

STAFF REPORT

TO: HONORABLE MAYOR AND CITY COUNCIL
FROM: GREG RAY, PUBLIC WORKS DIRECTOR/CITY ENGINEER 
SUBJECT: STATUS REPORT – WATER RESOURCES AND CONSERVATION EFFORTS

BACKGROUND

The purpose of this report is to provide the Council with an update regarding the status of water supply, demand and conservation efforts in the City of Grover Beach.

In the water year ending March 2015, businesses, residents and municipal uses consumed approximately 78% of the City's water supply contractually allocated to the City of Grover Beach. Based on the most recent population projections and the current trend which indicates a gradual reduction in per-capita water use, the City will have sufficient water sources to serve the entire City at estimated build-out population if the contractual allocation continues to be available. However, threats to the City's water supply, including the recent drought, could result in short- or long-term reductions in the water supply. Due to the effects of the drought on the City's water supply, staff will continue to pursue additional sources of supply.

The City has two principal water sources: ground water and surface water. At present, the total amount of water available to the City is 2,207 AF per year. This amount is detailed as follows:

<u>Water Source</u>	<u>Acre Ft (AF)</u>
Ground Pumping	1,198
Agricultural land conversion	209*
County Zone 3 (Lopez Lake)	<u>800</u>
Total	2,207

*The agricultural land conversion allocation is a credit based on conversion of previously irrigated cropland into developed land. The City of Grover Beach has received credit for 70 acres of land converted to residential development since 1983.

In 2011 the City Council adopted the 2010 Urban Water Management Plan update. The Urban Water Management Plan is a document required by the State Water Resources Control Board. It contains specific information about the City's water supply, demand projections, and vulnerability of the City's supply. The Water Shortage Contingency Plan is a component of the adopted Urban Water Management Plan. The City's Water Shortage Contingency Plan

APPROVED FOR FORWARDING



ROBERT PERRAULT
CITY MANAGER

Please Review for the Possibility of a Potential Conflict of Interest:

- None Identified by Staff Bright
 Shoals Nicolls
 Lee Shah

Meeting Date: June 8, 2015

Agenda Item No. 2

includes stages of action related primarily to drought, but also considers other short- and long-term supply shortages. The Council adopted four stages of action that include Stage 1 which is primarily educational; Stage 2 which identifies voluntary water conservations measures and use prohibitions; Stage 3 mandates a 10% reduction in water use, mandatory water conservation measures and use prohibitions; and Stage 4 which mandates a 25% reduction in water use, mandatory water conservation measures and use prohibitions. Stage 3 was enacted in 2014 by Council Resolution No. 14-38 (see Attachment 1).

DISCUSSION

Though the current population and water supply projections indicate that the City will have sufficient water for the anticipated buildout population, the recent drought has placed the City's water supplies in critical condition that may ultimately require short-term measures to further reduce water demand.

Groundwater Supply. Rainfall has been below average for four years. On behalf of the City, and as required by the Santa Maria Groundwater Basin Adjudication, consultants have completed extensive monitoring of the groundwater basin and prepared the Northern Cities Management Area (NCMA) Annual Report that is filed with the Court. The monitoring is conducted to document how the groundwater system is responding to annual rainfall and the extraction of water by urban and agricultural entities. The monitoring specifically includes the study of four wells situated in such a location as to provide early warning of impending deterioration of water quality and, in particular, sea water intrusion.

In 2009, monitoring well tests identified a rise in sodium-chloride, and potassium in one well located in Oceano. According to water experts the rise in these water constituents indicated the onset of sea water intrusion. In order to provide an early warning of impending salt water intrusion the NCMA used the 2009 well levels to identify an average well level of 7.5 feet as the critical point for concern of sea water intrusion. Annual monitoring since the 2009 event has not indicated recurrence of sea water intrusion; however, well levels measured between April 2013 and December 2014 show that well levels have been below 7.5 feet for at least 18 of the 21 months. More detail is provided in the NCMA Annual Report which is available for public review at the customer service counter at City Hall and on the City's website at <http://www.grover.org/DocumentCenter/Home/View/1893>.

The NCMA Annual Report indicates that total water use in the basin was at just 42% of the 9,500 AFY safe yield. However, even with the reduced demand, water elevations throughout the area declined by several feet, with some areas finishing the year with water elevations below sea level. Typically, when pumping is less than the safe yield, the remaining volume of groundwater results in increased groundwater in storage, which is then manifested by rising water levels. The current condition, with groundwater extractions at 42% of the safe yield and declining water elevations, illustrates the impacts of the ongoing severe drought that has significantly reduced recharge. This current condition is also in part a result of the impacts of reduced subsurface inflow recharge from the east (Nipomo Mesa) that has occurred because of overdraft pumping in the Nipomo Mesa Management Area (NMMA), the development of a pumping depression beneath the Mesa, and the elimination of the groundwater divide between the NCMA and NMMA. This condition of declining water levels in the NCMA, even though total pumping is currently 42% of the basin safe yield, will be exacerbated if the NCMA agencies are required to increase their dependency on groundwater withdrawals due to reductions or interruptions in local surface water supplies or State Water Project deliveries.

Surface Water Supply. Drought conditions have also affected water levels in Lopez Lake. Recent measurements indicate the lake is at approximately 37% full with 18,244 acre-feet of water in storage. In December 2014 the County Board of Supervisors adopted the Low Reservoir Response Plan (LRRP). The LRRP was adopted in response to a study conducted by the Zone 3 Technical Advisory Committee that showed current Lopez Lake delivery rates could result in complete depletion of the reservoir within two years under certain drought conditions. The LRRP identifies an adaptive management plan that reduces water deliveries in response to various reservoir storage levels. The adaptive management plan could extend the time of depletion another two years. At their meeting on April 21st the Zone 3 Advisory Committee, based on a recommendation from their Technical Advisory Committee, approved a recommendation to reduce municipal water deliveries from Lopez Lake by 10% by implementing the adaptive management component of the Low Reservoir Response Plan. Under current conditions it is expected that reductions could be increased to 20% as early as October 2015. These actions will reduce the City's allocation, but because of the surplus water entitlements stored in Lopez Lake the City can expect to receive full delivery of its allocation in the 2016 water year (ending March 31, 2016).

Potential Severe Water Shortage. For the reasons identified above the City's water supplies are in critical condition. Unless demand continues to decrease, the additional reductions in surface water deliveries may result in increased demand on groundwater pumping. If groundwater supplies were threatened by saltwater intrusion, the City could be forced to rely entirely on Lopez Lake deliveries until emergency water provisions could be enacted. Without significant rainfall this winter, water levels in Lopez Lake could fall below 10,000 acre-feet. Under the provisions of the LRRP, Lopez Lake deliveries would be reduced by 20%. Total annual supply without groundwater could be as little as 640 acre-feet. This amounts to 43.5 gallons per person per day. The current residential demand is approximately 67 gallons per person per day and total demand amounts to approximately 76 gallons per person per day. Under these conditions, it would require a 42% reduction in all water uses to reduce demand to available supply.

Water Conservation Efforts. In June of 2014 Council adopted a Stage 3 Water Shortage Condition. Since 2011 the City has been under Stage 1 or Stage 2 provisions which include public outreach and education and voluntary prohibitions on water use. The Stage 3 provisions include a mandatory 10% reduction in water use compared to 2013 which is the base year for comparison. Other provisions include mandatory prohibitions against wasting water (see Attachment 1). Customers who fail to achieve the 10% reduction receive a courtesy notice. At the next billing period customers who again fail to meet the required reduction receive a warning letter. At the next billing period customers who again fail to meet the required reduction receive a penalty that amounts to a 100% increase in their water consumption charge. Additional violations increase the penalty to 200% and then 300%. Generally the program has been very successful. The City has realized an average reduction in water consumption of approximately 18% since the program was adopted. Since August of 2014 only 2.4% of the City's water customers have received a first penalty, only 0.8% have received a second penalty and only 0.2% have received a third penalty. The City's Water Conservation Specialist has provided education and outreach to residents and business owners in an effort to assist them in complying with the requirements. The City's program has been one of the most successful in the state.

Implementation of the mandatory 10% reduction and penalties has received some criticism. Even though the majority of residents and businesses are complying without penalty (97.6%), some business owners and apartment owners/managers in particular have consistently applied

for waivers of the penalty or complained about implementation of the penalties. About 25% of the penalties have been waived by the Public Works Director. Waivers have been granted in cases where the number of persons in an apartment building has changed dramatically compared to the base year or where businesses can demonstrate a significant increase in business. In both cases the owners/managers must demonstrate that water conserving devices and practices have been implemented to the extent practicable.

Other cities in California have adopted water conservation programs with similar requirements but they either don't include penalties or treat businesses differently. In Santa Cruz customers facing penalties can receive a waiver if they attend a class on water conservation practices offered by the City. In the City of Arroyo Grande, water conservation requirements are not applied to businesses but businesses are expected to reduce landscape watering by 25%. Also, residential customers are required to reduce based on their consumption tier with greater reductions required from the higher tiers. The City of Pismo Beach has not implemented mandatory water use reductions.

Thresholds identified in the Water Shortage Contingency Plan for declaration of a Stage 4 Water Shortage Condition will likely be met by the end of summer. Stage 4 requires a 25% reduction in water consumption. Staff is anticipating costs for implementing the program will increase along with staff time and the number of complaints received. Although it has been very successful so far, Council could consider modifying the penalty system. Options identified by staff include:

- Mandatory water conservation training for residents or businesses requesting waivers
- Establishing modified baseline water use for apartment buildings
- Removing the mandatory conservation requirement for businesses that submit a water conservation plan detailing implementation of water conserving devices and practices to the maximum extent practicable
- Changing the penalty to an administrative citation that increases from in amount per violation up to a maximum limit. The City Municipal Code already contains provisions for applying administrative citations and penalties.
- Businesses account for approximately 18% of the annual water use. Council could consider eliminating application of the reduction requirements to businesses.

Water Conservation Incentives. The City currently offers incentives to customers who remove turf, retrofit toilets or retrofit washing machines. The programs have been very successful and in some cases have exhausted funds allocated to implementing the program. Staff is recommending continuing the program at its present levels and will return to Council with a recommendation to allocate additional funding for the remainder of this fiscal year.

State of California Executive Order B-29. On April 1st the Governor signed Executive Order B-29-15 which enacted statewide mandatory water conservation requirements. The Governor's Order includes a requirement that the State Water Board impose restrictions to achieve a statewide 25% reduction in potable urban water usage through February 28, 2016. The required reduction is to be based on a comparison to the amount of water used in 2013. The final regulations adopted by the Board imposed an 8% water use reduction on the City of Grover Beach. Due to the City's success in implementing the program the Board imposed the lowest water use reduction amount. Additional requirements include a mandatory provision to reduce outside irrigation to two days per week.

Northern Cities Management Area 2014 Annual Report. The NCMA 2014 Annual Report has

been completed and filed with the Court on behalf of the City of Grover Beach. A copy of the final report is available for public review at the customer service counter at City Hall and on the City's website at <http://www.grover.org/DocumentCenter/Home/View/1893>. Staff is recommending the City Council receive and file the report.

ALTERNATIVES

The Council has the following alternatives to consider:

1. Receive and file this report, receive and file the NCMA 2014 Annual Report and provide direction to staff regarding the penalty requirements of the Water Shortage Contingency Plan; or
2. Provide staff with additional direction.

RECOMMENDATION

It is recommended that the Council receive and file this report, receive and file the NCMA 2014 Annual Report and provide direction to staff regarding the penalty requirements of the Water Shortage Contingency Plan.

FISCAL IMPACT

This is a status report. No additional direct financial impact is anticipated as a result of this report. At present, the Water Fund reserves are dwindling as a result of increased costs for water conservation, reduced water sales and implementation of water system upgrades. If the Council directs staff to modify the current strategy new costs associated with the development of the strategy will be identified and staff may need to return to the Council for further budget amendments.

PUBLIC NOTIFICATION

The agenda was posted in accordance with the Brown Act.

ATTACHMENTS

1. Resolution No. 14-38
2. The NCMA 2014 Annual Report is available for public review at the customer service counter at City Hall and on the City's website at <http://www.grover.org/DocumentCenter/Home/View/1893>

RESOLUTION NO. 14-38

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF GROVER BEACH,
CALIFORNIA, DECLARING A STAGE 3 WATER SHORTAGE CONDITION IN
ACCORDANCE WITH THE ADOPTED WATER SHORTAGE CONTINGENCY PLAN**

WHEREAS, Resolution No. 11-39 adopting a Water Shortage Contingency Plan was passed, approved and adopted at a regular meeting of the City Council of the City of Grover Beach on the 20th day of June, 2011; and

WHEREAS, said plan contains definitions of five stages of water shortage actions, including Consumption Reduction Methods, Goals, Prohibitions and Penalties required for each Stage of Action; and

WHEREAS, the criteria for adopting a Stage 3 Water Shortage Condition have occurred; and

WHEREAS, certain water uses identified in the Water Shortage Contingency Plan are *prohibited* during a Stage 3 Water Shortage; and

WHEREAS, the Council has determined to implement the following measures in accordance with the Water Shortage Contingency Plan (refer to Exhibit A):

- Notify all customers of the water shortage;
- Mail information to all customers explaining the importance of water conservation;
- Provide technical information to customers on means to promote water use efficiency;
- Develop a media campaign to promote water conservation (including Channel 20);
- Develop or expand conservation programs such as low-flow toilet rebates;
- Penalties for violation of mandatory prohibitions;
- Require a reduction in water use of 10% during a Stage 3 water shortage; and

WHEREAS, the Council has determined to implement the following additional measures as recommended by staff:

- Directly notify large water users of the pending reduction goals and penalties;
- Offer large water users direct assistance in meeting the goals including information on possible plumbing retrofits and other water saving measures;
- Measure water use reduction in comparison to water use during the same billing period of the previous year. For example, compare a customer's June 2014 water bill to their June 2013 water bill to calculate the consumption reduction;
- Require the City to meet the same reduction goals by reducing water use in parks and other public facilities;
- Report to Council on the status of water use reduction and water supply conditions at regular intervals during the Stage 3 water shortage;
- Implement additional measures, including water rate or tier adjustments, if other measures fail to meet the reduction goal; and

WHEREAS, the Council has determined to implement the penalties in amounts and manner described in the Water Shortage Contingency Plan.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Grover Beach does hereby declare a Stage 3 Water Shortage Condition, which includes **mandatory water consumption reduction methods, goals, prohibitions and penalties** against certain water uses, all listed above and in accordance with the Water Shortage Contingency Plan.

Upon motion by Council Member Marshall, second by Mayor Pro Tem Lee, and on the following roll call vote, to wit:

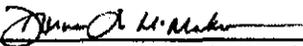
AYES: Council Members Bright, Marshall, Nicolls, Mayor Pro Tem Lee, and Mayor Peterson.
NOES: Council Members – None.
ABSENT: Council Members – None.
ABSTAIN: Council Members – None.

the foregoing Resolution was **PASSED, APPROVED, and ADOPTED** at a regular meeting by the City Council of the City of Grover Beach, California this 16th day of June, 2014.



DEBBIE PETERSON, MAYOR

Attest:



DONNA L. McMAHON, CITY CLERK

WATER SHORTAGE CONTINGENCY PLAN 2010

WATER SHORTAGE CONTINGENCY PLAN ELEMENTS

The City of Grover Beach shall implement an updated Water Shortage Contingency Plan for 2010 using the following as adapted from the seven steps recommended in the Urban Drought Guidebook 2008 Updated Edition:

- DEFINITION OF WATER SHORTAGE, STAGES OF ACTION
- PROVISION OF CONSUMPTION REDUCTION METHODS
- DEFINITION OF PROHIBITIONS AND PENALTIES
- METHODS FOR THE ANALYSIS OF IMPACT ON REVENUES AND EXPENDITURES AS WELL AS MEASURES TO OVERCOME THESE IMPACTS
- MECHANISMS TO DOCUMENT ACTUAL REDUCTIONS IN WATER USE RESULTING FROM IMPLEMENTATION OF THE WATER SHORTAGE CONTINGENCY PLAN

DEFINITION OF WATER SHORTAGE

The amount of rainfall in a given year or series of years is recommended as the basis for definition for stages of action. Rainfall, the ultimate source of recharge to the groundwater basin and surface water supplies, is readily monitored, and is recognized as the basis for defining drought. Rainfall is cumulated daily and summarized on an annual basis. City of Grover Beach rainfall averages approximately 16 inches per year. Rainfall at Lopez Recreation Area averages approximately 24 inches per year. A blended average of 20 inches of rainfall during a rainfall season (July 1 through June 30) will be the "Benchmark" amount used to determine what stage of action is necessary to be implemented.

San Luis Obispo County Division of Public Works maintains online rainfall sensors and Lopez Reservoir levels. Lopez Recreation Center (707) will be used in determining the annual rainfall amount in the Lopez Reservoir area. The City of Grover Beach Public Works Department maintains rainfall records from manual recordings taken daily at the City Yard. These recordings will be used in determining the annual rainfall amount in the City of Grover Beach.

Alternate (backup) sites Lopez Dam (737) and Oceano (795) located at 4th Street and Hwy 1 overcrossing will be used as a comparison to validate the rainfall amounts recorded at the official stations.

Ongoing groundwater monitoring of sentry wells along the coast in the Northern Cities Management Area is conducted on a quarterly basis. Any abnormal

quarterly "Monitoring Report" shall be considered in determining the Stage of Action of a Water Shortage Declaration.

Yearly "Blended Average Rainfall Amount" is the average of "yearly" measured rainfall at the two official locations.

When the measured yearly "Blended Average Rainfall Amount" falls substantially below "Benchmark" for a given time and in the amounts defined in the following "Water Shortage Stages of Action", a water shortage occurs.

WATER SHORTAGE STAGES OF ACTION

Water Shortage Stages of Action shall be directly related to the defined "Benchmark".

STAGE I - MINOR - VOLUNTARY

Rainfall Condition is 65% of "Benchmark" rainfall or a quarterly "Monitoring Report" raises the concern of potential seawater intrusion.

STAGE II - MODERATE - VOLUNTARY

Rainfall Condition is an average of 65% of "Benchmark" rainfall for two years in a row. Average will be determined beginning at the first year rainfall was 65% of "Benchmark." If a quarterly "Monitoring Report" raises the concern of potential seawater intrusion, this condition shall be considered in making a Stage II determination.

STAGE III - SEVERE - MANDATORY*

Rainfall Condition is an average of 65% of "Benchmark" rainfall for three years in a row. Average will be determined beginning at the first year rainfall was 65% of "Benchmark." Other factors, including any report of seawater intrusion, will also be considered before making a Stage III determination.

STAGE IV - CRITICAL - MANDATORY*

Rainfall Condition is an average of 65% of "Benchmark" rainfall for four years in a row. Average will be determined beginning at the first year rainfall was 65% of "Benchmark." Other factors, including any report of seawater intrusion, will also be considered before making a Stage IV determination.

STAGE V - TERMINATES THE EMERGENCY RESPONSE

Could be declared by the City Council when rainfall has returned to normal levels, Lopez Reservoir has returned to normal levels, monitoring reports are satisfactory and the City Council is convinced it is safe to do so. Remove all mandatory conservation measures.

* Before declaring a Severe or Critical Water Shortage except in the case of a sudden or catastrophic event, a public hearing will be held at which consumers of

such water supply shall have an opportunity to be heard to protest against the declaration and to present their respective needs to said governing board.¹

The City Engineer will monitor the actual "Blended Rainfall Amount" and all monitoring reports at least on a seasonal basis. If the seasonal analysis indicates the first stage of action criteria may have been met, the City Engineer will notify the City Council and recommend the Council declare a "Stage I" water shortage. If the City Council declares a "Stage I" water shortage, the Director of Public Works/City Engineer of the City of Grover Beach will implement "Consumption Reduction Methods" (see next section).

The same procedure for monitoring and City Council notification will be followed for Stages II, III, IV, and V.

During any water shortage "Stage of Action" declared by the City Council, City Staff will closely monitor water consumption and make recommendations as appropriate to the City Council. When a "Stage V" condition is declared by the City Council, staff will return to monitoring seasonal rainfall and monitoring reports on at least an annual basis.

CONSUMPTION REDUCTION METHODS

Once the City Council has declared a water shortage stage, measures will be implemented to meet water conservation goals. This section describes consumption reduction methods that will be implemented by the Director of Public Works in response to City Council declared water shortage "Stages of Action". These measures range from public education to mandatory watering days.

The following measures and prohibitions shall be VOLUNTARY during a Stage I or Stage II water shortage and become MANDATORY during a Stage III or Stage IV water shortage.

- Notify all customers of the water shortage
- Mail information to all customers explaining the importance of water conservation
- Provide technical information to customers on means to promote water use efficiency
- Develop a media campaign to promote water conservation (incl. Channel 20)
- Develop or expand conservation programs such as low-flow toilet rebates
- Increase rates (Requires City Council action)
- Lower tiers (Requires City Council action)

¹ Excerpt from Urban Drought Guidebook 2008 Updated Edition, Appendix A, Water Code Section 350-359

Prohibitions:

The Urban Water Management Planning Act requires prohibitions against specific water use practices during water shortages. The prohibitions include:

- Use of potable water for street cleaning
- Unauthorized use of water from any fire hydrant
- Use of potable water to wash sidewalks or roadways where air-blowers or sweeping provides a reasonable alternative
- Use of potable water for construction purposes, such as consolidation of backfill unless no other source of water or method can be used
- Restaurant water service to patrons unless upon request
- Hydrant flushing except where required for public health and safety
- Refilling existing private pools except to maintain water levels
- Use of potable water for planting of turf and other new landscaping unless it consists of low water using, drought tolerant plants
- Use of water for washing cars, boats, sidewalks, driveways or other exterior surfaces without a quick-acting shut-off nozzle on the hose
- Operation of any ornamental fountain or car wash unless the water is re-circulated

Depending on the duration and severity of the water shortage and at the discretion of the City Council, the above measures can include prohibiting water use for planting any new landscaping, limiting landscape watering to specific days of the week, and discontinuing operation of all fountains.

PENALTIES

The Water Shortage Contingency Plan imposes penalties at various shortage stages including house call warnings, double and triple water rates and disconnection. Any fines or penalties assessed under this Plan are subject to the provisions of Grover Beach Municipal Code.

When the City Council declares water shortage Stage III or IV, prohibitions become **MANDATORY**.

- Violation of mandatory prohibitions will result in penalties.
- A reduction in water use of 10% will be required during a Stage III water shortage.
- A reduction in water use of 25% will be required during a Stage IV water shortage.
- Customers will be responsible for achieving these goals.

During Stage III or IV Water Shortage Conditions, the Director of Public Works will be responsible for determining if any water account is in violation of the Consumption Reduction goal.

Any account found in violation of the Consumption Reduction goal will be monitored and managed on a monthly basis until the Consumption Reduction goal is achieved.

Step 1. The Director of Public Works will notify any account not meeting the goal and remind the account of the mandatory prohibitions and consumption reduction requirement. Penalties for non-compliance will also be described.

Step 2. The Director of Public Works will notify any account still not meeting the goal and make a house call to remind the account of the mandatory prohibitions and consumption reduction requirement. A written warning will be given that penalties for non-compliance will be exacted if compliance is not achieved within the next billing cycle after notice is given.

Step 3. The Director of Public Works will notify any account still not meeting the goal and remind the account of the mandatory prohibitions and consumption reduction requirement. Step 3 penalty is now invoked and consists of 100% increase of each tier of water rates for the billing cycle after this notice is given.

Step 4. The Director of Public Works will notify any account still not meeting the goal and remind the account of the mandatory prohibitions and consumption reduction requirement. Step 3 penalty is now increased and consists of 200% increase of each tier of water rates for the billing cycle after this notice is given.

Step 5. The Director of Public Works will notify any account still not meeting the goal and remind the account of the mandatory prohibitions and consumption reduction requirement. Step 3 penalty is now increased and consists of 300% increase of each tier of water rates for the billing cycle after this notice is given.

- Increased water rates will remain in effect until the first billing period after water use meets the consumption reduction goal set for the stage of water shortfall declared by the City Council.**
- In the event an account becomes delinquent, standard non-payment and disconnection rules shall apply.**
- Before a disconnected account may be reconnected, all outstanding billings and a standard reconnection fee shall be paid.**

METHODS FOR THE ANALYSIS OF IMPACT ON REVENUES AND EXPENDITURES

For the City of Grover Beach, effective implementation of the Water Shortage Contingency Plan would result in a decline in potable water sales.

Revenues derived from penalties for excessive water use or water wasting during the water shortage would not effectively offset lost revenues.

This penalty related revenue will be applied toward administration of the Water Shortage Contingency Plan. Declining water demands will be offset to a small degree by a decline in operating expenses related to the amount of water provided, such as pumping (energy) and water treatment costs.

During a Stage III or Stage IV Water Shortage, City Staff will analyze water production, consumption, and projected revenue compared to the normally expected revenue. Revenue shortfalls, if any, will be determined and any need for temporary water rate increases will be reported as appropriate to the City Council.

Any temporary water rate increases will apply to all water accounts and are **IN ADDITION** or cumulative to any water rate increases invoked under the **PENALTIES** section.

MECHANISIMS TO DOCUMENT ACTUAL REDUCTIONS IN WATER CONSUMPTION

During a Stage III or Stage IV Water Shortage, City Staff will analyze water production, consumption, and projected revenue compared to goals set by the City Council. Reports will be prepared as appropriate and will contain enough information to fully document decreased consumption in comparison to goals set based upon the Water Shortage Stage of Action declared by the City Council.