ATTACHMENT 2

DROUGHT IMPACTS

East Contra Costa County
2014 IRWM Drought Grant Proposal

ATTACHMENT 2 –
DROUGHT IMPACTS

In accordance with the PSP, this attachment provides:

- ✓ A discussion of the regional water management impacts resulting from the 2014 Drought and any anticipated impacts if drought conditions continue into 2015; and
- ✓ A discussion of the mandatory and voluntary conservation measures implemented as a result of the 2014 Drought, and additional measures planned should drought conditions continue into 2015.

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Drought Impacts

The East County region is heavily dependent upon Delta supplies, which are particularly vulnerable during drought periods given the multitude of competing demands on those supplies. Water agencies in the East County region have the western-most Delta diversion facilities and have been significantly impacted from degradation of Delta water quality resulting from the drought. Not only has there been historically low precipitation causing significant seawater intrusion into the Delta, the SWRCB has relaxed Delta water quality standards in 2014 by granting a series of Temporary Urgency Change Petitions filed by the DWR and the U.S. Bureau of Reclamation (USBR) that result in greater seawater intrusion and further degradation of water quality in the Delta. Delta water in the East County region is too saline for environmental, municipal, industrial and agricultural uses and therefore local water supplies have been severely impacted. Furthermore, the SWRCB sent water right curtailment notices to junior water rights holders throughout the state beginning in January of 2014 and for the first time in history plan to issue curtailment notices to pre-1914 water rights holders due to the severity of the drought.

The East County region has made significant investments in surface water storage (e.g. Los Vaqueros Reservoir Expansion) as well as water conservation and recycling programs in recent years. These previous investments are mitigating a portion of the near term impacts of the ongoing drought in terms of CVP water supply cutbacks and the general reduction in water quality within the Delta.

Because one of the proposed projects in this grant application – the CCWD-BBID Regional Intertie Project – can provide immediate drought relief to (1) BBID's wholesale water customers in San Joaquin County, and (2) Bay Area customers served by water agencies with connections to the South Bay Aqueduct [e.g. customers served by Alameda County Water District (ACWD) and Zone 7 Water Agency (Zone 7)] drought impacts to those beneficiaries are also described in the following pages as applicable. It should be noted that the Bay Area beneficiaries have provided letters of support for the CCWD-BBID Regional Intertie project (see **Appendix A-3 and A-4** of **Attachment 3**).

Risk of Not Meeting Existing Drinking Water Demands

Risk of Not Meeting Existing Drinking Water Demands			
Region/Agency	**Applicable? (Y/N)**	**Expected Timing of Impact**	**Brief Summary**
East County	No	N/A	• Drinking water impacts not currently projected for East County due to supplies available in Los Vaqueros Reservoir
San Joaquin BBID	Yes	By 9/30/14	• 12,000 residents served by BBID are at risk of losing their water supply if pre-1914 rights are curtailed
Bay Area: ACWD	Yes	By 9/30/14	• ACWD has declared a water shortage emergency and has adopted an ordinance that includes mandatory water use restrictions.
Bay Area: Zone 7	Yes	By 9/30/14	• Zone 7 has declared a local drought emergency and has implemented 25% mandatory conservation measures.

Summary of Drought Impacts in BBID's Service Area

BBID is a wholesale provider of water to approximately 12,000 residents in the Mountain House Development in San Joaquin County. The water supply used to serve these residents is Delta water diverted from the SWP's Harvey O. Banks Delta Pumping Plant intake channel, under a 2003 agreement DWR based on BBID's pre-1914 appropriative water right at Italian Slough. For the first time ever in the

District's history, the State Water Resources Control Board (SWRCB) has indicated BBID's pre-1914 water rights may be curtailed – starting as early as July of this year (SWRCB Resolution 2014-0031 adopted July 2, 2014). If this happens, the 12,000 residents will be at risk of losing their water supply.

Summary of Drought Impacts in Bay Area Beneficiaries' Service Areas

ACWD

Normally, ACWD receives about 40% of its water supply from the State Water Project (SWP) via the South Bay Aqueduct (SBA); this year, however, due to the extraordinarily dry hydrologic conditions, ACWD's SWP allocation has been set to 5% of its contract amount. In addition, due to the lack of local rainfall, ACWD's local groundwater levels are at critically low levels, and the groundwater basin is at risk of overdraft and seawater intrusion. The San Francisco Public Utilities Commission (SFPUC) has asked ACWD to reduce its use of Hetch Hetchy water by 10%. On March 13, 2014, the ACWD Board of Directors declared a water shortage emergency and adopted an ordinance that includes mandatory water use restrictions for the 330,000 residents of Fremont, Newark and Union City.

Zone 7

Normally, Zone 7 receives about 80% of its water supply from the SWP, with the remainder coming from local groundwater. This year, Zone 7's SWP allocation was set at 5%, the lowest in SWP history. As a result, Zone 7 must rely upon additional groundwater reserves to meet demands. However, Zone 7 manages its groundwater basin such that levels do not drop below historic lows (130,000 AF), even in multi-year droughts. In response to the continuing drought and in order to protect the groundwater basin from overdraft, Zone 7 Water Agency's Board of Directors declared a local drought emergency on January 29, 2014, and has directed its 220,000 treated and untreated customers in Dublin, Pleasanton, Livermore and Dougherty Valley to reduce their water use by 25%.

Risk of Not Meeting Existing Agricultural Water Demands

Risk of Not Meeting Existing Agricultural Water Demands			
Region/Agency	**Applicable? (Y/N)**	**Expected Timing of Impact**	**Brief Summary**
East County: BBID	Yes	By 9/30/14	• BBID has already been forced to fallow 2,500 acres of cropland due to the drought. An additional 6, 200 acres will be lost if pre-1914 water rights are curtailed as well.

BBID has two sources of irrigation water supply: (1) a CVP contract for 20,600 AFY; and (2) a pre-1914 appropriative water right at Italian Slough. Crops within BBID's service area were planted early this year under the assumption that BBID's full water rights would be available. However, because of the drought and CVP curtailment (BBID's CVP allocation for agricultural use was set a 0% for 2014), 2,500 acres of farmland were fallowed, including 2,135 acres in East County. If the SWRCB curtails BBID's pre-1914 water rights, an additional 6,200 acres of crops that have already been planted would be lost, including 4,515 acres within East County. BBID estimates that up to $60M in damages could result from curtailments in 2014 and 2015. This estimate also includes lost revenue from the 12,000 wholesale M&I customers at risk of curtailment.

2,500 acres of crops in BBID's service area have been fallowed due to drought

Risk of Not Meeting Ecosystem Water Demands

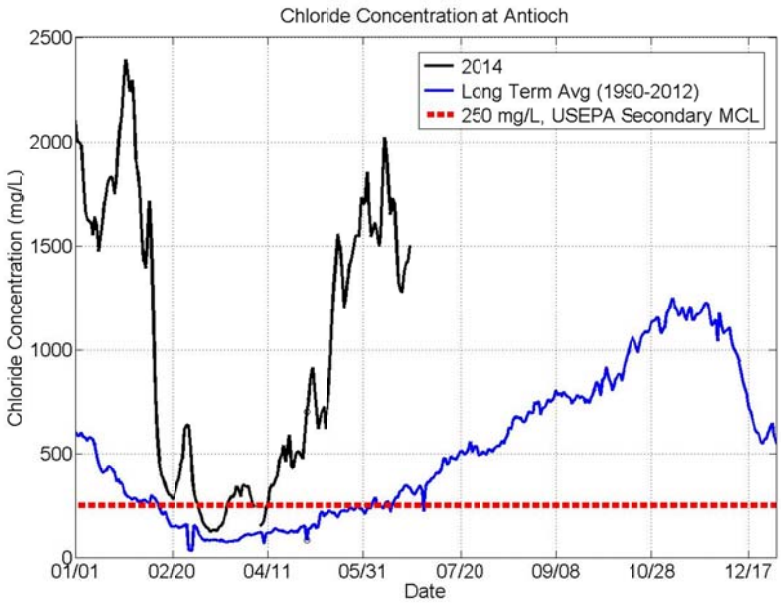
Risk of Not Meeting Ecosystem Water Demands			
Region	**Applicable? (Y/N)**	**Expected Timing of Impact**	**Brief Summary**
East County	Yes	Already Occurred	• Delta outflow standards have been relaxed, resulting in local water quality that is insufficient to support ecosystem needs.

On January 29, 2014, DWR and USBR filed a Temporary Urgency Change Petition to relax Delta outflow standards from the usual minimum required outflow of 7,100 cfs to 3,000 cfs. Typically the minimum outflow of 7,100 cfs is required from February through June to maintain salinity conditions, X2 or the distance from the Golden Gate Bridge to the 2 ppt isohaline, that are protective of habitat for native fisheries such as delta smelt. The position of X2 is typically maintained in the westernmost portion of the Delta and the East Contra region. Foregoing the ecosystem outflow requirements has led to an ecosystem water deficit of between 700,000 AF and 1,200,000 AF this year in the East County region. The ecosystem outflow requirements also provide ancillary protection for drinking water facilities in the region. Relaxation of those requirements means that local water quality is insufficient to support the ecosystem, municipal and industrial needs.

Risk of Drinking Water MCL Violations

Risk of Drinking Water MCL Violations			
Region/Agency	**Applicable? (Y/N)**	**Expected Timing of Impact**	**Brief Summary**
East County: CCWD	Yes	By 9/30/14 (chloride) By 9/30/15 (TTHMs)	• At risk of violating USEPA secondary MCL for chloride (250 mg/L) • At risk of violating SWRCB Decision 1641 chloride objective at Pumping Plant 1 • At risk for violating USEPA MCL for TTHMs (0.08 mg/L)
East County: DWD	Yes	By 9/30/14	• At risk of violating secondary MCL for TDS (500 mg/L)

The East County region's delivered water quality is highly dependent upon salinity levels in the Delta. Due to the drought and relaxation of outflow standards, salinity levels have increased sharply in the East County region. As illustrated in the chart below, chloride concentrations at Antioch's intake in the San Joaquin River are significantly higher than the USEPA MCL of 250 mg/L, with peak concentrations reaching 2,400 mg/L.



The increased salinity levels had has several impacts on the Region:

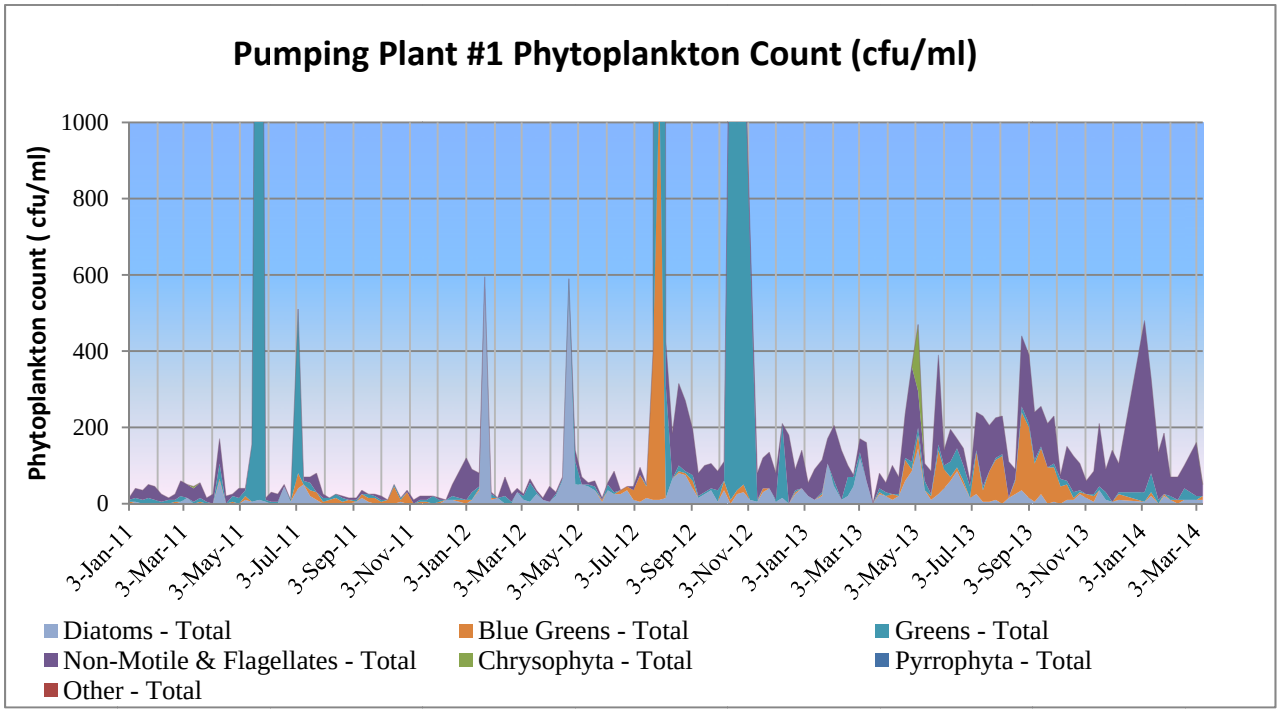
- Reduced ability to draw from local supplies
- Increased need for blending water supplies
- Increased risk of Secondary MCL violations for chloride
- Increased risk of MCL violations for THHMs
- Increased risk of SWRCB objective violations for chloride
- Increased risk of Secondary MCL violations for TDS

Risk of Chloride Standard Violations

The USEPA has set a secondary MCL for chloride concentration at 250 mg/L. The SWRCB's Decision 1641 also contains an additional chloride objective at CCWD's Pumping Plant 1 where chloride concentration must be below 150 mg/L for 155 days during critically dry years. Water quality at Pumping Plant 1 has not met the SWRCB standard to date and may also exceed the 250 mg/L MCL by September this year. As shown in the chart on the previous page, water quality near at the city of Antioch's intake already greatly exceeds both the SWRCB and USEPA standards. If 2015 is also dry, those standards will most certainly not be met throughout the East County region.

Risk of TTHM MCL Violations

The USEPA's Stage 1 Disinfectants and Disinfection Byproduct Rule established a primary MCL of 0.08 mg/L for total trihalomethanes (TTHM). The drought has caused an increase in Delta water total organic carbon levels, which poses an increased risk of TTHM formation. The figure below shows that phytoplankton counts at CCWD's Pumping Plant 1 have increased since the beginning of the drought. Increases in phytoplankton correspond to increases in total organic carbon. The increase in phytoplankton and organic carbon overall has increased the formation of disinfection byproducts and made it more difficult to maintain annual average TTHM levels below the MCL requirement. If the drought and high levels of organic carbon in the Delta persist into 2015, CCWD would have difficulty meeting the TTHM MCL requirements.



Risk of TDS Violations

In normal years, DWD's delivered water is about 300 mg/L TDS. Due to the drought, average TDS levels this year have been in the 400-500 mg/L range. If the drought continues, it is likely that the delivered water quality would exceed the USEPA secondary standard for TDS of 500 mg/L.

Risk of Groundwater Overdraft

Risk of Groundwater Overdraft			
Region/Agency	**Applicable? (Y/N)**	**Expected Timing of Impact**	**Brief Summary**
East County:	No	N/A	• East County's groundwater basins are not yet at risk of overdraft.
Bay Area: ACWD	Yes	By 9/30/14	• Due to the lack of local rainfall, ACWD's local groundwater levels are at critically low levels, and the groundwater basin is at risk of overdraft and seawater intrusion.

Risk of Discharge Water TMDL Violations

Risk of Discharge Water TMDL Violations			
Region/Agency	**Applicable? (Y/N)**	**Expected Timing of Impact**	**Brief Summary**
East County: ISD	Yes	9/30/15	• Poor water quality poses risk of NPDES Permit (Bay-Delta Water Quality Plan) violation for Electrical Conductivity

ISD's current NPDES permit (No. CA0085260 issued by the Central Valley Regional Water Quality Control Board) prohibits the discharge of effluent with an effluent EC higher than 1505 µmhos/cm. One consequence of poorer water quality (e.g. high salinity, increased TDS) is the increased likelihood that customers will install water conditioning units/water softeners to address taste and odor issues. These water softeners discharge significant amounts of sodium, thereby increasing the risk that ISD will not meet its EC requirement. ISD's current EC levels are below the permit limit, but if there is an increase in installation of water softeners over the next year, ISD may be at risk of violating the 1505 µmhos/cm.

Risk of Other Drought-Related Adverse Impacts

BBID provides water for fire suppression at Byron Airport. If pre-1914 water rights are curtailed, this water supply is at risk.

Water Conservation Measures

A discussion of the mandatory or voluntary water conservation measures and restrictions that have been implemented as a result of the 2014 Drought, as well as additional measures that are anticipated should drought conditions continue, are provided in the sections below. As noted in this discussion, all of the water purveyor project proponents have implemented water conservation measures seeking reductions of 20% compared to last year.

BBID Conservation Measures

Although BBID will not be receiving funding from this grant, the agency directly benefits from the implementation of the CCWD-BBID Regional Intertie project. As such, BBID's conservation efforts are described herein.

In the last ten years, BBID has invested $8 million dollars in Capital Improvement Projects with a primary focus on water conservation. Such projects include: pipeline replacement, pump station rehabilitation, and canal lining. BBID estimates annual water savings of 6,000 acre-feet. Of the 6,650 irrigable acres within the East County portion of BBID, approximately 4,000 acres utilize water-efficient micro-sprinklers or drip irrigation.

In response to the drought, BBID recently adopted a Resolution urging the Mountain House Community Services District to conserve water by 20% (see **Appendix A**). In addition, approximately 2,500 acres were fallowed, including 2,135 acres in East County, to reduce water demand.

If the drought continues, BBID would assist the Contra Costa County Resource Conservation District with a Regional Conservation Partnership Program. In addition technical assistance and/or potential funding for on-farm conservation programs would be provided.

CCWD Conservation Measures

The following section describes the measures CCWD has undertaken in response to the drought, as well as additional measures that will be enacted should dry year conditions continue. All of CCWD's wholesale customers including the City of Pittsburg, Antioch, DWD and City of Brentwood are following CCWD's direction in terms of a retail drought management program.

CCWD Drought Response

In response to the drought, CCWD implemented a Drought Management Program consistent with Stage II (Water Warning) of the Water Shortage Contingency Plan outlined in their 2010 UWMP. The program includes an overall voluntary reduction goal, mandatory water use restrictions and an excess use charge focusing on reducing outdoor water use, and increased conservation and public outreach. The program is discussed more in detail below.

Voluntary Drought Program

On January 17, 2014, Governor Brown declared a state of emergency, calling on all water districts to implement voluntary water conservation and to activate their water shortage contingency plans. In response, the CCWD Board of Directors approved the Drought Management Program on March 19, 2014 (see **Appendix B**).

The drought program approved by the Board called for a 25% reduction in outdoor water use, with an overall 15% reduction from the baseline (2005-2007) period. This overall reduction target is equivalent to a 20% reduction from last year. Water use records through May indicate that CCWD's customers are achieving this goal:

CCWD's Treated Water Service Area Consumption

Consumption (AF)			Percent Change (%)	
2014	**2013**	**Historical**	**2014 vs 2013**	**2014 vs Historical**
3,804	4,839	4,493	-21%	-15%

Mandatory Water Use Restrictions

To prevent the waste of water, the following uses are prohibited under the current drought program:

a) Outside watering of landscaping during the hours of 9 a.m. to 5 p.m.
b) Outside watering with CCWD furnished water that results in excessive flooding or runoff into a gutter, drain, patio, driveway or street.
c) Washing a vehicle, trailer or boat with CCWD-furnished water using a hose without a shutoff nozzle.
d) Washing paved or other hard-surfaced areas, including sidewalks, walkways, driveways, patios and parking areas with CCWD-furnished water.
e) Using CCWD-furnished water for non-recirculating decorative fountains or filling decorative lakes or ponds.

Lawn-to-Garden Rebate Program Incentives

On March 19, 2014, the CCWD Board of Directors also approved an increase in the lawn-to-garden rebate from $0.50 to $1.00 per square foot to further encourage reductions in outdoor water use and saving water in the critical summer and fall periods in particular. The Board also approved an underwriting incentive for garden design consultation not to exceed $150 per rebate. As a result of these approved changes, homeowners can now earn rebates up to $1,000, and commercial and municipal customers can earn rebates up to $10,000 when they replace their lawns with water-efficient landscaping.

Increased Public Awareness Campaign

In response to the drought, CCWD stepped up its public outreach campaign regarding the drought and the need to conserve water:

- CCWD's website was updated so that the Drought Management Program and tips for conserving water were prominently displayed on the main page.
- Flyers were developed in English and Spanish explaining the need to conserve and tips for reducing indoor and outdoor water use.
- Updated bill inserts were prepared highlighting the drought and the importance of conserving water.

The electronic and printed outreach materials described the myriad of water use efficiency programs offered by the District, including:

- **Free Water Use Surveys.** CCWD staff will perform an audit of single family residential, multi-family residential, and commercial water use (indoor and outdoor) to provide tips on how to better manage water use.
- **Free Conservation Devices.** CCWD offers several free devices aimed at reducing water use including: shower timers, showerheads, kitchen faucet aerators, bathroom faucet aerators, hose nozzles.
- **Free Workshops.** CCWD organized free workshops to demonstrate water efficient techniques. For example, a free workshop on water-efficient garden design and drip irrigation has been scheduled for August 24, 2014.
- **Coupons.** CCWD offers coupons for (1) car washes that use recycled water; and (2) mulch (which saves water by reducing evaporation).
- **Rebates.** CCWD offers several rebate programs: High Efficiency Clothes Washer Rebates; High Efficiency Toilet Rebates; SMART Sprinkler Timer Rebates; Water Efficient Landscape Rebates.

Excess Use Charge

CCWD also utilizes an Excess Use Charge (EUC) order to discourage the waste of water. The EUC was established during the 2007-2009 drought. CCWD's residential, irrigation and agricultural customers with a baseline water use below 1,000 gallons per day (gpd) pay an excess use charge if their use exceeds 1,000 gpd. For customers with baseline usage above 1,000 gpd, the threshold is historical use (2005-2007). Usage above the not-to-exceed threshold incurs an EUC of two times the quantity charge.

CCWD's Future Actions Should Drought Continue

If the drought were to continue, CCWD would consider implementation of mandatory water use reduction goals and activation of interties with neighboring agencies to alleviate in part Delta water quality impacts. The program would likely contain the following actions:

- Update the Drought Management Program (DMP), including water allotment levels for each customer class, to meet District reduction goals
- Develop standard operating procedure for water allotment appeals
- Program billing system to provide customers with allotments and reduction goals
- Develop DMP Communications Plan and develop guides for each customer class describing significant water use reductions
- Increase outreach to all customers, with a focus on large industrial customers, landscape customers and public authorities.
- Develop procedure for accepting/denying new service requests
- Identify recycled water stations available for construction throughout the CCWD service area
- Monitor production weekly against desired reduction goals
- Develop and adopt regulations further restricting water waste.

DWD Conservation Measures

The following section describes the measures DWD has undertaken in response to the drought, as well as additional measures that will be enacted should dry year conditions continue.

DWD Drought Response

In response to the drought, DWD implemented Stage A of the Water Shortage Contingency Plan outlined in its 2010 UWMP. This stage calls for DWD to appeal to customers to voluntarily reduce their water consumption, to prevent waste and unreasonable use of water and to comply strictly with the conservation following measures set forth in DWD's Regulation No. 8 "Water Conservation":

a. Periodically examine all plumbing systems to detect any leaks and repair leaks immediately upon detection.
b. Prevent water from running off premises into street gutters.
c. Install flow restrictors or replace all showerheads to limit flow to not more than 2.5 gallons per minute.
d. Install displacement devices in toilet tanks to reduce water use to 3 gallons per flush or replace older toilets with those that use 1.6 gallons per flush or less.
e. Install aerators or laminar flow devices on kitchen and lavatory facets to reduce maximum flow to 1.5 gallons per minute.
f. Minimize the amount of turf used in landscape areas and use drought-tolerant (low water-using) plants.

DWD plans to issue a call for 20% voluntary conservation, expected to be approved by the DWD Board of Directors on July 30, 2014. A copy of the draft resolution is provided in **Appendix C**.

Finally, DWD is conducting both a general and targeted public outreach campaign to increase awareness of the drought and the need to conserve water. The general outreach consists of bill inserts with updates on the status of the drought, as well as tips and web links for conserving water. **Appendix D** includes copies of the bill inserts included in the March 2014 and May 2014 bills. In addition, DWD staff is calling individual customers with high water use and requesting that they cut back on consumption. The District is utilizing all of its current staff to the fullest towards these outreach efforts.

DWD's Future Actions Should Drought Continue

If the current drought continues and DWD's supply is reduced by more than 15 percent, DWD will continue with all measures from Stage A. In addition, DWD's Board of Directors may declare, pursuant to Water Code section 350, a water shortage emergency condition to prevail within DWD. Thereafter, the Board could adopt regulations and restrictions on the use of water that will, in the sound discretion of the Board, conserve DWD's water supply for the greatest public benefit with particular regard to essential domestic uses, sanitation, and fire protection.

APPENDIX A –

BBID Conservation Directive

RESOLUTION NO. 2014-7
ENCOURAGING WHOLESALE AND RETAIL WATER USERS TO VOLUNTARY REDUCE WATER CONSUMPTION BY TWENTY PERCENT TO AID IN DROUGHT RELIEF EFFORTS

WHEREAS, the State of California is in the midst of a three-year drought that has severely depleted water resources to all Californians, and;

WHEREAS, Governor Edmund G. Brown, Jr. has declared a State of Emergency as California and the West enter into another year of extreme drought; and, has urged all Californians to reduce water consumption by 20%.

NOW, THEREFORE, BE IT RESOLVED, the Board of Directors hereby encourages all water users to voluntarily reduce water consumption by 20%.

PASSED AND ADOPTED this 24th day of June 2014 by the following vote:

AYES: ENOS, KAGEHIRO, M.MAGGIORE, T.MAGGIORE, MUSCO, TUSO
NOES:
ABSENT: BROWN
ABSTAIN:

/s/ Russell Kagehiro
Russell Kagehiro, President

Secretary's Certification

I, Rick Gilmore, Secretary of the Board of Directors of the Byron Bethany Irrigation District, do hereby certify that the foregoing Resolution is a true and correct copy entered into the Minutes of the Regular Board Meeting of 24 June, 2014, at which time a quorum was present, and no motion to amend or rescind the above resolution was made.

Rick Gilmore, Secretary

The foregoing instrument is a correct copy of the original document on file with the Byron Bethany Irrigation District.

Attest: Secretary of the Board of Directors, Byron Bethany Irrigation District

By: _____
Secretary of the Board

Date: 6/24/14

The foregoing instrument is a correct copy of the original document on file with the Bryan Cemetery Irrigation District.

Attest: Secretary of the Board of Directors, Bryan Cemetery Irrigation District

By: _____
Secretary of the Board

Date: _____

APPENDIX B –

CCWD Board Resolution
Re: Voluntary Drought Program

RESOLUTION NO. 14-06

A RESOLUTION OF THE BOARD OF DIRECTORS OF CONTRA COSTA WATER DISTRICT ESTABLISHING A 15% VOLUNTARY DROUGHT MANAGEMENT PROGRAM NECESSARY TO SUFFICIENTLY CONSERVE AVAILABLE WATER SUPPLY

WHEREAS, on January 17, 2014 Governor Jerry Brown declared that a state of emergency exists within the State of California due to drought conditions and called on all water districts to implement their water shortage contingency plans; and

WHEREAS, the United States Bureau of Reclamation (Reclamation) announced its initial 2014 water year allocations for the Central Valley Project and has forecast that the water supply available to Contra Costa Water District (CCWD/District) to be no more than 50% of its historical allocation under a median forecast; and

WHEREAS, drought conditions contribute to further uncertainty regarding regulatory conditions in the Sacramento-San Joaquin Delta that affect the amount and quality of water that can be legally moved from Reclamation's reservoirs to pumping plants in the Delta, including the District's; and

WHEREAS, although estimated water deliveries by Reclamation will be adequate to meet conservation minded, reasonable indoor and business water needs, outdoor water uses will require supplies from the Los Vaqueros Reservoir and other sources; and

WHEREAS, the District continues to enforce an Excess Use Charge, focusing on discretionary outdoor water use; nevertheless, additional conservation and waste prevention measures are necessary to further manage demands within the District to ensure sufficient water is available to meet reasonable domestic, municipal and industrial water needs of the District's customers in 2014; and

WHEREAS, the District focus is on further reducing outdoor water use to save water in the Los Vaqueros Reservoir for next year.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the CCWD that the Board hereby finds and determines that:

1. Based upon the facts recited above, and upon the authority contained in Water Code §350 et seq., §375 et seq., §31021 et seq., §31024 et seq., and §31026 et seq., drought conditions exist that can affect water supply and quality available to the District; and

2. Conservation and measures to prevent waste and unreasonable use are necessary to manage demands so that reasonable water needs of District customers can be met in 2014; and

3. Customers are hereby requested to voluntarily reduce their water use by 15% and to be conservation minded in their everyday use of water, with water use during the period of 2005 – 2007 used as the baseline for reduction; and

4. Customers are hereby requested to voluntarily reduce their outdoor landscape irrigation water use by 25% to assist in meeting the overall 15% water use reduction goal; and

5. The good drought watering practices, attached hereto as Exhibit A and incorporated herein as if fully set forth, are necessary to conserve water, promote effective water supply planning, assure reasonable and beneficial use of water, prevent waste and unreasonable use of water, and prevent unreasonable methods of use of water within the District; and said good watering practices are necessary to assure that sufficient supplies of water will be available to meet the needs of, and to protect the health and safety of, the District's customers and other members of the public.

* * * * * * * * * *

The foregoing Resolution was duly and regularly adopted at a meeting held on the 19th of March 2014 by the Board of Directors of the Contra Costa Water District by the following vote of the Board:

AYES: Boatmun, Burgh, Borba, Campbell, Wandry

NOES:

ABSTAIN:

ABSENT:

Joseph L. Campbell, President

ATTEST:

Mary A. Neher
District Secretary

GOOD DROUGHT WATERING PRACTICES

The following uses of water supplied by the District have been determined to be wasteful and are prohibited at any time when a 15% Voluntary Drought Management Program is in effect:

Single Family and Multi-Family Residential Customers

a. Using District-furnished water for non-recirculating decorative fountains or filling decorative lakes or ponds.
b. Washing paved or other hard-surfaced areas, including sidewalks, walkways, driveways, patios, and parking areas with District-furnished water.
c. Outside watering with District-furnished water that results in excessive flooding or runoff into a gutter, drain, patio, driveway, walkway or street.
d. Outside watering of landscaping during the daylight hours of 9AM-5PM.
e. Washing a vehicle, trailer or boat with District-furnished water using a hose without a shut off nozzle.

Non-residential Customers

a. Using District-furnished water for non-recirculating decorative fountains or for filling decorative lakes or ponds.
b. Washing paved or other hard-surfaced areas, including sidewalks, walkways, driveways, patios, and parking areas with District-furnished water.
c. Outside watering with District-furnished water that results in excessive flooding or runoff into a gutter, drain, patio, driveway, walkway or street.
d. Outside watering of landscaping during the daylight hours of 9AM-5PM.
e. Recycled water use for dust control, where available.

APPENDIX C –

DWD Draft Resolution Requesting 20% Voluntary Conservation

RESOLUTION NO. 2014 – 8

A RESOLUTION OF THE BOARD OF DIRECTORS OF DIABLO WATER DISTRICT CALLING ON ITS CUSTOMERS TO REDUCE WATER CONSUMPTION BY 20 PERCENT OF 2013 USAGE AND AMENDING THE DISTRICT'S DROUGHT EMERGENCY REGULATION NUMBER 9 BY IMPLEMENTING PROVISIONS OF THE DISTRICT'S WATER SHORTAGE CONTINGENCY PLAN TO PROHIBIT OUTDOOR WATER WASTING

WHEREAS, the State of California in the midst of a three-year water drought that has severely depleted the reservoirs and lakes necessary to provide continued water supplies to all Californians; and

WHEREAS, on January 17, 2014, California Governor Edmund G. Brown declared a Water State of Emergency as California and the West enter yet another year of extreme drought conditions and called on all Californians to reduce consumption by 20 percent; and

WHEREAS, on April 25, 2014, Governor Brown urged all Californians to avoid wasteful outdoor water use, and encouraged them to visit www.saveourh2o.org to find out how water can be conserved; and

WHEREAS, on July 15, 2014, the California State Water Resources Control Board adopted emergency regulations ordering all Urban Water Suppliers to implement conservation measures prohibiting wasteful outdoor water use.

NOW, THEREFORE, the Board of Directors of Diablo Water District does hereby resolve that the District is calling upon all of its customers to reduce water consumption by 20 percent of 2013 usage until the time the drought has ended and to visit

www.saveourh2o.org and the District's website www.diablowater.org to find ways to conserve water.

BE IT FURTHER RESOLVED that, the District's Drought Emergency Regulation Number 9 is hereby amended to read as follows:

Section 1. Authority and Effective Period.

This regulation is adopted pursuant to the emergency regulations adopted by the California State Water Resources Control Board, on July 15, 2014, which added new sections to Title 23 of the California Code of Regulations ordering all urban water suppliers to implement provisions of the District's Water Shortage Contingency Plan to prohibit outdoor water wasting and to provide monthly data on water production. These provisions shall continue until the emergency regulations are lifted by the California State Water Resources Control Board.

Section 2. Reduction of Water Use.

To conserve the water supply for the greatest public benefit with particular regard to health, sanitation, and fire protection during the current drought emergency conditions the District is calling upon each of its customers to take the following actions.

First, reduce the quantity of water used by 20 percent, of 2013 water use.

Second, eliminate unnecessary uses of water.

Third, take immediate action to prevent any water from being wasted.

Fourth, cut back on over irrigation of outdoor landscaping.

Section 3. Prohibited Uses of Water.

To promote water conservation, each of the following actions is prohibited, except where necessary to address an immediate health and safety need or to comply with a term or condition in a permit issued by a state or federal agency:

(1) The application of water to outdoor landscapes in a manner that causes runoff such that water flows onto adjacent property, non-irrigated areas, private and public walkways, roadways, parking lots, or structures;

(2) The use of a hose to wash an automobile, boat or trailer except where the hose is fitted with a shut-off nozzle or device attached to it that causes it to cease dispensing water immediately when not in use;

(3) The application of water to any hard surface, including but not limited to driveways, sidewalks, and asphalt; and

(4) The use of potable water in a fountain or other decorative water feature, except where the water is part of a recirculating system.

Section 4. Exception and Waivers.

Written applications for exceptions to, or waivers of, any provision of these regulations shall be received and may be granted in any case where the restriction might create a hazard to the health and safety of any individual or public, or would cause an undue and unavoidable hardship.

Section 5. Water Conservation.

This regulation supplements the provisions of Regulation No. 8, Water Conservation..

Section 6. Violations.

If the District finds that any provision of this regulation is not being complied with it shall notify the customer at whose premises the breach occurs. If the customer fails to take prompt and reasonable action to halt the breach the District may in its discretion suspend delivery of water to the premises, and/or install a device to restrict the flow of water to the customer, until the District determines that there will be no further breach of District regulations or fine the customer as may be allowed by law. The costs, as determined by the General Manager, of disconnecting the service, installing a flow restrictor, and reconnecting the service shall be charged to, and paid by, the customer.

* * * * *

I certify that the foregoing is a true and complete copy of a resolution duly adopted by the Board of Directors of Diablo Water District at the special meeting thereof held on July 30, 2014, by the following vote:

AYES:

NOES:

ABSENT:

DATE:

_____
Mike Yeraka, Secretary

APPENDIX D –

DWD Conservation Bill Inserts

DIABLO WATER DISTRICT

Drought Update

As of May 2014

Rationing is still **not** required at this time due to our investment in local groundwater wells and access to water stored in Los Vaqueros Reservoir. We do ask that our customers continue their normal water conservation efforts. For quick and easy ways to save water and money, look on the back of this flyer.

For more information on Water Conservation Tips, Rebates and Free Water Use Surveys provided by Contra Costa Water District, visit our website at

www.diablowater.org/conservation

Quick Tip:

If you feel like your water bill is too high, here are a few frequent sources to check for possible leaks:

Toilets – Make sure they are not continually running

Outside Irrigation – Broken Sprinkler Heads & Control Valves

Faucets – Make sure they are not continually dripping

P.O. BOX 127 • 2107 MAIN STREET • OAKLEY, CA 94561-0127 • PHONE: 925-625-3798

Quick and Easy ways to Save Water and Money

Indoors:

- **Laundry/Dishwasher** – Always wash full loads.
- **Faucets** – Find & Fix any leaks. Turn off the faucet when lathering hands, shaving or brushing teeth.
- **Showers –** Take shorter showers or turn off the water when lathering up. Replace Showerheads with a maximum flow rate of 2 gallons per minute.
- **Toilets –** Find & Fix any leaky toilets. Check out CCWD's rebate programs to replace any old toilets.

Outdoors:

- **Irrigation –** Adjust irrigation according to the weather and seasons. Oakley has very Sandy Soil. Sandy soil absorbs water faster, so shorter times once or twice a day is better than watering once a day for several minutes. Always make sure to check for broken sprinkler heads/valves.
- **Washing Vehicles –** Take your car to a carwash that recycles the water or make sure your water hose has a shut off valve if you are washing your car at home.
- Use a broom to sweep outdoor surfaces rather than using the water hose.

For more Conservation Tips, visit us at

www.diablowater.org/conservation

Diablo Water District

Offering a Helping Hand To Senior Citizens and the Disabled With Low Incomes

You May Qualify For a 25% Discount on Your Monthly Residential Service Charge if You Are:

- Over Age 62 With a Total Annual Household Income of $46,000 or Less.

OR

- Are Permanently and Totally Disabled With a Total Annual Household Income of $46,000 or Less.

Proof of Annual Income, Disability and/or Age Is Required.

Applications Are Available at the District Office at 2107 Main Street, Oakley (Raley's Shopping Center).

For Further Information, Please Call 625-3798.

Printed on recycled paper. Each ton of recycled paper saves 7,000 gallons of water.

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DIABLO WATER DISTRICT

Drought Update

Due to Record Low Rainfall
we are asking our customers
to continue their water
conservation efforts. Rationing
is not required at this time
due to our investment in
local groundwater wells and
access to water stored in
Los Vaqueros Reservoir.

Visit www.diablowater.org/conservation
for more information on
Water Conservation Tips,
Rebates, and
Free Water Use Surveys provided by
Contra Costa Water District

Quick Tip:

Check your irrigation system every couple of weeks for broken or misaligned sprinkler heads and drip emitters. This can save a significant amount of water and keep your lawn looking good.

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