

City of Moorpark

Bi- Annual Sustainability Report

September 2016



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INTRODUCTION

The bi-annual sustainability report is complete. This bi-annual report provides updates on the City's sustainability programs and objectives for the period between January 2014 to September 2016. The City Council adopted a two year goals and objectives document for FY 2015/16 and 2016/17 and the objectives listed below are ones that relate to sustainability and are discussed within the report:

- II.A.4 Determine feasibility of constructing a sidewalk on Arroyo Drive from Collins Drive to east City limits, and in conjunction with City of Simi Valley and County of Ventura, pedestrian and bike connections between Collins Drive and Madera Road by December 31, 2015. (CE/PW)
- II.A.6 Evaluate options to provide a continuous Class II bike lane on Campus Park Drive between Princeton Avenue and Beragan Street. (CE/PW)
- II.B.8 Evaluate feasibility of constructing an improved bicycle path on the north side of the Arroyo Simi, from the pedestrian bridge at Arroyo Vista Community Park to the east side of Spring Road, including a bridge undercrossing and connections to existing bike lanes on Spring Road. (PRCS and CE/PW).
- II.C.3. Consider feasibility of pedestrian bridge on Los Angeles Avenue (SR 118) in vicinity of Moorpark Avenue. (CE/PW)
- IV.A.8 Evaluate a policy and standards for use of more energy efficient street lights on public and private streets in new developments. (CE/PW & CD)
- IV.A.11 Develop program to construct sidewalks on one side of certain streets in industrial zoned areas to provide a safe path for pedestrians and to encourage walking by June 30, 2016. (CE/PW, PRCS & CD)
- IV.A.19 Install the second phase of a centralized irrigation system for City facilities, parks and landscape maintenance districts by September 30, 2015. (PRCS)
- IV.A.27 Evaluate potential requirement for use of pervious pavement on new private and public projects. (PRCS, CD & CE/PW)
- IV.A.30 Develop a Water Conservation Policy and Implementation Plan to meet mandatory water use restrictions for parks, facilities, and City administered maintenance districts to include turf reduction, changes to the Landscape Design Standards and Guidelines to assist private efforts, and funding recommendations for City activities by September 30, 2015. (PRCS)
- IV.B.2 Determine feasibility of purchasing existing City street lights and converting them to a more energy efficient lighting source. (CE/PW & F)

- V.A.4 Update City's 1995 Master Drainage Plan and incorporate needed improvements into Capital Improvement Program. (CE/PW & CD)
- V.A.10 Prepare a comprehensive update of Land Use, OSCAR, and Circulation Elements including environmental documentation and insure internal consistency among all General Plan Elements. Consider creation of a Natural Open Space land use designation and the city's vision for land within the City's Area of Interest as part of the Land Use Element. Present Land Use and Circulation Elements including possible designation of Moorpark Avenue (SR 23) between Casey Road and Los Angeles Avenue (SR 118) as an arterial street to the City Council by March 31, 2016. Present OSCAR Element including a Trails Master Plan to City Council by December 31, 2016. Upon adoption of any General Plan Amendments, prepare necessary changes to the Zoning Ordinance to insure conformity and consistency with the General Plan. (CD, PRCS & CE/PW)
- V.A.23 Develop a Tree Master Plan and Maintenance Plan including tree inventory and mapping by June 30, 2016. (PRCS)
- V.B.4. Develop options to enhance open space and greenbelt areas to include at a minimum: (1) strengthening the Tierra Rejada greenbelt agreement; and (2) consideration of adding new formal greenbelt(s) and agreement(s) for the areas north and south of the Ronald Reagan Freeway (SR 118) near the east end of the City of Moorpark and the west end of the City of Simi Valley plus contiguous unincorporated Ventura County and west of the City limits (Los Posas) for consideration by the City Council. (CD & CM)
- V.B.5 Evaluate feasibility of establishing a community garden program including identification of a preferred location. (

These adopted objectives along with the various sustainability projects and programs that the City is actively involved in or considering are categorized under ten main areas of discussion. These main categories have been split into sub-categories to further delineate the topics where appropriate.

AIR QUALITY

1.1. Traffic System Management Fund

Description: The Traffic System Management (TSM) Fund is the City's designated Transportation Demand Management (TDM) program fund. The TSM fund collects fees from projects that exceed Federal, State, and local air quality regulations. The funds are then used for City-wide offset mitigation programs that improve air quality.

Status: In 2004, the City Council approved a TSM fund program that outlined six categories that TSM funds could be used to improve air quality: bicycle facilities, trails, transit, alternative fuel vehicles (AFV), building technology, and administrative. To date, the TSM fund has been used as local match for grant funds, to purchase hybrid fleet vehicles, assist in funding of the Moorpark Transit system and CNG fuel, install bus turnouts and shelters, and fund consultant and staff costs for trail studies, and bikeway plans. TSM funds are also used to fund portions of capital improvement projects that improve community walkability and encourage use of mass transit, such as the Recreational Trail Project at Arroyo Vista Community Park, the Pedestrian Improvements at the Civic Center, second entrance to the Metrolink South Parking Lot and expansion of the North Metrolink Parking Lot. In consideration of new technology and programs, staff is in the process of preparing an update of the 2004 TSM Fund program to explore expanding eligible expenditure categories for further city-wide air quality improvement programs. The update will be presented to the City Council in the near future.

1.2. Alternative Fuel Vehicles (AFV)

Description: Outlining City AFV purchases and purchasing policy.

Status: The City purchased two Compressed Natural Gas (CNG) fueled buses for Moorpark Transit in 2015. The two new buses replaced the last two diesel buses that the City owns. The Moorpark Transit buses travel approximately 96,000 miles per year. The use of CNG instead of diesel fuel, saved the use of 15,958 gallons of diesel fuel, reducing the City's release of NOx by 42% and producing 40% less CO2. Since 2005, first through use of particulate matter traps on diesel buses and, second through replacing the diesel buses with CNG buses, the City has reduced its particulate matter emissions from Moorpark Transit operations by 93%. In addition to the CNG buses, the City also owns three hybrid vehicles and one truck with a CNG tank as an option for future use of CNG fuel. It is also an internal city practice to replace City vehicles where feasible with alternative fuel or hybrid vehicles. In 2013, the City leased a Chevrolet Volt as a test vehicle to determine if plug-in electric hybrid vehicles are a feasible choice for City use and it was put into service in March 2014. Staff will prepare an analysis in the last quarter of 2016 prior to the lease end and report to the City Council

1.3. Local Alternative Fuel Infrastructure

Description: Outlining Local Alternative Fuel Infrastructure

Status: Currently, no alternative fuel infrastructure exists within the City. The City currently fuels its CNG buses at the City of Thousand Oaks Municipal Services Center. The City also has a cooperative fueling agreement with the

City of Simi Valley to fuel the CNG buses at their Transit Maintenance Facility, in the event that the Thousand Oaks facility is unable to provide fuel.

1.3.1 Electric Vehicle Charging Stations

Description: Evaluate feasibility and funding options to install one or more public charging facilities for Electric Vehicles.

Status: **Complete.**

In January, 2013, the City installed four Electric Vehicle (EV) charging stations at various locations within the downtown area. Two were located at the Metrolink Station, one at the post office public parking lot on High Street, and one at the Civic Center Parking lot. The total cost for this work was approximately \$9,300 for the required infrastructure, such as electrical installation and conduit. However, the units were provided free of charge by Ecotality North America (Blink) and Coulomb Technologies, Inc. (Chargepoint) and were obtained through various Federal grant and marketing programs and one unit was provided by a local Moorpark business, AG Machining. In addition, each manufacturer has provided the City a one-year free subscription to their respective internet monitoring software. After the first year of service, the City was required to pay subscription fees of and \$230/year, per charger, for the ChargePoint service plan) and no fees have been charged to-date for the Blink chargers. Some revenue was received from the ChargePoint chargers to offset the costs to provide the stations. Under the Blink plan, CarCharging receives all the revenues to offset the costs of not charging a subscription fee. The cost to subscribers for use of the charging stations will be initially set at \$1.00/hour. Staff never anticipated that the revenue generated by the charging stations would cover the service plan fees within the first several years of use, but was hopeful that the costs to utilize the equipment would equal the plan fees as the number of electric vehicles increases over time. Unfortunately, the costs to use the ChargePoint chargers increased when ChargePoint stopped providing hardware maintenance on the systems. The cost of the maintenance plan and the subscription plan for both chargers exceeded \$3,000 per year. Currently the revenue received from the ChargePoint chargers only covered the costs to provide electricity to the units. In light of this fact, in June 2016, the City Council elected to discontinue the ChargePoint service. Because the ChargePoint charger installed at the City Hall parking lot is used frequently, the City Council directed that a lesser used charger at the metrolink south parking lot be relocated to the City Hall parking lot, in order to provide an EV Charger at the Civic Center. Staff is in the process of having the unit relocated.

In December 2013, the City leased a Chevrolet Volt for use by the Community Development department Code Enforcement staff. A separate charging system was installed for this vehicle.

1.4. Southern California Association of Governments (SCAG) – Clean Cities Program

Description: SCAG's Clean Cities Program was set up by the U.S. Department of Energy (DOE) to expand the use of alternative fuel vehicles and technologies to reduce consumption of petroleum.

Status: No change since 2013 report. By continuing to purchase hybrid or alternative fuel fleet vehicles, the City of Moorpark is contributing to the Clean Cities program goal of increasing AFV use and reducing petroleum consumption.

2. TRANSPORTATION

2.1. Congestion Management Program

Description: The Ventura County Transportation Commission (VCTC) prepares a county-wide Congestion Management Program (CMP).

Status: **No change since last report.** The City of Moorpark participates in the CMP primarily through capital improvement program projects that work towards relieving congestion within the City. To this end, in 2008 the City completed installation of two Traffic Signal Synchronization systems on two of the City's main thoroughfares, Los Angeles Avenue and Tierra Rejada Road. The primary objectives of the system are to improve the flow of traffic by increasing average speed and decreasing stop delays and to provide updated control and communication to the traffic signals. Ten signals on Los Angeles Avenue and eleven signals on Tierra Rejada Road were included in the project. The effect of the installation of the system was a 38% increase in average speed on Los Angeles Avenue and a 78% decrease in the number of stops. On Tierra Rejada Road the effect of the installation of the system was a 22% increase in average speed and a 77% decrease in number of stops. VCTC is currently working on an update to the 2009 CMP.

2.2. Bike Lanes and Trails

2.2.1. Trails Master Plan (*Objective V.A.10*)

Description: Present OSCAR element, including a trails master plan to the City Council by December 31, 2016.

Status: **No change since last report.** Staff has completed the rough draft OSCAR Element, including discussion of trails and a map to serve as the Trails Master Plan. Prior to the commencement of public hearings on the OSCAR Element, the City Council has directed that the OSCAR Element be reviewed by the Council's Community and Economic Development Committee. Staff is waiting to take this element to the Community and Economic Development Committee as it is linked to the updates to the Land Use and Circulation Elements, currently being prepared by staff.

2.2.2. Bike Lanes and Trails Funding

Description: Staff efforts to secure funding for planned bike lanes and trails.

Status: In addition to planning for various bike routes and trails throughout the City, staff is also in the process of securing the various funding sources to implement the projects. So far the City has secured \$206,323 in Bicycle Transportation Account (BTA) funds and \$66,000 in TDA Article 3 funds for provision of bicycle lanes on Princeton Avenue and the Arroyo Vista Recreation Center sidewalk/bike path from the pedestrian bridge to the park entrance. In 2012, staff secured \$100,000 in TDA Article 3 funds for sidewalk/accessibility improvements at the Civic Center. In 2013, staff secured \$30,000 in TDA Article 3 funds for consultant services for design options to connect a bike lane/pedestrian sidewalk from Collins Drive to the Simi Valley city limit line. . In 2015 the City secured \$100,000.00 to contribute towards adding a sidewalk in front of the eastern portion of Villa del Arroyo, as another step in connecting Moorpark pedestrian access into Simi Valley. In 2016, the City secured another \$100,000.00 to contribute towards adding a sidewalk in front of the western portion of Villa del Arroyo as well as extend the eastern portion of the original Villa del Arroyo sidewalk to the Simi Valley city limit line. The City is obligated to provide a minimum match of \$200,000 for both grants. City matching funds will come from TSM funds. Design is expected to start in FY 2016/17.

2.2.3 Bike Lanes and Trails Projects

Description: Discussion of the various city or developer provided bike lanes and/or trails, as well as future potential projects.

Status: The following is a list of bike lanes or trails that have been provided by the City or through a development agreement, as well as, future potential projects:

Developer Constructed trails

- 1) Meridian Hills multi-use trail (including portion across Peters property connecting to Country Club Estates)–completed in 2016
- 2) Spring Road multi-use trail – completed in 2007
- 3) Ridgecrest Drive multi-use trail – completed in 2007
- 4) Country Club Estates and Championship Drive multi-use trail – completed in 2005
- 5) Serenata multi-use trails – completed in 2006
- 6) Moorpark Highlands multi-use trails – partially completed in 2012

City Constructed Trails or Studies

- 1) Lassen Avenue Bikeway/Walkway – completed in 2009
- 2) Illuminated crosswalk at Moorpark Avenue and Second Street – completed in 2008
- 3) Downtown Trail Study – completed in 2007
- 4) Constructed curb ramps at “T” Intersections City-wide – completed in 2003
- 5) Arroyo Simi Trail Feasibility Study to construct a trail along the Arroyo Simi from the westerly City limit to Simi Valley– completed in 2003

Future Projects

- 1) Evaluate feasibility of constructing an improved bicycle path on the north side of the Arroyo Simi, from the pedestrian bridge at Arroyo Vista Community Park to the east side of Spring Road, including a bridge undercrossing and connections to existing bike lanes on Spring Road. Need to fund study to complete (*Objective II.B.8.*)
- 2) Design and construct a trail along Ventura County’s Drain No. 2 (east of Collins Drive) Need to fully fund project to complete
- 3) Design and construct a sidewalk and bike lane to connect existing AVRC bike/pedestrian facilities to the pedestrian bridge. Some funding identified, need to identify all sources to complete
- 4) Construct a sidewalk from Championship Drive to southern boundary of County Club Estates (Tract 4928). Some funding identified
- 5) Construct a bus stop and sidewalk at City Hall. Grant monies obtained. Project is in development.
- 6) Design and construct a trail between the Meridian Hills Development and adjacent property owner driveway.
- 7) Class II bike lane on Campus Park Drive between Princeton Avenue and Beragan Street. (*Objective II.A.6.*)

8) Develop program to construct sidewalks on one side of certain streets in the industrial zoned areas to provide a safer path for pedestrians and to encourage walking by June 30, 2016. (*Objective VI.A.11*)

9) Feasibility study of a sidewalk on Arroyo Drive from Collins Drive to the eastern City limits, and in conjunction with City of Simi Valley and County of Ventura, pedestrian and bike connections between Collins Drive and Madera Road completed in Fall 2015. Staff received a TDA Article 3 grant for \$30,000 to fund the feasibility study. (*Objective II.A.4.*)

10) Feasibility study to construct a pedestrian bridge over Los Angeles Avenue near Moorpark Avenue. (*Objective II.C.3*)

Future Potential Projects

1) Feasibility study to construct a pedestrian bridge over Poindexter Avenue and Union Pacific Railroad.

2.3. Transit

2.3.1. Fixed-route Bus Service

Description: Moorpark Transit ridership

Status: The City's fixed route bus service ridership was:

2011	67,449
2012	63,074
2013	66,745
2014	69,223
2015	63,286

Although the City established Saturday service (8:00 am to 5:00 pm) and extended Monday – Friday service from 6:00 am to 6:00 pm to 5:00 am to 8:00 pm August 10, 2013, lack of ridership has required some adjustments to the service. The Saturday service remains 8:00 am to 5:00 pm; however, service west of Leta Yancy Road was ended August 10, 2015, in order to provide more frequency service to the denser areas of the City. The extended service hours for Route 1 were also cut due to lack of ridership. The demonstration service is funded with a \$602,000 Congestion Mitigation and Air Quality (CMAQ) grant over a three-year period. Due to lack of ridership, on June 15, 2016, the City Council approved discontinuing the demonstration service effective August 1, 2016. Transit hours for fixed route service are now 6:00 am to 6:00 pm.

2.3.2. Paratransit Services

Description: Intra-city and Inter City Paratransit services

Status: Both services together provide service to senior and disabled passengers. The number of passengers served was:

2011	2,289
2012	2,456
2013	3,116
2014	5,760
2015	5,654

2015 ridership decreased 1.84% from 2014 numbers, which had increased 84.85% compared to 2013 numbers. In August 2015, the City began providing Inter-City services for Moorpark seniors age 65 and older. Seniors can now travel to the Cities of Camarillo, Thousand Oaks, Simi Valley, Westlake Village and surrounding unincorporated areas for \$5.00 per trip Monday through Friday, 6:00 am to 6:00 pm. As mentioned in 2.3.1 above, the City Council approved discontinuing the transit demonstration service, effective August 1, 2016. The current days and hours of operation for paratransit service is 6:00 am to 6:00 pm, Monday through Friday.

3. CLIMATE CHANGE

3.1. SB 375 Sustainable Communities and Climate Protection Act

Description: SB 375 enhances California's ability to reach its AB 32 goals by promoting good planning with the goal of more sustainable communities. Sustainable Communities requires California's Air Resources Board (ARB) to develop regional greenhouse gas emission reduction targets for passenger vehicles. ARB is required to establish targets for 2020 and 2035 for each region covered by one of the State's 18 metropolitan planning organizations (MPOs). Each of California's MPOs then prepare a "sustainable communities strategy (SCS)" that demonstrates how the region will meet its greenhouse gas reduction target through integrated land use, housing and transportation planning. Once adopted by the MPO, the SCS will be incorporated into that region's federally enforceable regional transportation plan (RTP).

Status: **No change since last report.** The Southern California Association of Governments (SCAG) released its 2012-2035 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) in compliance with SB 375 in April 2012. The addition of the sustainable communities strategy to the RTP means that the RTP now integrates not only transportation and land-use planning, but also housing and environmental planning with the goal of reducing regional greenhouse gas emissions. . The City can use the RTP/SCS when doing its own transportation, land use, and environmental planning to assist in efforts to reduce regional greenhouse gas emissions. Consistency with the RTP/SCS may also become a requirement for certain sources of grant funding.

In June 2013, SCAG approved amendment #1 to the 2012-2035 RTP/SCS. The Draft Amendment was developed as a response to changes to projects in the 2012-2035 RTP/SCS. A total of 43 projects were modified or added in the Amendment, with a majority of the changes being minor in nature, including changes to completion years, as well as minor modifications to project scopes, costs, and funding. No Ventura County projects were added/modified in the RTP amendment.

3.2. AB 32 Global Warming Solutions Act

Description: In 2006, the State Legislature passed AB 32, the Global Warming Solutions Act of 2006, which set the 2020 greenhouse gas emissions reduction goal into law. It directed the ARB to begin developing discrete early actions to reduce greenhouse gases while also preparing a scoping plan to identify how best to reach the 2020 limit.

Status: In 2011, a Greenhouse Gas Inventory report was completed for the City of Moorpark. This marks the completion of the first step towards the creation of a Climate Action Plan (CAP) for the City. The next step is to set greenhouse gas reduction targets and move into the climate action planning process.. The Ventura County Regional Energy Alliance (VCREA) has just completed a Greenhouse Gas (GHG) Inventory for the entire County. Using this GHG Inventory VCREA has begun to set GHG reduction goals for the region by the year 2020. VCREA will also be providing Climate Action Plan templates for member agencies to use in preparing their CAP's. Staff is monitoring the progress, and, once the templates are available, can begin to write the City's own CAP.

3.3. Renewable Energy

Description: Renewable energy is energy that comes from resources such as sunlight, wind, rain, tides, and geothermal heat which are naturally renewed.

Status: Solar Permits

Year	# Permits
2009-2012	242
2013	
2014	234
2015	143
Total:	619

From 2009 to 2015, there have been 619 solar permits issued in the City of Moorpark. This includes the solar system array installed at the Kohl's department store, as well as the solar array installed at the Target store. Due to work assignments, staff has been unable to work with Building and Safety to devise a system to tally the kwh generation potential of each of the systems.

4. GREEN BUILDING AND CONSTRUCTION TECHNIQUES

4.1. Green Building

4.1.1. Green Building Development Standards

Description: Green building refers to the process of constructing and siting a building to be environmentally responsible and resource efficient throughout the structures life cycle.

Status: **No change since last report.** In furtherance of promoting Green Building Standards, in January 2011, the 2010 California Green Building Standards code (CALGreen) was implemented , and it was extended in the 2013 California Green Building Standards Code, which took effect on January 1, 2014. CALGreen is California's first green building standards code and the first state mandated green building code in the nation. The purpose of CALGreen is to improve public health, safety, and general welfare through enhancement of design and construction of buildings using building concepts that reduce negative impacts or have positive environmental impacts and encourage sustainable construction practices. CALGreen applies to all newly constructed buildings or structures.

4.2. Sustainable Construction Techniques and Practices

4.2.1. City Building Construction

Description: Review of recent City building construction and practices as they relate to sustainability.

Status: **No change since last report.** The City completed construction on the Ruben Castro Human Services Center in September 2012. The following green elements were incorporated into the project:

- ✓ Reflective roofing materials to reduce heat absorption
- ✓ Steel studs manufactured from recycled material
- ✓ Skylights utilized in open space and warehouse areas, and strategic locations to maximize natural lighting sources
- ✓ Southern California Edison and Gas Company analysis conducted to maximize energy efficiencies
- ✓ Low-E glass windows throughout

- ✓ Drought tolerant landscaping materials and drip system irrigation to reduce water consumption

The Architect's agreement for the New City Hall project includes a provision to obtain LEED Certification. The City's practice will be to continue to seek LEED certification for all future facility construction projects.

4.2.2. Public Works Construction Practices

Description: City Council Policies Resolution 2012-3091, Policy 7.8 requires use of rubberized asphalt in all new street construction projects.

Status: Since 2007, the City has placed 26 lane miles of rubberized asphalt overlay resulting in diversion of approximately 50,000 scrap tires from landfills. The City also uses Asphalt Rubber Aggregate Membrane (ARAM) which is a sealing treatment that uses recycled tires and is used under a slurry seal or asphalt top coat. Since 2007, the City has placed 20.8 lane miles of ARAM, diverting 15,500 tires from the landfill. No rubberized asphalt or ARAM projects were completed in 2015. One ARAM project was completed in 2015 which treated 56,155 square yards of City street area, resulting in diversion of 3,882 tires from the landfill.

4.2.3. Use of Recycled Materials in Public Works Projects

Description: Types of recycled materials used in Public Works streets and roads projects.

Status: Recycled asphalt and concrete are used in road base and new asphalt pavement. Recycled scrap tires are also used in asphalt pavement. Faded street name signs are "re-faced" with new sign decals, allowing for the re-use of the metal sign stock.

4.2.4. Public Works Streets and Roads Design Practices

Description: Project design by the Public Works Department as it relates to sustainability.

Status: The total area of new or rehabilitated asphalt is considered in the design of road improvement projects to minimize the amount of asphalt streets where possible. An example is the raised median area that was added to the Mountain Trail street pavement rehab project in which a significant portion of existing asphalt street was replaced with a low maintenance and water use landscaped median.

4.3. Green Construction Materials

4.3.1. Artificial Turf for Playing Fields at City Parks.

Description: Evaluate use of artificial turf for playing fields at City parks including maintenance and replacement costs.

Status: **Objective completed.** Staff has determined that at the present time the costs associated with artificial turf in a typical park setting or on a typical playing field, does not equal the cost savings due to reductions in irrigation water use and typical sports field maintenance activities. Staff has determined that the water use and maintenance costs associated with one (1) acre of sports field turf is approximately \$8,500/year. At Arroyo Vista Community Park, the maintenance costs are considerably lower, approximately \$3,000/year for one (1) acre, due to the fact well water is used at this park with minimal direct cost implications. The cost associated with one (1) acre of artificial turf is approximately \$13,500/year, over the 10-year life of the product.

Staff has determined that the use of artificial turf is more cost effective when used in high profile sport fields, such as sports complexes or high profile arenas, where water use and turf maintenance are typically excessive. In these facilities the high cost for artificial turf use can be justified through cost savings. Currently, the City does not manage these types of facilities.

In addition, staff is concerned with the sustainability of this product, due to the fact that artificial turf typically has a 10-year life span before it needs to be removed (discarded) and replaced. Staff has discussed this issue with several manufacturers and has learned that the industry is making progress in this area. New sustainable and environmental friendly products are currently being developed. Staff will continue to monitor this option.

4.3.2 Pervious Pavement (*Objective IV.A.27*)

Description: Evaluate potential requirement for use of pervious pavement on new private and public projects.

Status: The recreational trail improvements at Arroyo Vista Community Park have been designed to incorporate pervious concrete in the parking lot and pervious asphalt for the bike trail. The project will serve as a test to see how these types of pavements perform over time. It will be one step in evaluating requiring these materials in new private and public projects.

5. SOLID WASTE AND RECYCLING

5.1. Recycling/Reuse/Diversion/Green Waste and Composting

5.1.1. Commercial and multifamily residential recycling)

Description: Develop options to enhance commercial and multifamily residential recycling as part of new refuse franchise agreements.

Status: Ongoing negotiations with both of the City's franchised waste haulers include development and implementation plans to increase commercial and multifamily residential recycling in compliance with AB 341 (which amends AB 939). The particulars of these development and implementation plans, and the timetables for the plans, will be available upon execution of the Franchise Waste Hauler Agreements. The City's two franchised waste haulers have accomplished 100% (Moorpark Rubbish Disposal) and 87% (Waste Management) compliance of commercial and multifamily customers designated for mandatory recycling, respectively.

5.1.2. Construction and Demolition Materials Management Plan

Description: In October 2010, the City implemented a new Construction and Demolition Materials Management Plan (C&D Plan) Program to require contractors for certain construction and all demolition projects to file a C&D Plan Deposit with the City. Documentation filed with the C&D Plan Deposit is submitted by the contractor to identify any construction debris that is expected to be recycled. Upon completion of the project, contractors file for a C&D Plan Deposit refund. The objective to this C&D Plan is to provide the City with a measureable and comprehensive evaluation of diverted construction debris. Prior to the implementation of the C&D Plan, the City did not keep records of diverted construction debris (though reports of accepted and diverted material from a local landfill were available to the City, no comprehensive report of all acceptable recycling facilities was available to the City). The City can now state, with confidence and documentation (gate tickets or weight receipts identifying diverted material and the weight of the diverted material) the minimum construction material diverted from landfills.

Status: From the first C&D Plan Deposit refund issued from August 2011 through January 2016, the total weight of measureable diverted construction debris in the City exceeds 4,600 tons.

5.1.3. Recyclable Material Diversion

Description: Amount of recyclable material diverted from the landfill. Previous reports included information from a fiscal year perspective. Beginning with this report, the information will be provided on a calendar year. This specific report includes July – December 2012 and all of 2013.

Status: In 2014, 15,379 tons of recyclable materials were diverted from the landfill through collection services, collection events, and collection centers,

including 5,930 tons of green waste. Additionally, 50 home composting bins were delivered to City residents.

In 2015, 15,902 tons of recyclable materials were diverted from the landfill through collection services, collection events, and collection centers, including 4,966 tons of green waste. Additionally, 35 home composting bins were delivered to City residents.

5.1.4. Beverage Container Recycling Grant

Description: The City receives grant funds from Calrecycle which are used to purchase beverage recycling containers for City facilities and parks and other capital items that may be needed to service the containers.

Status: With funds received in 2014 and 2015, the City purchased and installed 14 recycling receptacles for the High Street downtown area and 4 recycling receptacles for Poindexter Park. Since July 2011, the City has placed 106 beverage recycling containers at City facilities and parks. Additionally, the City utilized grant funds to support a Coastal Cleanup Day event each year.

5.2. HHW, Electronic Waste, and Universal Waste

5.2.1. Household Hazardous Waste (HHW), Electronic Waste, Universal Waste, and Paper Shredding Collection Events

Description: Events held during the year that provide a location for residents to take their hazardous, electronic and universal waste. Hazardous materials were collected at two locations outside of the City and statistics provided pertain to Moorpark residents only. The electronic waste and universal waste (batteries and fluorescent lights) collected, and the paper shredded, reflect City sponsored events only. Previous reports included information from a fiscal year perspective. Beginning with this report, the information will be provided on a calendar year. This specific report includes July – December 2012 and all of 2013.

Status: In 2014, HHW collections events attracted 243 participants, consisting of 151 participants in Camarillo and 92 participants in Simi Valley. In 2015, HHW collections events attracted 272 participants, consisting of 172 participants in Camarillo and 100 participants in Simi Valley.

In 2014, three City-hosted electronic/universal waste events attracted 1,329 participants who brought 24.7 tons of electronic waste, 4,500 pounds of batteries, 1,804 fluorescent lights, and 12.7 tons of paper for shredding. In 2015, three City-hosted events attracted 1,412 participants who brought 30.5

tons of electronic waste, 4,600 pounds of batteries, 2,968 fluorescent lights, and 12.7 tons of paper for shredding.

6. ENERGY CONSERVATION/CLEAN ENERGY

6.1. Energy Conservation/Clean Energy in City Buildings

6.1.1. Energy Saving Projects for City Parks and Facilities

Description: Energy savings projects completed by the City during the year.

Status: No lighting upgrade projects were performed in 2014 or 2015. However, the City has a lighting upgrade project planned for Arroyo Vista Community Park that is scheduled to be completed in 2016.

6.1.2. Energy Leader Partnerships Program

Description: The City is participating in Southern California Edison's (SCE) Energy Leader Partnerships program. This program assists with identifying and addressing energy efficiency opportunities in municipal facilities and pays increased incentives for City energy efficiency projects.

Status: The City of Moorpark attained the Silver Partner Tier in 2014. Advancement to the silver level tier provides the City with additional cash incentives toward completing energy efficiency projects. We are excited to begin working on the next projects that will help us to move up to the Gold Level tier.

Completion of the value level tier provided the following environmental benefits and incentives to the City of Moorpark:

- 135, 594 Total kWh saved
- These energy savings are equivalent to 19 CA homes being powered for one year
- Avoided 62 metric tons of CO₂, the equivalent of taking 12 cars off the road
- Total incentives received based on valued partner level: \$11,452.75 As a silver member we will now receive an additional \$0.03/kWh on future projects, which for these projects would have been an additional \$4,067.82 in incentives.

6.1.3. Future Energy Conservation Efforts

Description: Future energy conservation efforts at City facilities.

Status: Staff is in the process of evaluating several additional energy conservation techniques, as funding permits, such as utilizing solar equipment to supplement direct energy use in City facilities; additional interior and exterior lighting retrofits that utilize new energy saving equipment such as ballasts, florescent and LED lighting technology; and the implementation of new energy conserving construction trends such as centralized HVAC systems, advancements in window, door and insulation manufacturing and title 24 roofing systems.

6.1.4 Energy Efficient Street Lighting

6.1.4.1 New Street Lights (*Objective V.A.8.*)

Description: Evaluate a policy and standards for use of more energy efficient street lights on public and private streets in new developments.

Status: As a reminder, AB 719 requires the Investor Owned Utilities (IOU) to submit a new tariff to the Public Utilities Commission (PUC) by July 1, 2015, that would allow local governments to fund energy efficiency improvements in streetlight poles owned by the utility. The IOU's must structure the tariff such that the costs of the energy efficiency improvements are not shifted to non-participating ratepayers. The bill requires that the local governments that elect to use the tariff to fund the energy efficiency improvements, be allowed to participate in any available rebates or incentives for the specified improvement. SCE completed the tariff rate sheet required by AB 719. The rates amount to very little, if any savings to the City, if they elected to upgrade their SCE owned streetlights to LED.

6.1.4.2 Existing Street Lights (*Objective IV.B.2..*)

Description: Determine feasibility of purchasing existing City street lights and converting them to a more energy efficient lighting source.

Status: In August 2015, the City of Moorpark paid a deposit to Southern California Edison (SCE) to perform a streetlight valuation for the City of Moorpark. It was expected to take approximately 6 months to receive the valuation. The streetlight valuation would be the first step in determining the feasibility of the City purchasing the SCE owned streetlights and converting them to LED. In June 2016, SCE provided the City with the cost to purchase the streetlight system. The City has one year from the date of the presentation of the valuation to decide if they want to move forward with the purchase of the system. Staff is in the process of reviewing the potential costs savings associated with

purchase of the streetlight system and will be presenting the findings to City Council in December 2016.

6.1.5 Community Choice Energy (CEC) Program Feasibility

Community Choice Aggregation (CCA) is authorized by Assembly Bill 117 (AB 117) and was signed into law in 2002. CCAs allow local governments to pool (or aggregate) their electricity load in order to purchase and/or develop power on behalf of their residents, businesses, and municipal accounts. CCAs facilitate the purchase and sale of electrical energy, set their own rates, and choose the sources of their electricity, which can contribute to reductions in Greenhouse Gas emissions when power is purchased from renewable energy resources (“green energy”). In this way, CCAs can assist with meeting Greenhouse Gas Emission reduction goals outlined in AB 32, The Global Warming Solutions Acts, which requires a reduction in Greenhouse Gas Emissions to 1990 levels by the year 2020. CCAs can also contribute to economic development by increasing the demand for renewable energy resources, thereby creating additional jobs in the renewable energy market. CCAs work in partnership with the existing utility, which would continue to deliver the power, maintain the grid and infrastructure, and provide consolidated billing and other customer services. CCAs have all the public power benefits associated with non-profit municipal utilities, such as lower rates, cost efficiencies, and local control, but without the infrastructure maintenance costs. CCAs are monitored and regulated by the California Public Utilities Commission (CPUC).

In November 2015, the City Council approved participation in a study of the feasibility of creation of a Community Choice Energy Program within the County of Santa Barbara, County of San Luis Obispo, and County of Ventura. Each of the counties in the study has participating jurisdictions from within their counties. City staff is on the Advisory Working Group (AWG) that has been steering Phase I of the feasibility study. In September 2016, the CCE program launched. It is anticipated that the feasibility study will be completed in early 2017. The creation of a CCA could ultimately lower electrical costs and offer rate stability to the City, its residents, and businesses, while reducing greenhouse gas emissions, as required by AB 32, and creating jobs in the green energy market.

6.2. Property Assessed Clean Energy (PACE) Programs

6.2.1. California First (AB 811)

Description: AB 811 was passed in 2008 and created an alternative financing mechanism for property owners to make energy efficiency improvements to their home or business. Essentially, property owners are allowed to take out loans and pay the loan back through an assessment on their property taxes. The loan is unique because it will automatically transfer to the next homeowner/business property owner who will continue to pay the loan through a special assessment on their property taxes.

Status: California FIRST was able to begin offering residential PACE loans in September 2014. Due to the concerns that the Federal Housing Finance Agency had about residential PACE programs becoming a senior lien to residential mortgages, the CA State Treasurer's office created a fund that protects the mortgage lenders investments on PACE properties in the event of foreclosure. The idea is that this fund will protect participating homeowners from being placed in default of their loans by their lenders for participating in the PACE program. The California FIRST program launched their PILOT program in July 2014 and instituted a full launch of the program in September 2014. In February 2016, the City Council approved participation in two more PACE programs, the HERO program and Ygrene. The HERO program and Ygrene programs are similar to the California FIRST Program offering services to residential properties and commercial properties. Both of these new programs launched in September 2016.

7. Additionally, the County of Ventura launched the emPowerProgram to bring a residential energy upgrade loan program to the county.

WATER CONSERVATION

7.1. Water Conservation Efforts by City

7.1.1. City Water Conservation Program (*Objective VI.A.6.*)

Description: Install the second phase of a centralized irrigation system for City facilities, parks and landscape maintenance districts by September 30, 2015.

Status: Phase I of the irrigation controller project was completed in 2011 and included replacing 44 irrigation controllers in Landscape Maintenance Assessment District (LMD) Zones 2, 5, 10, 12, 15, and 22, as well as Mammoth Highlands Park, and Peach Hill Park.

Phase II of the project includes installing a total of fifteen (15) controllers at the following City parks: Glenwood Park, Tierra Rejada Park, Campus Park, Poindexter Park, Mountain Meadows Park, Miller Park, Campus Canyon Park, and College View Park. Staff is in the process of working on completion of Phase II of the project.

7.1.2. Bi-Annual Bark Mulching Program

Description: In July, 2011, staff initiated a bi-annual bark mulching program for both the City parks and Landscape Maintenance Districts. Bark mulch provides many important benefits to shrub and tree planting areas and the cost savings associated with the installation of bark mulch are comparatively equal to the direct costs incurred by the City. A summary of these benefits are:

- ✓ Water Savings: Bark mulch reduces loss of water from the soil by evaporation. It reduces the soil temperature and increases water retention. Bark mulch also minimizes soil compaction, improves water absorption and reduces irrigation runoff.
- ✓ Maintenance: Bark mulch prevents the germination of seeds and weeds and reduces the need for cultivation, fertilization and the use of chemical herbicides. Mulch improves the structure of the soil by adding vital nutrients and beneficial mycorrhizal fungus back into the soil as the mulch decomposes, reducing the need for chemical fertilization and improving plant health.

Status: Staff continues to utilize bark mulch in all planting areas to reduce water use and general maintenance. With the removal of the turf areas as a result of the drought restrictions in 2015, the number of acres of mulched area has expanded from 15 acres to 35 acres. Staff will continue to use bark mulch in all planting areas, along with drought tolerant ground cover and shrubs, as it's a relatively low cost solution to save water.

7.1.3. Landscaped Median Refurbishment (*Objective V.A.30.*)

Description: Develop design plan to refurbish median landscaping and hardscape on Tierra Rejada Road from Spring Road to Los Angeles Avenue, Campus Park Drive from Princeton Avenue to Collins Drive, and Princeton Avenue from Condor Drive to Campus Park Drive including cost estimates, financing, phasing and water conservation measures by December 31, 2015.

Status: In 2013, staff had an opportunity to coordinate a demonstration project consisting of native landscaping on Tierra Rejada Road, within the property owned by Southern California Edison (SCE), east of Walnut Creek. The result is a meadow of native grasses and shrubs specifically chosen to compliment the meadow appearance of the streetscape on Tierra Rejada Road. Since the plant material was installed, staff has had an opportunity to monitor the plant types and has found that they have established well, with minimal water and maintenance. Due to the success of the project, on February 19, 2014, the City Council approved a 12,000 s.f. project along the north side of Tierra Rejada Road, from the SCE property to Walnut Creek. The proposed project will include the same plant types installed within the SCE property, which primarily consists of *Carex pansa* (*Meadow Sedge*), a low growing bunch grass native to central California, and *Rhamnus Californica* (*Coffee Berry*), a

mid-height shrub native to the California foothill regions. The project includes retrofitting the existing irrigation system with low precipitation spray nozzles and installing bubblers at each of the remaining healthy Sequoia trees to supplement their water needs. Staff estimates a 50% reduction in water use based on the type of California native plant material and the installation of the low volume irrigation system. This would equal approximately \$1,790 annually in direct cost savings and a cost recovery of approximately 12 years.

On a larger scale, staff has initiated a plan to renovate all the landscaping on Tierra Rejada Road, including the slopes, parkways, and median islands, with drought tolerant plant material, or other low water use options. The majority of the Tierra Rejada Streetscape lies within LMD Zone 2 (Steeple Hill Area Tract 2865), LMD Zone 5 (Pheasant Run Tracts 3019 & 3525) and LMD Zone 10 (Mountain Meadows Planned Community). LMD Zone 2 is fully funded and there is funding available for normal maintenance procedures, and improvements can generally be made with funding from the LMD reserve account. Funding for general maintenance procedures in LMD zones 5 and 10, which includes the cost of irrigation water, has historically been supplemented by the General Fund. These two zones were accepted by the City prior to the passing of Proposition 218 (*The Right to Vote on Taxes Act*) in 1996. In FY 12/13, LMD Zone 10 had a negative fund balance of \$90,712 and LMD Zone 5 had a negative fund balance of \$43,221, resulting in substantial funding from the general fund to supplement normal maintenance procedures. The actual cost of water for these two zones in FY 12/13 was \$66,972, which is equivalent to approximately 50% of the negative fund balance. The conceptual design plans for the renovation of Tierra Rejada are completed and have been approved by the City Council. It is anticipated that the renovation project will start in late 2016.

In addition, staff has started to look into water conservation measures for the parkways and median islands on Princeton and Campus Park Drive. Although water use is proportionately low within these LMD Zones, due to the maturity of the existing landscape material, staff is confident that additional water conservation measures can be implemented to reduce the overall water budget.

Once staff has had an opportunity to prepare a study on the LMD areas that currently exhibit negative fund balances, staff will prepare an analysis on the fully funded zones. The larger zones include LMD Zone 12 (Carlsberg Specific Plan), LMD Zone 15 (Toll Brothers Tract 4928), LMD Zone 16 (Cabrillo Tract 5161), LMD Zone 22 (Pardee Tract 5045) and LMD Zone 18 (Colmer Tract 5307). The majority of these zones have also been installed with high to moderate water use plant types and staff feels that there are opportunities to reduce water consumption within these LMD's.

7.1.4. Turf Reduction In City Parks

Description: Develop a plan to reduce the amount of turf in City parks by ten (10) percent.

Status: Staff had begun plans to initiate a citywide plan to reduce the turf in all the City parks by a minimum of 10%. The plan was to provide options for park amenities such as walking paths, native landscape area, and sand volley ball courts. Some of the projects had already been started. In January 2014, the Governor declared a drought emergency urging voluntary water reduction by California Residents' and businesses. In April 2015, the Governor instituted an executive order making the water reduction requirement mandatory. Staff undertook the process of preparing a Drought Action Plan (DAP). One of the DAP actions was to reduce irrigated landscaping. Staff identified areas within the Parks and Landscape Maintenance Districts (LMDs) to reduce turf. By the end of 2015, the first phase of turf conversion projects was completed. Phase II of the turf conversion projects will be completed in 2016. Staff was able to obtain approval for \$511,000 in turf removal rebates from the Metropolitan Water District's Turf Rebate program to defray the costs of the turf removal projects. To date, over 19 acres of turf have been removed from City Parks and 11.7 acres have been removed from the LMD's. An update report on the turf removal projects will be presented to City Council in October or November.

7.1.5. Community Native Landscaping Demonstration Project)

Description: Prepare a demonstration project with community involvement for replacement of turf with native landscaping by June 30, 2013.

Status: Staff scheduled two programs funded by the California Department of Fish and Wildlife through the Summer Camp program at the Arroyo Vista Recreation Center in 2014. The programs were not only intended to demonstrate the importance of urban waterways, such as the Arroyo Simi to school aged children, but also included a native landscaping component where the children learned about the different types of native landscape plants and hands-on how to plant and manage these types of landscapes.

Additionally, staff plans to prepare a master plan for Monte Vista Nature Park to include drought tolerant demonstration gardens, walkways and seating areas. Staff intends to remove all the non-native landscape material within the park over the next three years and prepare a comprehensive plan of the entire parks site so that volunteer organizations, such as the Boy Scouts of America, can install portions of the park in phases. Staff is hopeful that this park will eventually showcase a wide range of native plant types with identification and interpretative signage.

7.1.6. Future Water Conservation Efforts (*Objective IV.A.30.*)

Description: Develop a Water Conservation Policy and Implementation Plan to meet mandatory water use restrictions for parks, facilities, and City administered maintenance districts to include turf reduction, changes to the Landscape Design Standards and Guidelines to assist private efforts, and funding recommendations for City activities by September 30, 2015

Status: Pursuant to the Governor's Executive Order, requiring mandatory water reductions across California, staff prepared a Drought Action Plan (DAP) which identified various water conservation techniques and practices the City should undertake to continue conserving water. So far, as previously reported, staff has been working on the reductions in irrigated landscape areas. Once the turf conversion projects are complete, staff will focus on the other water conservation items recommended by the DAP.

7.2. Water Conservation Requirements of New Development

7.2.1. California Model Water Efficient Landscape

Description: The Model Water Efficient Landscape ordinance (MWELo) requires new and rehabilitated landscape areas to meet certain water efficiency standards as outlined in the ordinance.

Status: The City of Moorpark adopted the State of California's Model Water Efficient Landscape ordinance and implements the ordinance through Resolution 2011-2996 - Landscape Design Standards and Guidelines. Staff is in the process of updating and adopting the revised MWELo as approved by the State Water Resources Control Board.

7.3. Use of Recycled Water within the City

7.3.1. Recycled Water Infrastructure

Description: Recycled water use within the City is governed by the Ventura County Waterworks District No. 1.

Status: **No change since last report.** Currently, the Moorpark Country Club utilizes recycled water for irrigation of the golf course and the landscaping area along Grimes Canyon Road. There is extensive "purple pipe" infrastructure throughout the other landscape areas in the Country Club Estates development, which can be converted to reclaimed water at such time when the reclaimed water allotment increases. The Ventura County Waterworks District has indicated that there is additional reclaimed water allocation and is making plans to lay additional reclaimed water infrastructure through the Moorpark Country Club LMD areas all the way to the Rustic Canyon Golf Course. This would utilize the entire allotment of reclaimed water. As additional reclaimed water is generated, more infrastructure could be laid to different landscape areas.

The City's standard development condition requires that, when available, use of reclaimed water is required for landscape areas subject to the approval of the Community Development Director, the City Engineer/Public Works Director and Ventura County Waterworks District No. 1. At this point in time, all available reclaimed water is spoken for, however, the Moorpark Wastewater Treatment Plant is expanding and additional reclaimed water infrastructure is being constructed.

8. WATER QUALITY

8.1. National Pollutant Discharge Elimination System (NPDES)

Description: The City operates under the requirements of the new NPDES stormwater permit. Under the permit, new land development and redevelopment have to comply with new water retention requirements for stormwater runoff and development that meets certain criteria are required to reduce effective impervious area to less than or equal to 5%.

Status: In 2014 and 2015, no projects were completed that were required to comply with this permit.

8.2. City Application of Fertilizers, Pesticides, and Herbicides

Description: Monitoring of application of fertilizers, pesticides, and herbicides and City efforts to reduce use of chemical products.

Status: The City is required to reduce its annual application of pesticides. In FY 2014-15 and 2015-16, applications were as follows:

FY 2014-2015	
Herbicides: Public Works	1,400 ounces
LMD	18.30 gallons
Parks	3,463 ounces
Fertilizers: Public Works	
LMD	0
Parks	6,500 pounds
Parks	48,000 pounds
Pesticides: Public Works	
LMD	0
Parks	35 gallons
Vector	5.6 pounds
	12.23 gallons
	87.25 pounds

FY 2015-2016

Herbicides: Public Works	1,792 ounces
LMD	20.5 gallons
Parks	3,198 ounces
Fertilizers: Public Works	0
LMD	5,250 pounds
Parks	48,000 pounds
Pesticides: Public Works	0
LMD	35 pounds
Parks	5.6 pounds
Vector	12.2 gallons
	64.75 pounds

As discussed above, the Parks department is embarking on a bi-annual bark mulch program in City parks and Landscape Maintenance Districts. Two of the benefits, a reduction in the use of chemical herbicides and the fact that bark mulch is a natural fertilizer thereby reducing the need for application of chemical fertilizers, contribute to water quality through reduced runoff of chemicals. In areas where it is still necessary to use liquid pesticides and herbicides, staff is researching other natural herbicides that can be used to control weed growth. On November 6, 2013, the City Council adopted Resolution No. 2013-3240, opposing the sale, purchase or use of anticoagulant rodenticides by City residents and businesses. This supplements the adopted policy prohibiting the use of anti-coagulant rodenticides for pest control by City contractors and expands it to all City properties.

8.3. Coastal Clean-Up Day

Description: The City participates in California Coastal Clean-up Day, which is held on the third Saturday of September. In 2014, Coastal Clean-up Day was held on September 20, in 2015 Coastal Clean-up day was held on September 19, and in 2016, Coastal Clean-up Day was held on September 17...

Status: The City's clean-up site was held at Villa Campesina Park. In 2014, 77 volunteers participated in a clean-up of the Arroyo where 350 pounds of trash were recovered. In 2015, Forty (40) volunteers participated in a cleanup of the Arroyo Simi, where 300 pounds of were recovered. In 2016, 30 volunteers participated in a cleanup of the Arroyo Simi, where 200 pounds of trash and 30 pounds of recyclables were recovered. In 2016, The next Coastal Cleanup Day will be Saturday, September 16, 17..

8.4. Calleguas Creek Integrated Watershed Protection Plan

Description: The Ventura County Watershed Protection District (WPD) is studying potential modifications to this flood control channel.

Status: The WPD has undertaken a process to study different modifications and needs to the Calleguas Creek Watershed flood channels to deal with sedimentation issues and the large costs associated with dredging the sediment. The WPD is also viewing this process as a way to accommodate or address other multi-use benefits, such as ground water recharge, water quality improvements, recreational enhancement, or habitat restoration.. The WPD's "Integrated Watershed Protection Plan Phase II study, proposed several regional basins to collect flood waters, which would be released at a slower rate and flow after storms occur. One of the proposed regional basins is located south of Virginia Colony and extends eastward towards Villa Del Arroyo Mobile Home Park; however, on May 31, 2013, the City received a letter from WPD stating that based on the City's successful approval of Moorpark's Letter of Map Revision with FEMA, coupled with escalating mitigation costs, regulatory restrictions, and the District's budgetary constraints, WPD was no longer pursuing the Virginia Colony project as a vital project. Staff will continue to monitor the process.

8.5. Master Drainage Plan Update (*Objective V.A.4.*)

Description: Update City's 1995 Master Drainage Plan and incorporate needed improvements into Capital Improvement Program.

Status: A Request for Proposals for the Master Drainage Plan update is being prepared.

9. OPEN SPACE

9.1. Urban Forest

9.1.1. Tree Inventory

Description: The City maintains a tree inventory of all trees owned by the City.

Status: At the end of 2015, the City's tree inventory was updated to include Zones 15 and 22 and tree additions to parks, LMDs, and Citywide parkways for a total of 19,481 trees. During the course of the year 223 additional trees were added throughout the City. The City also diverted 350 tons of green waste from tree maintenance services to the landfill by recycling woodchips for use in City planters. During the Arbor Day celebration, the City provided **105 Sycamore, Chitalpa and Callery Pear** trees to Moorpark residents. In addition, the City was awarded Tree City USA status for the eighth and ninth year in a row. The National Arbor Day Foundation also presented the City with the tree

growth award in recognition of the City's commitment to the environment and urban forest work.

9.1.2. Tree Master Plan (*Objective V.A.23.*)

Description: Develop a Tree Master Plan and Maintenance Plan including tree inventory and mapping by June 30, 2016. .

Status: Staff completed the Urban Forest Management Plan for all City trees. The plan provides a Vision and Mission Statement, current status of our urban forest and information on the overall management of our current tree population. Staff is in the process of working on the maintenance plan and mapping for the Master Plan.

9.2. Open Space

9.2.1. Public Ownership

Description: Open space owned by the City of Moorpark and efforts to increase the amount of open space land in City ownership.

Status: . The City currently owns open space parcels totaling approximately 404 acres:

- Country Club Equestrian Staging Area (6 acres)
- Meridian Hills Open Space (259 acres)
- Serenata (20 acres)
- Crawford Canyon (4 acres)
- Virginia Colony Open Space – SDI Parcels (21 acres)
- Moorpark Highlands Parcel, Northeast of Future SR 23 Bypass (14 acres)
- Tierra Rejada Green Belt (80 acres)

9.2.2. Private Ownership

Description: Open space in private ownership throughout the City.

Status: To date, several new developments were required to preserve open space, in perpetuity, within their projects totaling approximately 1,124 acres. The developments are:

- Moorpark Country Club Estates, Tract 4928 (500 acres, including golf course)
- Deauville, Tract 4340 (38 acres)
- Buttercreek Estates, Tract 4142 (24 acres)
- Verona, Tract 4342 (9 acres)
- Belmont, Tract 4341 (36 acres)

- Marlborough ,Tract 3096 (3 acres)
- Peach Hill Countryside, Tract 2406 (3 acres)
- Park View Estates, Tract 2451 (5 acres)
- Peach Hill, Tract 2194 (6 acres)
- Fox Shadow, Tracts 3019 & 3525 (7 acres)
- Serenata, Tracts 4973, 4974, 4975, 4977, 4980 (131 acres)
- Moorpark Highlands, Tract 5045 (169 acres)
- Meridian Hills, Tract 5187-1 & 2 (75 acres)
- Varsity Park Patio Homes, Tracts 3070, 4170 (40 acres)
- Campus Hills, Tract 3963 (123 acres)
- College Heights, Tract 3049 (30 acres)
- Carlsberg Business Park, Tract 4973 (25 acres)

As more development occurs in the City, additional open space areas will be preserved consistent with the policies and goals of the City's General Plan..

9.2.3. Enhance Open Space (*Objective V.B.4*)

Description: Develop options to enhance open space and greenbelt areas to include at a minimum: (1) strengthening the Tierra Rejada greenbelt agreement; and (2) consideration of adding new formal greenbelt(s) and agreement(s) for the areas north and south of the Ronald Reagan Freeway (SR 118) near the east end of the City of Moorpark and the west end of the City of Simi Valley plus contiguous unincorporated Ventura County and west of the City limits (Las Posas) for consideration by the City Council.

Status: **No change since last report.** The County of Ventura amended the zoning for permitted land uses in the open space zone to reduce the possibility for incompatible assembly uses in the Tierra Rejada Greenbelt. Further City work on this objective will follow work on the OSCAR Element.

9.2.4. Open Space Joint Powers Agreement (*Objective VI.A.29*)

Description: Evaluate options for Joint Powers Agreement (JPA) with other public agencies for purchase and management of open space properties.

10.

Status: The City is currently in discussions with the Santa Monica Mountains Conservancy. A JPA with the Santa Monica Mountains Conservancy was approved in 2014, the JPA has not been executed pending some final language changes.**PUBLIC INFORMATION, PROMOTION, AND SUSTAINABLE PURCHASING**

10.1. Public Promotion

10.1.1. Sustainability Outreach

Description: Place sustainability information on the City's website, government channel, and in City publications, including information on actions taken by the City to conserve water.

Status: The sustainability section of the website is updated with new information relevant to the City of Moorpark as it is received. The City departments that have implemented conservation measures are encouraged to submit articles for the City newsletter to keep residents informed of actions the City is taking to conserve natural resources and save money.

10.2. Purchasing

10.2.1. Sustainable Purchasing

Description: City Council policies Resolution 2012-3091 contains Policy 7.7, Waste Reduction and Recycled Content Product Procurement Practices which directs that the City purchase reuseable, recyclable, and recycled products whenever possible. It calls for all departments to review their purchasing requirements and maximize use of products that are durable, recyclable, and reusable. The policy also asks that all City employees practice waste reduction procedures and minimize use of disposables.

Status: Staff is making sure that all departments are aware of Council Policy 7.7 to ensure that it is implemented. Staff is researching green purchasing policies and ordinances to determine if one can be implemented here.

10.3. Organizational Efforts

10.3.1. Compact for a Sustainable Ventura County

Description: The Compact for a Sustainable Ventura County is a voluntary effort among the cities and county to create a more sustainable Ventura County. Beginning in 2005 the Compact outlined a three phase approach to reach their final goal.

Status: The Compact is still in Phase 2.5 continuing with its community outreach and gathering comments about the basic compact principles. Phase 3 will be the approval and implementation of these principles by all the local governments in Ventura County. Staff monitors and follows progress on the Compact as they move through the various phases.

10.3.2 Beacon Program

Description: The Beacon Program is a statewide program that provides support and recognition to California cities and counties that are working to reduce greenhouse gas (GHG) emissions, save energy, and adopt policies and programs that promote sustainability. The Beacon Program is funded through California utility ratepayers and sponsored by the Institute for Local Government and the Statewide Energy Efficiency Collaborative.

Status: In 2016, the City of Moorpark was awarded Beacon Awards at the Gold Level for 12% Agency Greenhouse Gas Reductions and a Gold Level Award in Sustainability Best Practices. The awards will be presented at the League of California Cities Conference in October 2016.

10.4. Sustainable Practices

10.4.1. Employee Sustainability

Description: Encouraging sustainability at the employee level.

Status: Notification is being distributed to all employees regarding Council Policy 7.7, Waste Reduction and Recycled Content Product Procurement Practices which among other city wide sustainability practices, requires the purchase of recycled or recyclable products where feasible and encourages departments and individual employees to adopt sustainability practices at their workplaces such as reducing energy usage, and practicing waste reduction techniques. For more than ten years, City employees have been recycling paper waste at their desk.