



# City of Sierra Madre Agenda Report

*John Capoccia, Mayor*  
*Gene Goss, Mayor Pro Tem*  
*Rachelle Arizmendi, Council Member*  
*Denise Delmar, Council Member*  
*John Harabedian, Council Member*

*Nancy Shollenberger, City Clerk*  
*Richard Mays, City Treasurer*

TO: Honorable Mayor Capoccia and Members of the City Council

FROM: Elaine I. Aguilar, City Manager *EA*

INITIATED BY: Bruce Inman, Director of Public Works *BI*

DATE: November 24, 2015

**SUBJECT: CONSIDERATION OF ORDINANCE 1370U, AN URGENCY ORDINANCE OF THE CITY COUNCIL OF THE CITY OF SIERRA MADRE, CALIFORNIA, AMENDING CHAPTERS 13.04 (WATER SYSTEM) AND 13.24 ("MANDATORY WATER CONSERVATION PLAN") BY ADDING A NEW SUBSECTION 13.24.240 ("IMPLEMENTATION OF STATE MANDATES") ALLOWING FOR AMENDMENT OF THIS CODE BY CITY COUNCIL RESOLUTION, AMENDING SUBSECTION 13.04.100 ("DELINQUENT BILLS"), PROVIDING FOR UNPAID ADMINISTRATIVE PENALTIES TO BE ADDED TO THE WATER BILLING, AMENDING SECTION 13.04.120 ("DISCONTINUING OF SERVICE"), PROVIDING FOR UNPAID ADMINISTRATIVE PENALTIES TO BE ADDED TO THE WATER BILLING, AND AMENDING SECTION 13.24.140 ("ADMINISTRATIVE FINES AND PENALTIES") ADDING A SUBSECTION D ESTABLISHING THE PROCEDURE FOR ADDING UNPAID PENALTIES TO THE WATER BILL**

## **SUMMARY**

Staff recommends that the City Council:

- 1.) Hold a public hearing on the matter of the proposed urgency ordinance.
- 2.) Approve and adopt Urgency Ordinance 1370U.

## **ANALYSIS**

On October 19, the City Council directed staff to return to Council for action several water conservation-related items. One of those items is the addition of irrigation restriction penalties to the customer's water bill, to ensure collection and to heighten the perception that compliance with irrigation restrictions is mandatory. Another item that staff was directed to bring back for local enactment is the state restriction on outdoor

irrigation within 48 hours after measurable rain. (The proposed requirement that all new multi-family residential units be provided with individual water meters and the proposed prohibition on the use of potable water for dust control will be brought back to Council on a later date.)

Ordinance 1370U provides for three changes in the Municipal Code relative to water conservation and the collection of administrative penalties. The proposed amendments to the Code are described in the first five Sections of the Ordinance.

Section 1 of the Ordinance modifies §13.04.100 (Delinquent Bills) to specifically include unpaid penalties. This addresses a statement commonly heard from water customers that they will pay for the water portion of the bill or 'their water bill,' but will not pay their penalties.

Section 2 of the Ordinance modifies §13.04.120 (A) (Discontinuing of Service) to specifically include unpaid penalties in the range of conditions under which water service can be shut off.

Section 3 of the Ordinance modifies §13.24.140(C) to include those future State regulations adopted by the City under the new §13.24.240.

Section 4 of the Ordinance adds a new subsection 13.24.140(D) to include a prohibition on outdoor irrigation within 48 hours of measureable rain. This is an adoption of a regulation adopted by the State Water Resources Control Board (SWRCB Resolution 2015-0013, March 17, 2015) . The City's proposed regulation under this ordinance goes a step further by adopting a numeric value defining "measureable rain."

Section 5 of the Ordinance adds a new Section 13.24.240 which allows future regulations adopted by the state (or eliminated by the State) to be incorporated into the Code, or deleted from the Municipal Code by Council resolution.

#### **FINANCIAL REVIEW**

To the extent that this Ordinance will provide for improved collection on penalties assessed upon violators of irrigation restrictions, there will be a positive effect on water-related revenue. The effect is expected to be minimal.

#### **ENVIRONMENTAL REVIEW**

The imposition of new regulations regarding restrictions on irrigation and other uses of water is statutorily exempt from review under the California Environmental Quality Act, Public Resources Code sections 21000 et seq. ("CEQA") pursuant to Public Resources Code section 21080, subdivision (b)(4) and CEQA Guidelines Section 15269, subdivision (c). (Cal. Code Regs., tit. 14, § 15269, subd. (c)) as a specific action necessary to mitigate the effects of an emergency (drought or water shortage emergency).

**PUBLIC NOTICE PROCESS**

This item has been noticed through the regular agenda notification process. Copies of the report are available via the City's website at [www.cityofsierramadre.com](http://www.cityofsierramadre.com), at the City Hall public counter, and the Sierra Madre Public Library.

**STAFF RECOMMENDATION**

Staff recommends that the City Council:

- 1.) Hold a public hearing on the matter of the proposed urgency ordinance.
- 2.) Approve and adopt Urgency Ordinance 1370U.

Attachments:

Urgency Ordinance 1370U

Staff Report, October 19 (w/o attachments)

# ATTACHMENT

## URGENCY ORDINANCE NO. 1370U

**AN URGENCY ORDINANCE OF THE CITY COUNCIL OF THE CITY OF SIERRA MADRE, CALIFORNIA, AMENDING CHAPTERS 13.04 (WATER SYSTEM) AND 13.24 ("MANDATORY WATER CONSERVATION PLAN") BY ADDING A NEW SUBSECTION 13.24.240 ("IMPLEMENTATION OF STATE MANDATES") ALLOWING FOR AMENDMENT OF THIS CODE BY CITY COUNCIL RESOLUTION, AMENDING SUBSECTION 13.04.100 ("DELINQUENT BILLS"), PROVIDING FOR UNPAID ADMINISTRATIVE PENALTIES TO BE ADDED TO THE WATER BILLING, AMENDING SECTION 13.04.120 ("DISCONTINUING OF SERVICE"), PROVIDING FOR UNPAID ADMINISTRATIVE PENALTIES TO BE ADDED TO THE WATER BILLING, AND AMENDING SECTION 13.24.140 ("ADMINISTRATIVE FINES AND PENALTIES") ADDING A SUBSECTION D ESTABLISHING THE PROCEDURE FOR ADDING UNPAID PENALTIES TO THE WATER BILLING**

**WHEREAS**, on January 17, 2014, the Governor of the State of California proclaimed a state of drought emergency in the State of California due to current drought conditions in the state; and

**WHEREAS**, the Governor's proclamation also noted that the snowpack in California's mountains are approximately 20 percent of the normal average for January 2014, and that the state is experiencing extremely dry conditions that have persisted since at least 2012; and

**WHEREAS**, the Governor's proclamation called upon all Californians to reduce their water usage by 20 percent; and

**WHEREAS**, on July 8, 2014 the City Council of the City of Sierra Madre declared a water shortage emergency and initiated Phase III water conservation measures; and

**WHEREAS**, the California State Water Resources Control Board has adopted Emergency Regulation Article X ("Prohibition of Activities and Mandatory Actions During Drought Emergency") pursuant to its authority under Water Code Section 1058.5; and

**WHEREAS**, it is necessary for the City of Sierra Madre to enact similar prohibitions in order to comply with state law;

**WHEREAS**, the State of California has established a water conservation goal for the City of Sierra Madre of reducing the City's water consumption by 32 percent as measured against the same period in 2013; and

**WHEREAS**, in spite of prior efforts to do so, the City has been unsuccessful in meeting the conservation goal as set by the State.

**NOW THEREFORE,**

**SECTION 1: Municipal Code Amendment.** Section 13.04.100 of the Sierra Madre Municipal Code is hereby amended to read as follows:

**13.04.100 - Delinquent bills.**

All meters shall be read by the water department as provided in Section 13.04.050 and all bills for water or other service, including any unpaid penalties placed on such bills pursuant to Section 13.24.140, shall be due and payable at the city hall upon presentation. All bills remaining unpaid thirty days after the billing date, as printed on the bill, shall thereupon become delinquent and there shall be added to such delinquent bill an additional charge as set by resolution, which shall thereafter be paid and collected as part of said bill. Where bills become so delinquent, the water service to such delinquent user may be restricted at any time after appropriate twenty-four hour notice and/or restriction of water service. It shall be unlawful for any consumer pursuant to Section 13.04.270 to adjust or alter any reduction or service as a result of this chapter.

**SECTION 2: Municipal Code Amendment.** Section 13.04.120 of the Sierra Madre Municipal Code is hereby amended to read as follows:

**13.04.120 - Discontinuing of service.**

- A. The water rates, charges and penalties herein made, including penalties assessed for a violation of Chapter 13.24, shall be charged against property upon which such water or service is furnished (except the charges provided for under flat rates in Section 13.04.050) and against the owner thereof; if for any cause any of such sums owing become delinquent and unpaid, or if any of the other terms of this chapter of the rules and regulations established as a condition to the use of water are not complied with, the water may be restricted; and provided there has been no bona fide change in ownership, the water shall not be turned on to the same property until all of such charges, delinquencies and penalties have been paid in full, including the additional sum of the amount fixed in subsection E of this section for the expense of turning water off and on.
- B. The water superintendent may, in his/her discretion, shut off the water for a period not exceeding three months upon the written request of the owner of any premises upon which such water or service is furnished, provided no delinquency exists in the payment of charges and penalties for water service, upon the payment of the sum of the amount fixed in subsection E of this section as and for the expense of turning water off and on.
- C. If no application is made to restore such water service before the end of a three-month period, the water superintendent may remove the meter installed for such premises and

the water department shall charge and collect for reinstalling a meter for such premises the charges specified in Section 13.04.150.

- D. After the current month subsequent to the last meter reading by the water department following the receipt of the water department of the aforesaid written request, no further monthly minimum charge shall be made against such premises until water service has been restored.
- E. The amount fixed for water turn-off and turn-on charges is established by city council resolution.

**SECTION 3: Municipal Code Amendment** Section 13.24.140 of the Sierra Madre Municipal Code is amended to read as follows:

**13.24.140 - Failure to comply—Penalties.**

It is unlawful for any customer or user thereof of the water department to fail to comply with Sections 13.24.070 through 13.24.120 of this chapter. Civil penalties for failure to comply with any of the provisions shall be as follows:

- A. First Violation. For the first violation by any customer of the water department of any provision of Sections 13.24.070 through 13.24.120, a surcharge penalty is imposed in an amount of twice the Tier 1 water rate per one hundred cubic feet of water or billing units.
- B. Second Violation. For the second and all future violations by any customer of the water department of any provision of Sections 13.24.070 through 13.24.120, a surcharge penalty is imposed in the amount of three times the Tier 1 water rate per one hundred cubic feet of water or billing units.
- C. Pursuant to State Water Resources Control Board Emergency Rule Article X, Section X.1 and the procedures set forth in Chapter 1.18 ("Administrative penalties") of this code, a violation of Sections 13.24.060(A), (B), (F), and (G) or [Sections] 13.24.230 or additional state regulations adopted according to Section 13.24.240 of this chapter shall be punishable by an administrative citation as follows:
  - 1. \$125.00 for the first violation;
  - 2. \$250.00 for the second violation;
  - 3. \$500.00 for the third and any additional violation.
- D. Upon the exhaustion of the procedures set forth in Chapter 1.18 ("Administrative penalties") and this chapter for any penalties imposed pursuant to this section, the city may thereafter place any such unpaid penalties on the water bill in the manner

prescribed in section 13.04.050. Payments on water bills shall first be applied to any such unpaid penalties before payments for water or other service.

#### **SECTION 4. Municipal Code Amendment**

Section 13.24.230 of the Sierra Madre Municipal Code is amended to read as follows:

##### **13.24.230 - Restrictions on irrigation.**

- A. If so declared pursuant to a drought or water shortage emergency, in addition to the restrictions set forth in Section 13.24.060 (A)–(G), no customer shall make, cause, use, or permit the use of water delivered from the water department more than two days per week for purposes of irrigating of lawn, landscape or other vegetated area ("landscape irrigation"):
  - 1. Even-numbered addresses shall be limited to landscape irrigation on Mondays and Thursdays.
  - 2. Odd-numbered addresses and addresses ending in fractions shall be limited to landscape irrigation on Tuesdays and Fridays.
- B. The restrictions of subsection A above do not apply to landscape irrigation zones that exclusively use very low flow drip type irrigation systems when no emitter produces more than two (2) gallons of water per hour. These restrictions are not applicable to watering or irrigating by use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self-closing water shut-off nozzle or device, or for very short periods of time for the express purpose of adjusting or repairing an irrigation system.
- C. No water customer shall perform any type of outdoor watering within 48 hours of a measurable rain event. A measureable rain event shall be defined as a storm producing 0.25 inches or more of precipitation within Sierra Madre during a 24-hour period.

#### **SECTION 5. Municipal Code Amendment**

Section 13.24.240 shall be added to the Sierra Madre Municipal Code to read as follows:

##### **13.24.240 - Implementation of state mandates.**

In times of water emergency the State Water Resources Control Board may adopt regulations requiring local agencies to enact certain mandatory water conservation measures. In similar manner the state may rescind water conservation measures. The city council shall, after a noticed public hearing and by resolution, order that the appropriate water conservation measures as directed by the State be implemented, modified, or rescinded. The resolution shall become effective immediately upon adoption by the city council and shall be published once in the newspaper of general circulation.

**SECTION 6. Severability.** If any section, subsection, subdivision, sentence, clause or phrase of this ordinance is for any reason held to be unconstitutional or otherwise invalid, such decision shall not affect the validity of the remaining portions of this ordinance. The City Council hereby declares that it would have passed this Ordinance and each section, subsection, subdivision, sentence, clause and phrase hereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses or phrases be declared unconstitutional.

**SECTION 7. Effective Date.** This ordinance shall become effective immediately upon passage and adoption if passed and adopted by a four-fifths vote of the City Council, pursuant to Government Code Section 36937 (b).

**SECTION 8. Certification.** The City Clerk shall certify to the adoption of this ordinance and shall cause the same to be published or posted in the manner prescribed by law.

AYES:

NOES:

ABSENT:

ABSTAIN:

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John Capoccia, Mayor

ATTEST:

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Nancy Shollenberger, City Clerk

APPROVED AS TO FORM:

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Teresa L. Highsmith, City Attorney





**COPY**

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TO: Honorable Mayor Capoccia and Members of the City Council

FROM: Elaine I. Aguilar, City Manager *EA*  
Bruce Inman, Director of Public Works *BI*

DATE: October 19, 2015

SUBJECT: **CONSIDERATION OF MULTIPLE FACTORS RELATIVE TO THE  
STATUS OF SIERRA MADRE WATER CONSERVATION EFFORTS**

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### **SUMMARY**

The City of Sierra Madre has historically drawn its entire water supply from local groundwater sources, specifically the Santa Anita subarea of the Raymond Groundwater Basin. Due to declining groundwater levels in that basin, the City instituted water conservation measures in accordance with its Water Conservation Plan (Sierra Madre Municipal Code Chapter 13.24). Beginning on May 28, 2013, Council Resolution 13-12 implemented mandatory Phase 1 and Phase 2 conservation. Between May 2013 and April 2015, the Council has taken a number of additional actions in response to the prolonged drought and the declining groundwater levels.

In early October 2013, the City's wells had to be shut down to avoid damage. On October 11, 2013 the City began taking water from the Metropolitan Water District and has utilized imported water from that source exclusively since that date. The difference between the groundwater and the imported Colorado River water in water chemistry, water temperature and water disinfection agent has wreaked havoc on the City's 85+ year old water distribution system. The discoloration of potable water due to iron oxide released from the inside of public and private piping has required increased hydrant flushing and the accompanying loss of water. The City has been working with water quality consultants and developing a treatment program for the water which has reduced, but not completely eliminated the discoloration.

In June, 2015 the City's water distribution system began to fail. Water mains installed in the 1930's began to leak. Water distribution system leaks have increased more than 600% for the June-August period of 2015, as compared to the same period in 2013.

In addition, in April 2014, the Governor issued an Executive Order proclaiming a state of emergency due to the prolonged State-wide drought. Pursuant to the Executive

FOR CITY COUNCIL AGENDA \_\_\_\_\_

**ATTACHMENT**

Order, the State Water Resources Control Board (SWRCB) implemented a mandatory 25% reduction in potable water use. The SWRCB's implementation plan resulted in a cumulative Sierra Madre water reduction goal of 32%. The City has only attained the 32% reduction in one out of the past 4.5 months. The City's current cumulative conservation is at 22.3%. On September 14, the City received a warning notice for failure to meet the assigned water conservation standard. On October 1<sup>st</sup>, the City received a, "Notice of Violation for Failure to Meet Water Conservation Standard and Order for Additional Information."

For all of the reasons summarized above, the City Council is conducting a Special meeting to discuss a number of water related matters. Staff recommends that the City Council provide direction on the following:

1. Water Penalties & Fines; including assessment and use of the funds
2. Water System Improvements/Water Quality
3. Additional programs or actions to increase water conservation to meet State Conservation Goal
4. Update Regarding Spreading MWD water
5. City Response to SWRCB Violation Notice

### **ANALYSIS**

The City of Sierra Madre has taken a number of steps to respond to the prolonged drought and reduced water levels in the Santa Anita subarea of the Raymond Groundwater Basin. The City has instituted water conservation measures in accordance with its Water Conservation Plan (Sierra Madre Municipal Code Chapter 13.24.) On May 28, 2013, by Council Resolution 13-12, mandatory Phase 1 and Phase 2 conservation was implemented. Between May 2013 and April 2015 the Council has taken additional actions:

- Ordinance 1342
- Ordinance 1351 – Adopted Tiered Water Rates, Increasing annually through FYE 2018 (1/28/2014)
- Ordinance 1356U – Adopting Moratorium on new water service installations under Water Code (7/8/2014)
- Ordinance 1357U – Adopting Building Moratoria due to water shortage (7/8/2014)
- Ordinance 1358U – Adopting Building Moratoria due to water shortage (7/8/2014)
- Ordinance 1359U – Adding SWRCB water conservation measures to SMMC 13.24. (7/22/14)
- Ordinance 1361 – Adopting Article 15.20 of California Plumbing Code (Graywater Systems) into City Building Code

- Resolution 13-65 – Postponing Conservation Penalty Assessment (Due to Adjustment in Billing Schedules) (9/24/13)
- Resolution 13-81 – Postponing Conservation penalty Assessment (Due to Community having met the Conservation Goal in place at the time) (11/26/13)
- Resolution 14-58 – Enacting Phase 3 Water Conservation (7/8/2014)
- Resolution 14-61 – Initiating State Restrictions on Irrigation (per Ordinance 1359U) (7/22/2014)

While the City was responding to the declining levels in the aquifer, the Governor was taking action in response to the State-wide drought. The Governor issued an Executive Order and the Governor and Legislature continue to implement new water related legislation.

A number of issues have arisen that require Council policy direction. This staff report identifies a number of matters requiring immediate attention. Some of the issues are city specific issues (such as direction on how to use the funds collected in penalties and fines), while others pertain to the State mandated 32% water conservation standard for Sierra Madre. The following items are not listed in priority order.

1. Water Penalties & Fines; Including Assessment and Use of the Funds

In July 2015, the City began assessing penalties for customers that exceed their conservation targets. Prior to that date, the Council had suspended the imposition of penalties. As of the October billings, a total of \$155,000 has been billed/invoiced.

There are a few important factors to take into consideration prior to beginning a discussion of water penalties assessed for exceeding water conservation targets. The Council requested a discussion regarding what to do with penalties, in addition to a discussion of the penalties in general. There are sections of this report that overlap, in that penalties are discussed in this section of the report, and increasing penalties as a tool to achieving the State mandated goal is discussed on page 12 of this report.

For a bit of background information, the next few pages provide information regarding the penalties charged between July 2015 and October 2015 and statistical comparisons.

First, it is important to note the following:

- Revenue from Water Penalties should be used for Water Utility purposes: the funds should not be transferred to the General Fund and used for General Fund purposes (for example, to help balance the General Fund Budget).
- Revenue from Water Penalties was included in the current Water Utility Budget; a total of \$114,000 was included in Water Revenues for the current fiscal year. This revenue currently shown in the budget as part of the total water resources,

and as such, allocating the funds for a new, currently unbudgeted purpose will result in a reduction to the "bottom line" in the water fund.

Here is a four-month history of billed/invoiced water penalties:

Month 2015	# and % of accounts	Penalties Invoiced/Billed
July 2015	660 Accounts 35%	\$54,000
August 2015	315 accounts 17%	\$30,070
September 2015	433 accounts 23%	\$43,700
October 2015	320 accounts 17%	\$27,150
Total		\$154,920

A further analysis of the individual accounts that incurred penalties shows:  
For July to August, the percentage of accounts that exceeded their conservation target fell into the following categories: (The detailed October data was not available when this report was prepared.)

	July		September		August		October
# of Units Over	% of Accounts	% of Units	% of Accounts	% of Units	% of Accounts	% of Units	
100 +	1.9	20.4	2.1	28	1.6	19.4	
99 to 50	3.6	16.3	5.1	18	3.8	14.1	
30 to 49	6.3	11.2	8.1	16	8.9	21.1	
15 to 29	17.7	23.5	15.9	17	18.4	23	
6 to 14	33.1	21.4	34.9	16.3	27.6	16.2	
1 to 5	37.4	7.2	33.9	4.7	39.7	6.2	

This chart above evaluates the number of units that a customer exceeded their conservation target, and not the percentage amount that a customer exceeded their target. The same information as above, but show by the percentage amount that a customer exceeded their target shows the following:

	July		September		August		October
% of Target Exceeded	% of Accounts	% of Units	% of Accounts	% of Units	% of Accounts	% of Units	
100% +	13.4	42	2.1	28	11	30.8	
70% to 99%	9.1	17.4	2.1	9.2	5	10.4	
50% to 69%	11	11.4	3	8.7	12	22.2	
30% to 49%	19.3	15.2	8.1	16	16	15.5	
11% to 29%	29.1	11.3	25.1	23	28	15.2	
5% to 10%	14.3	2.3	29.8	11.4	16	4.5	
1% to 4%	3.3	0.4	29.8	3.7	12	1.4	

In further analyzing the customers who exceeded conservation targets, and only looking at customers who exceeded their target by at least 100 units of water per billing cycle, slightly more of the customers were single family residences. The units used in excess of the conservation target ranged from 100 to 400 units.

	Single Family	Multi- Family	Institutional	Commercial
July	18	13	8	1
August	3	1	1	0
September	6	2	1	0
October				

Another analysis that was performed was an analysis of the number of customers who were billed a penalty in July 2015 and were also billed a penalty in September 2015. Of all the accounts billed a penalty in July, approximately 63% incurred penalties in their September billing.

At this time, it would be appropriate for the Council to discuss if penalties should be allocated to a specific water utility related activity, such as increased water conservation education, dedicated staffing, water conservation programs (such as turf removal or fixture rebates) or “saved” in the event the City is fined for not achieving the State’s mandated 32% goal. The revenue is currently a component of the City’s total water utility revenue and pays for operational costs and is included in the water utility’s bottom line (i.e. Surplus or deficit.)

Another topic would be whether penalties should be increased. Penalties are currently two times the Tier 1 rate.

Another related topic pertains to whether water conservation targets should be revised for multi-unit properties. In evaluating the data, proportionally speaking, fewer multi-family units are exceeding their conservation targets. This may be the result of multi-family units being treated the same as single family units with respect to the minimum 12 units of water per dwelling unit. If the Council is interested in staff evaluating alternatives for minimum water units per multi-family dwelling, staff can return to a future meeting.

In February 2015 (Resolution 15-08), the Council authorized the use of the Administrative Citation procedure for violations of the prohibitions listed in Municipal Code §§ 13.24.060 and 13.24.230. Examples of these types of violations are: watering on the incorrect day; over watering; using water on driveways or sidewalks; or use of a hose to wash a car without a hose nozzle incorporating an automatic shutoff. A total of 1179 courtesy notices have been written. Sixty Notices of Violation have been sent. And 59 citations have been written, totaling \$7,800. However, only \$4,700 has been paid. The only method currently available to collect Administrative Citation fines is

either to put a lien on the property, or to send the citation to the City's collection agency. Staff has not experienced much success in collections, and does not recommend placing liens on properties due to the administrative time involved in this process. Using a collection agency results in the City collecting less than the citation amount. Staff would like the Council to consider a Municipal Code Amendment to authorize the Administrative Citation to be added to a property's water bill, so that if the total amount is not paid (the bill amount and the citation amount), the water can be turned off for non-payment. Staff would not be adding the citation amount to the water bill immediately, because staff would need to provide time for an appeal to be filed pursuant to the City's Administrative Citation ordinance. Once the time period for an appeal has lapsed, and if the citation remains unpaid, then the citation would be added to the customer's water bill.

Lastly, the Council has requested a discussion regarding the imposition of penalties for excess water use that results from a leak on private property. The City receives calls from approximately one to three customers a month who state that the reason they incurred a larger than normal bill is because of an undetected leak on the property. There is currently no City policy that allows staff to issue any discount for this type of water use. All water that flows through a water meter is billed to the customer, regardless of how the water is used. The theory is the water was produced, and costs incurred to get the water to the customer. There is even a new state law that requires the City to immediately notify customers if the City becomes aware of a leak on the customer's property.

Staff surveyed neighboring water utilities, and only one of 18 water utilities surveyed provided a discount for water use related to a leak. Most of the water utilities follow the same process as Sierra Madre, in that a customer who incurs a larger than normal bill can work out a payment plan to make payments over time.

The one utility that provides a billing adjustment follows the following procedure: A "one-time-only" adjustment is possible, if the customer writes a letter requesting consideration because of a leak and briefly explains what occurred on the property. Proof must be provided that the leak was repaired, either by providing a copy of the repair bill from the plumber, or a receipt for parts, if the repairs were made by the account holder. A water department employee will inspect the property to confirm that there is not an ongoing leak. To determine the amount of the financial adjustment, a three year average of the consumption for the same billing cycle is evaluated, and the difference is divided in half, with a cap of a \$300 credit. This water utility was not charging penalties for exceeding a water conservation target, so using this method to provide financial relief would require a modification to the calculation.

As an alternative, staff developed a simplified method to provide financial relief for customers who have undetected leaks. A one-time only adjustment can be made to the penalty portion of the bill. Proof that the leak was repaired must be provided, and staff will verify that a leak no longer exists, before any adjustment is made. The entire water

use would be subject to the city's tiered water rates, but any "penalty" portion (two times the Tier 1 rate, for water used in excess of the water conservation target) of the bill could either be reduced by 50%, or eliminated entirely.

If the Council is interested in providing financial relief for leaks on private property, staff would need direction regarding the method to be used to calculate the billing adjustment. Staff would return with a Resolution to memorialize the Council's policy.

2. Water System Improvements/Water Quality  
Review, Prioritization, and Funding of Water System Repairs

Review, Prioritization, and Funding of Water System Repairs

The City's water distribution system includes approximately 7.5 miles of pipeline dating back to 1930 or older. These water mains reached the expected end of their service lives years ago, and some of them are now failing. It is now the norm to have at least one water system leak a day, many days there are multiple system leaks. As noted in a September 8 Council staff report regarding personnel changes, since June the city's water distribution system has been plagued with frequent leaks. The September 8 report noted a 633% increase in leaks over the same period in 2013. The increased frequency of leaks continues; the total leak count from June 1, 2015 to October 14, 2015 comes to 135, vs. 12 for 2013.

Distribution system leaks are typically repaired by excavating around the leaking pipe, painstakingly scraping rust deposits off the outside of the pipe to allow for a good seal, and installation of a repair clamp. Due to the fragile nature of many of the city's water mains, the cleaning of the outside of the pipe or the compression on the pipe of clamp application often causes additional leaks. On average each leak repair requires about 6-12 man-hours depending on whether or not the Vactor truck can be utilized for excavation. The use of recently-purchased leak detection equipment will shave some time off that average. However in some areas where excavation must be done by hand, each leak can take considerably longer. Deputy Director Reynoso describes the typical leak response below in detail:

Typical leak procedures

1. Duty man arrives and evaluates leak (Triage, if other leaks are running concurrently)
2. Call Dig Alert (For marking of Gas Company mains and other buried utilities)
3. Mobilize additional Crew
4. Set Up delineation and traffic control
5. Locate leak with ground mic and/or correlator
6. Once utilities respond to Dig Alert ticket, punch holes in asphalt to confirm leak location.
7. Break asphalt 3'x3' square



8. Hand dig to water main. 3'-5' deep. (Vacuum eliminates most hand digging process and saves over an hour of labor)
9. Install pump to remove water from pothole. (Vacuum eliminates this process and saves time in setting up pump and dealing with loss of pump prime)
10. Expose water main and prepare mainline for repair clamp by removing tar coating and rust from outside of pipe.
11. Verify the outside diameter of the pipe and install appropriate size clamp
12. Torque clamp to manufacturer's recommendation
13. Wrap exposed section of pipe to protect from aggressive soil
14. Haul away asphalt and spoils (Vacuum eliminates most of this process. Spoils are vacuumed into truck during process.)
15. Backfill pothole and compact soil
16. Install temporary asphalt
17. Clean up site. (Vacuum minimizes spoils piles making clean up faster)
18. Clean trucks and equipment (Clean Vacuum Truck after use)
19. Street department returns to site to permanently repair street patch

Water Department staff is on 24-hour call for emergencies, including water system leaks. As such, on weekdays, staff comes in early to respond to leaks and it is not unusual for those same staff members to stay late beyond the end of their shifts to complete leak repairs or finish other time-sensitive work tasks delayed by leak repair duties. As evidence of the impact the leak 'explosion' has caused, Public Works overtime cost for the June-October period of 2013 totaled \$9,490. For that same period in 2015 the overtime cost totaled \$20,070.

This amount of effort is being expended on what are essentially temporary repairs. Work is being done, resources expended, on pipe that ultimately needs to be replaced. By continuing in the present reactionary mode, limited resources cannot be properly managed. The amount of time and energy spent by water department staff in dealing with leaks interferes with all other regular work tasks of staff, such as meter reading, hydrant flushing, data collection and record keeping, general systems maintenance and water quality sampling. In order to keep up with the increased workload, overtime costs have risen dramatically and the City Council has agreed to re-instate a frozen water department staff position.

Water system leaks and hydrant flushing for water quality improvement count against the City in terms of meeting its 32% conservation goal, with the lost water being considered by the State as water used by the City and its customers.

At this time it is necessary to begin what is essentially an emergency water main replacement program. While it is not possible to replace all the piping in the system which is beyond its expected service life, the replacement of all or even just some of the worst sections of pipe can eliminate the amount of time spent on making temporary repairs on the new pipe and free up staff for other important duties or repair of other mains.



At the request of the City Council Water Subcommittee, staff has identified the 20 worst segments of the water system and estimated the cost to replace these sections of main at \$3.12 million. A listing of those sections of water main is included with this report as Table A.

**Table A**

Segment	Pipeline location	Estimated Replacement Cost
1	Canyon Crest/Skyland/Idlehour from Orange to Orange	\$ 520,125
2	Fern Glen from Canyon Crest to Fern Dr.	61,250
3	W. Montecito from Baldwin to Auburn	128,100
4	Fane from Colony to Holdman	61,250
5	Colony from Santa Anita Ct to Fane	119,000
6	X-Country Canyon Crest to Middle Brookside	99,000
7	Woodland 16" Transmission Line.	327,250
8	N. Michillinda from Alegria to Edgeview	273,000
9	Santa Anita Ct from Sierra Pl to Mt Trail	74,400
10	Santa Anita Ct. Between Mt. Trail and Rancho	61,250
11	San Gabriel Ct from Sierra Pl to Mt Trail	67,650
12	Sierra Pl. from E Sierra Madre Blvd. to Lowell	117,150
13	W. Alegria from Sunnyside east to end	33,000
14	Fairview Ave. from Grove St to Michillinda	215,000
15	Key Vista from Sierra Keys to end	34,000
16	Cross-country above Lower Brookside	100,300
17	Gatewood Ln from Michillinda to include Gatewood Terr.	\$ 175,000
18	W. Bonita between Baldwin and Hermosa	\$ 197,050
19	Liliano From Arno to Stonehouse	\$ 348,250
20	Manzanita Ave from Hermosa to Lima St	\$ 121,250
Total 2012 Cost*		\$ 3,012,025
2015 Cost		\$ 3,126,482

	Original 2012 Leaker List
	New Leaker
	2012 Leaker/Current Problem

Staff has also identified water main sections for which replacement would benefit water quality. These are listed separately on Table B. Although these sections have not been plagued with leakage as the 20 on the worst leaker list have been, they are sections of pipe where discoloration complaints are most frequent of where staff observes the most

water discoloration when flushing hydrants. The discoloration list totals \$670,840. While these mains don't result in a lot of leaks, they do contribute to water quality complaints and excessive public and private water system flushing to clear the water from discoloration. These are listed as options the Council may want to consider in addition to replacement of some or all of the 20 sections listed in Table A.

**Table B**

21	Old Ranch Road (All)	\$246,138
22	Madre Lane (All)	\$64,500
23	Pleasant Hill (All)	\$90,300
24	Arno Drive, from Santa Anita Avenue to Liliano Drive	\$96,250
25	Liliano Drive, from Arno Drive to cul-de-sac.	\$77,000
26	Kaia Lane	\$36,750
27	Casey Street	\$35,350

**Total 2012 Cost\*** **\$646,288**

**2015 Cost** **\$670,840**

\*Costs in Tables A & B are based on September 2012 City Infrastructure Study

The costs listed in this reports are estimates of the costs to replace water mains along with their appurtenant fire hydrants, valves, and house service laterals. There are promising technologies available today for lining of underground potable water mains. This process is far less disruptive to the surrounding neighborhood and costs about 30% less that pipeline replacement. One of the firms manufacturing and installing domestic water pipe linings is Aquapipe/Sanexen. The firm has made presentations to staff regarding their product and construction processes. Staff proposes to seek bids from Sanexen for some of the pipeline work that is needed. That firm will not be available for work in Southern California until late November.

Main replacements are projects of a size cost that requires competitive bidding. That bidding process in turn necessitates preparation of plans and specifications (Bid Documents) for publication seeking bids. The steps to implementation of a capital improvement project such as this are:

- 1) Determine project scope
- 2) Prepare RFP for design services.
- 3) Obtain Council approval of RFP
- 4) Advertise RFP for design.
- 5) City Council award of professional services contract
- 6) Design
- 7) Obtain City Council approval to go out to bid for construction
- 8) Advertise for bids (Minimum of 30 days)
- 9) City Council award of construction contract

This process can take several months. At the current rate of leak development, a great deal of additional field staff time will be spent over the months leading to a project being awarded, not to mention the amount of water that will be lost. However, staff proposes to begin this process within the next few weeks with the development of a second or third phase of main replacements.

A proposed first phase of main replacements has been created through engineering work already done. Construction plans exist (prepared by City Engineer Tcharkhoutian) for a portion of Segment 1 (Skyland and Idlehour; Fern Drive to Canyon Crest), all of Segment 12 (Sierra Place), and all of Segment 20 (Manzanita; Lima to Hermosa). The plans were prepared in 2001 for a project that never received construction funding. These plans can be combined by staff with the technical specifications from 2001 and current boilerplate bid specs and be ready for bidding within a short period of time. The estimated cost of the group of Segments is \$637,700. Staff recommends proceeding with this group of segments first.

Remaining portions of Segment 1, along with Segments 2, 3, 6, and 7 would be excellent candidates for the use of pipe lining technology due to limited or complete lack of (in the case of No. 7) construction access. Staff remains in contact with Sanexen to determine the specific bid document needs for their process. Although staff currently intends to bid those segments for lining only, Sanexen and its competitor will not be excluded from bidding all main replacement projects. Staff would propose this group of segments as a second phase of the work. Current estimated replacement cost for these segments is \$786,450.

The short West Alegria Segment 13 serves only 4 addresses and is a manageable project for city staff to replace, without the needs for plans and bid documents. If this small project can be successfully completed by staff when balanced with other staff responsibilities and West Alegria customer inconveniences minimized, then the small Segment 15 Key Vista replacement might be another candidate for in-house replacement.

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FY 2015-16 Proposed emergency water main replacement program

Phase 1	Segments 1, 12 & 20	\$637,700
Phase 2	Segments 1, 2, 3, 6, & 7	\$786,450
Total		\$1,424,150

Segment 6 is included in the approved 5-Year Capital Improvement Project list for FY 15-16; Segments 12 and 20 are listed in the 5-year CIP for FY 16-17.

Immediate, possible funding for the water main replacements can come from Water Fund reserves, or from General Fund dollars. As of June 30, 2014, there is \$2.3 million in Water Fund Reserves. As of June 30, 2014, there is \$553,476 in Unassigned General Fund Reserves, and \$4.6 million in Assigned General Fund Reserves (50% of operating revenues reserve policy.) Although staff does not recommend that non-

water funds be used for water department purposes, it is ultimately a City Council policy decision. Staff evaluated whether a loan could be made from the General Fund to the Water Fund, and the City's Bond documents specify that the Water fund, "will not incur any other indebtedness payable out of (water) revenues." The City Attorney has recommended that before proceeding with a loan, that a legal opinion be requested from the City's bond counsel. There would be a cost for the opinion.

### 3. Additional Water Conservation Measures

The following ideas are presented as possible means to improve the City's overall conservation to assist in meeting the State mandated standard (32%.)

- a. One day a week watering
- b. Hire staff dedicated to Water Conservation education and enforcement
- c. Increase penalty for exceeding water conservation target – currently the penalty is two times the Tier 1 rate, or \$5.02 per unit.
- d. Prohibiting use of potable water for dust control for private construction projects
- e. Allow for reduction of water allocations for customers appealing their existing allocation, when calculated water budget indicates that less water is needed at the appellant's address.
- f. Reinstate water shut-offs for repeat violators of conservation restrictions.
- g. Adopt state restriction on watering within 48 hours of measurable rain.
- h. Require individual water meters for each new multi-family dwelling unit
- i. Revise multi-family water use targets.
- j. Evaluate the City's top water users and reevaluate their water conservation targets.

### 4. Update Regarding Spreading MWD Water

For purposes of improving water quality staff has proposed that the water imported via SGVMWD & MWD be diverted to the City's spreading grounds instead of being taken directly into the city's distribution system. This would allow the natural cleansing process of the local soils to remove the disinfectant and at least correct the chemical structure of the imported water to make it conform more to the City's historic water supply.

Prior to the use of imported, treated water for groundwater recharge, it is necessary to obtain the approvals of both the Regional Water Quality Control Board and the Raymond Basin Management Board.

#### A. Spreading of imported water – Los Angeles Regional Water Quality Control Board Review/Approval

On September 1, 2015 staff submitted a letter to the Los Angeles regional Water Quality Control Board requesting a Waiver of Waste Discharge Requirements to enable the City to use treated potable water for groundwater recharge. On

Monday, October 12, the Executive Director of the LARWQCB signed the Waiver, providing conditional approval for the use of the imported water for groundwater recharge. The conditions of approval of the waiver are:

1. The discharges of imported potable water shall not cause pollution or nuisance as defined in California Water Code Section 13050.
2. The discharge imported potable water shall not be disposed of in geologically unstable areas or so as to cause earth movement.
3. The total volume of discharge shall not exceed 815 million gallons per year.

The conditions are easily achievable, the potable water is non-polluting, the spreading grounds are not geologically unstable, and the stated maximum 815 million gallons actually exceeds the maximum 2,500 acre feet of water that the City is allowed from the MWD connection. A copy of the Waiver and conditions has not yet been received by the City. If that document arrives prior to the Special Meeting, a copy will be provided to the City Council.

B. Spreading of imported water – Raymond Basin Management Board Review/Approval

On September 1, 2015 staff sent the identical request for the use of imported water for groundwater recharge to the office of the Raymond Basin Management Board, intending that the Watermaster review of the request be handled concurrently with the request to LARWQCB.

There have been delays at the Raymond Basin due to Watermaster staff deciding to wait until there was clearance from the state before starting their own analysis of the City's request. City staff corrected that in mid-September and the Raymond Basin Board is scheduled to hear the matter at its regular meeting of October 21. As of the preparation of this report, Public Works staff has not been advised of the recommendation that Board staff will be making on the matter.

In any case, staff has requested but not yet received an estimated cost to do a study of the impacts on the aquifer. Staff will return with this information as soon as it is available, before proceeding with implementing this alternative.

5. Update on Restoring and Stabilizing the Water level in the Santa Anita Subarea

SMAART

The Raymond Basin Management Board (RBMB) is the court-appointed Watermaster for the Raymond Groundwater Basin. In an effort to address the record low water levels in the Santa Anita Subarea of the Raymond Basin, in January 2014 the RBMB created the ad hoc Sierra Madre Arcadia Aquifer Recovery Team (SMAART). The group consisted of RBMB staff, representatives of Arcadia and Sierra Madre, as well as three other voting members of the RBMB. In March 2014 at the request of SMAART, a groundwater monitoring program was initiated.

The groundwater monitoring program consisted of Board staff taking monthly water level readings at the two cities' wells, monitoring of the pumping activities of the two cities, and data collection regarding groundwater recharge activities in the Subarea. Between March 2014 and the present, the monitoring program provided monthly reports to both cities summarizing all the information collected.

The primary reason for establishment of SMAART was for the two cities to develop a mutually agreeable plan for the management of the Subarea. The meetings were discontinued in June of 2014 after the discussions reached an impasse.

Following a meeting between the Mayors of the two cities and their respective senior staff members, the SMAART again began to meet in July of 2015. Discussions have centered on the development of a reasonable safe yield for the Subarea and an agreement for the Management of the Basin.

At the September SMAART meeting, participants were provided a draft Management Plan to review and comment on. A copy of the Draft Management Plan is attached to this report as Exhibit A in redline form. This management Plan model is still under refinement and discussion, and is presented only as an indicator of progress toward the goal of restoring the Basin.

In addition, a process for determining a reliable annual safe yield was discussed and agreed upon in concept. That draft concept is attached as Exhibit B in graph form. The graphed data shows East Raymond Basin fiscal year annual precipitation in the Y axis and fiscal year water production in the X axis. The red dots are critical; all the others were plotted simply to see if the rainfall/production created any sort of pattern. The red dots represent periods of time in both wet years and dry, when water levels in the aquifer remained relatively constant. These were understood to represent safe yields for the Basin. The line drawn between the red dots allows the user to roughly estimate an annual safe yield based on the prior year's rainfall. For example, using the graph a rainfall in 2020 of 25 inches would allow for an annual yield of about 5,200 acre feet in 2021. This safe yield model is still under refinement and discussion, and is presented only as an indicator of progress toward the goal of restoring the Basin.

#### 6. City Response to SWRCB Violation Notice and Order for Additional Information

On October 1<sup>st</sup>, the City received a, "Notice of Violation for Failure to Meet Water Conservation Standard and Order for Additional Information." Staff has prepared a draft response to the SWRCB, and the draft is attached. Staff is seeking input from the City Council regarding the draft, before forwarding the City's response. The proposed response is attached as Exhibit C.



### **FINANCIAL REVIEW**

Other than staff time, there are no costs incurred with the Council's review of this staff report. Depending upon the alternatives the Council desires to implement, there may be expenses incurred, in the range of a few thousand dollars, to more than \$1 million.

### **PUBLIC NOTICE PROCESS**

This item has been noticed through the regular agenda notification process. Copies of the report are available via the City's website at [www.cityofsierramadre.com](http://www.cityofsierramadre.com), at the City Hall public counter, and the Sierra Madre Public Library.

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### **STAFF RECOMMENDATION**

It is recommended that the City Council provide staff with direction.

Attachments:      Exhibit A: Draft East Raymond Basin Management Plan (Markup form)  
                         Exhibit B: Draft Safe Yield estimating tool  
                         Exhibit C: Draft reply to SWRCB Order for Additional Information