

BOARD MEETING AGENDA
SPECIAL MEETING OF THE BOARD OF DIRECTORS OF
CITRUS HEIGHTS WATER DISTRICT

THURSDAY APRIL 30, 2015 beginning at 6:30 PM
DISTRICT ADMINISTRATIVE OFFICE
6230 SYLVAN ROAD, CITRUS HEIGHTS, CA

**** NOTE CHANGE IN MEETING LOCATION ****

DISTRICT TEMPORARY ADMINISTRATIVE OFFICE
7011 SYLVAN ROAD, SUITE E, CITRUS HEIGHTS, CA

In compliance with the Americans with Disabilities Act, if you have a disability and need a disability-related modification or accommodation to participate in this meeting, please contact the Assistant General Manager or Human Resources Specialist at (916) 725-6873. Requests must be made as early as possible, and at least one full business day before the start of the meeting.

CALL TO ORDER:

Upon request, agenda items may be moved to accommodate those in attendance wishing to address that item. Please inform the General Manager.

ROLL CALL OF DIRECTORS:

PLEDGE OF ALLEGIENCE:

VISITORS:

PUBLIC COMMENT:

The Public shall have the opportunity to directly address the Board on any item of interest to the public before or during the Board's consideration of that item pursuant to Government Code Section 54954.3. Public comment on items of interest within the jurisdiction of the Board is welcome, subject to reasonable time limitation of each speaker.

(A) Action Item

(D) Discussion Item

(I) Information Item

O-1. Water Conservation Options Workshop (I/D)

Review the District's Conservation Options in light of the anticipated actions by the State Water Resources Control Board (SWRCB) on May 5-6, 2015.

O-2. San Juan Water District / Sacramento Suburban Water District

Reorganization (I/D)

Review and discuss the Phase 2A Study: Analysis of Reorganizing San Juan Water District and Sacramento Suburban Water District.



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Board of Directors

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Susan K. Sohal

FUTURE CHWD BOARD OF DIRECTORS MEETING DATES:

May 12, 2015	6:30 PM	Regular Meeting
June 2, 2015	6:30 PM	Regular Meeting

ADJOURNMENT:

CERTIFICATION:

I do hereby declare and certify that this agenda for the Special Meeting of the Board of Directors of the Citrus Heights Water District was posted in a location accessible to the public at the outdoor bulletin board at the District Administrative Office Building, 6230 Sylvan Road, Citrus Heights, CA 95610 at least 24 hours prior to the Special Meeting in accordance with Government Code Section 54956.



ROBERT A. CHURCHILL, Secretary

Dated: April 28, 2015

CITRUS HEIGHTS WATER DISTRICT

DISTRICT STAFF REPORT TO BOARD OF DIRECTORS APRIL 30, 2015 SPECIAL MEETING

SUBJECT : WATER CONSERVATION OPTIONS WORKSHOP
 STATUS : Information/Discussion Item
 REPORT DATE : April 28, 2015
 PREPARED BY : Hilary Straus, Assistant General Manager

OBJECTIVE:

Review the District's Conservation Options in light of the anticipated actions by the State Water Resources Control Board (SWRCB) on May 5-6, 2015.

BACKGROUND AND ANALYSIS:

In April 2014, Governor Brown issued an Executive Order asking the SWRCB to assess voluntary conservation levels for urban water agencies, and granted that State agency authority to adopt emergency conservation regulations. Consequently, the SWRCB adopted regulations in July 2014 and updated those regulations in March 2015. As a result of continued severe drought conditions into a fourth year, on April 1, 2015, Governor Brown directed the SWRCB to implement mandatory water reductions in urban areas to reduce water usage by 25 percent statewide. The Governor also directed that this regulation take into account the different levels of conservation already achieved by communities based upon their relative per capita water usage or "Residential Gallons Per Capita Per Day" (R-GPCD).

On April 7 and 22, 2015, SWRCB staff issued revised proposed conservation regulations, having received more than 250 comments State-wide, including two comment letters from the Citrus Heights Water District (CHWD) (Attachment 1) and comments from State-wide and regional water associations (Attachment 2). Based on a District-wide R-GPCD during the period July-September 2014, the SWRCB proposed a conservation mandate of a 32% reduction in water use.

It is anticipated that the SWRCB will issue a Notice of Proposed Emergency Rulemaking on April 28th for public comment and possible action by the SWRCB at its May 5-6, 2015 meeting. If the State Board acts on May 5th or 6th, 2015, it is anticipated that the SWRCB's regulations would become effective on May 15, 2015. Further, it is noteworthy that these emergency regulations do not address rate structures and other pricing mechanisms. However, SWRCB is considering possible implementation of non-compliance fines on a per diem basis for Water Districts (up to \$10,000) and their customer (up to \$500).

At the April 12th CHWD Board of Directors meeting, the Board reaffirmed the District's Stage 3 – Water Warning, and enacted additional regulations specific to the April 7th SWRCB announcement, including:

- Prohibiting irrigating turf or ornamental landscaping during, and up to 48 hours following, measurable rainfall;
- Establishing a maximum number of 3 days per week watering allowance;
- Requiring that operators of hotels and motels must provide guests with the option of choosing not to have towels and linens laundered daily, and prominently display notice of this option.

CHWD has already achieved a conservation rate of 20% during 2014. In anticipation of additional action from the SWRCB, CHWD staff is providing several additional options for CHWD Board consideration to achieve the additional anticipated 12% of mandated water savings:

- Adopt a Stage 4 Water Crisis Long Term (Attachment 3, Pg. 6), anticipated to coincide with the State's new regulations requiring the District to reduce consumption by 32% through February 2016. Note—The District's Stage 4 Water Crisis includes measures to reduce District water consumption ranging from 26% to 50%;
- Restrict outdoor watering to a maximum 2 days per week scheduled based upon odd/even addresses;
- Work with the top 20% of high consumption users to reduce consumption;
- Hire additional temporary staff for water waste monitoring;
- Utilize Operations personnel to distribute water waste door hangers;
- Increase public outreach, including developing a "Drought Resource Center" at the District's web site and in the front lobby;
- Extend the District's efforts at public outreach through the Regional Water Authority (RWA);
- Pursue State funding for a "cash for grass" program at the District level;
- Consider implementing Stage 4—Water Crisis drought billing rate (Attachment 4).

Items being considered or implemented by other local water districts include:

- Hiring private security companies for water waste patrol (Implementing - Sacramento Suburban; Considering - City of Sacramento)
- Issuing rebates for water saving devices, such as point-of-heat water faucet devices or recirculating pumps (Considering - Sacramento Suburban, City of Sacramento, Sacramento County, Roseville)
- Giving out automatic shut-off nozzles, buckets and water efficient sprinkler heads (Implementing - San Juan Water District, Sacramento Suburban, Fair Oaks Water District, Sacramento County, West Sacramento, Roseville)
- Holding water conservation workshops for homeowners and businesses (Implementing - CalAm Water District, City of Sacramento, Roseville)
- Adding an online water waste reporting tool (Implementing - City of Folsom, City of Sacramento)

- Increasing leak detection efforts by hiring contract staff (Considering - Sacramento Suburban)
- Changing to monthly billing, allowing for a faster response to high water users (Considering - San Juan Water District)
- Implementing Automated Meter Reader (AMR)/Automated Meter Infrastructure (AMI) programs to increase efficiency (Implementing – El Dorado Irrigation District, City of Folsom, Roseville)
- Hiring interns and volunteers to assist with water usage monitoring (Considering - San Juan Water District)
- Giving away or providing at reduced cost smart controllers, including smart controllers with rain sensors (Considering - Sacramento Suburban)

As previously mentioned, the State's anticipated emergency regulations do not address rate structures and other pricing mechanisms, which could send price signals to rate payers to further reduce water consumption.

Water Shortage Rate Structure

The Water Shortage Rate Structure was adopted by the CHWD Board in November 2014 after a Proposition 218 public notification process and a Public Hearing conducted at the same time that regular water rates for 2015 were considered. This shortage rate structure is intended to serve as a price signal for customers to encourage reduced water use in a Stage 3 or higher Water Conservation Stage. It also serves as a source of revenue to support costs that may be incurred during water shortages including staffing costs for increased water conservation activities or public information costs.

The Water Shortage Rate Structure establishes two charges on top of the regular 2015 water rates. The first is a Water Shortage Charge that sets a percentage increase on the cost of every unit¹ of water consumed by the customer. The second is an Excess Use Charge in the form of a higher percentage increase on units of water consumed in excess of a specified number of units based on the size of the customer's water meter. For example, a typical residential customer with a 1-inch meter would pay the excess use charge if their water consumption exceeds 52 units during a two-month billing cycle. The Water Shortage Rate Structure varies with the level of Water Conservation Stage declared by the Board of Directors (Attachment 4).

Proposition 218 - Capistrano Taxpayers Association v. City of San Juan Capistrano (2013)

The ruling in the recent Capistrano case addresses two elements of Proposition 218. The first part of the decision addresses the use of tiered municipal water rate structures, which are commonly established to create an economic incentive for conservation and efficiency. The idea behind tiered rates is that the more water one uses, the more one pays for each additional increment or "tier" of water. The first tier is frequently designed to be as cost-effective to the rate payer as is possible, and reflects an estimate of basic household needs, while successive tiers place a greater premium on water and are intended to send a price

¹ 1 Unit = 748 Gallons of Water

signal that incentivizes conservation.

It is important to note that the Court of Appeal did not decide that all tiered water rates are illegal; rather the Court analyzed Prop 218 requirements, and determined that the rates in each tier must reflect the cost of service for property owners falling in that tier. Should the Board be interested in considering the Stage 4 rates, staff would work with legal counsel and the District's rate consultant to evaluate the rate structure in relation to the Court's ruling and report back to the Board.

As the Citrus Heights Water District plans for the current drought, some of the key financial issues it faces are as follows:

- **Increased costs related to increased use of groundwater.** As a result of the current drought, the District may have to pump groundwater at an increased unit cost in an effort to conserve more surface water for use by others within the San Juan Water District wholesale service area that do not have access to groundwater sources. This increased pumping activity results in higher electric costs, a portion of which is offset by a reduction in the amount of purchased water from San Juan Water District. Higher pumping and well maintenance costs are due to increases in SMUD standby and peak demand rates, and a planned increase in groundwater production for 2015.
- **Increased unit cost of wholesale surface water.** Citrus Heights Water District's main source of water is surface water provided via wholesale by the San Juan Water District (SJWD). There are three components to the SJWD charge to the Citrus Heights Water District. Two of the three components (the Service Charge and Debt Service Charge) are fixed costs. The third component (Per Unit Cost of Water or "Commodity Rate") is variable. As conservation measures are implemented, Citrus Heights Water District anticipates purchasing/using less wholesale surface water from SJWD, but as approximately two-thirds of the cost of the wholesale water is fixed, the unit cost to the Citrus Heights Water District will increase.
- **Economic activity.** The recent upswing in building and economic activity in the area has a spillover effect on workload in various areas of District operations, from increased need for inspection of construction projects to greater customer service activity related to buying and selling of property, conservation inquiries as well as possible need for additional temporary conservation staff. As conservation efforts by our customers increase, income will decrease as a result of the cost to deliver water per unit and fixed cost premiums go up.
- **Drawdown of District's Rate Stabilization Reserves Anticipated.** It is noteworthy that the District's rate revenue consultant and staff project that on an annual basis, Stage 4 drought conditions and accompanying conservation measures would result in the following draw-down of Citrus Heights Water District's Rate Stabilization Reserves (currently at \$1 million):
 - 1) *No Drought Rates* are implemented, an estimated deficit of approx. \$1.47 million in operations resulting in an over draw of reserves by (\$470,000);
 - 2) *Stage 3 Drought Rates* are implemented, an estimated deficit of approx. \$1.1 million in

operations resulting in an over draw of reserves by (\$100,000)

3) *Stage 4 Drought Rates* are implemented, the estimated deficit of operations and draw-down of reserves is \$502,000.

If the regulations now being considered by the SWRBC are enacted in their proposed form, staff anticipates presenting to the CHWD Board for consideration a declaration to move to Stage 4--Water Crisis. Additional conservation measures, highlighted above, may also be part of the staff recommendation, based upon Board input at tonight's workshop.

Further, implementation of the Water Shortage Rate Structure is not a requirement under Stage 4, but would be consistent with the objectives of Stage 4. Implementation requires an affirmative vote of the Board of Directors, and a 30-day advance notice to customers would be made before beginning to apply the rate structure to customer bills.

RECOMMENDATION:

Review the District's Conservation Options in light of the anticipated actions by the SWRCB on May 5-6, 2015.

ACTION:

No action required.



ATTACHMENT 1

CHWD Response Letter April 13, 2015

CHWD Response Letter April 22, 2015



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April 13, 2015

Ms. Jessica Bean
State Water Resources Control Board

Via email to: jessica.bean@waterboards.ca.gov

Dear Ms. Bean,

Citrus Heights Water District appreciates the opportunity to comment on the SWRCB's Proposed Regulatory Framework for Mandatory Conservation Measures (Proposed Framework). The purposes of this letter are to identify the key facts in the Proposed Framework that affect the District, address the problems proposed by the identified facts, and propose solutions that can meet Governor Brown's objectives in the April 1, 2015 Executive Order.

Citrus Heights Water District provides water service to a population of approximately 67,000 residents in northeast Sacramento County and a small portion of south Placer County. The communities that the District serves include portions of the cities of Citrus Heights and Roseville and unincorporated areas of Fair Oaks, Orangevale and Carmichael. All of the District's 19,600 service connections are metered serving single and multi-family residential customers, commercial accounts and governmental /institutional customers.

The District's water supplies include surface water from Folsom Reservoir and groundwater from the District's five wells with a sixth coming on-line this October.

The comments provided herein are intended to be in agreement with and supplemental to those provided today by the Regional Water Authority of which this District is a founding member.

The Big Picture

California is experiencing an epic drought that puts communities, farms and fish in real danger of cataclysmic failure. And it is becoming more apparent that droughts, like this one, are the norm. The District recognizes the impending peril and will continue to do its part to assist those in need just as it may find itself asking for assistance from other Californians in another perilous time for another reason.

The District, through its own policies and foresight, has:

- Secured local water assets,
- Planned for extended droughts through surface and groundwater conjunctive use efforts and programs that were significantly supported by Proposition 50 and Proposition 13 grant funds from the State,
- Developed a culture and economy in harmony with the Sacramento region's environment, and
- Invested and plans to continue to invest millions of dollars for infrastructure upgrades to improve reliability and mitigate drought calamities.

The District has fully embraced the State's statutory mandate for "Regional Self-Reliance" and responsibly planned for and paid for its citizens' drought mitigation and long-term conservation programs. But now the District is being told to *do more* and *pay more* to benefit those Californians that reside outside of its region who have not embraced Regional Self-Reliance and have failed to plan. And the *do more* and *pay more* order looks to be in place for the foreseeable future creating a fundamental injustice to the District's ratepayers.

Do More.

Citrus Heights Water District is being asked to disproportionately carry California's drought burden. The District is being asked to reduce its residential per capita water use by 35% and its commercial-institutional usage by a similar percentage so that California can meet a 25% statewide water conservation objective. This mandate for the District to "do more" is fundamentally wrong, especially when taking into account, irrespective of growth, the District's achievement of a reduction in water use of 49% when comparing 2014 to 1999.

The District has planned for and secured reliable local water supplies (not imported supplies) and built its own infrastructure and conveyance system to manage droughts and other water reliability issues in harmony with the Sacramento region's culture and environment. The District has managed its surface and groundwater resources to endure critically dry years. In other words, the District has planned for its water future using local supplies and engineering – all with an understanding that droughts in California are inevitable and that reliable water supplies form the basis of a sound economy. And, despite this current epic drought crisis, the District's good water planning would allow it to serve its residents adequate water supplies to meet their fundamental needs and beyond. The proposed Framework could actually force the District to forego utilization of the reliability and drought mitigation assets in which it has invested.

But the State of California seeks to levy punishment on the District for good planning (calling it *waste*) by telling the District's 67,000 residents that they must disproportionately carry the water supply burden for all of California by reducing their usage by 35%. And, in particular, the District's residents must carry that burden on behalf of those areas in the State that rely on imported sources of water that greatly exceed their naturally-occurring local resource limits. The District's residents should not be forced to perpetually "do more" and disproportionately bear the burden of inadequate water supply planning in other areas of California.

Pay More.

The District is also being asked to "pay more" and disproportionately bear California's drought costs despite the District's investments to-date in its reliable water supplies and long-term conjunctive use water supply facilities planning. The State of California is telling the District's residents that although the District's ratepayers have paid to acquire the District's reliable water assets that protect the District's residents from drought, the District should share those water assets with other Californians at the District's sole expense. In other words, the District should *give its water supply away for free* even though the District's ratepayers made all of the investments to secure the reliable supplies and pay for the delivery infrastructure.

The State is also mandating that, even though the District's financial coffers rely upon the bimonthly fees paid by the District's residents for their metered water consumption, the District should sacrifice those fees – and solely bear the economic burden of the loss of those fees – so that areas without water can be served. In short, the State is telling the District's ratepayers to assume the economic burden for the inadequate water supply planning in other areas in the State that are beyond the District's control!

In addition, by forcing reductions in commercial demand, the State is directly impacting the District's business economy. Indeed, under the SWRCB Proposed Framework, the District's excellent long-term water planning and sound investments in supplies, conservation, and infrastructure do not satisfy the State's "equitable conservation standards." The Proposed Framework mandates that the District disproportionately carry the financial burden of this drought in order to benefit all of California.

The District's ratepayers should not be forced to perpetually "do more" and "pay more" to rectify the inadequate water supply planning of other areas in California. The disproportional assignment of drought-related burdens and costs to the District's ratepayers who have planned well for their futures is, in its purest form, unjust and inequitable.

The Details

The District has spent a considerable amount of time assessing the details provided in the Proposed Framework. The District's comments are divided into the following categories: (1) Tiered Residential Per-Capita Use Targets; (2) Commercial, Industrial and Institutional water use reduction; (3) The Newly Constructed Home and Building Irrigation Mandate; (4) Compliance Assessment; (5) Enforcement; and (6) California Water Law.

1. The Tiered Residential Per-Capita Use Targets Should be Changed to Reflect Local Factors that Affect R-GPCD, Historical Conservation Performance, and the Statutory Mandate of Regional Self Reliance.

Fact: The SWRCB is targeting a reduction in statewide urban potable water demand of about 1.3 million acre-feet. The Proposed Framework allocates this total savings based upon calculated September 2014 R-GPCD, resulting in GPCD reduction targets between 10% and 35% statewide.

Problem: The proposed tiered R-GPCD is fundamentally flawed because it fails to reflect local factors that affect R-GPCD. The SWRCB, on the SWRCB website, has expressly identified the inappropriateness of using this data to calculate and compare water conservation effectiveness:

It is not appropriate to use Residential Gallons Per Capita Day (R-GPCD) water use data for comparisons across water suppliers, unless all relevant factors are accounted for. Factors that can affect per capita water include: Rainfall, temperature and evaporation rates... population growth... population density... socio-economic measures such as lot size and income... and water prices.¹

It is confounding why the SWRCB would use the methodology it expressly deems as inappropriate to address the mandates of its water conservation decree. Treating dissimilar water supply conditions and circumstances as "the same" everywhere in the State is a recipe for failing policy and arbitrary action.

Solution: SWRCB should develop a methodology that takes its own identified factors into account when assessing R-GPCD. Climate, meteorology, hydrology, population statistics, environmental conditions and obligations, distance from source water, conveyance and transportation losses, regional self-reliance on local water supplies, return flows (via creeks, streams, permitted wastewater discharges, etc.), and past conservation performance are just some of the items that need to be considered in making the R-GPCD calculation a useful planning and conservation tool. These factors need not

¹http://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/conservation_reporting_info.shtml

be exact, but could be applied to refine tiered per capita use targets to better reflect the conditions that exist in various regions in this State.

2. The Commercial, Industrial and Institutional Water Use Reductions should be Incorporated into the Overall Per Capita Water Use Target for the Water Purveyors.

Fact: The Governor's Order directs the SWRCB to address Commercial, Industrial and Institutional (CII) water conservation in similar percentages to those identified for Residential uses. The Governor's Order states that the SWRCB "impose restrictions to require that [CII] properties... implement water efficiency measures to reduce potable water usage in an amount consistent with the reduction targets mandated in Directive 2."

Problem: As described above, CII uses have significant bearing on the economic viability of the District. Punishing a District that has planned for and secured water supplies to keep their CII uses whole in times of shortage should be abandoned. The Governor's Order and subsequent press releases indicate his emphasis on the economic importance of California's agricultural economy to the local residents and the State of California as a whole. Similarly, the District's commercial economy is just as important to the District's economic well-being and requires the same protections that the Governor has decreed for agriculture.

Solution: Let the District determine how it will meet its required GPCD reduction rather than SWRCB mandating particular requirements for particular classes of water users. The SWRCB should be more concerned about achieving the 1.3 million acre-foot reduction target, not *how* a water purveyor goes about doing it. The SWRCB should allow the District to determine what is in the District's best interest to meet conservation targets and how the District may be able to accommodate those interests with the resources that are at its disposal. Simply mandating that CII users must conserve some portion of water precludes creative solutions that might allow for economic productivity to continue while resource conservation goals are achieved.

3. The Mandate for New Home Landscape Irrigation should be Clarified as Prospective Rather Than Retrospective so that Existing and Approved Land Use Plans can Progress.

Fact: The Governor's Order directs the SWRCB to "prohibit irrigation with potable water outside of newly constructed homes and buildings that is not delivered by drip or microspray systems."

Problem: Incorporating resource conservation ethics into the landscape plans of new homes and new developments is an important long-term conservation protocol for the State of California. It is not, however, a logical

drought mitigation measure and should be addressed prospectively rather than retrospectively. Requiring approved land use plans and home building plans to be completely reconfigured based on the Governor's Order is impractical and unworkable for the District and the Cities and Counties in which it provides water service. Existing land use plans developed by and permits issued by the Counties of Sacramento and Placer and the Cities of Citrus Heights and Roseville for homes within the District for which a "Will Serve" letter has been issued and/or are approved but not yet constructed would require modification that may trigger other legal obligations or challenges for said Counties and Cities or require said Counties of Cities to halt home building altogether. Such action is overkill in light of the other priority actions that could make more water available for drought mitigation in California.

Solution: The existing Model Water Efficient Landscape Ordinance (MWELO) obligations dictate the irrigation parameters for newly constructed homes. Retrofitting "newly constructed homes and buildings" would require a significant amount of resources that would result in minimal water conservation savings in the current drought cycle. Time is better spent adjusting the MWELO for future land use plans that are undergoing the land use and water supply planning processes before homes and buildings are approved or constructed.

4. The Compliance Assessment Should Reflect Actual Compliance Achieved through Historical Actions and Progress Rather Than an Arbitrary Baseline Assessment.

Fact: The Proposed Framework defines the reporting months for which comparisons between 2013 R-GPCD and 2015-16 projected R-GPCD will be made to assess compliance. The proposal states that monthly values for June 2015 through February 2016 will be compared "to the same period(s) in 2013."

Problem: The period identified for comparison would encroach upon a period of extreme drought peril in California. California is in its fourth consecutive year of drought. Yet the SWRCB wishes to compare the District's tiered R-GPCD and CII conservation mandate to historical periods where the District was already experiencing and mitigating drought impacts. Moreover, the Governor declared a state of Emergency on January 17, 2014 and the SWRCB is now considering the extremely dry conditions that developed in late 2013 and early 2014 as the basis for the District's compliance assessment. This timeline adversely affects those agencies that responded to the drought in its earliest stages.

Solution: We suggest that the comparison period be established as March 2012 through February 2013. Such an assessment reflects conditions that existed in the drought's infancy where water users were beginning to

understand the implications of reduced precipitation and runoff. Furthermore, the comparison period should incorporate meteorological and climatological variances. For instance, along the lower American River, November and December 2012 had significant rainfall events, providing over 12 inches of rain which significantly affects irrigation and water demands. Comparing similar meteorological situations is critical to assessing compliance in meeting R-GPCD and CII conservation criteria. Absent these considerations, comparisons may inadvertently indicate a purveyor shifting from "in compliance" to "out of compliance" and then back to "in compliance" as weather factors affect the baseline and comparison months.

5. The Enforcement Actions Should Clarify What Enforcement Actions Equate with Specific Regulatory Violations and What Procedures will be used in Implementing Enforcement Actions.

Fact: The Proposed Framework identifies "informal" and "formal" enforcement actions that might be levied upon urban water purveyors that violate SWRCB mandated actions. The enforcement actions threaten fines of "up to \$10,000 per day for each day of non-compliance." These extraordinary measures and heavy fines may be justified by the perilous water conditions in the State of California, but clarity in how these enforcement actions are triggered and implemented is extremely important to the District.

Problem: Enforcement of regulatory actions is a critical component of effective governance. But enforcement of regulatory actions is unjust where the regulations are unclear and the types of enforcement actions levied for regulatory infractions is not clearly articulated and thus potentially inconsistently applied. The Proposed Framework simply lists informal and formal enforcement but does not link those enforcement tools to the types of regulatory violations that may be in effect. For instance, the District simply cannot be responsible for leaky pipes upon a resident's property with a potential fine to the District amounting to \$10,000 per day. The Proposed Framework fails to describe how the regulatory enforcement will apply to the obligations of the District and therefore the District is unable to provide meaningful comment on the listed enforcement actions.

Solution: The Proposed Framework should clarify which enforcement actions relate to specific regulations and violations. Simply stating that it is possible for the SWRCB to bring formal enforcement actions against the District of up to \$10,000 per day for "compliance" that the District may or may not be able to control is too vague to warrant meaningful comment. Clarification of such extraordinary enforcement penalties is needed.

6. The Proposed Framework Should Clarify How It Implicates the Fundamental Components of California Water Rights Law

Fact: California Water Rights law is based upon 150 years of well-established principles for allocating water supplies in times of shortage. The water rights priority doctrine was upheld in the most recent California Supreme Court case dealing with water in California, *Barstow v. Mojave*, where the court reiterated the water rights priority system as the "central principle in California water law." The court contemplated and addressed the California Constitutional prohibition on waste and unreasonable use but returned to the doctrine of priority in rendering its final decision.

Problem: The Proposed Framework seeks to "equitably" reapportion water based upon notions of fairness that are counter to the water rights priority system and counter to the *Barstow v. Mojave* decision. Changing the water rights priority system based upon malleable concepts of equity through water conservation mandates, renders the priority doctrine meaningless and will create vast uncertainty in water and land use planning throughout California.

Solution: Reassert the legal principles in California's water rights priority system so that there is no misunderstanding among water purveyors and users in the State that failure to adequately plan for drought with local supplies and local investments may lead to cessation in water supply availability and an undue burden on local ratepayers and customers.

Summary

Once again, we appreciate the opportunity to comment on the SWRCB's Proposed Framework. The District is hopeful that SWRCB staff, management and Board Members will deeply reflect upon the underlying inequities of the Proposed Framework that affect the District as well as the regulatory suggestions provided in this letter. If you have any questions about the issues described in this letter, please contact me directly through any of the communication channels provided below.

Sincerely,

Robert A. Churchill

Robert A. Churchill
General Manager
rchurch@chwd.org

cc: Board of Directors, Citrus Heights Water District
Henry Tingle, City Manager: City of Citrus Heights
John Woodling, Executive Director: Regional Water Authority



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April 22, 2015

Ms. Jessica Bean
State Water Resources Control Board

Via email to: jessica.bean@waterboards.ca.gov

Dear Ms. Bean,

The Citrus Heights Water District disagrees with the SWRCB's proposed draft emergency regulations implementing the Governor's April 1, 2015 Executive Order (Proposed Regulations) issued on Saturday April 18, 2015. The Proposed Regulations violate state law as well as the State's regional self-reliance mandate, punishing those entities who rely upon local water sources by investing "*in water use efficiency, water recycling, advanced water technologies, local and regional water supply projects, and improved regional coordination of local and regional water supply efforts.*"¹

"No Good Deed Goes Unpunished"²

The District has invested millions of ratepayer dollars to carefully plan and implement water management measures that have positioned the District to continue reasonable water service to its ratepayers during periods of drought or other water supply disruptions. In other words, the District has planned for its water supply reliability for 2015 and beyond through sound management and sound investments so that its ratepayers' needs are met.

The District also continues to help Californian's during the prolonged drought by voluntarily reducing its water use to assist those in need – achieving an average monthly savings since July 2014 of 17% compared to July 2013. An even more outstanding example of this District's commitment and focus on being good stewards of our water resources is our **reduction of water use, irrespective of growth, by 49%** from 1999 to 2014. Yet the reduction mandates included in the Proposed Regulations disproportionately punish the District for its regional self-reliant planning by illegally taking the District's water without compensation for use by those who have not planned for drought in accordance with California law.³

The District's primary investment for drought protection has been its **conjunctive use** facilities and prudent management of regional groundwater

¹ Water Code Section 85021 (developed as part of the Sacramento-San Joaquin Delta Reform Act of 2009).

² Clare Boothe Luce (1956).

³ The California Supreme Court has been very clear on the doctrine of prior appropriation as the primary component in California Water Rights law. *City of Barstow v. Mojave Water Agency* (2000) 23 Cal.4th 1224.

with its regional partners. Our regional groundwater conditions have been managed expressly for drought mitigation – after years of extensive regional in-lieu and direct recharge. Yet these groundwater investments must now remain idle as SWRCB forces the District’s ratepayers – that made the drought-savvy investments – to take extraordinary conservation measures to benefit other areas in the State. Why is the SWRCB forcing the District’s ratepayers to forego our own locally-available resources to meet the needs of those that have failed to plan at significant cost and expense to the District?

Who Benefits from the 1.3 MAF Savings?

The SWRCB states that the tiered reductions will save approximately 1.3 million acre-feet (MAF) over the next nine months, equating to a little more than 1.7 MAF annually. With one acre-foot able to meet the needs of between 1 and 5 homes for a year⁴, and using 3-people per home as an average, 1.7 MAF would be enough to serve 5 million to 25 million people. Who are the intended beneficiaries of the District’s conserved water? The District does not need SWRCB protection or planning because it has responsibly managed its water assets for 2015 and beyond. But if the SWRCB is protecting others that have not planned for their future then the uncompensated reallocation of water resources based upon vague notions of waste and unreasonable use is simply illegal. All water conserved by the District belongs exclusively to the District under Water Code Section 1011 and cannot be reallocated to others without the consent of the District.

We fully understand that some regions of the state face significant groundwater declines and other regions are solely dependent on surface water resources that are significantly depleted. But the District has planned for these circumstances in its local region based upon the availability of local resources – the District is regionally self-reliant. The perceived “equity” in taking water from those who have planned for drought conditions to help those that have not is not only illegal under California Water Law, it is the most inequitable solution available.⁵

The Regulations are Unworkable

The Emergency Regulations state: “Each urban supplier...shall reduce its total water usage by [*some identified percentage*] compared to the amount used in the same month in 2013.” Our District’s reduction target is 32%. Though we understand the attraction of mathematical simplicity used by the SWRCB to develop these targets, the methodology ignores the complexity of

⁴ The range is dependent on the factors noted by the SWRCB on their urban water use reporting website:
http://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/conservation_reporting_info.shtml

⁵ *City of Barstow v. Mojave Water Agency* (2000) 23 Cal.4th 1224

water management and use in this region and is contrary to SWRCB's own policy for addressing conservation savings.⁶

The current Emergency Regulations state: "*These three months reflect the amount of water used for summer outdoor irrigation, which provides the greatest opportunity for conservation savings.*"⁷ From this premise, a 32% reduction is imposed on our ratepayers for all months – whether or not outdoor irrigation is actually occurring. The solution posed is completely unworkable and grossly inequitable during the winter months for District ratepayers.

SWRCB's proposed regulations mandate that the District's ratepayers reduce their *indoor use* by over 30% during the winter months – a rate far more punitive than the rates imposed on other purveyors who live in cooler climates and more dense communities (where those location's 2014 summer baseline R-GPCD value reflects indoor use). Our ratepayers cannot be expected to reduce indoor use by over 30% when others with the same indoor use have significantly lower mandates, most of which rely almost exclusively on imported water supplies. It is noteworthy also that **significant quantities of year-round indoor water use** from inland communities are treated and reclaimed or returned to river systems to the benefit of downstream users and the environment. By example, the Sacramento Regional County Sanitation District, serving a population of 1.4 million in the greater Sacramento region, treats and returns 150 million gallons per day to the Sacramento River.

Solution: The reduction targets must be adjusted so that indoor conservation objectives are more equitable and achievable. At a minimum, the Proposed Regulations should be modified to reflect a second period of average R-GPCD when landscape irrigation is minimal or even non-existent. We suggest this period would be the average of use during November 2014 through February 2015.

As an example, the District's July-September 2014 R-GPCD averaged 233. In contrast, the November-February average R-GPCD was 88, a ratio of 2.65:1.

Under this framework, a November-February required reduction target would be 16%, as represented by the proposed Section 865(c)(5). This target has a much greater equity and opportunity for success than applying

⁶ The SWRCB lists several factors as part of a "Important Note" that clearly states: "*It is not appropriate to use Residential Gallons Per Capita Day (R-GPCD) water use data for comparisons across water suppliers, unless all relevant factors are accounted for.*" (http://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/conservation_reporting_info.shtml)

⁷ April 18, 2015 Fact Sheet, p. 2.

the summertime target of 32% to our significantly lower winter-month R-GPCD.

Summary

The SWRCB's self-declared "equitable, achievable, and enforceable" emergency regulations are truly just the opposite - the proposed regulations reward those who failed to plan for drought by punishing those that did plan. SWRCB is punishing the District's ratepayers for their foresight and drought-planning investments and actions. Moreover, the proposed regulations ignore accepted principles of California Water Law and ignore the state's policy of "regional self-reliance" by placing the drought mitigation burden on the District - a District that has prepared for these exact drought circumstances with local resources and local planning.

The mandated target of 32% for the responsible Citrus Heights Water District ratepayers is illegal, inequitable and unworkable.

Sincerely,

Robert A. Churchill

Robert A. Churchill
General Manager
rchurch@chwd.org

cc: Board of Directors: Citrus Heights Water District
John Woodling, Executive Director: Regional Water Authority

ATTACHMENT 2

ACWA Response Letter

NSWA Response Letter

RWA Response Letter



Association of California Water Agencies

Since 1910

Leadership • Advocacy • Information • Service

April 22, 2015

Delivered by e-mail to: Jessica.Bean@waterboards.ca.gov

Jessica Bean
Engineering Geologist
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814

Subject: Comments on Mandatory Conservation Proposed Regulations Released on
April 18, 2015

Dear Ms. Bean:

The Association of California Water Agencies (ACWA) appreciates this opportunity to comment on the State Water Resources Control Board (Water Board) staff's "Proposed Emergency Regulation" and its associated "Urban Water Suppliers and Proposed Regulatory Framework Tiers to Achieve 25% Use Reduction (Provisional)" released on April 18, 2015 (Proposed Emergency Regulation).

ACWA supports the Governor's Executive Order and its key provision to reduce potable urban water usage by 25 percent statewide over coming months. We continue to appreciate the effort Water Board staff is devoting to meeting with and soliciting input from ACWA and other stakeholders on ways to do this effectively.

ACWA appreciates that Water Board staff addressed a number of our comments from our March 13, 2015 letter on the Proposed Regulatory Framework dated April 7, 2015 (Framework). Our March 13 comment letter emphasized two core policy principles that are inherent in the Executive Order and the Administration's overall response to the drought and which need to be advanced by the Emergency Regulations:

1. Protect economic uses of potable water, while focusing efforts to substantially reduce water use for ornamental, lower-priority outdoor purposes;
2. Ensure fairness for communities statewide.

We offered a number of specific changes to address significant concerns raised by the Framework. On balance, Water Board staff addressed most of the "economic uses" concerns (such as the use of potable water for commercial agriculture in Sec. 865 (e), and deferring the Commercial, Industrial and Institutional (CII) implementation focus to local water agencies which are best positioned to determine how to avoid or mitigate local economic impacts), but many significant "fairness" concerns remain or have been exacerbated by the Proposed Emergency Regulation.

Remaining Concerns and Recommendations

1. Climate Adjustment

ACWA continues to believe that an adjustment for climate *must* be included in the Proposed Emergency Regulation. The principle of fairness requires a reasonable outdoor irrigation allocation that will necessarily be somewhat greater in the hotter climate zones. A residential lot of exactly the same size with exactly the same landscape and efficient irrigation technology will require more water for even minimal irrigation in a hot, interior climate zone as compared to in a cooler coastal location. A conservation standard where summertime temperatures top 105 degrees can't be based on the amount of water needed to irrigate landscapes where temperatures rarely exceed 75 degrees. The assigned conservation standard must account for climate and other factors that reflect local conditions. However, the indicator of residential gallons per capita per day (R-GPCD) that Water Board staff has used as the sorting mechanism in the Urban Water Suppliers and Proposed Regulatory Framework Tiers to Achieve 25% Use Reduction to establish the conservation standard, does not provide the needed adjustment. In fact, the use of average R-GPCD for July through September 2014 (in place of the one month "snapshot" of September 2014 R-GPCD in the previous proposal) shifts the burden even more to water suppliers located in hot climate zones.

In our March 13 letter we recommended a conceptual climate adjustment approach based on published evapotranspiration zone and water use data. Water supplier locations by climate zone would be determined and an adjustment factor for each climate zone would be applied to the water supplier's R-GPCD. This climate adjusted R-GPCD would be used to reorder the table and then reassign the conservation standard.

Incorporation of a climate adjustment is a key element to ensuring a broader support for the fairness of the conservation burden that is being assigned to water suppliers statewide. Since March 13 we have developed a detailed recommended approach and offer a climate adjusted version of the "Urban Water Suppliers and Proposed Regulatory Framework Tiers to Achieve 25% Use Reduction" table (Attached Spreadsheet). Attachment 1 describes the approach and methodology.

We are ready to work closely with Water Board staff in coming days to fully explain our approach to adding a climate adjustment and identify ways that it can be improved and incorporated into the Proposed Emergency Regulation.

Recommendation:

Incorporate the ACWA climate adjusted version of the "Urban Water Suppliers and Proposed Regulatory Framework Tiers to Achieve 25% Use Reduction" table into the regulation and amend the text of the Emergency Regulation Sec. 865 (c)(3) through (10) to reflect the results.

2. Exception Process

Although Water Board staff has expressed its intention to administer its enforcement process with discretion to address specific problems that may be faced by local water agencies, we continue to recommend that an explicit "Exception Process" be included in the Proposed Emergency Regulation.

Including an exception process as an administrative element of the Proposed Emergency Regulation would allow water suppliers to present to the Water Board specific information and evidence supporting needed adjustments to address extenuating circumstances or unreasonable local impacts. Exception processes are commonly used by water suppliers to address specific hardship situations on a case-by-case basis when implementing mandatory conservation programs. An example of "extenuating circumstances" could be where a relatively small water supplier has a relatively large state agency water customer (such as a prison, highway or office complex) that consumes a substantial proportion of the water suppliers' production but which has not reduced its water use despite local demands and state policy direction. Another example may be a situation in which local health and safety conditions are triggered. The "exception process" could require water suppliers to disclose proposed actions that would partially mitigate effects on overall water use reductions.

Recommendation

Add language to the Proposed Text of the Emergency Regulation to provide for an administrative process where the Executive Director or his designee may issue exceptions to address specific hardship situations on a case-by-case basis, based on evidence submitted by water suppliers.

3. Credit for New Local Supplies

ACWA continues to believe that the Emergency Regulations should include an incentive for bringing new local potable reuse or desalination supplies on-line since the drought was declared in 2013 or in the immediate coming months while this Emergency Regulation is in force. Although there are many longer-term water supply development opportunities which may be the proper focus of on-going local water supply planning efforts, credit for immediate actions to off-set potable water use as part of emergency drought response will help demonstrate to local rate-payers the wisdom of developing a diverse water supply portfolio.

Recommendation

Add the following language to the Proposed Text of the Emergency Regulation:

"Each urban supplier that adds a new drought-proof supply, such as potable reuse, seawater desalination, or other drought-proof potable water supplies may deduct the amount of water produced by the drought-proof supply from its total potable water production to meet the economic demands of the commercial, industrial, institutional sectors and agricultural use that is not excluded under section 865(e)."

4. Water Supply Adjustment

ACWA supports the proposal to allow for a lower Conservation Standard if a water supplier can demonstrate that they have adequate local surface water supplies. The Water Board's Fact Sheet states that "these criteria relate to the source(s) of supply, precipitation amounts, and the number of years those supplies could last." However, the Proposed Text of the Emergency Regulation unnecessarily limits use of this provision by inappropriately focusing it only on normal 2014 precipitation and not on the actual adequacy of the water supply. This should be remedied by amending the text to provide more appropriate and rigorous criteria.

Recommendation:

Add the following language to the Proposed Text of the Emergency Regulation:

“Each urban water supplier whose source of supply does not include groundwater or water imported from outside the hydrological region, and is sufficient to meet all demands for three years with no additional recharge that received average precipitation in 2014 may, notwithstanding its average July – September 2014 R-GPCD, submit for Executive Director approval, a request to reduce its total water usage by 4% for each month as compared to the amount used in the same month in 2013. Any such request shall be accompanied by information showing that the supplier’s sources of supply do not include any groundwater or water imported from outside the hydrological region and that the supplier’s source of supply is adequate for three years without additional recharge, service area received average annual precipitation in 2014.”

5. Collective Conservation Standard

ACWA supports including a provision in the Proposed Emergency Regulations authorizing formation of groups of water suppliers that could collectively achieve the assigned conservation standard, as described in the Water Board Fact Sheet. We encourage the State Water Board to authorize multiple jurisdictions to join together to form regional alliances that are assigned a collective conservation standard. We recommend that the State Water Board consider modeling the formation of regions based on the methodology that was developed by the Department of Water Resources for forming regional alliances to comply with SB x7-7. Regional alliances may allow for jurisdictions to leverage resources to develop common messaging and water conservation programs in response to the drought.

Recommendation:

Add a provision in the Proposed Emergency Regulations authorizing formation of groups of water suppliers that could collectively achieve the assigned conservation standard.

6. Standardize Methods

The Water Board staff should amend and standardize calculation methods for total production and service area population, and provide a method to account for bimonthly billing cycles and different numbers of days in each billing cycle. Water suppliers are aware of wide disparities in the way these data have been reported since July 2014. Water suppliers need to be assured that reported data used comparatively for regulatory and enforcement purposes are actually comparable. In fact, the assignment of the water supplier conservation standard is dependent upon this data and some agencies are already amending their reporting with this in mind. Although Water Board staff has correctly requested documentation to support these changes, the existing guidance should be augmented as needed to further standardize the methods.

Recommendation:

Establish a process to amend and standardize calculation methods for total production and service area population, and provide a method to account for bimonthly billing cycles and different numbers of days in

each billing cycle. We recommend that the Water Board accept and review water supplier data on an on-going basis, subject to adequate supporting documentation. Create a time-limited process during May in which data submitted before a date late in the month, and which is accepted by staff, will be used to revise the "Urban Water Suppliers and Proposed Regulatory Framework Tiers to Achieve 25% Use Reduction" table and recalculate the conservation standards, a final version of which would be published by June 1. During May, water suppliers would be subject to "provisional conservation standards" as adopted by the Water Board on May 5.

7. Waste and Unreasonable Use of Water

ACWA recognizes and supports Water Board authority to conduct proceedings to "prevent the waste and unreasonable use of water" under Article X Section 2 of the State Constitution based on specific facts case by case. However, we are concerned that adding the clause "prevent the waste and unreasonable use of water" throughout the Proposed Emergency Regulations sets up a presupposition that any failure to achieve the conservation standards, or even procedural failures on the part of water suppliers is now a de-facto waste and unreasonable use of water and could provide the basis for proceeding against the water rights of those agencies. This raises unnecessary legal threats at a time in which the focus of the water community as a whole needs to be on effective actions to address the drought emergency.

Recommendation:

We strongly recommend eliminating the clause "prevent the waste and unreasonable use of water" wherever it appears.

8. Alternative 25% Statewide Conservation Framework Proposed by Water Agencies

ACWA has reviewed the "Alternative 25% Statewide Conservation Framework" proposed by a coalition of water agencies, including Irvine Ranch Water District, Eastern Municipal Water District, Western Municipal Water District, Moulton Niguel Water District, Rancho California Water District, Elsinore Valley Municipal Water District, and City of Corona. We are extremely impressed by this alternative and the way it appears to address the key policy objectives of the Governor's Executive Order, which must be achieved by the Emergency Regulation. While it incorporates many elements of the Water Board staff proposal, it seems to better resolve some of the major equity concerns that have been identified by ACWA and so many water suppliers.

This alternative is designed to achieve the mandated additional 25% statewide reduction from 2013 potable use. It incorporates important policy and technical elements from the on-going 20x2020 conservation target setting process including the more robust and comprehensive metric of "gallons per capita per day" (GPCD). But it also uses the Water Board's R-GPDC metric as an input to establish conservation standards. It adjusts for population growth by using average 2014-15 population and production to account for areas that have experienced growth since 2013. It includes elements that indirectly address climate zones, which as described above is a key policy objective for ACWA.

This alternative deserves serious consideration by Water Board staff and the Board itself. We recognize that the results it produces create a new set of "winners" and "losers," but it may significantly boost the

Jessica Bean
Page 6 of 6
April 22, 2015

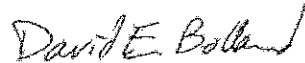
confidence of many in the water community that the results are based on a stronger analytical framework and have greater credibility.

Recommendation:

The Water Board staff should thoroughly review this alternative model for technical accuracy and seriously consider incorporating it or a modified version of this model into the Emergency Regulations.

Thank you for your consideration of these comments. ACWA will continue to work with the Water Board and our member water agencies to identify ways to effectively implement the Executive Order and the resulting Emergency Regulations. If you have any questions, please contact me at daveb@acwa.com or (916) 441-4545.

Sincerely,



David Bolland
Special Projects Manager

cc: Honorable Felicia Marcus, Chair
Honorable Frances Spivy-Weber, Vice Chair
Honorable Dorene D'Adamo, Board Member
Honorable Tam Doduc, Board Member
Honorable Steven Moore, Board Member
Mr. Tom Howard, Executive Director
Ms. Caren Trgovcich, Chief Deputy Director
Mr. Eric Oppenheimer, Director of the State Water Board's Office of Research, Planning and Performance
Mr. Max Gomberg, Climate Change Advisor



April 22, 2015

State Water Resources Control Board
Felicia Marcus, Chair
Members of the Board
1001 I Street
Sacramento, CA 95814

Via email to Jessica.Bean@waterboards.ca.gov

Re: Draft Regulations - 25% Conservation Standard

Dear Chair Marcus and Board Members:

The North State Water Alliance (Alliance) joins many entities in Northern California in expressing our concerns with the draft conservation regulations and particularly the authority relied upon by the State Water Resources Control Board (SWRCB) to impose mandatory conservation targets for various water agencies.

Northern California has been challenged in many ways by the fourth consecutive dry year. We appreciate the Governor's leadership and share the objective to achieve greater water savings through continued and improved conservation. As you know, water agencies throughout Northern California have aggressively managed water to stretch existing supplies and they have implemented significant conservation measures that have resulted in tangible water savings.

Importantly, water in the North State is carefully managed for various reasonable and beneficial uses "to the fullest extent of which they are capable." We are therefore concerned by the SWRCB's continued reliance on its "waste and unreasonable use" authority to support various actions throughout the region. Here, the draft regulations state that they will prevent "waste and unreasonable use," which is simply not accurate and is not supported by the facts surrounding water management in Northern California.

The "tiers" of mandated conservation contained in the draft regulations are not based on any particular "unreasonable use" or "waste" of water, but are instead simply tied to urban usage from a specific time period in 2013. The "tiers" do not recognize water right priorities, population density, climatic variation, or any other facts particular to water use. The draft regulations are intended to apply to water diverted and used from any source, whether from surface or groundwater supplies.

Various counsel in the region will provide further details on our concerns. In general, the SWRCB cannot exercise its "reasonable use" authority in a blanket manner, such as the draft regulations. In our view, the SWRCB's "reasonable use" authority is not a panacea. Instead, it is a framework by which the SWRCB can carefully examine specific diversions and uses of water and determine whether, based on specific facts, a particular use is unreasonable. The draft

regulations do not look at any particular use or type of use and instead simply declare the regulations are necessary to prevent the “waste and unreasonable use of water.”

The draft regulations also ignore the rule of priority. The draft regulations implement tiered conservation mandates tied to beneficial use during a portion of 2013, thus in Northern California the regulations will likely result in senior water right holders being forced to cease beneficial use (“conserve”), while junior water right holders are entitled to continue to use water, perhaps at much greater quantities than senior water right holders. Imposing conservation mandates that result in water right holders diverting water without regard to priority “ignores the priority system that is fundamental to the SWRCB’s authority to regulate water uses.

More than 150 cities, counties, water suppliers, businesses, and community groups in Northern California have recently come together around our common interests in water resources to form the *North State Water Alliance* and to speak with a unified voice. The *Alliance* is an urban-rural partnership committed to statewide water solutions that protect the economy, environment and quality of life in Northern California.

Please call us if you have any further questions.

Sincerely yours,

Regional Water Authority
Northern California Water Association
Mountain Counties Water Resources Association
Sacramento Area Council of Governments
Sacramento Metro Chamber



April 22, 2015

Felicia Marcus, Chair
 State Water Resources Control Board
 1001 I Street
 Sacramento, CA 95814

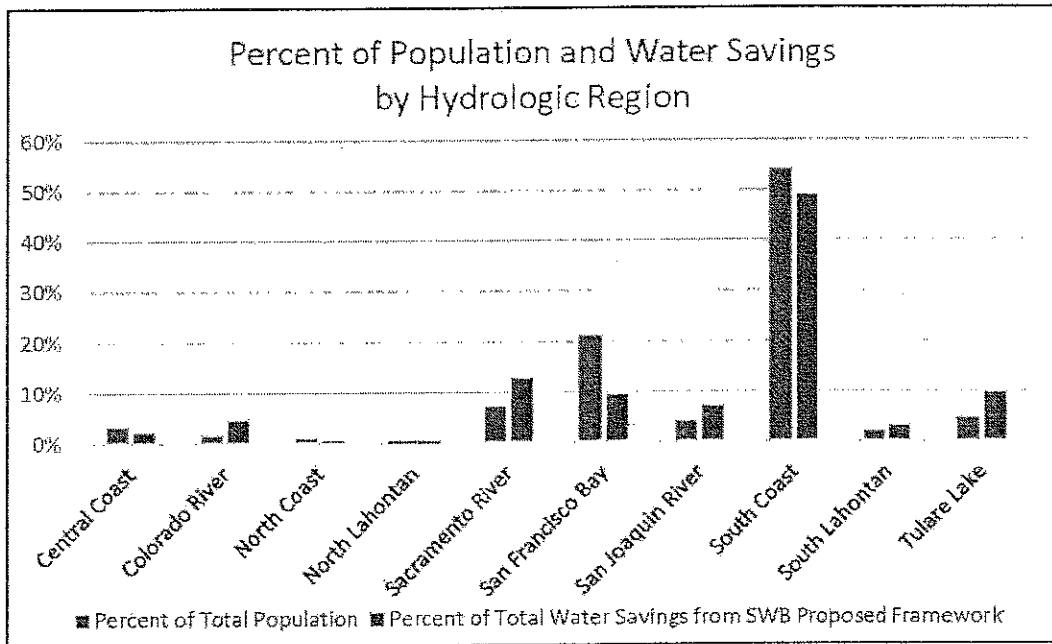
Transmitted by email to jessica.bean@waterboards.ca.gov

Dear Chair Marcus and Board Members D'Adamo, Doduc, Moore and Spivey-Weber:

Thank you for the opportunity to comment on the State Water Resources Control Board (Board)'s draft regulations for complying with the Governor's Executive Order requiring a mandatory statewide 25% reduction in urban water use. We appreciate the magnitude of the challenges the ongoing drought creates for California, and are committed to responding by continuing and expanding our conservation efforts. We provided prior comments on the Board's proposed regulatory framework, and are disappointed that the Board did not take the opportunity to remedy the significant inequity that exists in the conservation tiers based on residential gallons per capita per day (R-GPCD) water usage. Our comments below center around three themes: inequities in the draft regulations, strategies for rectifying those inequities, and recommendations regarding implementation.

Inequity In the Proposed Regulatory Framework

In an attempt to refine the framework, the Board increased, rather than decreased, the inherent inequity of the approach. This revised framework is now tasking the Sacramento region with implementing the highest water use reductions in the state, with more than a dozen local water suppliers asked to conserve 32% or more. By lowering the conservation expectations for some of the most populous areas of the state, other, smaller water suppliers will be forced to comply with water reductions as high as 36%. The chart below, developed from the Board's data, clearly shows that inland areas of the state will be making up for the lowered expectations on the South Coast and Bay Area. The revisions effectively place more than 60% of the state's population in tiers that are required to save less than the Governor's designated 25%. This will cause further division between the state's regions rather than unifying the state in this severe drought emergency.



- ra Sedwick, Chair
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In addition to the increased inequities between regions, the very premise for the framework is flawed. It is built around the Board's misunderstanding that R-GPCD is a metric that measures previous conservation progress. This is simply not accurate. R-GPCD and GPCD figures vary throughout the state for a variety of reasons including those mentioned on the Board's website. Prior investments in conservation influence a water supplier's R-GPCD value, but do not account for variations of weather, density, land use patterns and local economics, which more heavily influence this number.

Further compounding this issue is that the Board has allowed water suppliers to calculate their own R-GPCD. Water suppliers may follow the Board's provided methodology or they may develop their own methodology. This has resulted in reported R-GPCD figures that are based on differing local assumptions such as subtracting out water loss. This inconsistency in the calculations may be acceptable for showing progress by an individual water supplier, but is not acceptable for regulations that assign unequal responsibility.

Also embedded in the proposed regulatory framework methodology is the incorrect assumption that a higher R-GPCD number represents "waste and unreasonable use" that must be addressed by the regulations. In some locations a "higher" R-GPCD may be appropriate for that area. In fact, it may only be higher because it is being compared statewide, not within the appropriate local region.

Strategies to Increase Equity

To rectify these inequalities, RWA encourages the Board to modify its draft regulations to provide for a more equitable apportionment of responsibility statewide that takes climate variability, 2014 conservation efforts and existing local and regional water supply conditions into account.

In order to account for the varying effects of climate on R-GPCD (due to the fact that landscapes in hotter, drier climates require more water to be healthy), RWA recommends that the Board factor evapotranspiration (ET) rates (or other appropriate indices) into the proposed regulatory framework. This could be accomplished by assigning a relative ratio among ET zones throughout the state to normalize R-GPCD before assigning tiers. This will help to equalize the responsibility for conservation among inland and coastal regions of the state.

While we understand the Board's desire to target outdoor water use, there should be a minimum reduction target of 10% for all water suppliers, and at least 15% for all but the lowest R-GPCD tier. The 8% and 12% tiers are simply too permissive. The State is in a serious drought emergency and we need every water supplier to substantially contribute to the statewide goal of 25%. Additionally no water supplier should be held to a lower conservation standard than what was achieved with voluntary restrictions in 2014. Under the proposed regulatory framework, there are water suppliers that achieved much higher voluntary conservation targets in 2014 than what are required in 2015. This allows water suppliers to back off their conservation efforts while other water suppliers that substantially saved in 2014 are asked to do more. It is unclear why the Board includes 2014 savings in its table, but fails to consider it in any way in the draft regulations.

The proposed regulatory framework provides a very narrow exception based on water availability. Such an exception should be expanded to provide relief at the highest tiers of compliance. The Sacramento region has invested many millions of dollars in conjunctive use facilities to achieve groundwater sustainably. Meeting demands during drought is one objective of these efforts. The draft regulations will prohibit water suppliers from responsibly using the water supplies they have developed for the situation we now face in California. This action contradicts the State's policy that encourages regional self-reliance.

Framework Implementation and Funding:

Implementing the draft regulations will be challenging and will likely have significant impacts--both on customers and the revenues and fiscal stability of water suppliers. RWA urges the Board, its partners at the California Department of Water Resources, the administration and the Legislature to expedite the appropriation and award of grants from the \$100 million authorized for water conservation provided by Proposition 1. This is especially important because the summer months are rapidly approaching and they provide the best opportunity to achieve outdoor water savings, a desire explicitly expressed by the Board.

Furthermore, we urge the prioritization of the available funding to those water suppliers that are

assigned the upper compliance tiers to support their greater contribution to the statewide target. The level of public outreach messaging, media engagement, conservation programs and enforcement needed to achieve these revised conservation standards will require substantial additional funding in a short time frame, which is not conducive to the longer term process needed to legally adjust water rates. The recent court decision in the case of San Juan Capistrano illustrates the difficulty water suppliers will have in promoting conservation through rates.

In terms of implementation of this proposed regulatory framework, water suppliers need time and resources to message their updated reduction targets. Water savings will largely depend on customer response and communicating these new targets. Recommended conservation actions will need continuous and constant messaging over time to be effective. The expectation that water suppliers, especially those at the higher tiers, will meet their monthly targets every month is unrealistic due to monthly variations in weather, utility operations, customer response, public outreach and media coverage. RWA recommends the Board use its understanding of the challenges of reaching these disproportionate targets in their enforcement efforts. Where water suppliers are making good faith efforts to comply, early and punitive enforcement actions will undermine, rather than promote, conservation progress.

Thank you for the opportunity to comment on the draft regulations and we look forward to hearing the Board's response to our comments. If you have any questions, please contact me at (916) 967-7692.

Sincerely,

A handwritten signature in black ink, appearing to be 'J. Woodling', written in a cursive style.

John Woodling
Executive Director
Regional Water Authority

ATTACHMENT 3

CHWD Water Conservation Stages



CITRUS HEIGHTS WATER DISTRICT

MANDATORY REQUIREMENTS – WATER CONSERVATION STAGES 1 – 5:

WATER CONSERVATION STAGE DECLARATION

Upon declaration or amendment by the Board of Directors of a specific Stage in effect, the following mandatory water conservation requirements shall be in effect.

The declaration of Short-Term Stage 4 or Stage 5 water conservation requirements may be declared by the agency's General Manager or his/her designee and subject to ratification by the agency's Board of Directors in a regular or special session. A short-term declaration is for water shortage conditions expected for a duration of 45 days or less.

STAGE 1 – NORMAL WATER SUPPLY

1. Water shall be used for beneficial purposes only; all unnecessary and wasteful uses of water are prohibited.
2. Water shall be confined to the customer's property and shall not be allowed to run-off to adjoining properties or to the roadside ditch or gutter. Care shall be taken not to water past the point of saturation.
3. Free-flowing hoses for all uses are prohibited. Automatic shut-off devices shall be attached on any hose or filling apparatus in use.
4. Leaking customer pipes or faulty sprinklers shall be repaired within five (5) working days or less if warranted by the severity of the problem.
5. All pools, spas, and ornamental fountains/ponds shall be equipped with a recirculation pump and shall be constructed to be leak-proof. Pool draining and refilling shall be allowed only for health, maintenance, or structural considerations.
6. Washing streets, parking lots, driveways, sidewalks, or buildings, except as necessary for health, esthetic or sanitary purposes, is prohibited.
7. Customers are encouraged to take advantage of the water agency's conservation programs and rebates.



CITRUS HEIGHTS WATER DISTRICT
Mandatory Requirements – Water Conservation Stages 1 - 5

STAGE 2 – WATER ALERT

1. Water shall be used for beneficial purposes only; all unnecessary and wasteful uses of water are prohibited.
2. Water shall be confined to the customer's property and shall not be allowed to run-off to adjoining properties or to the roadside ditch or gutter. Care shall be taken not to water past the point of saturation.
3. Free-flowing hoses for all uses are prohibited. Automatic shut-off devices shall be attached on any hose or filling apparatus in use.
4. Leaking customer pipes or faulty sprinklers shall be repaired within five (5) working days or less if warranted by the severity of the problem.
5. All pools, spas, and ornamental fountains/ponds shall be equipped with a recirculation pump and shall be constructed to be leak-proof. Pool draining and refilling shall be allowed only for health, maintenance, or structural considerations.
6. Washing streets, parking lots, driveways, sidewalks, or buildings, except as necessary for health, esthetic or sanitary purposes, is prohibited.
7. Customers are encouraged to take advantage of the water agency's conservation programs and rebates.
8. Reduce landscape and pasture irrigation by 5 – 10%. Customers with "smart" irrigation timers or controllers are asked to set their controllers to achieve 90 to 95% of the evapotranspiration (ET) rate. Drip irrigation systems are excluded from this requirement.
9. Reduce indoor water use by 5 – 10%. Contact your water provider for tips and techniques to reduce indoor water use.
10. Users of construction meters and fire hydrant meters will be monitored for efficient water use.



CITRUS HEIGHTS WATER DISTRICT
Mandatory Requirements – Water Conservation Stages 1 - 5

STAGE 3 – WATER WARNING

1. Water shall be used for beneficial purposes only; all unnecessary and wasteful uses of water are prohibited.
2. Water shall be confined to the customer's property and shall not be allowed to run-off to adjoining properties or to the roadside ditch or gutter. Care shall be taken not to water past the point of saturation.
3. Free-flowing hoses for all uses are prohibited. Automatic shut-off devices shall be attached on any hose or filling apparatus in use.
4. Leaking customer pipes or faulty sprinklers shall be repaired within two (2) working days or less if warranted by the severity of the problem.
5. All pools, spas, and ornamental fountains/ponds shall be equipped with a recirculation pump and shall be constructed to be leak-proof. Pool draining and refilling shall be allowed only for health, maintenance, or structural considerations.
6. Washing streets, parking lots, driveways, sidewalks, or buildings, except as necessary for health, esthetic or sanitary purposes, is prohibited.
7. Customers are encouraged to take advantage of the water agency's conservation programs and rebates.
8. Reduce landscape and pasture irrigation by 11 – 25%. Customers with "smart" irrigation timers or controllers are asked to set their controllers to achieve 75 to 89% of the evapotranspiration (ET) rate. Drip irrigation systems are excluded from this requirement.
9. Reduce indoor water use by 11 – 25%. Contact your water provider for tips and techniques to reduce indoor water use.
10. Restaurants shall serve water only upon request.
11. Users of construction meters and fire hydrant meters will be monitored for efficient water use.



CITRUS HEIGHTS WATER DISTRICT
Mandatory Requirements – Water Conservation Stages 1 - 5

STAGE 4 – WATER CRISIS: SHORT-TERM

The declaration of Short-Term Stage 4 water conservation requirements may be declared by the agency's General Manager or his/her designee and subject to ratification by the agency's Board of Directors in a regular or special session. A short-term declaration is for water shortage conditions expected for a duration of 45 days or less.

1. Water shall be used for beneficial purposes only; all unnecessary and wasteful uses of water are prohibited.
2. Water shall be confined to the customer's property and shall not be allowed to run-off to adjoining properties or to the roadside ditch or gutter. Care shall be taken not to water past the point of saturation.
3. Free-flowing hoses for all uses are prohibited. Automatic shut-off devices shall be attached on any hose or filling apparatus in use.
4. Leaking customer pipes or faulty sprinklers shall be repaired within 24 hours or less if warranted by the severity of the problem.
5. All pools, spas, and ornamental fountains/ponds shall be equipped with a recirculation pump and shall be constructed to be leak-proof. No potable water from the District's system shall be used to fill or refill swimming pools, artificial lakes, ponds or streams. Water use for ornamental ponds and fountains is prohibited.
6. Washing streets, parking lots, driveways, sidewalks, or buildings, except as necessary for health or sanitary purposes, is prohibited.
7. Customers are encouraged to take advantage of the water agency's conservation programs and rebates.
8. Reduce landscape and pasture irrigation by 26 – 50%. Customers with "smart" irrigation timers or controllers are asked to set their controllers to achieve 50 to 74% of the evapotranspiration (ET) rate. Drip irrigation systems are NOT excluded from this requirement.
9. Reduce indoor water use by 26 - 50%. Contact your water provider for tips and techniques to reduce indoor water use.
10. Restaurants shall serve water only upon request.
11. Flushing of sewers or fire hydrants is prohibited except in case of emergency and for essential operations.



CITRUS HEIGHTS WATER DISTRICT
Mandatory Requirements – Water Conservation Stages 1 - 5

STAGE 4 – WATER CRISIS: SHORT-TERM continued

12. Users of construction meters and fire hydrant meters will be monitored for efficient water use. Use of reclaimed water for construction purposes is encouraged.
13. Installation of new turf or landscaping is prohibited.



CITRUS HEIGHTS WATER DISTRICT
Mandatory Requirements – Water Conservation Stages 1 - 5

STAGE 4 – WATER CRISIS: LONG-TERM

The declaration of Long-Term Stage 4 water conservation requirements will be by the agency's Board of Directors in a regular or special session. A long-term declaration is for water shortage conditions expected for a duration of more than 45 days.

1. Water shall be used for beneficial purposes only; all unnecessary and wasteful uses of water are prohibited.
2. Water shall be confined to the customer's property and shall not be allowed to run-off to adjoining properties or to the roadside ditch or gutter. Care shall be taken not to water past the point of saturation.
3. Free-flowing hoses for all uses are prohibited. Automatic shut-off devices shall be attached on any hose or filling apparatus in use.
4. Leaking customer pipes or faulty sprinklers shall be repaired within 24 hours or less if warranted by the severity of the problem.
5. All pools, spas, and ornamental fountains/ponds shall be equipped with a recirculation pump and shall be constructed to be leak-proof. No potable water from the District's system shall be used to fill or refill swimming pools, artificial lakes, ponds or streams. Water use for ornamental ponds and fountains is prohibited.
6. Washing streets, parking lots, driveways, sidewalks, or buildings, except as necessary for health or sanitary purposes, is prohibited.
7. Customers are encouraged to take advantage of the water agency's conservation programs and rebates.
8. Reduce landscape and pasture irrigation by 26 – 50%. Customers with "smart" irrigation timers or controllers are asked to set their controllers to achieve 50 to 74% of the evapotranspiration (ET) rate. Drip irrigation systems are NOT excluded from this requirement.
9. Reduce indoor water use by 26 - 50%. Contact your water provider for tips and techniques to reduce indoor water use.
10. Restaurants shall serve water only upon request.
11. Flushing of sewers or fire hydrants is prohibited except in case of emergency and for essential operations.



CITRUS HEIGHTS WATER DISTRICT
Mandatory Requirements – Water Conservation Stages 1 - 5

STAGE 4 – WATER CRISIS: LONG-TERM continued

12. Water for flow testing and construction purposes from water agency fire hydrants and blow-offs is prohibited. Use of reclaimed water for construction purposes is encouraged.
13. Installation of new turf or landscaping is prohibited.
14. Water Crisis/Emergency tiered pricing will be implemented.
15. No commitments will be made to provide service for new water service connections.



CITRUS HEIGHTS WATER DISTRICT
Mandatory Requirements – Water Conservation Stages 1 - 5

STAGE 5 – WATER EMERGENCY: SHORT-TERM

The declaration of Short-Term Stage 5 water conservation requirements may be declared by the agency's General Manager or his/her designee and subject to ratification by the agency's Board of Directors in a regular or special session. A short-term declaration is for water shortage conditions expected for a duration of 45 days or less.

1. Water shall be used for beneficial purposes only; all unnecessary and wasteful uses of water are prohibited.
2. Landscape and pasture irrigation is prohibited.
3. Free-flowing hoses for all uses are prohibited. Automatic shut-off devices shall be attached on any hose or filling apparatus in use.
4. Leaking customer pipes or faulty sprinklers shall be repaired immediately. Water service will be suspended until repairs are made.
5. All pools, spas, and ornamental fountains/ponds shall be equipped with a recirculation pump and shall be constructed to be leak-proof. No potable water from the District's system shall be used to fill or refill swimming pools, artificial lakes, ponds or streams. Water use for ornamental ponds and fountains is prohibited.
6. Washing streets, parking lots, driveways, sidewalks, or buildings, except as necessary for health or sanitary purposes, is prohibited.
7. Customers are encouraged to take advantage of the water agency's conservation programs and rebates.
8. Reduce indoor water use by more than 50%. Contact your water provider for tips and techniques to reduce indoor water use.
9. Restaurants shall serve water only upon request.
10. Water for flow testing and construction purposes from water agency fire hydrants and blow-offs is prohibited. No potable water from the District's system shall be used for construction purposes including but not limited to dust control, compaction, or trench jetting. Use of reclaimed water for construction purposes is encouraged.
11. Flushing of sewers or fire hydrants is prohibited except in case of emergency and for essential operations.
12. Installation of new turf or landscaping is prohibited.



CITRUS HEIGHTS WATER DISTRICT
Mandatory Requirements – Water Conservation Stages 1 - 5

STAGE 5 – WATER EMERGENCY: SHORT-TERM continued

13. Automobiles or equipment shall be washed only at commercial establishments that use recycled or reclaimed water.



CITRUS HEIGHTS WATER DISTRICT
Mandatory Requirements – Water Conservation Stages 1 - 5

STAGE 5 – WATER EMERGENCY: LONG-TERM

The declaration of Long-Term Stage 5 water conservation requirements will be by the agency's Board of Directors in a regular or special session. A long-term declaration is for water shortage conditions expected for a duration of more than 45 days.

1. Water shall be used for beneficial purposes only; all unnecessary and wasteful uses of water are prohibited.
2. Landscape and pasture irrigation is prohibited.
3. Free-flowing hoses for all uses are prohibited. Automatic shut-off devices shall be attached on any hose or filling apparatus in use.
4. Leaking customer pipes shall be repaired immediately. Water service will be suspended until repairs are made.
5. All pools, spas, and ornamental fountains/ponds shall be equipped with a recirculation pump and shall be constructed to be leak-proof. No potable water from the District's system shall be used to fill or refill swimming pools, artificial lakes, ponds or streams. Water use for commercial and multi-family residential ornamental ponds and fountains is prohibited.
6. Washing streets, parking lots, driveways, sidewalks, or buildings, except as necessary for health or sanitary purposes, is prohibited.
7. Customers are encouraged to take advantage of the water agency's conservation programs and rebates.
8. Reduce indoor water use by more than 50%.
9. Restaurants shall serve water only upon request.
10. Water for flow testing and construction purposes from water agency fire hydrants and blow-offs is prohibited. No potable water from the District's system shall be used for construction purposes including but not limited to dust control, compaction, or trench jetting. Use of reclaimed water for construction purposes is encouraged.
11. Flushing of sewers or fire hydrants is prohibited except in case of emergency and for essential operations.
12. Installation of new turf or landscaping is prohibited.



CITRUS HEIGHTS WATER DISTRICT
Mandatory Requirements – Water Conservation Stages 1 - 5

STAGE 5 – WATER EMERGENCY: LONG-TERM continued

13. Automobiles or equipment shall be washed only at commercial establishments that use recycled or reclaimed water.
14. New connections to the District water distribution system will not be allowed.
15. Water Crisis/Emergency tiered pricing will be implemented.
16. No commitments will be made to provide service for new water service connections.



ATTACHMENT 4

**CHWD Water Shortage Rate Structure
Report by Reed Group**

**Citrus Heights Water District
Water Shortage Rate Structure (2015) (1)**

	Stage 1 Normal Supply	Stage 2 Water Alert	Stage 3 Water Warning	Stage 4 Water Emergency	Stage 5 Water Crisis	USBR Health & Safety Std.
Use Reduction Goals →	None	5% to 10%	11% to 25%	26% to 50%	Over 50%	Over 75%
Bi-Monthly Service Charges (2)						
<i>Domestic, Commercial & Irrigation Meters</i>						
3/4" meter	\$ 36.89	\$ 36.89	\$ 36.89	\$ 36.89	\$ 36.89	\$ 36.89
1" meter	\$ 56.13	\$ 56.13	\$ 56.13	\$ 56.13	\$ 56.13	\$ 56.13
1 1/2" meter	\$ 68.95	\$ 68.95	\$ 68.95	\$ 68.95	\$ 68.95	\$ 68.95
2" meter	\$ 133.08	\$ 133.08	\$ 133.08	\$ 133.08	\$ 133.08	\$ 133.08
3" meter	\$ 210.03	\$ 210.03	\$ 210.03	\$ 210.03	\$ 210.03	\$ 210.03
4" meter	\$ 415.22	\$ 415.22	\$ 415.22	\$ 415.22	\$ 415.22	\$ 415.22
<i>Combination Meters</i>						
4" meter	\$ 133.08	\$ 133.08	\$ 133.08	\$ 133.08	\$ 133.08	\$ 133.08
6" meter	\$ 210.03	\$ 210.03	\$ 210.03	\$ 210.03	\$ 210.03	\$ 210.03
8" meter	\$ 415.22	\$ 415.22	\$ 415.22	\$ 415.22	\$ 415.22	\$ 415.22
10" meter	\$ 1,011.57	\$ 1,011.57	\$ 1,011.57	\$ 1,011.57	\$ 1,011.57	\$ 1,011.57
Water Usage Charges (\$/CCF) (2)						
Standard Water Usage Rate	\$ 0.7663	\$ 0.7663	\$ 0.7663	\$ 0.7663	\$ 0.7663	\$ 0.7663
Water Shortage Charge (3)						
			10%	25%	40%	55%
Sample Water Shortage Charges			\$ 0.0766	\$ 0.1916	\$ 0.3065	\$ 0.4215
Sample Aggregated Usage Rates			\$ 0.8429	\$ 0.9579	\$ 1.0728	\$ 1.1878
Excess Use Charge (4) (5)						
				50%	150%	250%
Sample Excess Use Charges				\$ 0.4790	\$ 1.6092	\$ 2.9695
Sample Aggr. Excess Use Rates				\$ 1.4369	\$ 2.6820	\$ 4.1573
Excess Use Charge applies to usage above amounts shown (5)						
			3/4" meter	26 CCF		
			1" meter	52 CCF		
			1 1/2" meter	156 CCF		
			2" meter	208 CCF		
			3" meter	416 CCF		
			4" meter & larger	832 CCF		

Notes:

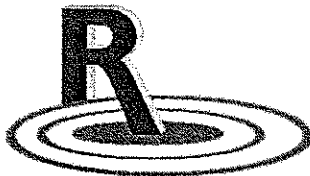
- (1) This Table shows the water shortage charges and excess use charges applied to the proposed water rates for 2015. The percentages would be applied to any then-current water rates in future years.
- (2) No changes to the bi-monthly service charges are proposed during water shortages.
- (3) Water shortage charges are incremental increases in the standard water usage rate applied in Stages 3, 4 and 5, and with the Health and Safety limitation.
- (4) Excess use charges effectively create a higher-priced second tier, and would apply only in Stages 4 and 5, and with the Health and Safety limitation. The percentage is applied to the combined water usage and water shortage rate to create the second tier.
- (5) Excess use charge applies to bi-monthly usage in excess of amounts shown for each meter size.

CITRUS HEIGHTS WATER DISTRICT

**Financial Impacts of Water Shortage
and Proposed Shortage Strategy**

Final Report

September 16, 2014



THE REED GROUP, INC.

FINANCIAL IMPACTS OF WATER SHORTAGE AND PROPOSED SHORTAGE STRATEGY

SUMMARY AND RECOMMENDATIONS

With 2013 the driest year on record in California, and with extremely dry conditions continuing in 2014, the Citrus Heights Water District (District), the Sacramento region, and much of California are confronting limited water supplies. In January 2014, the District declared a Stage 3 – Water Warning and has requested customers to reduce water usage such that overall usage is reduced by 20 percent. If drought conditions persist or worsen in 2015, Stage 3 water use restrictions could continue, or a higher stage of shortage could be declared. The District is taking steps to find ways to augment water supplies, as well as helping customers to reduce water demands.

Reduced water sales inevitably reduce the District's water rate revenues. While certain water supply costs will also be reduced, other costs will increase and revenues will decline more than costs resulting in a financial deficit. To offset the financial deficit created by water shortage, and to help encourage customers to meet use reduction goals, the District is considering the adoption of water shortage rates. Water shortage rates would vary for each stage of water shortage as declared by the District's Board of Directors. At its discretion, the Board of Directors could decide whether or not to implement water shortage rates concurrently with the declaration of a water shortage stage. The proposed water shortage rates would be overlaid onto the standard water rates in place at the time of the declaration. The water shortage rates would be temporary, and would be lifted when drought conditions end.

Exhibit 1 presents the proposed water shortage rates for each stage of water shortage, as they would be overlaid on the proposed standard water rates for 2015. No changes to the rates would occur under Stage 1 – Normal Supply or Stage 2 – Water Alert conditions. In Stage 3 – Water Warning, Stage 4 – Water Emergency, and Stage 5 – Water Crisis a *water shortage charge* would be applied (layered on) to the standard uniform water usage rate. In Stage 4 – Water Emergency and Stage 5 – Water Crisis an *excess use charge* would also apply to excessive usage, as defined. Bi-monthly service charges are unaffected by the water shortage rate proposal. The water shortage charges and excess use charges would also apply if water usage is restricted to amounts needed for Health and Safety (i.e., 65 gallons per capita day), as has been discussed by the US Bureau of Reclamation.

The proposed water shortage rates would help to offset the financial deficit created by reduced water sales, but would not eliminate the deficit. The District will also need to utilize a portion of available reserves to bridge the deficit gap. A Rate Stabilization Reserve of \$1 million has been established and is already in place for this purpose.

Under the proposed water shortage rates, customers that achieve water use reduction goals will generally have lower water bills than they normally pay. If customers do not reduce water usage their water bills would increase.

Exhibit 1
Citrus Heights Water District
Proposed Water Shortage Rate Structure (2015) (1)

	Stage 1 Normal Supply	Stage 2 Water Alert	Stage 3 Water Warning	Stage 4 Water Emergency	Stage 5 Water Crisis	USBR Health & Safety Std.
Use Reduction Goals -->	None	5% to 10%	11% to 25%	26% to 50%	Over 50%	Over 75%
Bi-Monthly Service Charges (2)						
<i>Domestic, Commercial & Irrigation Meters</i>						
3/4" meter	\$ 36.89	\$ 36.89	\$ 36.89	\$ 36.89	\$ 36.89	\$ 36.89
1" meter	\$ 56.13	\$ 56.13	\$ 56.13	\$ 56.13	\$ 56.13	\$ 56.13
1 1/2" meter	\$ 68.95	\$ 68.95	\$ 68.95	\$ 68.95	\$ 68.95	\$ 68.95
2" meter	\$ 133.08	\$ 133.08	\$ 133.08	\$ 133.08	\$ 133.08	\$ 133.08
3" meter	\$ 210.03	\$ 210.03	\$ 210.03	\$ 210.03	\$ 210.03	\$ 210.03
4" meter	\$ 415.22	\$ 415.22	\$ 415.22	\$ 415.22	\$ 415.22	\$ 415.22
<i>Combination Meters</i>						
4" meter	\$ 133.08	\$ 133.08	\$ 133.08	\$ 133.08	\$ 133.08	\$ 133.08
6" meter	\$ 210.03	\$ 210.03	\$ 210.03	\$ 210.03	\$ 210.03	\$ 210.03
8" meter	\$ 415.22	\$ 415.22	\$ 415.22	\$ 415.22	\$ 415.22	\$ 415.22
10" meter	\$ 1,011.57	\$ 1,011.57	\$ 1,011.57	\$ 1,011.57	\$ 1,011.57	\$ 1,011.57
Water Usage Charges (\$/CCF) (2)						
Standard Water Usage Rate	\$ 0.7663	\$ 0.7663	\$ 0.7663	\$ 0.7663	\$ 0.7663	\$ 0.7663
Water Shortage Charge (3)						
			10%	25%	40%	55%
Sample Water Shortage Charges			\$ 0.0766	\$ 0.1916	\$ 0.3065	\$ 0.4215
Sample Aggregated Usage Rates			\$ 0.8429	\$ 0.9579	\$ 1.0728	\$ 1.1878
Excess Use Charge (4)						
				50%	150%	250%
Sample Excess Use Charges				\$ 0.4790	\$ 1.6092	\$ 2.9695
Sample Aggr. Excess Use Rates				\$ 1.4369	\$ 2.6820	\$ 4.1573
Excess Use Charge applies to usage above amounts shown (5)						
			3/4" meter	26 CCF		
			1" meter	52 CCF		
			1 1/2" meter	156 CCF		
			2" meter	208 CCF		
			3" meter	416 CCF		
			4" meter & larger	832 CCF		

Notes:

- (1) This Table shows the proposed water shortage charges and excess use charges applied to the proposed water rates for 2015. The percentages would be applied to any then-current water rates in future years.
- (2) No changes to the bi-monthly service charges are proposed during water shortages.
- (3) Water shortage charges are incremental increases in the standard water usage rate applied in Stages 3, 4, and 5, and with the Health and Safety limitation.
- (4) Excess use charges effectively create a higher-priced second tier, and would apply only in Stages 4 and 5, and with the Health and Safety limitation. The percentage is applied to the combined water usage and water shortage rate to create the second tier.
- (5) Excess use charge applies to bi-monthly usage in excess of amounts shown for each meter size.

The District's Board of Directors will be considering the proposed drought water rates at a public hearing in setting rates for calendar year 2015. Additional information about the public hearing can be obtained from the District at www.chwd.org.

Details of the financial and water rate analyses are presented in the body of this report. This includes examples of how the proposed water shortage rates would affect various customers including those that do reduce water usage and those that do not, which is presented at the end of the report.

WATER SHORTAGE FINANCIAL ANALYSIS

An extended water shortage can have an adverse financial impact on the District and its ability to provide water service. In the face of the current drought situation, a financial analysis was conducted to determine the potential impacts to the District of reduced water sales within its service area.

Stages of Water Supply and Shortage

The District has defined five stages of water supply shortage to assist with water resource management and emergency planning. These stages include:

- Stage 1 – Normal Supply
- Stage 2 – Water Alert (5% to 10% use reduction)
- Stage 3 – Water Warning (11% to 25% use reduction)
- Stage 4 – Water Crisis (26% to 50% use reduction)
- Stage 5 – Water Emergency (>50% use reduction)

In addition, a water supply limitation of 65 gallons per capita per day (gpcd) has been discussed regionally and by the US Bureau of Reclamation as a minimum water allocation to protect Health and Safety. This Health and Safety limitation has also been incorporated into the financial and rate analysis.

Coming on the heels of a very dry year in 2013, in January 2014 the water in Folsom Reservoir had fallen to about 18 percent of its storage capacity. Other major reservoirs in California were also at very low levels. In this critically dry environment, on January 17, 2014 Governor Brown declared a drought state of emergency and asked Californians to reduce water use by 20 percent. He also called upon urban water agencies to implement water shortage contingency plans. As a result of drought conditions, the Citrus Heights Water District (District) declared a Stage 3 – Water Warning on January 14, 2014 and is asking customers to reduce water usage by an overall 20 percent.

The District relies extensively on water purchased from San Juan Water District, which comes from Folsom Reservoir. However, it also owns, operates, and maintains a number of groundwater wells as a backup supply. The District has ramped up use of its groundwater wells to help offset reduced surface water supplies. The marginal cost of groundwater production, however, is more costly than the marginal cost of surface water.

Financial Implications of Water Shortage

This report focuses on the financial affects of water shortage on the District's finances. The District's operation and financial condition is affected in several ways by a water shortage. Changes in operating and maintenance costs and revenues include:

- Reduction in water sales and water sales revenue
- Reduction in surface water purchases and surface water purchase costs

- Increased groundwater production and groundwater production costs
- Increased demand management program activities and related costs

While the reduction in water sales revenue will be partially offset by the reduction in surface water purchase costs, revenue will decline more than costs thereby creating a financial deficit. In addition, the District is faced with increased costs by shifting to groundwater and working to inform and assist customers in meeting water use reduction goals.

In response to the water shortage, and the financial deficit created, the District has the ability to take a variety of actions. The analysis presented herein focuses on three potential courses of action, including:

- Drawing down a portion of available financial reserves
- Implementing water shortage charges to generate some incremental revenue and also increase the financial incentive for customers to reduce water usage
- Implementing excess use charges to serve as a penalty for excessive water usage in the more severe water shortage situations.

The District also will seek to reduce operating and maintenance costs and may, where possible, seek additional outside revenues. However, the analysis herein focuses on only the three potential response actions listed above.

Water Shortage Financial Analysis

Using current budget and water use information, an analysis of the potential financial impacts of water shortages has been modeled. The analysis includes estimating the magnitude of reduced revenue, reduced costs, and increased costs that may be associated with each stage of water shortage. **Exhibit 2** summarizes the estimated financial impacts of water shortage (based on normalized 2014 costs, revenues, and water usage) and assesses potential changes in operating revenues and expenses relative to normal water supply conditions and under the various stages of water shortage.

Exhibit 2 shows how the financial deficit would increase with more severe stages of water shortage. Under water shortage conditions, the financial deficit grows as water sales decline. While total expenses would also decline, the fall in revenues would exceed the decline in expenses. The financial deficit could grow to about \$2.1 million with a Stage 5 – Water Crisis and to more than \$2.3 million under health and safety use limitations. The financial magnitude of each of the factors contributing to the deficit at each stage of water shortage is included in Exhibit 2.

To mitigate the financial impacts resulting from a water shortage, a three-pronged approach is suggested. Spreading the response across all three areas helps to mitigate the impact in any single area. The three suggested responses are described below, and graphically presented in **Exhibit 3**.

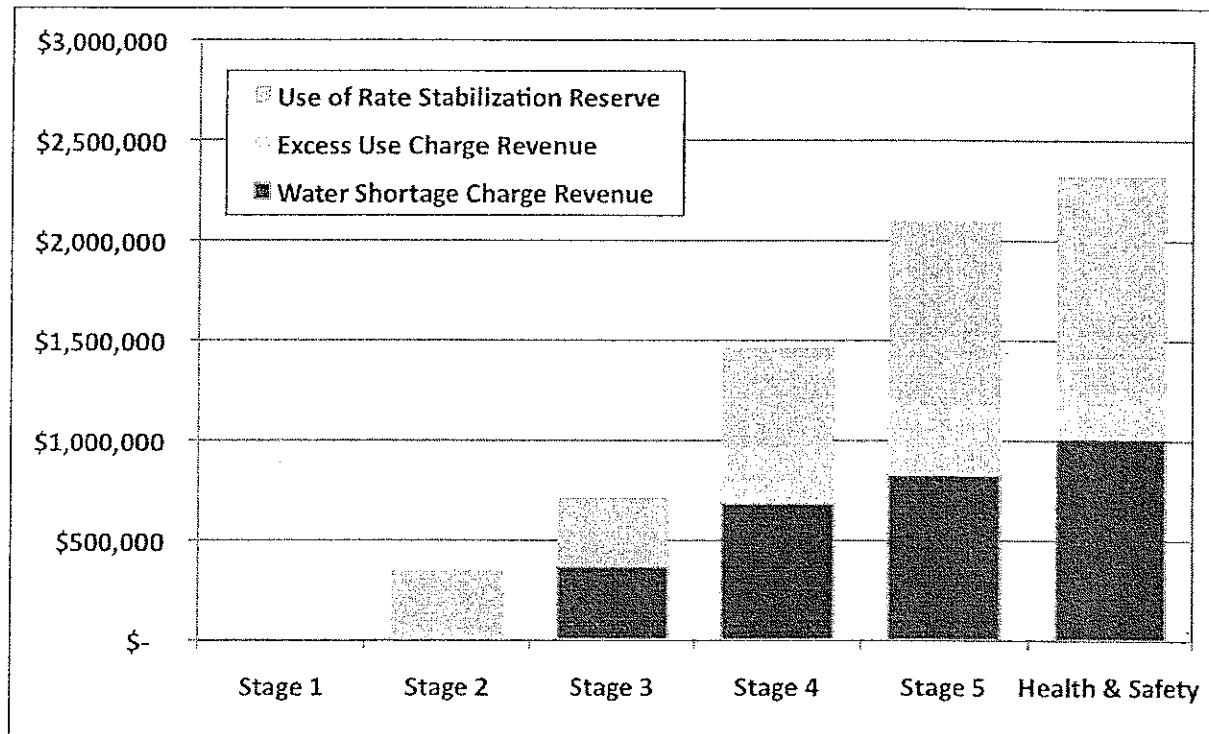
Exhibit 2
Citrus Heights Water District
Estimated Financial Impact Created by Water Shortages (2014)

	Stage 1 Normal Supply (1)	Stage 2 Water Alert	Stage 3 Water Warning	Stage 4 Water Crisis	Stage 5 Water Emergency	USBR Health & Safety Std.
Use Reduction Goals -->	None	5% to 10%	11% to 25%	26% to 50%	Over 50%	Over 75%
Est. Financial Impact from Water Shortage						
Reduced Water Sales Revenue	\$ -	\$ (351,000)	\$ (710,000)	\$ (1,466,000)	\$ (2,093,000)	\$ (2,326,000)
Reduced Surface Water Purchase Costs	\$ -	\$ 351,000	\$ 341,000	\$ 502,000	\$ 921,000	\$ 1,086,000
Increased Groundwater Production Costs	\$ -	\$ -	\$ 369,000	\$ 692,000	\$ 830,000	\$ 1,015,000
Increased Demand Management Costs	\$ -	\$ -	\$ -	\$ 272,000	\$ 342,000	\$ 225,000
Est. Total Financial Deficit	\$ -	\$ (351,000)	\$ (710,000)	\$ (1,466,000)	\$ (2,093,000)	\$ (2,326,000)
Multi-Pronged Corrective Strategy						
Use of Rate Stabilization Reserves (2)	\$ -	\$ 351,000	\$ 341,000	\$ 502,000	\$ 921,000	\$ 1,086,000
Impose Water Shortage Charge (3)	\$ -	\$ -	\$ 369,000	\$ 692,000	\$ 830,000	\$ 1,015,000
Impose Excess Use Charge (4)	\$ -	\$ -	\$ -	\$ 272,000	\$ 342,000	\$ 225,000
Total Corrective Actions	\$ -	\$ 351,000	\$ 710,000	\$ 1,466,000	\$ 2,093,000	\$ 2,326,000
Water Shortage Charge -->			10%	25%	40%	55%
Excess Use Charge -->				50%	150%	250%

Notes:

- (1) The 2014 budget and related estimates suggest a \$163,000 increase in the Operating Fund balance during the year.
- (2) Amounts shown are the reduction in the Rate Stabilization Reserve due to water shortage.
- (3) Water shortage charges would apply only to the water usage rate (not fixed service charges), and would represent approximately 3.8%, 7.3%, 9.2%, and 11.5% of total annual water rate revenue in Stages 3, 4, and 5, and with the Health and Safety limitation, respectively.
- (4) Excess use charges would apply to the water usage rate and water shortage charges (not fixed service charges), and would represent approximately 2.9%, 3.8%, and 2.5% of total annual water rate revenue in Stages 4 and 5, and with the Health and Safety limitation, respectively.

Exhibit 3
Citrus Heights Water District
Bridging the Deficit Gap With Reserves and New Revenues



1. *Drawdown Available Reserves* - At the beginning of 2014, the District had \$1,000,000 in its Rate Stabilization Reserve, as well as other funds in its Operating Fund and Operating Reserve. A portion of these reserves could be used to bridge the financial deficit created by water shortage. The proposed water shortage financial strategy would rely on using a portion of the Rate Stabilization Reserve to help bridge the deficit gap. The amount that would be required increases with the severity of water shortage conditions. Based on the potential financial impact of water shortage, it is recommended that the Rate Stabilization Reserve be increased from \$1 million to \$2 million. The additional \$1 million could come from the District's Operating Fund, avoiding the need to generate additional revenue to provide for this increased funding.

The amount that would be needed from the Rate Stabilization Reserve during periods of shortage would depend on the stage (severity) and duration of drought. The amounts shown in Exhibit 2 and reflected graphically in Exhibit 3 represent annual estimates. They range from potentially needing about \$350,000 in Stage 2 to over \$1 million under Health and Safety use limitations. The recommended \$2 million for the Rate Stabilization Reserve would help buffer the District's finances during a multi-year drought.

2. *Impose Water Shortage Charge* – In water shortage situations, many water utilities implement temporary water shortage surcharges to (1) help reduce the financial deficit created by the shortage, and (2) provide customers with a greater financial incentive for reducing water usage. The analysis herein suggests imposing a water shortage charge in Stages 3, 4, and 5 of a declared water shortage, as well as under Health and Safety use limitations. While the details of the water shortage charges are explained later in this report, the water shortage charges would effectively increase the standard water usage rate (but not the bi-monthly service charges) during the period of shortage. It is suggested that water shortage charges provide an incremental increase to the standard water usage rate of 10 percent in Stage 3 – Water Warning, 25 percent in Stage 4 – Water Crisis, 40 percent in Stage 5 – Water Emergency, and 55 percent under Health and Safety conditions. These charges would provide an estimated additional, \$369,000, \$692,000, \$830,000 and \$1,015,000, respectively, during these stages of shortage, and would thereby help to bridge the financial deficit gap caused by water shortage.
3. *Impose Excess Use Charge* – In more severe water shortage conditions, an excess use charge is recommended to provide an incentive to customers to reduce water use and discourage excessive usage. While some additional revenue may be generated by the excess use charge, its primary purpose is to discourage excessive water usage. Any revenue obtained from the excess use charge would help bridge the financial deficit created by the shortage, and help provide the needed funds to cover the increased costs for demand management programs and increased groundwater production. While the details of the excess use charges are explained later in this report, the excess use charges would effectively create a second tier in the water rate structure. Customers meeting water use reduction goals would generally be able to avoid any excess use charges. It is suggested that excess use charges create a second tier with a step increase of 50 percent in Stage 4 – Water Crisis, 150 percent in Stage 5 – Water Emergency, and 250 percent with Health and Safety use limitations. These charges may provide an estimated \$272,000 in Stage 4, \$342,000 in Stage 5, and \$225,000 under the Health and Safety use limitation, though it is possible that no or very little revenue would be generated from this charge.

The combined affect of using the available Rate Stabilization Reserve and augmenting water rate revenue with water shortage charges and excess use charges would help to fully mitigate the financial impact of a water shortage at each defined Stage. **Exhibit 4** presents the analysis of estimated annual revenues and expenses at each stage of water shortage, based on implementation of the response actions suggested above.

Exhibit 4
Citrus Heights Water District
Estimated Impact of Water Shortage on Revenues and Expenditures with Mitigation Responses (2014)

	Stage 1 Normal Supply	Stage 2 Water Alert	Stage 3 Water Warning	Stage 4 Water Crisis	Stage 5 Water Emergency	USBR Health & Safety Std.
Use Reduction Goals --> Modeled Use Reduction -->	None	5% to 10% 10%	11% to 25% 20%	26% to 50% 40%	Over 50% 55%	Over 75% 60%
Revenues						
Service Charge Revenue	\$ 5,752,000	\$ 5,752,000	\$ 5,752,000	\$ 5,752,000	\$ 5,752,000	\$ 5,752,000
Water Usage Charge Revenue (1)	\$ 4,614,000	\$ 4,152,000	\$ 3,691,000	\$ 2,768,000	\$ 2,076,000	\$ 1,845,000
Water Shortage Charge Rev. (2)			\$ 369,000	\$ 692,000	\$ 830,000	\$ 1,015,000
Excess Use Charge Rev. (3)				\$ 272,000	\$ 342,000	\$ 225,000
Other Operating Revenue	\$ 458,000	\$ 458,000	\$ 458,000	\$ 458,000	\$ 458,000	\$ 458,000
Interest and Other Revenue	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
Total Revenues (% of normal)	\$10,849,000	\$10,387,000 96%	\$10,295,000 95%	\$ 9,967,000 92%	\$ 9,483,000 87%	\$ 9,320,000 86%
Expenditures and Transfers						
Benefits	\$ 683,000	\$ 683,000	\$ 683,000	\$ 683,000	\$ 683,000	\$ 683,000
Water Demand Management (4)	\$ 265,000	\$ 294,000	\$ 331,000	\$ 442,000	\$ 589,000	\$ 663,000
Customer Service & Admin.	\$ 1,916,000	\$ 1,916,000	\$ 1,916,000	\$ 1,916,000	\$ 1,916,000	\$ 1,916,000
Pumping & Well Maintenance (5)	\$ 142,000	\$ 242,000	\$ 392,000	\$ 812,000	\$ 683,000	\$ 611,000
Surface Water Purchase Fixed Charges	\$ 1,051,000	\$ 1,051,000	\$ 1,051,000	\$ 1,051,000	\$ 1,051,000	\$ 1,051,000
Volumetric Surface Water Costs (6)	\$ 1,310,000	\$ 1,070,000	\$ 781,000	\$ 83,000	\$ -	\$ -
Transmission & Distribution	\$ 1,686,000	\$ 1,686,000	\$ 1,686,000	\$ 1,686,000	\$ 1,686,000	\$ 1,686,000
Debt Service	\$ 744,000	\$ 744,000	\$ 744,000	\$ 744,000	\$ 744,000	\$ 744,000
Transfer to CIP/Deprec. Reserves (7)	\$ 2,889,000	\$ 2,889,000	\$ 2,889,000	\$ 2,889,000	\$ 2,889,000	\$ 2,889,000
Contrib. to Operating Fund Reserves (8)	\$ 163,000	\$ 163,000	\$ 163,000	\$ 163,000	\$ 163,000	\$ 163,000
Total Uses of Funds (% of normal)	\$10,849,000	\$10,738,000 99%	\$10,636,000 98%	\$10,469,000 96%	\$10,404,000 96%	\$10,406,000 96%
Surplus/(Deficit) in Operations	\$ -	\$ (351,000)	\$ (341,000)	\$ (502,000)	\$ (921,000)	\$ (1,086,000)

Notes:

- (1) Water usage revenue will decline in proportion to water sales.
- (2) Water shortage charge would be imposed in Stages 3, 4, and 5, and with the Health and Safety limitation, to limit the financial impact of a shortage.
- (3) Excess use charge would be imposed in Stages 4 and 5, and with the Health and Safety limitation, to limit the financial impact of shortage and penalize excessive use.
- (4) Water demand management costs estimated to increase in inverse proportion to shortage cutbacks during water shortages.
- (5) Groundwater well maintenance and pumping costs would increase as supply mix shifts to greater use of groundwater.
- (6) Volumetric surface water purchase costs would decline in proportion with reduced surface water purchases.
- (7) Transfer of funds for CIP reserve, Depreciation reserve, and current CIP project expenditures.
- (8) The 2014 budget and related estimates suggest a \$163,000 increase in the Operating Fund balance during the year. Under water shortage conditions this increase would decline depending on the stage of shortage.

WATER SHORTAGE RATES

This section describes proposed water shortage rates, which include both water shortage charges and excess use charges.

The District's normal water rate structure includes a fixed bi-monthly service charge based on the size of the water meter and a uniform water rate for all water usage. About 55 percent of annual water rate revenues is generated from the fixed service charges, with 45 percent of revenue from water usage charges. The proposed water shortage rates affect the water usage charges, but not the fixed service charges. The District is considering adjusting its water rates

by 3 percent in 2015. The proposed (2015) standard water rates are shown in **Exhibit 1**, near the beginning of this report, under the heading for Stage 1 – Normal Supply.

Water Shortage Charges

To help encourage water conservation and to help close the financial deficit created by a water shortage, it is recommended that the District implement a water shortage charge in the higher stages of water shortage (Stages 3, 4, and 5), as well as under Health and Safety use limitations. The water shortage charge would be an incremental increase in the standard water usage rate. Even though the water shortage charge represents an increase in the water rates, total water rate revenue will still decline with reduced water sales in each stage of shortage. In addition, because a three-pronged approach is suggested for addressing the financial deficit created by a shortage, customers that meet water use goals will have lower water bills with the water shortage charges than they would with normal water usage and normal water rates.

Exhibit 1, near the beginning of this report, presents the proposed standard water rate schedule for 2015, with water shortage charges laid over the standard usage rate in Stages 3 and above. As an example, the standard uniform water rate is \$0.7663 per CCF (1 CCF = 100 cubic feet = 748 gallons). In Stage 3, a 10 percent water shortage charge would mean adding \$0.0766 per CCF to the standard rate as the water shortage charge. Similarly in Stage 4, a 25 percent water shortage charge would mean adding \$0.1916 per CCF to the standard uniform rate. Because the water shortage charge would only apply to the water usage rate, and not to the fixed bi-monthly service charge, the water shortage charge would represent approximately a 3.8 percent, 7.3 percent, 9.2 percent, and 11.5 percent increase in total water rate revenue in Stages 3, 4, and 5, and with the Health and Safety limitation, respectively. These are relatively modest revenue increases for dealing with significant water supply shortages.

Excess Use Charges

To ensure that customers are not using excessive amounts of water during the more severe stages of water shortage, the proposed water shortage rate structure also includes excess use charges that would be implemented in Stage 4 – Water Crisis, Stage 5 – Water Emergency, and under Health and Safety use limitations. **Exhibit 1** also presents the proposed excess use charges, and their application to the proposed standard rates for 2015.

Effectively, the excess use charge imposes a new second tier into the water rate structure. In the Stage 4 – Water Crisis, the excess use charge would create a tier rate 50 percent higher than the combined standard water usage rate and water shortage charge. The second tier would apply to water use in excess of 52 CCF (bi-monthly) for a typical 1" water meter. The tier break point would vary with meter size. In the Stage 5 – Water Emergency, the excess use charge would create a second tier rate 150 percent higher than the rate for the combined standard water usage rate and water shortage charge. Under Health and Safety use limitations, the excess use tier rate would be 250 percent higher than the rate for the combined standard water usage rate and the water shortage charge.

Because of the critical nature of the supply limitations in Stages 4 and 5, and under Health and Safety use limitations, no customer in the District should be using water that would result in excess use charges. Therefore, the revenue that might be generated from the excess use charge

will likely be limited. The excess use charge is primarily intended to send a strong signal to customers of the severity of water supply limitations and the importance of reducing usage. Any revenue that might be generated from the excess use charge would be directed to drought-related demand management programs and efforts to augment water supplies. In no case would excess use charges generate revenue that would exceed the total cost of providing service to District customers.

Exhibit 5 graphically shows the standard and water shortage rate structures across all stages of water shortage. The graph reflects the water shortage charge and excess use charge as proposed and laid over the proposed standard water usage rate for 2015. Bi-monthly service charges are not reflected in this graphic. For perspective, the average normal bi-monthly water use for a single family household is about 40 CCF (about 500 gpd). Winter water use tends to be lower and summer use tends to be higher. For example, typical winter water usage may be about 20 CCF bi-monthly (about 250 gpd) and is representative of indoor water usage for most single family homes. Summer peak demands can vary significantly depending on size and type of landscaping, irrigation practices, and other factors.

Potential Impact of Water Shortage Rates on Customer Bills

The water shortage rate structure has been specifically designed such that customers achieving water use reduction goals will have lower water bills than they normally pay. Customers that do not conserve will have higher water bills. Because the water shortage charge applies to all water usage, all customers will contribute to bridging the financial gap created by water shortage. Of course, those customers that use the least amount of water or conserve the most will pay less through the water shortage rates. Because the water shortage rates do not affect the fixed bi-monthly service charges, the impact of the water shortage charges on the total water bill is mitigated. Excess use charges should be totally avoidable by all customers.

Exhibit 6 illustrates how three different residential customers (with a standard 1" water meter) would be affected by the water shortage rates across each of the stages of water shortage. Bi-monthly water bills are shown for customers that, under normal conditions, use 40 CCF (average), 80 CCF (representative of summer peak), and 20 CCF (representative of winter usage) water use. Water bills are calculated for customers meeting the requested water use reduction goals, and customers that do not conserve at all.

Exhibit 5
Citrus Heights Water District
Proposed Water Shortage Usage Rate Structure (2015) for a Typical 1" Water Meter

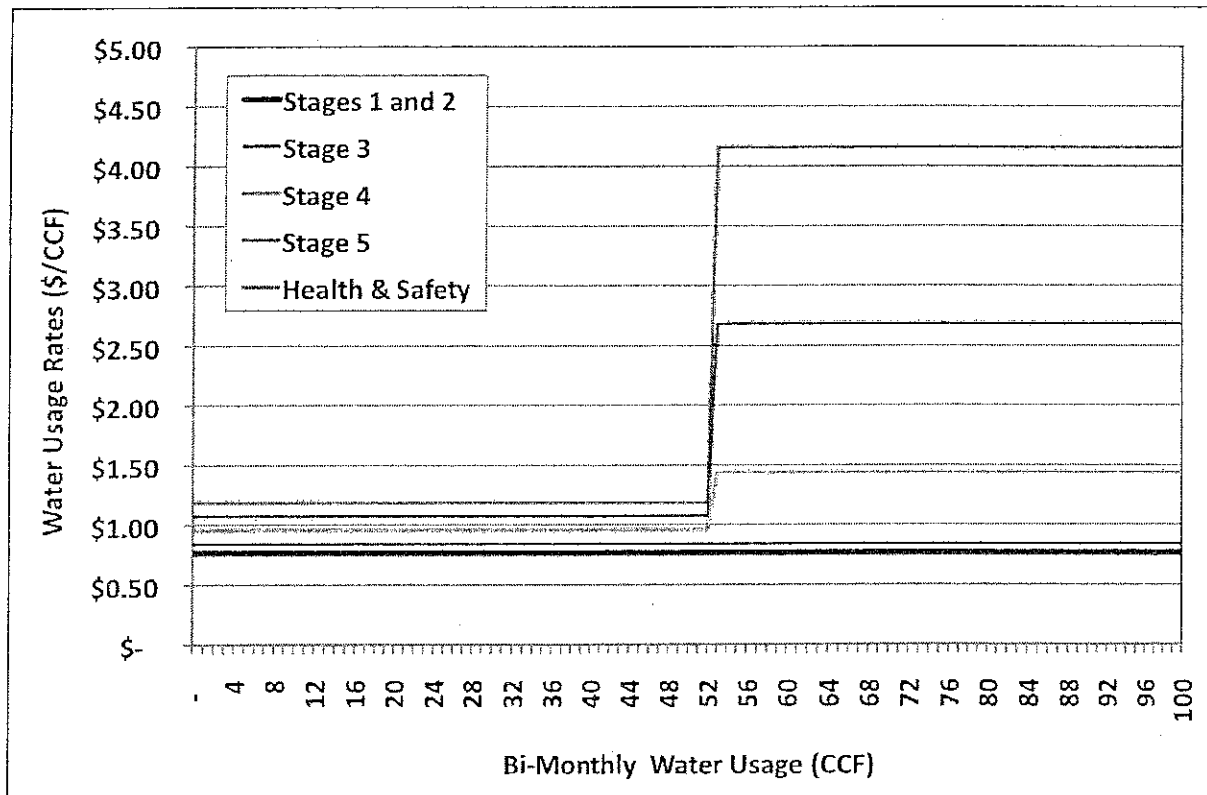


Exhibit 6 illustrates that customers achieving water use reduction goals will have lower water bills than they normally pay, and those that do not conserve will pay more. The magnitude of the impact varies with the specific water use characteristics of the customer and the stage of water shortage.

The District recognizes that some customers, under normal conditions, use very little water and have already implemented conservation measures and practices. The District deeply appreciates these efforts. The water shortage rate structure is not intended to penalize low water using customers that are in this situation. As an example, a customer using only 10 CCF bi-monthly (125 gpd) in a Stage 5 – Water Emergency would have a water bill of \$66.86 of which \$3.07 (4.6%) is from the water shortage charge. This additional amount is not punitive, but represents a proportionate share of the extra costs of providing water service under severe drought conditions.

Exhibit 6
Citrus Heights Water District
Sample Single Family Residential Water Bills

Water Shortage Stage	Water Use Reduction Goal	Bi-Monthly Water Use (CCF)	Service Charge	Usage Charge	Water Shortage Charge	Excess Use Charge	Total Water Bill	% Change from Normal Bill
Average Single Family Customer Meeting Reduction Goals								
Stage 1 - Normal Supply	None	40	\$ 56.13	\$ 30.65	\$ -	\$ -	\$ 86.78	
Stage 2 - Water Alert	5% to 10%	36	\$ 56.13	\$ 27.59	\$ -	\$ -	\$ 83.72	-3.5%
Stage 3 - Water Warning	11% to 25%	32	\$ 56.13	\$ 24.52	\$ 2.45	\$ -	\$ 83.10	-4.2%
Stage 4 - Water Emergency	26% to 50%	24	\$ 56.13	\$ 18.39	\$ 4.60	\$ -	\$ 79.12	-8.8%
Stage 5 - Water Crisis	Over 50%	18	\$ 56.13	\$ 13.79	\$ 5.52	\$ -	\$ 75.44	-13.1%
Health & Safety Limit (1)	65 gpcd	16	\$ 56.13	\$ 12.26	\$ 6.74	\$ -	\$ 75.13	-13.4%
Average Single Family Customer With No Water Use Reduction								
Stage 1 - Normal Supply	None	40	\$ 56.13	\$ 30.65	\$ -	\$ -	\$ 86.78	
Stage 2 - Water Alert	5% to 10%	40	\$ 56.13	\$ 30.65	\$ -	\$ -	\$ 86.78	0.0%
Stage 3 - Water Warning	11% to 25%	40	\$ 56.13	\$ 30.65	\$ 3.07	\$ -	\$ 89.85	3.5%
Stage 4 - Water Emergency	26% to 50%	40	\$ 56.13	\$ 30.65	\$ 7.66	\$ -	\$ 94.45	8.8%
Stage 5 - Water Crisis	Over 50%	40	\$ 56.13	\$ 30.65	\$ 12.26	\$ -	\$ 99.04	14.1%
Health & Safety Limit	65 gpcd	40	\$ 56.13	\$ 30.65	\$ 16.86	\$ -	\$ 103.64	19.4%
Low Water-Using Single Family Customer Meeting Reduction Goals								
Stage 1 - Normal Supply	None	20	\$ 56.13	\$ 15.33	\$ -	\$ -	\$ 71.46	
Stage 2 - Water Alert	5% to 10%	18	\$ 56.13	\$ 13.79	\$ -	\$ -	\$ 69.92	-2.1%
Stage 3 - Water Warning	11% to 25%	16	\$ 56.13	\$ 12.26	\$ 1.23	\$ -	\$ 69.62	-2.6%
Stage 4 - Water Emergency	26% to 50%	12	\$ 56.13	\$ 9.20	\$ 2.30	\$ -	\$ 67.62	-5.4%
Stage 5 - Water Crisis	Over 50%	10	\$ 56.13	\$ 7.66	\$ 3.07	\$ -	\$ 66.86	-6.4%
Health & Safety Limit (1) (2)	65 gpcd	10	\$ 56.13	\$ 7.66	\$ 4.21	\$ -	\$ 68.01	-4.8%
Low Water-Using Single Family Customer With No Water Use Reduction								
Stage 1 - Normal Supply	None	20	\$ 56.13	\$ 15.33	\$ -	\$ -	\$ 71.46	
Stage 2 - Water Alert	5% to 10%	20	\$ 56.13	\$ 15.33	\$ -	\$ -	\$ 71.46	0.0%
Stage 3 - Water Warning	11% to 25%	20	\$ 56.13	\$ 15.33	\$ 1.53	\$ -	\$ 72.99	2.1%
Stage 4 - Water Emergency	26% to 50%	20	\$ 56.13	\$ 15.33	\$ 3.83	\$ -	\$ 75.29	5.4%
Stage 5 - Water Crisis	Over 50%	20	\$ 56.13	\$ 15.33	\$ 6.13	\$ -	\$ 77.59	8.6%
Health & Safety Limit	65 gpcd	20	\$ 56.13	\$ 15.33	\$ 8.43	\$ -	\$ 79.89	11.8%
High Water-Using Single Family Customer Meeting Reduction Goals								
Stage 1 - Normal Supply	None	80	\$ 56.13	\$ 61.30	\$ -	\$ -	\$ 117.43	
Stage 2 - Water Alert	5% to 10%	72	\$ 56.13	\$ 55.17	\$ -	\$ -	\$ 111.30	-5.2%
Stage 3 - Water Warning	11% to 25%	64	\$ 56.13	\$ 49.04	\$ 4.90	\$ -	\$ 110.08	-6.3%
Stage 4 - Water Emergency	26% to 50%	48	\$ 56.13	\$ 36.78	\$ 9.20	\$ -	\$ 102.11	-13.1%
Stage 5 - Water Crisis	Over 50%	36	\$ 56.13	\$ 27.59	\$ 11.03	\$ -	\$ 94.75	-19.3%
Health & Safety Limit (1)	65 gpcd	16	\$ 56.13	\$ 12.26	\$ 6.74	\$ -	\$ 75.13	-36.0%
High Water-Using Single Family Customer With No Water Use Reduction								
Stage 1 - Normal Supply	None	80	\$ 56.13	\$ 61.30	\$ -	\$ -	\$ 117.43	
Stage 2 - Water Alert	5% to 10%	80	\$ 56.13	\$ 61.30	\$ -	\$ -	\$ 117.43	0.0%
Stage 3 - Water Warning	11% to 25%	80	\$ 56.13	\$ 61.30	\$ 6.13	\$ -	\$ 123.56	5.2%
Stage 4 - Water Emergency	26% to 50%	80	\$ 56.13	\$ 61.30	\$ 15.33	\$ 13.41	\$ 146.17	24.5%
Stage 5 - Water Crisis	Over 50%	80	\$ 56.13	\$ 61.30	\$ 24.52	\$ 45.06	\$ 187.01	59.2%
Health & Safety Limit	65 gpcd	80	\$ 56.13	\$ 61.30	\$ 33.72	\$ 83.15	\$ 234.30	99.5%

Notes:

(1) The Health and Safety limit of 65 gpcd equates to 16 CCF bi-monthly for a household with three people.

(2) This low water-using customer would already be meeting the Health and Safety requirement. No further reduction is needed.

