ATTACHMENT 7

PROGRAM PREFERENCES

East Contra Costa County
2014 IRWM Drought Grant Proposal

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In accordance with the PSP, this attachment provides:

- ✓ A summary discussion of issues relating to the Human Right to Water Policy and the region's efforts to address the goal of that policy; and
- ✓ A discussion of the program preferences met by each project, including the level of certainty and the breath and magnitude to which the preference will be met.

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Human Right to Water

On September 25, 2012, Governor Brown signed AB 685, establishing a policy that every Californian had a human right to safe, clean, affordable and accessible water adequate for human consumption, cooking and sanitary purposes. This policy speaks to the (1) Quantity; (2) Quality; (3) Accessibility; and (4) Affordability of California's water supplies.

Quantity

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 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 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. 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 in terms of CVP water supply cutbacks and the general reduction in water quality within the Delta. This proposal addresses water quantity by including two projects which will conserve water (ISD Irrigation and Recycled Water Fill Station and DWD Leak Detection and Repair) and improve the ability of local suppliers to meet water demands. In addition, the third project (CCWD-BBID Regional Intertie) will enable transfers to agencies which are currently experiencing significant shortages due to drought conditions.

Quality

Poor water quality in the Delta, especially during drought years, continues to be problematic for the East County region. High salinity levels create taste and odor issues and pose increased risks for bromate and trihalomethane formation. To address these issues CCWD has invested in numerous infrastructure projects to improve the water quality served to customers: 1) CCWD completed the Middle River Intake in 2009 which is located further east in the Delta to take advantage of superior quality water; 2) CCWD has embarked upon a multi-phase project to encase 4 miles of the unlined portion of the Contra Costa Canal in order to isolate it from the saline groundwater; 3) CCWD recently expanded the Los Vaqueros Reservoir from 100,000 AF to 160,000 AF which enables CCWD to blend the fresh water released from the reservoir with saltier Delta diversions to ensure water delivered to customers remains good even during times when Delta water quality is poor. This proposal addresses water quality by including a project that reduces the possibility of contamination to the drinking water supply by eliminating avenues for pathogens to enter drinking water mains (DWD Leak Detection and Repair Project). Furthermore, water delivered via the CCWD-BBID intertie will be of excellent quality when releases from Los Vaqueros Reservoir are made to meet demands.

Accessibility

Poor water quality during drought years can limit the accessibility of local water supplies within the East County Region. The City of Antioch has only been able to divert water from the San Joaquin River for a total of 20 days this year due to high salinity levels. CCWD has not been able to utilize its Mallard Slough water right since July 2011 due to poor water quality. However, CVP imports and stored water in the Los Vaqueros reservoir have ensured that water supplies are accessible to all East County residents. By including two projects which will conserve regional water supplies (ISD Irrigation and Recycled Water Fill Station and DWD Leak Detection and Repair), this proposal improves accessibility of water supplies.

In addition, the proposal includes the CCWD-BBID Regional Intertie project, which will make water supplies accessible to agencies experiencing critical supply shortages.

Affordability

All of the East County water suppliers utilize lifeline rates to promote affordability of their water supplies. Under the lifeline rate program, discounts between 25% and 50% of monthly service charges (depending on the water supplier) are available to those residents with a total household income of $46,000 or less who are (1) over the age of 62, or (2) permanently or totally disabled. CCWD spends about $60,000 per year to subsidize low-income customers that qualify under the lifeline rates program. This proposal addresses affordability by including three highly cost-effective projects that will provide emergency drought relief for the region.

Program Preferences

Project # 1 – CCWD-BBID Regional Intertie

Program Preferences met by the CCWD-BBID Regional Intertie project are summarized below. All of the preferences described can be met with a HIGH degree of certainty given the established technical feasibility of this project. The magnitude of the benefit provided would depend on the frequency and amount of water transfers requested, but based on recent transfer requests and discussions, it is anticipated that the intertie will be used to transfer 10,000 AFY in all years. This project would have STATEWIDE benefits given its ability to free up capacity for delta exports.

Regional Project
This project meets the regional criteria as defined by the California Water Code (CWC) §10537, by improving operational efficiency and water supply reliability through conveyance facilities and water transfers.

Integrates Water Management
This project integrates several water management strategies within the East County region including water supply reliability and regional water exchanges.

Reduces Conflict
This proposed intertie would reduce the number of competing demands placed on Delta export facilities (Banks and Jones Pumping Plants) by freeing up capacity in the Delta Mendota Canal that would have otherwise been used to serve BBID. Delta diversions will be reduced when the intertie is used and demands are met by releasing water stored in Los Vaqueros.

Contributes to CALFED Objectives
This project contributes to the CALFED Water Supply objective by enabling up to 10,000 AFY of water to be transferred from CCWD to agencies facing severe water shortages.

Reduces Reliance on Delta Supplies
This project is included in the East County IRWMP, which was developed with a goal of reducing the Region's dependence on Delta supplies. Furthermore, Delta diversions will be reduced when the intertie is used and demands are met by releasing water stored in Los Vaqueros Reservoir.

Addresses Statewide Priorities
This project addresses several statewide priorities including: Drought Preparedness (through establishment of system interties); and Use and Reuse Water More Efficiently (through reducing reliance on Delta for water supply needs).

Human Right to Water
The proposed project would address the *Quantity* component of the Human Right to Water policy by providing up to 10,000 AFY of water supply to customers facing severe water shortages. This project addresses the *Accessibility* component of the Human Right to Water policy by facilitating water transfers to BBID that can happen year round, and not just from July to September like the current Delta export facilities. The project addresses the *Affordability* component of the Human Right to Water policy by reflecting the most cost-effective approach to achieving the project benefits.

Project # 2 – DWD Leak Detection and Repair

Program Preferences met by the DWD Leak Detection and Repair project are summarized below. Since the DWD Leak Detection and Repair project is technically feasible and will be ready to proceed by March 2015, there is a HIGH likelihood of realizing the benefits described. This project would have REGIONAL benefits as water saved could be used to meet other East County demands.

Regional Project
This project meets the regional criteria as defined by the California Water Code (CWC) §10537, by reducing demand through urban water use efficiency.

Integrates Water Management
This project integrates several water management strategies within the East County region including: water supply reliability, water conservation, and water use efficiency; and water distribution.

Reduces Conflict
This project reduces potential conflicts associated with competing demands on Delta supplies by freeing up water that would otherwise be lost via leaking pipes. It is estimated that 200 AFY would be saved through implementing this project (refer to Attachment 3 for the basis of this estimate), but the exact savings will not be known until all the leaks are identified and repaired.

Contributes to CALFED Objectives
The DWD Leak Detection and Repair Project contributes to the CALFED Water Supply objective. By saving potable water that would have otherwise been lost to leaks, water supplies are increased and more water is made available to others. It is estimated that 200 AFY would be saved through implementing this project (refer to Attachment 3 for the basis of this estimate), but the exact savings will not be known until all the leaks are identified and repaired.

Part of IRWM that Reduces Reliance on Delta Supplies
The DWD Leak Detection and Repair Project is included in the East County IRWMP, which aims to diversify the Region's water supplies so that it is not entirely dependent upon Delta Supplies. Water conservation measures such as this leak detection and repair project are one component in the IRWMP's approach towards effective management of Delta resources. It is estimated that implementation of this Project would save 200 AFY of Delta supplies (refer to Attachment 3 for the basis of this estimate), but the exact savings will not be known until all the leaks are identified and repaired.

Addresses Statewide Priorities
The DWD Leak Detection and Repair project addresses several Statewide priorities, including: Drought Preparedness (through promoting water conservation); Use and Reuse Water More Efficiently (through increasing urban conservation measures); and Climate Change Response Actions (through reducing energy consumption).

Human Right to Water
The DWD Leak Detection and Repair project addresses the *Quantity*, *Quality* and *Accessibility* aspects of the Human Right to Water policy. Repairing leaks will save an estimated 200 AFY of potable supplies that would have otherwise been lost, providing greater assurance of meeting demands during critical drought periods. Repairing leaks also reduces the possibility of contamination to the drinking water supply by eliminating avenues for pathogens to enter the drinking water mains. Repairing leaks in a controlled manner, rather than on an emergency basis, will reduce the number of people that lose access to water supply during the repair. The project addresses the *Affordability* component of the Human Right to Water policy by reflecting the most cost-effective approach to achieving the project benefits.

Project # 3 – ISD Irrigation and Recycled Water Fill Station

Program Preferences met by the ISD Irrigation and Recycled Water Fill Station project are summarized below. Since the ISD Recycled Water Fill station project is technically feasible and will be ready to proceed by March 2015, there is a HIGH likelihood of realizing the benefits described. This project would have REGIONAL benefits as water saved could be used to meet other East County demands.

Regional Project
This project meets the regional criteria as defined by the California Water Code (CWC) §10537, by increasing water supplies for beneficial use by implementing a recycled water project.

Integrates Water Management
This project integrates several water management strategies within the East County region including: water supply reliability, water conservation, and water use efficiency; and water distribution.

Reduces Conflict
By using recycled water to meet non-potable demands, this project frees up 20 AFY of potable supplies for higher and better uses.

Contributes to CALFED Objectives
The ISD Irrigation and Recycled Water Fill Station project contributes to the CALFED Water Supply objective. By freeing up 20 AFY in potable water that would have otherwise been used to serve non-potable demands, potable water supplies are increased and more water is made available to others.

Integrates Water Management and Land Use Planning
Implementation of this recycled water project would free up potable water supply for use in planned developments.

Reduces Reliance on Delta Supplies
The ISD Irrigation and Recycled Water Fill Station project has been added to the project list of the East County IRWMP, which aims to diversify the Region's water supplies so that it is not entirely dependent upon Delta Supplies. Implementation of recycled water use is one component in the IRWMP's approach towards effective management of Delta resources. Implementation of the ISD Recycled Water Fill Station project would offset 20 AFY of Delta supplies.

Addresses Statewide Priorities
The ISD Irrigation and Recycled Water Fill Station project addresses several Statewide priorities, including: Drought Preparedness (through promoting water recycling); and Use and Reuse Water More Efficiently.

Human Right to Water
The ISD Irrigation and Recycled Water Fill Station project addresses the *Quantity, Accessibility, and Affordability* aspects of the Human Right to Water policy. Implementing this recycled water project would free up 20 AFY of potable water supplies that would otherwise not have been available to help meet potable demands during critical drought periods. By conserving regional potable supplies, the project improves accessibility to Delta supplies. The project addresses the *Affordability* component of the Human Right to Water policy by reflecting the most cost-effective approach to achieving the project benefits.

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