

CITY OF CARMEL-BY-THE-SEA

DEPARTMENT OF COMMUNITY PLANNING AND BUILDING

STAFF REPORT

TO: MAYOR BURNETT AND MEMBERS OF THE CITY COUNCIL

FROM: MARC WIENER, ASSOCIATE PLANNER

THROUGH: JASON STILWELL, CITY ADMINISTRATOR

DATE: 11 SEPTEMBER 2012

SUBJECT: RECEIVE AN UPDATE ON CARMEL'S WATER CONSERVATION
WORK PLAN.

BACKGROUND

California American Water (Cal-Am) is the primary purveyor of water for the Monterey Peninsula. The majority of the water used by Cal-Am comes from either the Carmel River or the Seaside Basin. In 1995, the State Water Resources Control Board (SWRCB) ruled that Cal-Am did not have valid permits for the majority of the water it was pumping from the Carmel River and limited the amount of water that could be pumped (Order 95-10). In October, 2009 the SWRCB issued a Cease and Desist Order requiring that Cal-Am cease its unauthorized diversions by December 31, 2016.

With the unresolved issues related to finding a regional water solution, it is important that the City of Carmel-by-the-Sea be proactive in determining how to prepare for a restricted water supply in the future. On 1 November 2011 the City Council approved a Water Conservation Work Plan to assist with reducing water use in the City. The purpose of this meeting is to provide the Council with an update on the work plan.

ADOPTED WATER CONSERVATION WORK PLAN

As part of the work plan the City has reviewed its facilities and operations to make certain that proper steps have been taken to promote operations that will conserve water. The following is a list of work plan requirements followed with an update by staff.

A. City Facilities & Operations:

- 1. Evaluate current irrigation practices to determine if water saving opportunities exist.**
- 2. Evaluate City landscaped areas to determine if more drought tolerant plantings or alternative materials would be appropriate.**
- 3. Perform an audit of City buildings and facilities to determine if retrofitting existing fixtures would be appropriate.**

Response: With regards to irrigation, the City primarily uses a combination of drip irrigation and low flow spray heads. Larger areas that require irrigation, such as Devendorf Park, use a rotor spray system that is more efficient than a standard sprinkler head. The City could improve its irrigation practices by installing a rain shutoff sensor on all of its irrigation systems.

A rain shutoff sensor is an irrigation shutoff device that prevents automatic irrigation systems from turning on during and after a rain storm or when there is high moisture content in the air. The City currently uses a rain sensor system at Devendorf and First Murphy parks. Areas in need of the rain sensor system include Vista Lobos, Scenic Road, Ocean Avenue and the Sunset Center. The City is currently preparing to purchase additional rain sensors.

With the exception of Devendorf Park, all city facilities with landscape irrigation utilize drought tolerant plant materials. While there is limited opportunity to improve on the current drought tolerant landscaping, the City could remove specific landscaped areas and replace them with mulch. This option is not recommended at this time, but may be necessary in the future.

It should be noted that the City has been very proactive in retrofitting its facilities. Low flow toilets have been installed in almost all City facilities, including the public restrooms. The public restrooms also include low flow faucets with three-second timers. Two facilities that are in need of retrofitting are City Hall and the First Murphy House. The Building Maintenance department is aware of this need and intends to retrofit these buildings with low flow fixtures in the near future.

B. Maintain Fire Readiness

- 1. Maintain fire hydrants.**
- 2. Monitor and clear heavy vegetation (fuel loads)**
- 3. Maintain fire fighting staff and adequate apparatus and equipment.**
- 4. Continue building and fire code compliance programs.**

Response: There have been no changes since the Draft Work Plan was presented to the Council at the November 2011 meeting. As stated in the previous report, in 2008 Cal-Am, working in conjunction with the City, completed a major \$1 million capital investment in upgraded water mains and installation of numerous new fire hydrants. The project involved digging up and replacing 5,680 feet of severely corroded water-mains that were originally installed in the 1930s.

The City continues to maintain a high state of operational readiness with highly trained personnel staffing a three-person engine and two-person ambulance 24/7 with modern state of the art facilities, fire apparatus and equipment. The City also has aggressive building and fire code compliance programs and conducts annual fuel reduction and weed abatement surveys.

C. Identify Potential Sources for Additional Water

- 1. Evaluate the potential of using recycled water from the Carmel Area Waste Water District (CAWD).**
- 2. Explore opportunities to better utilize the spring water at Del Mar.**
- 3. Support regional efforts to develop water development contingency plans.**

Response: The City is currently in discussion with the Pebble Beach Community Services District (CSD) about connecting to the recycled water pipeline. The pipeline would provide 5-acre feet of water to be used for irrigation at Rio Park and for the pathway along 4th Avenue. Staff expects to have the details worked out on the proposed connection by the end of the year. The estimated cost of connecting to the pipeline is \$4,000-5000.

With regards to the Del Mar spring, the City recently replaced a 10,000 gallon tank with a 25,000 gallon tank that collects non-potable water. The tank is connected to the irrigation system along Scenic Road, which previously used potable water. This will reduce water use by approximately 1 acre foot per year. Some of this water savings is expected to be applied to the restrooms on Scenic. It should be noted that the Del Mar spring water could potentially be pumped up to 4th Avenue in the event that Carmel is not able to connect to the recycled water pipeline.

The City has continued to participate in regional discussions regarding the development of water contingency plans and in determining the most productive and cost effective approach of supplying a long-term water supply to the Peninsula. The City played an important role in the formation of the Monterey Peninsula Regional Water Authority Technical Advisory Committee. The committee was formed in December 2011 with the purpose of evaluating future options for a long-term water supply.

D. City Ordinances:

- 1. Review City ordinances related to water conservation and landscaping to determine if additional best management practices should be considered.**

Response: Besides the facilities and operations under the City's direct control, the City can influence the water conservation on private property as well. The City has been proactive in adopting a landscape ordinance and a water conservation ordinance. For example, CMC Section 17.34 requires that 75% of landscaping be drought tolerant and that irrigation systems be designed to minimize the use of water. CMC 17.50 requires the use of water-conserving plumbing fixtures for all new homes or substantial construction projects. The City also encourages cisterns and rain catchment systems.

E. Public Outreach:

- 1. Review and continue to determine the potential impact of water rationing on residents and business owners.**
- 2. Provide information to the public on appropriate Best Management Practices.**
- 3. Encourage businesses, particularly inns to retrofit old plumbing fixtures to reduce water consumption to the extent possible.**
- 4. Develop statements on the City's web page with water conservation messages.**

Response: In an effort to raise awareness, the City is in the process of constructing a water conservation page on its website. The web-page will include information pertaining to water conservation as well as links to local water conservations sites such as montereywaterinfo.org.

The City has also made available the Best Management Practices Guide produced by Cal-Am Water and the Monterey Peninsula Water Management District. The guide provides information on how to reduce water use for both residential and commercial properties. The Guide is available at City Hall and on the City website.

SUMMARY

It should be emphasized that this Water Conservation Work Plan is meant to be expanded and revised as new thoughts and programs are developed. Staff will provide periodic updates on the progress of the work plan.

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RECOMMENDATION

Receive an update on Carmel's Water Conservation Work Plan.