Portola Valley

Carbon Emissions

On September 13, 2006 the Portola Valley Town Council authorized the Mayor to sign the U.S. Mayors' Climate Protection Agreement, pledging to reduce the Town's emissions of greenhouse gases to at least seven percent below 1990 levels by the year 2012. To reach that goal, the Climate Protection Task Force was formed in early October. Based on models from other cities the task force formed three subcommittees: Metrics, Building Performance and Energy Efficiency, and Education. The purpose of the committees will be to formulate lines of inquiry and goals and to craft a work plan and timetable for accomplishing those goals. The task force will submit recommendations to the Town Council in the spring of 2007. To assist this effort, the Town has joined Sustainable Silicon Valley and ICLEI–Local Governments for Sustainability.

The task force will recommend target greenhouse gas reductions, investigate historic aggregate residential energy consumption in Town, determine baseline emissions and target levels, look into next generation incentives for green design on residential building projects and retrofits, investigate changes in design regulations, institutionalize Bike to School days, support student projects, and establish school climate clubs.

Housing

In March 2004, a presentation was made to the Town Council, Planning Commission, and Architectural & Site Control Commission (ASCC) on the *San Mateo Countywide Sustainable Buildings Guide*. The information provided was to encourage a discussion with the Council, Commissions, and staff regarding the adoption of an ordinance or policy at the Town level to encourage green building practices in the design of private, commercial, and municipal buildings.

As a result of this meeting, staff has provided architects and homeowners with copies of the *Guide* and the *San Mateo Countywide Sustainable Buildings Checklist* for their review and use. Staff requests that the architects and homeowners use the guidelines and complete the checklist as part of the submittal on applications that require ASCC and Planning Commission review. This has been a submittal requirement since June 2004.

The Town now includes a green design discussion into all staff reports for review by the ASCC providing an analysis of how architects and homeowners have responded to the checklist, what aspects of the checklist have been taken into consideration with their design, and what aspects have actually been undertaken. This provides the ASCC an opportunity to ask questions about green design and have a dialogue with the architect and homeowner. An important message is being delivered to local architects, homeowners, and builders in the community that the Town is committed to sustainable development by promoting the use of green building practices.

Water

Through implementation of the Town's General Plan and ordinances, the Town encourages water conservation. The Town has a rich heritage of varied native plants and groundcovers that have evolved in this climate and in these soils, providing habitat and food for local wildlife and requiring less water and maintenance. The Town emphasizes the use of native plants in landscaping projects, discourages large lawns, and encourages residents to be conscious of water use and utilize low-water-use fixtures and appliances and pool covers to minimize evaporation and conserve energy. Being a small rural town without a formal drainage system, almost all of our drains are direct street flow into open vegetated earth swales.

Other

The Town already has a number of progressive measures in place. These include:

- Green building approach to New Town Center construction.
- Recycling and diversion of construction and demolition debris.
- Waste diversion/business and residential recycling programs.
- Design guidelines that encourage vegetation preservation, planting of natives, and a minimal approach to lighting.
- Promoting sustainability and encouraging the use of solar energy and installation of photovoltaics, a $50 flat-rate permit fee established.
- Environmental Preferable Purchasing policy.
- Safe Routes to Schools program.
- Bicycling/walking pedestrian facilities.
- Open Space Preservation program.

Redwood City

Carbon Emissions

Alternative Transportation Program

Redwood City's Alternative Transportation Committee offers incentives to encourage employee use of transportation other than driving alone. For example, a City employee may buy up to six Commuter Checks, each with a face value of $20, for $10 each, and use them to buy passes or tickets for any of the Bay Area Transit agencies, effectively cutting in half the cost of using public transit by City employees.

As a further incentive, for every 20 times a City employee uses alternative transportation, he or she can purchase a $20 grocery gift card for half price. There is also a monthly drawing for two $25 gift cards, open to any employee who has used an alternate form of transportation five times in a month. An estimated 100 employees (or approximately 20 percent of City employees) participate in the alternative transportation program.

City fleet vehicles

City fleet vehicles offer a significant opportunity to reduce carbon emissions. A total of 15 older general sedans have already been replaced with Toyota Prius hybrid sedans (purchased with the help of a $2,000 per vehicle incentive from the Bay Area Air Quality Management District). Hybrids represent one quarter of the City's entire sedan fleet (including police sedans). Redwood City has also added three electric vehicles to its fleet.

Redwood City will continue to move forward with use of low-emission vehicles, focusing on replacement vehicles powered with engines certified as super ultra low- or ultra low-emission and concentrating

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on replacing older vehicles with hybrid vehicles whenever possible.

Among the City's challenges are the limited number of manufacturers and models available for alternative and hybrid vehicles, thus somewhat restricting the use of the competitive bidding process, and the lack of fueling infrastructure for alternative fuel vehicles.

Redwood City has scheduled the replacement of six of its oldest heavy duty vehicles with new ones that meet California's stringent 2007 emissions standards. This is a significant investment, at an estimated replacement cost of $1.5 million—but one which it feels is very worthwhile for the City and the community.

Redwood City has already converted to ultra low sulfur diesel fuel, which produces less air borne emissions than that produced by ordinary diesel. The City also plans to test biodiesel when it becomes readily available from suppliers.

Housing

Transit-oriented development

The updated General Plan will incorporate transit-oriented development (TOD). The proposed Downtown Precise Plan, which covers most of the area within 1,500 feet of the Caltrain Station, incorporates the basic tenets of TOD, including more intensive development in the form of multi-story buildings, mixed-use, higher residential densities, and a pedestrian-oriented street environment.

The updated General Plan will also address the El Camino Real Grand Boulevard Initiative as it pertains to transit and pedestrian orientation. The Transportation and Circulation Element will address the San Mateo County Transit District (SamTrans) proposal to develop enhanced bus transit along most of the length of El Camino Real, providing an opportunity to develop TOD. The General Plan will also consider opportunities for incorporating TOD in conjunction with a new ferry terminal, depending on where the terminal will be located.

The Precise Plan estimates that 2,500 to 3,700 residential units could be accommodated as TOD. Fifteen percent of these units will be affordable to low-income residents. At present, there are a series of residential projects existing, under construction, or proposed, that can be considered TOD. The completed projects include City Center Plaza (81 units, 100 percent affordable) and Franklin Street Apartments (206 units, 15 percent affordable). Montgomery Village (58 units, 100 percent affordable) on El Camino Real and Vera Avenue is currently under construction. Another residential project proposed on Woodside Road calls for 43 units of which 15 percent would be affordable (because there is a bus route along this portion of Woodside Road, this project is considered TOD).

Green building

Some basic policies addressed in the Conservation Element include promoting energy efficiency in new building construction, incorporating green building principles, and reducing overall energy consumption.

In the last year, a total of 69 residential units have been approved (58 are multi-family units, and the remaining 11 are single-family units). Of these, 59 units will meet Leadership in Energy and Environmental Design (LEED) standards. They include the 58 units at Montgomery Village residential project and one single-family residence.

The Transportation and Circulation Element will emphasize reducing automobile use, thereby conserving energy while at the same time reducing air pollution. This includes policies and actions to encourage walking, bicycling, and use of public transportation. The Land Use Element will also address transportation by encouraging land use patterns that reduce automobile use while creating a more pedestrian-friendly environment.

Water

A separate Water Supply Element will also be included in the City's General Plan. This element establishes policies for water conservation and also discusses Redwood City's recycled water system and includes policies for more widespread use of recycled water.

One hundred percent of Redwood City's water comes from the Hetch Hetchy water system, operated by the San Francisco Public Utilities Commission. The City's contractual supply assurance is 12,243 acre feet of water per year (10.9 million gallons per day) which it has been exceeding regularly since FY 1998-99. Redwood City's Water Utility has 23,000 water service accounts, serving approximately 83,000 people in its 35-square-mile service area.

Redwood City has implemented several important conservation programs which combined have achieved significant water savings. The conservation programs in place use a mix of incentives and rebates, free conservation devices, one-on-one residential conservation consultations, site water use analysis, and education and public outreach to increase water use efficiency in homes, businesses, and institutions.

The total water savings as a result of water conservation efforts for FY 2005-06 are 149,333,336 gallons, (approximately 458 acre feet) accomplished through the following programs and activities:

- 694 Smart Home Water Use House Calls—Residential Water Surveys.
- 1,099 free Smart Home Water Conservation Kits given to households.
- 448 Residential High-Efficiency Clothes Washer Rebates.
- 5,500 water-wasting toilets replaced through the Toilet Replacement Program.
- 21 nozzles replaced through the High-Efficiency Pre-Rinse Spray Nozzle Replacement Program.
- 12 Commercial High-Efficiency Clothes Washer Rebates provided.
- 38 Large Landscape Irrigation Efficiency audits performed.

Through its aggressive water conservation efforts, the City expects the community will be conserving 815 acre feet per year by end of 2009 (0.7 million gallons per day). Combined with the expected 900 acre feet of additional potable water savings resulting from the implementation of a recycled water project, Redwood City will erase its annual water deficit of 1,000 acre feet and provide additional water supply to support future growth.

The City's public education on water conservation focuses not only on publicizing its programs but also on educating the next generation. Redwood City's Annual Poster Contest is a fun and dynamic way for school children to think about and express their understanding of water conservation. Prizes are awarded to the best posters in each class level and to their teachers for participation in the program. The City also provides onsite school presentations designed to educate students on the value of water and the importance of using it efficiently. Education materials and videos on a variety of water topics, such as conservation, our water planet, the forms water takes, and the water cycle, integrating social studies and science themes are made available to schools.

The City's award winning website tells the community what conservation programs are available and how individuals can participate. The City mails a newsletter insert with its water bills providing information on specific programs and water conservation education tips and techniques.