open space; encouraging cluster development that is harmonious with the natural environment; providing high quality residential housing; providing adequate city services; providing general guidelines and standards for reviewing any development; requiring developers to pay their fair share of on-site and off-site costs; and ensuring traffic from new development does not overburden streets in the area. The Hillside Area Plan is incorporated into the General Plan by reference and is included in the appendix.

RC-1.3
Observation Areas

The City shall encourage observation areas with outstanding vistas be provided in coordination with recreational trails.

RC-1.4
Connected Open Space Areas

The City shall integrate, wherever possible, the local open space system with the open space systems of nearby communities and the region to preserve a continuous and connected system of open space areas.

RC-1.5
Seek Funds for Open Space Acquisition
When in the public interest, the City shall seek funds for the acquisition of open space, either in fee or as an easement, from Federal, State, and other governmental entities, as well as private sources.

RC-1.6
Require Easements Where Appropriate
Where appropriate, conservation or open space easements shall be required of new development in order to provide trail connections and /or protect unique natural features or other environmentally significant resources identified during CEQA review, such as steep hillsides, natural stream courses, or unique plant or animal communities or habitats.

RC-1.7
Explore Methods for Protecting Open Space
The City shall explore various methods for protecting open space resources including, but not limited to, regulation, full acquisition, transfer of development rights, and dedication of open space or conservation easements.

RC-1.8
Protection of Significant Open Space Resources

All significant open space resources (i.e. identified habitat for wildlife and rare, threatened, or endangered plant species, etc.) shall, to the extent feasible be protected or avoided through project design and appropriate mitigation. Removal of vegetation should be minimized, and replanting required to maintain soil stability, prevent erosion, and maximize regeneration. Existing wildlife habitats should be protected in a natural and undeveloped state as part of open space areas and as a means of preserving and attracting wildlife. Depleted habitats adaptable to restoration should also be included as open space where appropriate.

RC-1.9
Limit Development in Open Space Areas

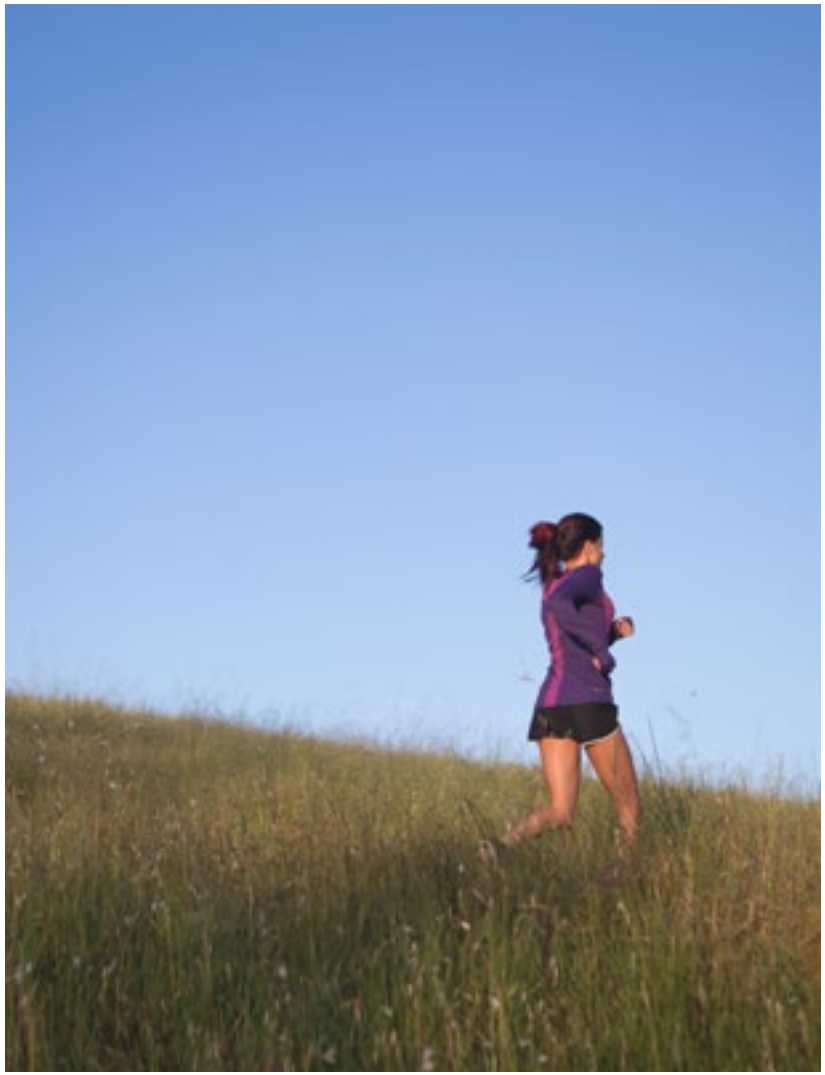
Development within a designated open space area will be permitted only in select areas and will be limited to facilities needed in conjunction with low density recreational areas or select public facilities. Manmade structures shall be subordinate to and not conflict with the quality of the open space. The City shall prohibit inappropriate uses of open space, such as off-road motorized vehicles, to prevent environmental damage and preserve the quality of the open space. Grading, tree removal, or other disturbance within designated open space areas shall only be permitted when plans for such activities have been approved by the City and found necessary for protection or enhancement of the open space or to provide for safe and enjoyable public use of the open space resource.

RC-1.10
Minimize Visual Impact of Public Utilities on Open Space Areas

The City shall, to the extent feasible, protect open space by working internally and with outside agencies to locate utilities to minimize impacts on the visual quality of the open space area.

RC-1.11
Designate Hazard Areas as Open Space

The City shall designate areas as Open Space in locations where environmental conditions pose a health and safety risk to development that cannot be mitigated to an acceptable level, such as areas directly adjacent to seismic fault lines or traces.



Biological Resources

The city has a variety of plant and wildlife species that includes several special status plant and wildlife species. These species can be found along the wetland areas on the western fringe of the city, in the riparian habitat along the creeks, in the grasslands of the eastern hillsides, and among the "urban forest" of trees and shrubs that provide habitat for birds and small mammals within the city's neighborhoods.

The policies in this section guide the City in the protection, enhancement, and restoration of biological habitats so they can continue to be valuable for a diverse array of native and protected animals and plants.

Special status species are plants and animals that are legally protected under the Federal and State Endangered Species Acts or other regulations and species that are considered sufficiently rare by the scientific community to qualify for such listing.

GOAL RC-2

To protect, restore, and enhance important biological habitats and their associated plant, wildlife, and fish species throughout Union City and to educate people as to this need.

POLICIES

RC-2.1

Preserve Significant Natural Resources

The City shall commit to preservation of significant natural resources including wetlands; bay shores; hillside areas; and significant plant, animal, and fish habitats.

The City shall define the following as sensitive habitat areas: riparian woodland and scrub, freshwater marsh/ wetland areas, non-freshwater marsh/wetland areas, and grassland areas.

Critical habitat is a term defined and used in the Endangered Species Act that refers to a specific geographic area that contains features essential for the conservation of a threatened species and that may require special management and protection. Critical habitat can include an area that is not currently occupied by the species, but that will be needed for its recovery.

RC-2.2
Require Biological Surveys
The City shall require a site survey by a qualified biologist for sites that have the potential to contain critical or sensitive habitat or special status species or for sites within 100 feet of such areas. Appropriate mitigation measures shall be incorporated into the project as necessary to protect the resources.

RC-2.3
Require Wetland Delineation
A wetland delineation shall be prepared using the protocol defined by the U. S. Army Corps of Engineers for sites with the potential to contain wetland resources. Appropriate mitigation measures shall be incorporated into the project as necessary to protect the resources.

RC-2.4
Ensure Subdivisions Provide for Adequate Buildable Space Outside Critical Biological Areas
The City shall require any project that would create new parcels or lots to demonstrate that the resulting parcels/lots provide for adequate building space outside of critical biological areas and areas inhabited by special status species.

RC-2.5
Participate in Wetland and River Restoration Efforts
The City shall support regional efforts to restore wetlands ecology and stream and river resources.

RC-2.6
Support Acquisition of Conservation Easements
The City shall cooperate with other public agencies and organizations to acquire conservation easements on privately-owned lands in order to preserve important wildlife corridors and to provide protection of State or Federal special status species and the habitats they occupy and use.

RC-2.7
Support Public Education on Natural Resource Protection
The City shall support efforts to educate the public about the natural resources in the city and the steps that can be taken to help protect, enhance, restore, and enjoy these resources.

RC-2.8
Increase Access and Appreciation of Hills and Wetlands
The City shall work with other public agencies to improve public access to and public appreciation of the hills and wetlands.

RC-2.9
Protect Wetlands
The City shall provide signage and strategically locate fences to prevent humans and dogs from adversely affecting wetlands.

RC-2.10
Nesting Bird Protection
The City shall require project applicants to retain the services of a qualified biologist(s) to conduct a pre-construction nesting bird survey during the nesting season (February 1 through August 31) prior to all new development that may remove any trees or vegetation that may provide suitable nesting habitat for migratory birds or other special-status bird species. If nests are found the qualified biologist(s) shall identify appropriate avoidance measures, and these measures shall be incorporated into the project and implemented accordingly.

Water Resources

Within Union City, groundwater resources supply 75 percent of the water used in the City. This groundwater comes from a single groundwater basin called the Niles Cone. The primary source of recharge for the Niles Cone Groundwater Basin is local runoff from the Alameda Creek Watershed, which is captured, diverted, and recharged at the Alameda County Water District's groundwater recharge facilities. It is critical that the City protects this vital resource from contamination and that the City protects the watershed areas that recharge this groundwater basin.

In addition to groundwater resources, it is also imperative that the City protect surface water from sedimentation and other contaminants. Prior to discharge, the City is required to reduce the pollutants entering the City's storm drainage system as these systems drain into the creeks, which ultimately discharge into the bay. The City is part of a consortium of Alameda County cities and agencies, referred to as the Alameda Countywide Clean Water Program, whose mission is to facilitate local compliance with the Federal Clean Water Act and the San Francisco Bay Region Municipal Regional Stormwater Permit. The City continues to protect surface water quality through the installation of green infrastructure and trash capture devices.

The policies in this element protect the quality of water resources in Union City and incorporate elements of the City's Green Infrastructure Plan. Policies in the Public Facilities and Services Element address water supply and delivery, as well as the storm drainage system.

GOAL RC-3

To protect and enhance the natural qualities of Union City's groundwater, surface water, and streams, and to ensure sufficient water supplies of good quality for all beneficial uses.

POLICIES

RC-3.1

Work with ACFCWCD to Protect Streams and Creeks

The City shall work with the Alameda County Flood Control and Water Conservation District (ACFCWCD) in an effort to restore and protect the natural conditions along stream and creek corridors to improve water quality; provide for enhanced animal, plant, and fish habitats; and provide for additional recreation amenities. Specific actions include:

a. In areas already disturbed, efforts should be made to restore the natural character including planting of native vegetation to the extent possible.

b. The development of trails along the corridors should be encouraged, and streamside rest areas should be provided that include indigenous streamside vegetation.

c. The City shall work with ACFCWCD to establish a schedule for trash and debris removal from their facilities.

d. New projects for flood and erosion control should be designed to preserve the natural creekside condition where possible. Alteration of streambeds and adjacent vegetation is to be permitted only as a means of erosion or flood control as permitted by the City and in such a manner as to enhance the area within the city.

RC-3.2
Work with ACWD to Protect and Recharge Aquifers

The City shall work with the Alameda County Water District to protect and recharge the Niles Cone water-bearing aquifers through a variety of measures including the incorporation of green infrastructure elements into new development projects.

RC-3.3
Erosion Control

The City shall require an erosion control plan for new construction, and shall ensure, through review and inspection, that erosion control is being implemented correctly on construction sites.

RC-3.4
Compliance with Regional Municipal Stormwater Permit

The City shall require new development to comply with the most recent version of the San Francisco Bay Regional Municipal Stormwater Permit, which focuses on the incorporation of low impact development measures into development projects to improve the quality of stormwater runoff including, but not limited to, the incorporation of permeable paving, green roofs, cisterns, and biotreatment (e.g. rain gardens, bioretention units, bioswales, and planter/tree boxes), hydro-modification management, and the preservation of undeveloped open space.

RC-3.5
Incorporate LID measures into City Projects and Existing Roadways

The City shall incorporate low-impact development measures using green streets infrastructure as identified in the Green Infrastructure Plan, such as rain gardens, infiltration planters, tree wells, and permeable paving to improve the quality of stormwater runoff within City projects and within existing roadways to the extent feasible.

RC-3.6
Soil Conservation Practices

The City shall require new development to incorporate soil conservation best practices to minimize erosion and related impacts on water quality and effects on drainage courses.

RC-3.7
Public Education to Protect Stormwater Quality

The City shall continue to support and coordinate with the Alameda Countywide Clean Water Program on their public outreach and education campaign.

Historical and Cultural Resources

Union City has a number of historic structures and cultural resources that provide an important link in reconstructing the City's past. Preserving the city's heritage can strengthen Union City's "sense of place", promote civic pride, and produce economic benefits as well. The City maintains an inventory of historical resources (i.e., Union City Cultural Resources Survey) and enforces its Landmark and Historic Preservation Ordinance, which provides guidance on designating and preserving historic resources.

The policies in this section protect the City's historic and cultural resources. The Special Areas Element contains policies specifically addressing the preservation and enhancement of the Historic Alvarado District and the Decoto neighborhood, which contain several historic structures and sites.

GOAL RC-4

To protect, to the extent possible, the City's significant archeological and historical resources.

POLICIES

RC-4.1
Preserve Public Landmarks
The City shall encourage the preservation of public landmarks.

RC-4.2
Support the Preservation and Rehabilitation of Historical Resources
The City shall support public and private efforts to preserve, rehabilitate, and continue the use of historic structures and sites.

RC-4.3
Use Appropriate Standards to Evaluate Historical Resources
The City shall use appropriate Federal, State, and local standards in evaluating the significance of historical resources within the city.

RC-4.4
Incorporate Historical Resources into the Landmark and Historic Preservation Overlay Zone
The City shall work with property owners to apply the Landmark and Historic Preservation Overlay Zone to properties or buildings of historic significance. The properties or buildings may be those that provide significant examples of architectural styles of the past, are landmarks in the history of architecture, are unique and irreplaceable assets to the City and its neighborhoods, or provide for future generations examples of the physical surroundings in which past generations lived.

RC-4.5
Support Union City Historical Museum
The City shall continue to encourage and provide support for the Union City Historical Museum.

RC-4.6
Protection of Archeological Resources
The City shall strive to ensure that significant archaeological resources are adequately identified and protected from destruction through avoidance where feasible. In the event that any previously unidentified cultural resources are uncovered during site preparation, excavation, or other construction activity, all such activity shall cease until these resources have been evaluated by a qualified archaeologist (or other qualified specialist as appropriate) and specific measures can be implemented to protect these resources in accordance with sections 21083.2 and 21084.1 of the California Public Resources Code. Where such resources are Native American, the developer shall prepare the assessment in consultation with appropriate Native America tribe(s).

RC-4.7
Treatment of Remains
Consistent with California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097.98, if human remains are encountered, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin. The remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within 24 hours. The Native American Heritage Commission must then immediately identify the "most likely descendant(s)" of receiving notification of the discovery. The most likely descendant(s) shall then make recommendations within 48 hours and engage in consultations concerning the treatment of the remains.

RC-4.8
Protection of Paleontological Resources
The City shall require avoidance and/or mitigation for potential impacts to paleontological resources for any development in Union City that occurs within high sensitivity geologic units, whether they are mapped at the surface or occur at the subsurface. High sensitivity geology units include Great Valley Sequence (Panoche and Knoxville Formations), Monterey Group (Claremont Shale and Hambre Sandstone), Briones Formation, Orinda Formation, and Pleistocene age alluvial fan and fluvial deposits. When paleontological resources are uncovered during site excavation, grading, or construction activities, work on the site will be suspended until the significance of the fossils can be determined by a qualified paleontologist. If significant resources are determined to exist, the paleontologist shall make recommendations for protection or recovery of the resource.

The City shall require the following specific requirements for projects that could disturb geologic units with high paleontological sensitivity:

- **Retain a Qualified Paleontologist to Prepare a PMMP.** Prior to initial ground disturbance in previously undisturbed strata of geologic units with high sensitivity, the project applicant shall retain a Qualified Paleontologist, as defined by the SVP (2010), to direct all mitigation measures related to paleontological resources and design a Paleontological Mitigation and Monitoring Program (PMMP) for the project. The PMMP should include measures for a preconstruction survey, a training program for construction personnel, paleontological monitoring, fossil salvage, curation, and final reporting, as applicable.

Air Quality

The term "air quality" refers to concentrations of various pollutants in the atmosphere within a specific location. Air quality conditions at a particular location are a function of the type and amount of air pollutants emitted into the atmosphere, the size and topography of the regional air basin, and the prevailing weather conditions. Air pollutants have the potential to adversely impact public health, native vegetation, visibility, and buildings.

Both the State of California and the Federal Government have established ambient air quality standards for several different pollutants. These standards represent the maximum allowable atmospheric concentrations of each pollutant that may occur and still protect public health and welfare.

Union City falls within the San Francisco Bay Area Air Basin (SFBAAB). Within the basin the Bay Area Air Quality Management District (BAAQMD) is responsible for developing air quality plans, monitoring air quality, and reporting air quality data for both the city of Union City and the surrounding area. Several pollutants are regulated by the BAAQMD; however, carbon monoxide, ozone, and particulate matter (e.g., PM10 and PM2.5) are of greatest concern due to the SFBAAB's nonattainment status for ozone and PM10.

BAAQMD issues permits to stationary sources of air pollution in the Bay Area and inspects these sites to ensure that they operate within allowable standards. Stationary sources include dry cleaning businesses, gas stations, medical offices, large-scale retail stores, building suppliers, printers, and a range of other industrial and commercial activities.

BAAQMD also addresses resident exposure to toxic air contaminants (TACs), especially along freeways and in areas with heavy truck traffic. New regulations for diesel-powered vehicles have reduced risk levels, but additional precautions may be needed for development near high volume roadways such as Interstate 880.

The policies in this section seek to protect and improve air quality by requiring new development to reduce emissions and exposure to toxic air contaminants. The Land Use Element and Mobility Element contain additional policies that support improved airy quality through land use patterns and transportation options that reduce automobile-related emissions. Additional policies specifically related to the reduction of greenhouse gas emissions are addressed in a separate section below.

***Fine particulate matter (PM)** refers to very small particles – less than 2.5 microns in diameter (PM2.5) or less than 10 microns (PM10) – that can travel deep into the lungs and enter the bloodstream. Fine PM originates from a variety of sources, including fossil fuel combustion, residential wood burning and cooking, and natural sources, such as wildfires and dust.*

***Ozone** is a gas that occurs both in the Earth's upper atmosphere and at ground level. Ozone can be good or bad, depending on where it is found. "Good" ozone occurs naturally in the upper atmosphere, where it forms a protective layer that shields us from ultraviolet rays. "Bad" ozone is found at the ground level and happens when pollutants emitted by cars, industrial uses, and other sources chemically react in the presence of sunlight. Ground-level ozone is the main ingredient in smog.*

Certain air pollutants have been classified as toxic air contaminants (TACs) because they are known to increase the risk of cancer and/or other serious health effects, ranging from eye irritation to neurological damage. The California Air Resources Board has defined about 200 substances as TACs.

GOAL RC-5

To prevent the deterioration of and to improve air quality within Union City.

POLICIES

RC-5.1
Air Quality Plan Implementation

The City shall cooperate with the Bay Area Air Quality Management District to implement the Air Quality Plan and enforce air quality standards.

RC-5.2
Air Quality During Construction and Operations

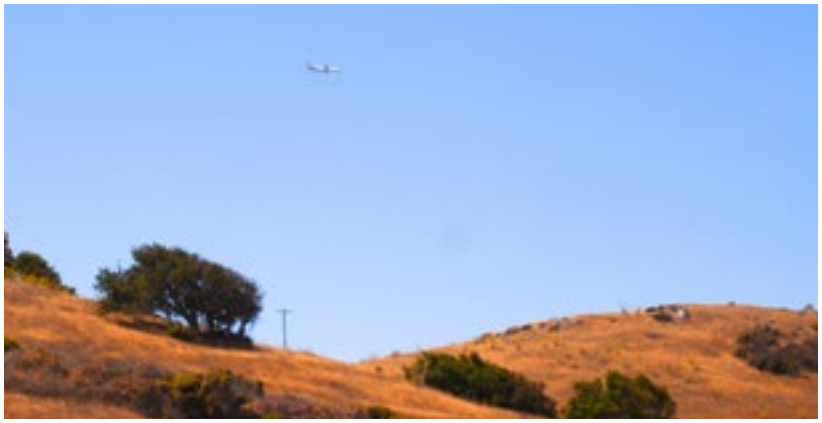
The City shall require that development projects incorporate the Bay Area Air Quality Management District (BAAQMD) Basic Construction Mitigation Measures to reduce construction and operational emissions for reactive organic gases, nitrogen oxides, and particulate matter (PM10 and PM2.5).

RC-5.3
Wood Burning Fireplace Replacement

The City shall promote the replacement of non-EPA certified fireplaces and woodstoves and encourage residents to participate in BAAQMD programs, such as the Wood Smoke Reduction Incentive Program.

RC-5.4
Minimize Odors

The City shall require all businesses, in particular fast food and manufacturing, to minimize odors generated by the business so that the odors are not detectable off-site.



RC-5.4
Health Risk Assessments

The City shall implement Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines and State Office of Environmental Health Hazard Assessment policies and procedures requiring health risk assessments (HRAs) for new residential development and other sensitive receptors, as defined in the BAAQMD CEQA Guidelines, within 1,000 feet of sources of toxic air contaminants, including freeways and roadways with over 10,000 vehicle trips per day. Based on the results of the HRA, the City shall identify and implement measures, such as air filtration systems, to reduce potential exposure to particulate matter, carbon monoxide, diesel fumes, and other potential health hazards. Measures identified in HRAs shall be included into the site development plan as a component of a proposed project.

Energy Conservation

The production and consumption of fossil-fuel-based energy, such as electricity and vehicle fuel consumption, releases greenhouse gases. Increasing the use of renewable energy sources or reducing energy consumption may limit negative impacts resulting from global climate change.

Energy conservation can be carried out in many ways. Active transportation initiatives and projects not only improve health, but also keep people from using energy-intense modes such as the automobile. Smart growth land use strategies like transit-oriented and mixed-use infill development are also effective ways of reducing a community's energy consumption.

This section focuses on programs and initiatives that promote energy conservation in the built environment. The Public Facilities Element contains additional policies supporting the City's efforts to make its own facilities more energy efficient and supporting utility providers in the use of renewable energy.

GOAL RC-6

The City shall continue to promote programs and initiatives that support and maximize energy conservation and the use of renewable energy in Union City.

POLICIES

RC-6.1
Reduced Energy Consumption
The City shall support measures to reduce energy consumption and increase energy efficiency in residential, commercial, industrial, and public buildings.

RC-6.2
Renewable Energy
The City shall promote efforts to increase the use of renewable energy resources, including but not limited to, wind, solar, hydropower, and biomass and the use of battery storage within the community and City operations, where feasible.

RC-6.3
Solar Technology on Private Buildings
The City shall encourage the incorporation of solar panels and other solar technology on parking structures and residential, industrial, and commercial buildings.

RC-6.4
Solar Panels on City Facilities
The City shall install solar panels on City facilities, as appropriate and feasible.

RC-6.5
Use of Landfills for Renewable Energy
The City shall encourage the reuse of closed landfills within the City, including the Turk Island Landfill, as a site for solar or other renewable energy generation.

RC-6.6
Energy-Efficient Lighting
The City shall employ energy-efficient lighting technology to reduce the energy required to light parks, streets, and public facilities.

RC-6.7
Green Building
The City shall encourage new development to adopt and incorporate green building features included in the CALGreen Tier 1 checklist in project designs and shall consider future amendments to the Municipal Code to adopt CALGreen Tier 1 requirements consistent with the State building code.

RC-6.8
Zero Net Energy
The City shall encourage Zero Net Energy (ZNE) building design for new residential and non-residential construction projects and consider future amendments to the Municipal Code to adopt ZNE requirements consistent with the State building code.

RC-6.9
Water Heater Replacement
The City shall encourage the use of high-efficiency or alternatively-powered water heater replacements at time of replacement in existing residential development.

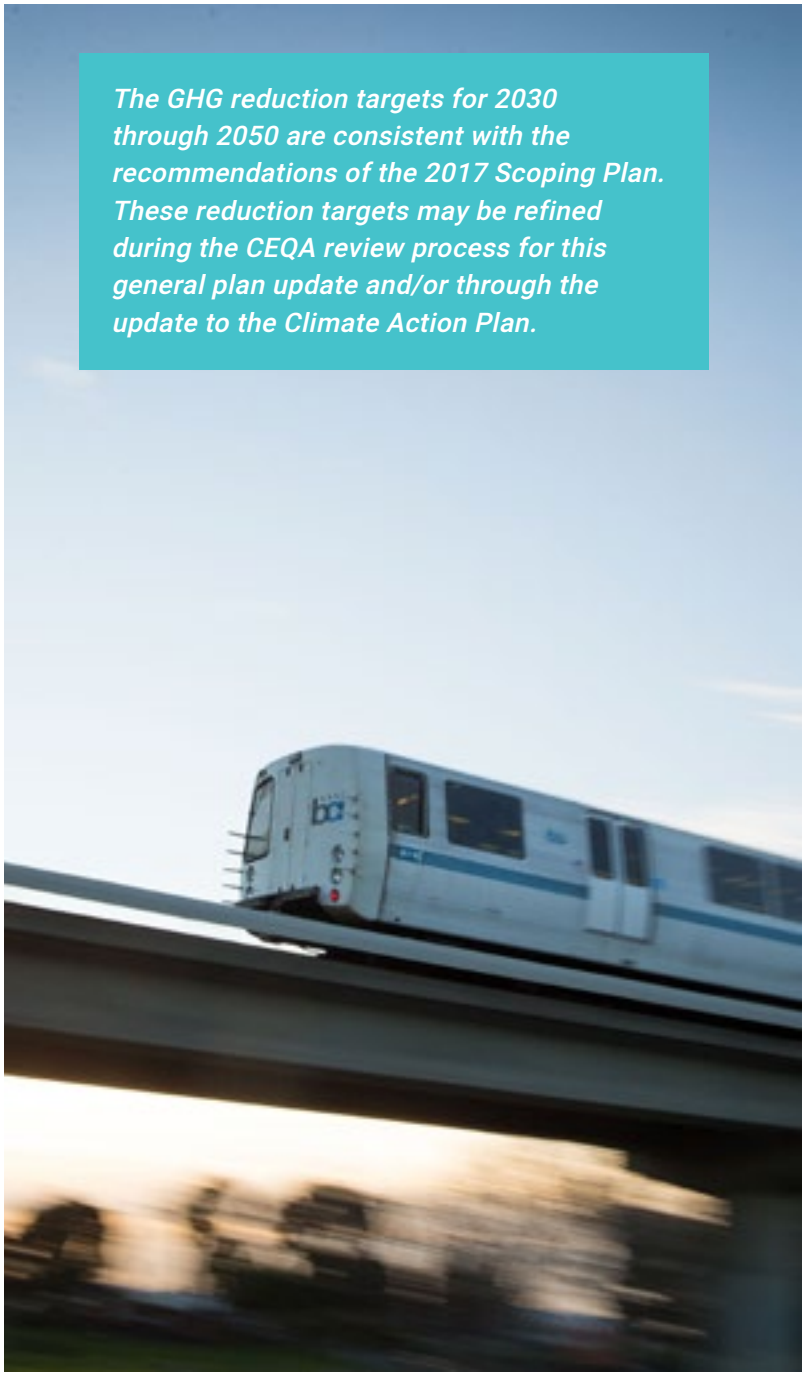
Greenhouse Gas Emissions Reduction

The City's Climate Action Plan (CAP) was adopted in 2010 and includes a 2005 baseline greenhouse gas (GHG) emission inventory, 2020 emissions forecast, and GHG reduction target for the year 2020. The City's GHG target is to reduce GHG emissions to 20 percent below 2005 baseline emission levels by the year 2020. The CAP includes GHG reduction measures organized into six "Action Areas" which include land use, transportation, energy, water, waste, and green infrastructure.

An update to the 2005 GHG emissions inventory was prepared for the year 2010, which concluded that citywide emissions had decreased by 4 percent. This reduction is partially attributable to the cleaner mix of electricity utilized by PG&E in 2010 as well as 23 percent decrease in GHG emissions related to local government operations, which was driven largely by an 80 percent decrease in transit fleet emissions.

The California Air Resources Board released the 2017 Scoping Plan Update, which sets new greenhouse gas reduction targets. The 2017 Scoping Plan recommends a planning level goal of six metric tons of carbon dioxide equivalent (C02e) emissions per capita by 2030 and two metric tons of C02e per capita by 2050. As a result, all jurisdictions, including Union City, will be required to update measures to achieve reductions of GHG emissions to meet 2030 and 2050 targets.

This Element provides a framework for reducing greenhouse gas (GHG) emissions by establishing targets for GHG reduction. It contains high-level policies that compliment and give direction to the upcoming update of the Climate Action Plan. Several other elements in the General Plan provide support for reducing GHG emissions, including the Land Use and Community Design Elements, which emphasize transit-oriented development; the Mobility Element, which aims to reduce reliance on automobiles; and the Public Facilities and Services Element, which encourages sustainable practices in City operations. The Safety Element contains policies to improve resiliency in response to sea level rise, drought, severe weather, and other climate change-related impacts.



The GHG reduction targets for 2030 through 2050 are consistent with the recommendations of the 2017 Scoping Plan. These reduction targets may be refined during the CEQA review process for this general plan update and/or through the update to the Climate Action Plan.

GOAL RC-7

The City shall continue to promote programs and initiatives that support and maximize energy conservation and the use of renewable energy in Union City.

POLICIES

RC-7.1
Establish Greenhouse Gas Reduction Targets

The City shall establish community and municipal greenhouse gas emission reduction targets in the Climate Action Plan that are consistent with the State Scoping Plan, AB 32, and SB 32.

RC-7.2
Climate Action Plan Implementation

The City shall continue implementing CAP measures and prioritize implementation actions that result in the greatest reduction in GHG emissions with the least amount of implementation costs, as financially feasible.

RC-7.3
Environmentally Sustainable Practices

The City shall implement environmentally sustainable practices within government buildings and operations.

RC-7.4
Greening the City Fleet

The City shall reduce consumption of carbon-intensive fuels through the purchase of more efficient or alternative-fuel vehicles (e.g., hybrid, electric, natural gas) when buying new or replacement vehicles for the City fleet.

RC-7.5
Greenhouse Gas Reduction in New Development

The City shall reduce greenhouse gas emissions from new development by encouraging development that lowers vehicle miles traveled (VMT); discouraging auto-dependent development patterns; 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; and other methods of reducing emissions.

Implementation Programs

RC-3.A

Green Infrastructure Plan

The City shall prepare, adopt, and implement a Green Infrastructure Plan in compliance with NPDES Stormwater Municipal Regional Permit (MRP 2.0) requirements.

- **Responsibility:** Public Works Department
- **Time Frame:** 2019

RC-4.A

Maintain Inventory of Historical Resources

The City shall maintain an inventory of historical resources.

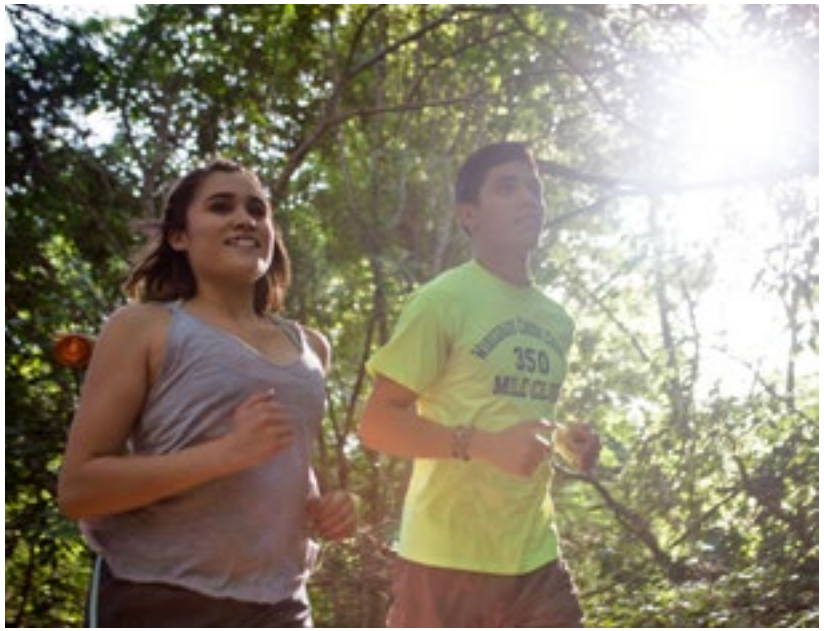
- **Responsibility:** Economic and Community Development Department
- **Time Frame:** Ongoing

RC-4.B

Cultural Resources Study Requirement

If a project requires activities that have the potential to impact cultural resources, the City shall require the applicant to retain a qualified archaeologist meeting the Secretary of the Interior's (SOI) Professional Qualification Standards (PQS) in archaeology and/or an architectural historian meeting the SOI PQS standards in architectural history to complete a Phase 1 cultural resources inventory of the project site (NPS 1983). A Phase 1 cultural resources inventory should include a pedestrian survey of the project site and sufficient background archival research and field sampling to determine whether subsurface prehistoric or historic remains may be present. Archival research should include a records search conducted at the Northwest Information Center (NWIC) and a Sacred Lands File (SLF) search conducted with the Native American Heritage Commission (NAHC). The technical report documenting the Phase 1 cultural resources inventory shall include recommendations to avoid or reduce impacts to cultural resources. These recommendations shall be implemented and incorporated in the project.

- **Responsibility:** Economic and Community Development Department
- **Time Frame:** Ongoing



RC-6.A

High-Efficiency or Alternatively-Powered Water Heater Replacement Program

The City shall provide educational material and information on the City website and through the Building Division on high-efficiency and alternatively-powered water heater replacement options available to current homeowners considering water heater replacement. The City shall streamline the permitting process for high-efficiency and alternatively-powered water heat replacement, and develop appropriate financial incentives by working with energy utilities or other partners. Replacement water heaters could include high-efficiency natural gas (i.e., tankless), or other alternatively-powered water heating systems that reduce or eliminate natural gas usage such as solar water heating systems, tankless or storage electric water heaters, and electric heat pump systems.

- **Responsibility:** Economic and Community Development Department
- **Time Frame:** FY 22/23

RC-7.A

Update the Climate Action Plan

The City shall periodically update the Climate Action Plan to address municipal operations, maintain compliance with GHG reduction targets set forth by the California Air Resources Board, and assess and modify existing CAP implementation programs.

- **Responsibility:** Economic and Community Development Department
- **Time Frame:** 2020 and every five years thereafter