

Appendix A
UWMP Checklist

Appendix F: UWMP Checklist

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x	x	Chapter 1	10615	A plan shall describe and evaluate sources of supply, reasonable and practical efficient uses, reclamation and demand management activities.	Introduction and Overview	
x	x	Chapter 1	10630.5	Each plan shall include a simple description of the supplier's plan including water availability, future requirements, a strategy for meeting needs, and other pertinent information. Additionally, a supplier may also choose to include a simple description at the beginning of each chapter.	Summary	
x	x	Section 2.2	10620(b)	Every person that becomes an urban water supplier shall adopt an urban water management plan within one year after it has become an urban water supplier.	Plan Preparation	

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 2.6	10620(d)(2)	Coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.	Plan Preparation	
x	x	Section 2.6.2	10642	Provide supporting documentation that the water supplier has encouraged active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan and contingency plan.	Plan Preparation	
x		Section 2.6, Section 6.1	10631(h)	Retail suppliers will include documentation that they have provided their wholesale supplier(s) - if any - with water use projections from that source.	System Supplies	

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
	x	Section 2.6	10631(h)	Wholesale suppliers will include documentation that they have provided their urban water suppliers with identification and quantification of the existing and planned sources of water available from the wholesale to the urban supplier during various water year types.	System Supplies	
x	x	Section 3.1	10631(a)	Describe the water supplier service area.	System Description	
x	x	Section 3.3	10631(a)	Describe the climate of the service area of the supplier.	System Description	
x	x	Section 3.4	10631(a)	Provide population projections for 2025, 2030, 2035, 2040 and optionally 2045.	System Description	
x	x	Section 3.4.2	10631(a)	Describe other social, economic, and demographic factors affecting the supplier's water management planning.	System Description	
x	x	Sections 3.4 and 5.4	10631(a)	Indicate the current population of the service area.	System Description and Baselines and Targets	
x	x	Section 3.5	10631(a)	Describe the land uses within the service area.	System Description	

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 4.2	10631(d)(1)	Quantify past, current, and projected water use, identifying the uses among water use sectors.	System Water Use	
x	x	Section 4.2.4	10631(d)(3)(C)	Retail suppliers shall provide data to show the distribution loss standards were met.	System Water Use	
x	x	Section 4.2.6	10631(d)(4)(A)	In projected water use, include estimates of water savings from adopted codes, plans, and other policies or laws.	System Water Use	
x	x	Section 4.2.6	10631(d)(4)(B)	Provide citations of codes, standards, ordinances, or plans used to make water use projections.	System Water Use	
x	optional	Section 4.3.2.4	10631(d)(3)(A)	Report the distribution system water loss for each of the 5 years preceding the plan update.	System Water Use	
x	optional	Section 4.4	10631.1(a)	Include projected water use needed for lower income housing projected in the service area of the supplier.	System Water Use	
x	x	Section 4.5	10635(b)	Demands under climate change considerations must be included as part of the drought risk assessment.	System Water Use	

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x		Chapter 5	10608.20(e)	Retail suppliers shall provide baseline daily per capita water use, urban water use target, interim urban water use target, and compliance daily per capita water use, along with the bases for determining those estimates, including references to supporting data.	Baselines and Targets	
x		Chapter 5	10608.24(a)	Retail suppliers shall meet their water use target by December 31, 2020.	Baselines and Targets	
	x	Section 5.1	10608.36	Wholesale suppliers shall include an assessment of present and proposed future measures, programs, and policies to help their retail water suppliers achieve targeted water use reductions.	Baselines and Targets	
x		Section 5.2	10608.24(d)(2)	If the retail supplier adjusts its compliance GPCD using weather normalization, economic adjustment, or extraordinary events, it shall provide the basis for, and data supporting the adjustment.	Baselines and Targets	

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x		Section 5.5	10608.22	Retail suppliers' per capita daily water use reduction shall be no less than 5 percent of base daily per capita water use of the 5-year baseline. This does not apply if the suppliers base GPCD is at or below 100.	Baselines and Targets	
x		Section 5.5 and Appendix E	10608.4	Retail suppliers shall report on their compliance in meeting their water use targets. The data shall be reported using a standardized form in the SBX7-7 2020 Compliance Form.	Baselines and Targets	
x	x	Sections 6.1 and 6.2	10631(b)(1)	Provide a discussion of anticipated supply availability under a normal, single dry year, and a drought lasting five years, as well as more frequent and severe periods of drought.	System Supplies	
x	x	Sections 6.1	10631(b)(1)	Provide a discussion of anticipated supply availability under a normal, single dry year, and a drought lasting five years, as well as more frequent and severe periods of drought, <i>including changes in supply due to climate change.</i>	System Supplies	

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 6.1	10631(b)(2)	When multiple sources of water supply are identified, describe the management of each supply in relationship to other identified supplies.	System Supplies	
x	x	Section 6.1.1	10631(b)(3)	Describe measures taken to acquire and develop planned sources of water.	System Supplies	
x	x	Section 6.2.8	10631(b)	Identify and quantify the existing and planned sources of water available for 2020, 2025, 2030, 2035, 2040 and optionally 2045.	System Supplies	
x	x	Section 6.2	10631(b)	Indicate whether groundwater is an existing or planned source of water available to the supplier.	System Supplies	
x	x	Section 6.2.2	10631(b)(4)(A)	Indicate whether a groundwater sustainability plan or groundwater management plan has been adopted by the water supplier or if there is any other specific authorization for groundwater management. Include a copy of the plan or authorization.	System Supplies	
x	x	Section 6.2.2	10631(b)(4)(B)	Describe the groundwater basin.	System Supplies	

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 6.2.2	10631(b)(4)(B)	Indicate if the basin has been adjudicated and include a copy of the court order or decree and a description of the amount of water the supplier has the legal right to pump.	System Supplies	
x	x	Section 6.2.2.1	10631(b)(4)(B)	For unadjudicated basins, indicate whether or not the department has identified the basin as a high or medium priority. Describe efforts by the supplier to coordinate with sustainability or groundwater agencies to achieve sustainable groundwater conditions.	System Supplies	
x	x	Section 6.2.2.4	10631(b)(4)(C)	Provide a detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years	System Supplies	
x	x	Section 6.2.2	10631(b)(4)(D)	Provide a detailed description and analysis of the amount and location of groundwater that is projected to be pumped.	System Supplies	
x	x	Section 6.2.7	10631(c)	Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.	System Supplies	

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 6.2.5	10633(b)	Describe the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.	System Supplies (Recycled Water)	
x	x	Section 6.2.5	10633(c)	Describe the recycled water currently being used in the supplier's service area.	System Supplies (Recycled Water)	
x	x	Section 6.2.5	10633(d)	Describe and quantify the potential uses of recycled water and provide a determination of the technical and economic feasibility of those uses.	System Supplies (Recycled Water)	
x	x	Section 6.2.5	10633(e)	Describe the projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected.	System Supplies (Recycled Water)	
x	x	Section 6.2.5	10633(f)	Describe the actions which may be taken to encourage the use of recycled water and the projected results of these actions in terms of acre-feet of recycled water used per year.	System Supplies (Recycled Water)	

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 6.2.5	10633(g)	Provide a plan for optimizing the use of recycled water in the supplier's service area.	System Supplies (Recycled Water)	
x	x	Section 6.2.6	10631(g)	Describe desalinated water project opportunities for long-term supply.	System Supplies	
x	x	Section 6.2.5	10633(a)	Describe the wastewater collection and treatment systems in the supplier's service area with quantified amount of collection and treatment and the disposal methods.	System Supplies (Recycled Water)	
x	x	Section 6.2.8, Section 6.3.7	10631(f)	Describe the expected future water supply projects and programs that may be undertaken by the water supplier to address water supply reliability in average, single-dry, and for a period of drought lasting 5 consecutive water years.	System Supplies	
x	x	Section 6.4 and Appendix O	10631.2(a)	The UWMP must include energy information, as stated in the code, that a supplier can readily obtain.	System Suppliers, Energy Intensity	

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 7.2	10634	Provide information on the quality of existing sources of water available to the supplier and the manner in which water quality affects water management strategies and supply reliability	Water Supply Reliability Assessment	
x	x	Section 7.2.4	10620(f)	Describe water management tools and options to maximize resources and minimize the need to import water from other regions.	Water Supply Reliability Assessment	
x	x	Section 7.3	10635(a)	Service Reliability Assessment: Assess the water supply reliability during normal, dry, and a drought lasting five consecutive water years by comparing the total water supply sources available to the water supplier with the total projected water use over the next 20 years.	Water Supply Reliability Assessment	
x	x	Section 7.3	10635(b)	Provide a drought risk assessment as part of information considered in developing the demand management measures and water supply projects.	Water Supply Reliability Assessment	

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 7.3	10635(b)(1)	Include a description of the data, methodology, and basis for one or more supply shortage conditions that are necessary to conduct a drought risk assessment for a drought period that lasts 5 consecutive years.	Water Supply Reliability Assessment	
x	x	Section 7.3	10635(b)(2)	Include a determination of the reliability of each source of supply under a variety of water shortage conditions.	Water Supply Reliability Assessment	
x	x	Section 7.3	10635(b)(3)	Include a comparison of the total water supply sources available to the water supplier with the total projected water use for the drought period.	Water Supply Reliability Assessment	
x	x	Section 7.3	10635(b)(4)	Include considerations of the historical drought hydrology, plausible changes on projected supplies and demands under climate change conditions, anticipated regulatory changes, and other locally applicable criteria.	Water Supply Reliability Assessment	
x	x	Chapter 8	10632(a)	Provide a water shortage contingency plan (WSCP) with specified elements below.	Water Shortage Contingency Planning	

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x	x	Chapter 8	10632(a)(1)	Provide the analysis of water supply reliability (from Chapter 7 of Guidebook) in the WSCP	Water Shortage Contingency Planning	
x	x	Section 8.10	10632(a)(10)	Describe reevaluation and improvement procedures for monitoring and evaluation the water shortage contingency plan to ensure risk tolerance is adequate and appropriate water shortage mitigation strategies are implemented.	Water Shortage Contingency Planning	
x	x	Section 8.2	10632(a)(2)(A)	Provide the written decision-making process and other methods that the supplier will use each year to determine its water reliability.	Water Shortage Contingency Planning	
x	x	Section 8.2	10632(a)(2)(B)	Provide data and methodology to evaluate the supplier's water reliability for the current year and one dry year pursuant to factors in the code.	Water Shortage Contingency Planning	

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 8.3	10632(a)(3)(A)	Define six standard water shortage levels of 10, 20, 30, 40, 50 percent shortage and greater than 50 percent shortage. These levels shall be based on supply conditions, including percent reductions in supply, changes in groundwater levels, changes in surface elevation, or other conditions. The shortage levels shall also apply to a catastrophic interruption of supply.	Water Shortage Contingency Planning	
x	x	Section 8.3	10632(a)(3)(B)	Suppliers with an existing water shortage contingency plan that uses different water shortage levels must cross reference their categories with the six standard categories.	Water Shortage Contingency Planning	
x	x	Section 8.4	10632(a)(4)(A)	Suppliers with water shortage contingency plans that align with the defined shortage levels must specify locally appropriate supply augmentation actions.	Water Shortage Contingency Planning	
x	x	Section 8.4	10632(a)(4)(B)	Specify locally appropriate demand reduction actions to adequately respond to shortages.	Water Shortage Contingency Planning	

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 8.4	10632(a)(4)(C)	Specify locally appropriate operational changes.	Water Shortage Contingency Planning	
x	x	Section 8.4	10632(a)(4)(D)	Specify additional mandatory prohibitions against specific water use practices that are in addition to state-mandated prohibitions are appropriate to local conditions.	Water Shortage Contingency Planning	
x	x	Section 8.4	10632(a)(4)(E)	Estimate the extent to which the gap between supplies and demand will be reduced by implementation of the action.	Water Shortage Contingency Planning	
x	x	Section 8.4.6	10632.5	The plan shall include a seismic risk assessment and mitigation plan.	Water Shortage Contingency Plan	
x	x	Section 8.5	10632(a)(5)(A)	Suppliers must describe that they will inform customers, the public and others regarding any current or predicted water shortages.	Water Shortage Contingency Planning	
x	x	Section 8.5 and 8.6	10632(a)(5)(B) 10632(a)(5)(C)	Suppliers must describe that they will inform customers, the public and others regarding any shortage response actions triggered or anticipated to be triggered and other relevant communications.	Water Shortage Contingency Planning	

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x		Section 8.6	10632(a)(6)	Retail supplier must describe how it will ensure compliance with and enforce provisions of the WSCP.	Water Shortage Contingency Planning	
x	x	Section 8.7	10632(a)(7)(A)	Describe the legal authority that empowers the supplier to enforce shortage response actions.	Water Shortage Contingency Planning	
x	x	Section 8.7	10632(a)(7)(B)	Provide a statement that the supplier will declare a water shortage emergency Water Code Chapter 3.	Water Shortage Contingency Planning	
x	x	Section 8.7	10632(a)(7)(C)	Provide a statement that the supplier will coordinate with any city or county within which it provides water for the possible proclamation of a local emergency.	Water Shortage Contingency Planning	
x	x	Section 8.8	10632(a)(8)(A)	Describe the potential revenue reductions and expense increases associated with activated shortage response actions.	Water Shortage Contingency Planning	
x	x	Section 8.8	10632(a)(8)(B)	Provide a description of mitigation actions needed to address revenue reductions and expense increases associated with activated shortage response actions.	Water Shortage Contingency Planning	

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x		Section 8.8	10632(a)(8)(C)	Retail suppliers must describe the cost of compliance with Water Code Chapter 3.3: Excessive Residential Water Use During Drought	Water Shortage Contingency Planning	
x		Section 8.9	10632(a)(9)	Retail suppliers must describe the monitoring and reporting requirements and procedures that ensure appropriate data is collected, tracked, and analyzed for purposes of monitoring customer compliance.	Water Shortage Contingency Planning	
x		Section 8.11	10632(b)	Analyze and define water features that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, separately from swimming pools and spas.	Water Shortage Contingency Planning	
x	x	Sections 8.12 and 10.4	10635(c)	Provide supporting documentation that Water Shortage Contingency Plan has been, or will be, provided to any city or county within which it provides water, no later than 30 days after the submission of the plan to DWR.	Plan Adoption, Submittal, and Implementation	

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 8.14	10632(c)	Make available the Water Shortage Contingency Plan to customers and any city or county where it provides water within 30 after adopted the plan.	Water Shortage Contingency Planning	
	x	Sections 9.1 and 9.3	10631(e)(2)	Wholesale suppliers shall describe specific demand management measures listed in code, their distribution system asset management program, and supplier assistance program.	Demand Management Measures	
x		Sections 9.2 and 9.3	10631(e)(1)	Retail suppliers shall provide a description of the nature and extent of each demand management measure implemented over the past five years. The description will address specific measures listed in code.	Demand Management Measures	
x		Chapter 10	10608.26(a)	Retail suppliers shall conduct a public hearing to discuss adoption, implementation, and economic impact of water use targets (recommended to discuss compliance).	Plan Adoption, Submittal, and Implementation	

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 10.2.1	10621(b)	Notify, at least 60 days prior to the public hearing, any city or county within which the supplier provides water that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan. Reported in Table 10-1.	Plan Adoption, Submittal, and Implementation	
x	x	Section 10.4	10621(f)	Each urban water supplier shall update and submit its 2020 plan to the department by July 1, 2021.	Plan Adoption, Submittal, and Implementation	
x	x	Sections 10.2.2, 10.3, and 10.5	10642	Provide supporting documentation that the urban water supplier made the plan and contingency plan available for public inspection, published notice of the public hearing, and held a public hearing about the plan and contingency plan.	Plan Adoption, Submittal, and Implementation	
x	x	Section 10.2.2	10642	The water supplier is to provide the time and place of the hearing to any city or county within which the supplier provides water.	Plan Adoption, Submittal, and Implementation	
x	x	Section 10.3.2	10642	Provide supporting documentation that the plan and contingency plan has been adopted as prepared or modified.	Plan Adoption, Submittal, and Implementation	

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 10.4	10644(a)	Provide supporting documentation that the urban water supplier has submitted this UWMP to the California State Library.	Plan Adoption, Submittal, and Implementation	
x	x	Section 10.4	10644(a)(1)	Provide supporting documentation that the urban water supplier has submitted this UWMP to any city or county within which the supplier provides water no later than 30 days after adoption.	Plan Adoption, Submittal, and Implementation	
x	x	Sections 10.4.1 and 10.4.2	10644(a)(2)	The plan, or amendments to the plan, submitted to the department shall be submitted electronically.	Plan Adoption, Submittal, and Implementation	
x	x	Section 10.5	10645(a)	Provide supporting documentation that, not later than 30 days after filing a copy of its plan with the department, the supplier has or will make the plan available for public review during normal business hours.	Plan Adoption, Submittal, and Implementation	
x	x	Section 10.5	10645(b)	Provide supporting documentation that, not later than 30 days after filing a copy of its water shortage contingency plan with the department, the supplier has or will make the plan available for public review during normal business hours.	Plan Adoption, Submittal, and Implementation	

Retail	Wholesale	2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 10.6	10621(c)	If supplier is regulated by the Public Utilities Commission, include its plan and contingency plan as part of its general rate case filings.	Plan Adoption, Submittal, and Implementation	
x	x	Section 10.7.2	10644(b)	If revised, submit a copy of the water shortage contingency plan to DWR within 30 days of adoption.	Plan Adoption, Submittal, and Implementation	

Appendix B
DWR Standardized UWMP Data Tables

Table 2-1 Retail Only: Public Water Systems

Public Water System Number	Public Water System Name	Number of Municipal Connections 2020	Volume of Water Supplied 2020
CA 0710009	Town of Discovery Bay Community Services District	6,134	1,049
TOTAL		6,134	1,049

NOTES: 2020 connections based on DDW permit and DOF population data including any growth that occurred in DB during 2020.

Table 2-2: Plan Identification		
Select Only One	Type of Plan	Name of RUWMP or Regional Alliance <i>if applicable</i>
<input checked="" type="checkbox"/>	Individual UWMP	
	<input type="checkbox"/> Water Supplier is also a member of a RUWMP	
	<input type="checkbox"/> Water Supplier is also a member of a Regional Alliance	
<input type="checkbox"/>	Regional Urban Water Management Plan (RUWMP)	
NOTES: DB is a retail water agency who serves customers within its service area and is preparing an individual UWMP similar to its 2010 and 2015 UWMPs.		

Table 2-3: Supplier Identification	
Type of Supplier (select one or both)	
<input type="checkbox"/>	Supplier is a wholesaler
<input checked="" type="checkbox"/>	Supplier is a retailer
Fiscal or Calendar Year (select one)	
<input type="checkbox"/>	UWMP Tables are in calendar years
<input checked="" type="checkbox"/>	UWMP Tables are in fiscal years
If using fiscal years provide month and date that the fiscal year begins (mm/dd)	
Units of measure used in UWMP (select from drop down)	
Unit	MG
NOTES: MG = million gallons.	

Table 2-4 Retail: Water Supplier Information Exchange

The retail Supplier has informed the following wholesale supplier(s) of projected water use in accordance with Water Code Section 10631.

Wholesale Water Supplier Name

N/A

NOTES: DB is not a wholesale agency nor does it receive any water supplies from a wholesale agency.

Table 3-1 Retail: Population - Current and Projected						
Population Served	2020	2025	2030	2035	2040	2045(<i>opt</i>)
	15,575	18,637	21,587	24,537	28,285	32,606
NOTES: Population projections are based on proposed new developments planned during the 2020 UWMP planning horizon (2020-2045).						

Table 4-1 Retail: Demands for Potable and Non-Potable Water - Actual

Use Type <i>(Add additional rows as needed)</i>	2020 Actual		
	Additional Description	Level of Treatment When Delivered	Volume
Commercial		Drinking Water	18
Institutional/Governmental	Included in Commercial	Drinking Water	
Landscape		Drinking Water	161
Losses		Drinking Water	105
Other	Residential	Drinking Water	766
TOTAL			1,050
NOTES: Based on 2020 calendar year water consumption data for all user accounts in the TODB service			

Table 4-3 Retail: Total Gross Water Use (Potable and Non-Potable)

	2020	2025	2030	2035	2040	2045 (opt)
Potable Water, Raw, Other Non-potable <i>From Tables 4-1R and 4-2 R</i>	1,050	1,423	1,645	1,873	2,160	2,491
Recycled Water Demand* <i>From Table 6-4</i>	0	0	0	0	0	0
TOTAL WATER USE	1,050	1,423	1,645	1,873	2,160	2,491

**Recycled water demand fields will be blank until Table 6-4 is complete.*

NOTES: Total gross water use based on TODB water use of 209 gpcd in accordance with updated population projections.

Table 4-4 Retail: 12 Month Water Loss Audit Reporting	
Reporting Period Start Date (mm/yyyy)	Volume of Water Loss*
01/2015	91
07/2016	46
07/2017	57
07/2018	33
07/2019	102
* Taken from the field "Water Losses" (a combination of apparent losses and real losses) from the AWWA worksheet.	
NOTES: olume of water loss based on 2020 water audit conducted by TODB including real plus apparent losses.	

Table 4-5 Retail Only: Inclusion in Water Use Projections

<p>Are Future Water Savings Included in Projections? (Refer to Appendix K of UWMP Guidebook)</p>	<p>Yes</p>
<p>If "Yes" to above, state the section or page number, in the cell to the right, where citations of the codes, ordinances, etc... utilized in demand projections are found.</p>	<p>Chapter 4, Section 4.2</p>
<p>Are Lower Income Residential Demands Included In Projections?</p>	<p>Yes</p>
<p>NOTES: Future water savings are based on reductions in per capita water use from green code compliance of pre-1994 housing stock, water loss reductions, and improved irrigation efficiency. Lower income residential demands included in 2020 UWMP future demand projection calculations.</p>	

Table 5-1 Baselines and Targets Summary
Retail Supplier or Regional Alliance Only

Baseline Period	Start Year	End Year	Average Baseline GPCD*	Confirmed 2020 Target*
10-15 year	2001	2010	261	209
5 Year	2003	2007	264	
*All values are in Gallons per Capita per Day (GPCD)				
NOTES: 2020 water use target methodology similar to basis for determination in 2015 UWMP.				

Table 5-2: 2020 Compliance*Retail Supplier or Regional Alliance Only*

Actual 2020 GPCD*	Optional Adjustments to 2020 GPCD Enter "0" if no adjustment is made. <i>From Methodology 8</i>					2020 GPCD* <i>(Adjusted if applicable)</i>	Did Supplier Achieve Targeted Reduction for 2020? Y/N
	Extraordinary Events*	Economic Adjustment*	Weather Normalization*	TOTAL Adjustments*	Adjusted 2020 GPCD*		
184				0	184	184	Yes
<i>*All values are in Gallons per Capita per Day (GPCD)</i>							
NOTES: DB met 2020 water use target of 209 gpcd every year from 2016 through 2020 based on total water production divided by population served							

Table 6-1 Retail: Groundwater Volume Pumped						
<input type="checkbox"/>	Supplier does not pump groundwater. The supplier will not complete the table below.					
<input type="checkbox"/>	All or part of the groundwater described below is desalinated.					
Groundwater Type	Location or Basin Name	2016	2017	2018	2019	2020
Alluvial Basin	East Contra Costa Subbasin of the San Joaquin Valley Groundwater Basin	829	911	916	888	1,050
TOTAL		829	911	916	888	1,050
NOTES: Based on total metered groundwater volume pumped from TODB wells from calendar year 2016 through calendar year 2020. Increases are due to population growth.						

Table 6-2 Retail: Wastewater Collected Within Service Area in 2020						
<input type="checkbox"/>	There is no wastewater collection system. The supplier will not complete the table below.					
100	Percentage of 2020 service area covered by wastewater collection system <i>(optional)</i>					
100	Percentage of 2020 service area population covered by wastewater collection system <i>(optional)</i>					
Wastewater Collection			Recipient of Collected Wastewater			
Name of Wastewater Collection Agency	Wastewater Volume Metered or Estimated?	Volume of Wastewater Collected from UWMP Service Area 2020	Name of Wastewater Treatment Agency Receiving Collected Wastewater	Treatment Plant Name	Is WWTP Located Within UWMP Area?	Is WWTP Operation Contracted to a Third Party? <i>(optional)</i>
Town of Discovery Bay Community Services District	Estimated	486	Town of Discovery Bay Community Services District	WWTP No. 1 and No. 2	Yes	Yes
Total Wastewater Collected from Service Area in 2020:		486				
NOTES: Total wastewater influent volume is based on metered flows received at WWTP (No. 1 and No. 2) from 1/1/2020 through 12/31/2020.						

Table 6-4 (DWR Table 6-3) Retail: Wastewater Treatment and Discharge Within Service Area in 2020

<input type="checkbox"/> No wastewater is treated or disposed of within the UWMP service area. The Supplier will not complete the table below.											
Wastewater Treatment Plant Name	Discharge Location Name or Identifier	Discharge Location Description	Wastewater Discharge ID Number <i>(optional)</i>	Method of Disposal	Does This Plant Treat Wastewater Generated Outside the Service Area?	Treatment Level	2020 volumes				
							Wastewater Treated	Discharged Treated Wastewater	Recycled Within Service Area	Recycled Outside of Service Area	Instream Flow Permit Requirement
WWTP No. 1 and 2	Old River	Old River South of Highway 4 Bridge		River or Creek Outfall	No	Tertiary	486	486	0	0	
Total							486	486	0	0	0
NOTES: The TODB upgraded its WWTP treatment to tertiary level to meet NDPES Permit Discharge Requirements.											

Table 6-5 (DWR Table 6-4) Retail: Recycled Water Direct Beneficial Uses Within Service Area

<input checked="" type="checkbox"/>	Recycled water is not used and is not planned for use within the service area of the supplier. The supplier will not complete the table below.									
Name of Supplier Producing (Treating) the Recycled Water:		Town of Discovery Bay Community Services District								
Name of Supplier Operating the Recycled Water Distribution System:		Town of Discovery Bay Community Services District								
Supplemental Water Added in 2020 (volume) <i>Include units</i>		0								
Source of 2020 Supplemental Water		N/A								
Beneficial Use Type	Potential Beneficial Uses of Recycled Water (Describe)	Amount of Potential Uses of Recycled Water (Quantity) <i>Include volume units</i>	General Description of 2020 Uses	Level of Treatment <i>Drop down list</i>	2020	2025	2030	2035	2040	2045 (opt)
Agricultural irrigation					0	0	0	0	0	0
Landscape irrigation (excludes golf courses)					0	0	0	0	0	0
Golf course irrigation					0	0	0	0	0	0
Commercial use					0	0	0	0	0	0
Industrial use					0	0	0	0	0	0
Geothermal and other energy production					0	0	0	0	0	0
Seawater intrusion barrier					0	0	0	0	0	0
Recreational impoundment					0	0	0	0	0	0
Wetlands or wildlife habitat					0	0	0	0	0	0
Groundwater recharge (IPR)*					0	0	0	0	0	0
Surface water augmentation (IPR)*					0	0	0	0	0	0
Direct potable reuse					0	0	0	0	0	0
Other <i>(Provide General Description)</i>					0	0	0	0	0	0
				Total:	0	0	0	0	0	0
Internal Reuse <i>(not counted towards Statewide Recycled Water volume)</i> .										
*IPR - Indirect Potable Reuse										

Table 6-6 DWR Table 6-5 Retail: 2015 UWMP Recycled Water Use Projection Compared to 2020 Actual

<input checked="" type="checkbox"/>	Recycled water was not used in 2015 nor projected for use in 2020. The Supplier will not complete the table below.		
Use Type	2015 Projection for 2020	2020 Actual Use	
Agricultural irrigation	0	0	
Landscape irrigation (excludes golf courses)	0	0	
Golf course irrigation	0	0	
Commercial use	0	0	
Industrial use	0	0	
Geothermal and other energy production	0	0	
Seawater intrusion barrier	0	0	
Recreational impoundment	0	0	
Wetlands or wildlife habitat	0	0	
Groundwater recharge (IPR)	0	0	
Surface water augmentation (IPR)	0	0	
Direct potable reuse	0	0	
Other	<i>Type of Use</i>	0	0
Total		0	0
NOTES:			

Table 6-7 (DWR Table 6-6) Retail: Methods to Expand Future Recycled Water Use			
<input checked="" type="checkbox"/>	Supplier does not plan to expand recycled water use in the future. Supplier will not complete the table below but will provide narrative explanation.		
	Provide page location of narrative in UWMP		
Name of Action	Description	Planned Implementation Year	Expected Increase in Recycled Water Use
Total			0
NOTES:			

Table 6-8 (DWR Table 6-7) Retail: Expected Future Water Supply Projects or Programs						
<input type="checkbox"/>	No expected future water supply projects or programs that provide a quantifiable increase to the agency's water supply. Supplier will not complete the table below.					
<input type="checkbox"/>	Some or all of the supplier's future water supply projects or programs are not compatible with this table and are described in a narrative format.					
	Provide page location of narrative in the UWMP					
Name of Future Projects or Programs	Joint Project with other suppliers?		Description (if needed)	Planned Implementation Year	Planned for Use in Year Type	Expected Increase in Water Supply to Supplier
	<i>Drop Down List (y/n)</i>	<i>If Yes, Agency Name</i>				
<i>Add additional rows as needed</i>						
Well 8	No		Groundwater Well	2021	All Year Types	0
NOTES: Well 8 is intended to replace Well 5A. Well 5A will be abandoned upon completion of Well 8.						

Table 6-8 Retail: Water Supplies — Actual				
Water Supply	Additional Detail on Water Supply	2020		
		Actual Volume	Water Quality	Total Right or Safe Yield (optional)
Groundwater (not desalinated)		1,050	Drinking Water	
Total		1,050		0

NOTES: 2020 actual volume based on metered water production data from 1/1/2020 through 12/31/2020 for all water sources.

Table 6-10 (DWR Table 6-9) Retail: Water Supplies — Projected

Water Supply		Projected Water Supply <i>Report To the Extent Practicable</i>									
Additional Detail on Water Supply	2025		2030		2035		2040		2045 (opt)		
	Reasonably Available Volume	Total Right or Safe Yield (optional)	Reasonably Available Volume	Total Right or Safe Yield (optional)	Reasonably Available Volume	Total Right or Safe Yield (optional)	Reasonably Available Volume	Total Right or Safe Yield (optional)	Reasonably Available Volume	Total Right or Safe Yield (optional)	
Groundwater (not desalinated)		2,500		2,500		2,500		2,500		2,500	
Total		2,500	0	2,500	0	2,500	0	2,500	0	2,500	0

Table 7-1 Retail: Basis of Water Year Data (Reliability Assessment)

Year Type	Base Year <i>If not using a calendar year, type in the last year of the fiscal, water year, or range of years, for example, water year 2019-2020, use 2020</i>	Available Supplies if Year Type Repeats	
		<input type="checkbox"/>	Quantification of available supplies is not compatible with this table and is provided elsewhere in the UWMP. Location _____
		<input checked="" type="checkbox"/>	Quantification of available supplies is provided in this table as either volume only, percent only, or both.
		Volume Available	% of Average Supply
Average Year	2008	1328	100%
Single-Dry Year	2007	1328	100%
Consecutive Dry Years 1st Year	2012	1328	100%
Consecutive Dry Years 2nd Year	1013	1328	100%
Consecutive Dry Years 3rd Year	2014	1328	100%
Consecutive Dry Years 4th Year	2015	1328	100%
Consecutive Dry Years 5th Year	2016	1328	100%

Supplier may use multiple versions of Table 7-1 if different water sources have different base years and the supplier chooses to report the base years for each water source separately. If a Supplier uses multiple versions of Table 7-1, in the "Note" section of each table, state that multiple versions of Table 7-1 are being used and identify the particular water source that is being reported in each table.

Table 7-2 Retail: Normal Year Supply and Demand Comparison					
	2025	2030	2035	2040	2045 <i>(Opt)</i>
Supply totals <i>(autofill from Table 6-9)</i>	2,500	2,500	2,500	2,500	2,500
Demand totals <i>(autofill from Table 4-3)</i>	1,423	1,645	1,873	2,160	2,491
Difference	1,077	855	627	340	9

Table 7-3 Retail: Single Dry Year Supply and Demand Comparison					
	2025	2030	2035	2040	2045 (Opt)
Supply totals	2,500	2,500	2,500	2,500	2,500
Demand totals	1,423	1,645	1,873	2,160	2,491
Difference	1,077	855	627	340	9
NOTES: No demand reductions required, available supplies exceed total water demands. Available supplies not impacted from a single dry year condition.					

Table 7-4 Retail: Multiple Dry Years Supply and Demand Comparison

		2025	2030	2035	2040	2045 (Opt)
First year	Supply totals	2,500	2,500	2,500	2,500	2,500
	Demand totals	1,423	1,645	1,873	2,160	2,491
	Difference	1,077	855	627	340	9
Second year	Supply totals	2,500	2,500	2,500	2,500	2,500
	Demand totals	1,423	1,645	1,873	2,160	2,491
	Difference	1,077	855	627	340	9
Third year	Supply totals	2,500	2,500	2,500	2,500	2,500
	Demand totals	1,423	1,645	1,873	2,160	2,491
	Difference	1,077	855	627	340	9
Fourth year	Supply totals	2,500	2,500	2,500	2,500	2,500
	Demand totals	1,423	1,645	1,873	2,160	2,491
	Difference	1,077	855	627	340	9
Fifth year	Supply totals	2,500	2,500	2,500	2,500	2,500
	Demand totals	1,423	1,645	1,873	2,160	2,491
	Difference	1,077	855	627	340	9
Sixth year <i>(optional)</i>	Supply totals	2,500	2,500	2,500	2,500	2,500
	Demand totals	1,423	1,645	1,873	2,160	2,491
	Difference	1,077	855	627	340	9

Table 7-5: Five-Year Drought Risk Assessment Tables to address Water Code Section 10635(b)

2021	Total
Gross Water Use	1,125
Total Supplies	2,500
Surplus/Shortfall w/o WSCP Action	1,375
Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	
WSCP - use reduction savings benefit	
Revised Surplus/(shortfall)	
Resulting % Use Reduction from WSCP action	0%

2022	Total
Gross Water Use [Use Worksheet]	1,199
Total Supplies [Supply Worksheet]	2,500
Surplus/Shortfall w/o WSCP Action	1,301
Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	
WSCP - use reduction savings benefit	
Revised Surplus/(shortfall)	
Resulting % Use Reduction from WSCP action	0%

2023	Total
Gross Water Use [Use Worksheet]	1,274
Total Supplies [Supply Worksheet]	2,500
Surplus/Shortfall w/o WSCP Action	1,226
Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	
WSCP - use reduction savings benefit	
Revised Surplus/(shortfall)	
Resulting % Use Reduction from WSCP action	0%

2024	Total
Gross Water Use [Use Worksheet]	1,349
Total Supplies [Supply Worksheet]	2,500
Surplus/Shortfall w/o WSCP Action	1,151
Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	
WSCP - use reduction savings benefit	
Revised Surplus/(shortfall)	
Resulting % Use Reduction from WSCP action	0%

2025	Total
Gross Water Use [Use Worksheet]	1,424
Total Supplies [Supply Worksheet]	2,500
Surplus/Shortfall w/o WSCP Action	1,076
Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	
WSCP - use reduction savings benefit	
Revised Surplus/(shortfall)	
Resulting % Use Reduction from WSCP action	0%

**Table 8-1
Water Shortage Contingency Plan Levels**

Shortage Level	Complete Both	
	Percent Shortage Range ¹ <i>Numerical value as a percent</i>	Water Shortage Condition <i>(Narrative description)</i>
1	Up to 10%	Mild Water Shortage
2	11 to 20%	Moderate Water Shortage
3	21 to 30%	Severe Water Shortage
4	31 to 40%	Critical Water Shortage
5	41 to 50%	Critical Water Shortage
6	>50%	Catastrophic Water Shortage

¹ One stage in the Water Shortage Contingency Plan must address a water shortage of 50%.

Table 8-3 (DWR Table 8-2): Demand Reduction Actions

Shortage Level	Demand Reduction Actions	How much is this going to reduce the shortage gap? <i>Include volume units used.</i>	Additional Explanation or Reference <i>(optional)</i>	Penalty, Charge, or Other Enforcement?
All levels	Other	0-50%	Demand Reduction Program	No
I-II	Other	0-20%	Voluntary Water Use Reductions	No
I-II	Other		Voluntary Restrictions – no waste, not enforced	No
I-II	Expand Public Information Campaign	0-20%	Public Outreach Measures - General	No
II-VI	Other	20-30%	Expedite Conversion of Water Efficient Fixtures	No
II-III	Landscape - Limit landscape irrigation to specific days	20-30%	Irrigation Reduction – limit 3 watering days/week	Yes
II-VI	Landscape - Prohibit certain types of landscape irrigation	20-40%	Irrigation Reduction – parks/open spaces	Yes
II-VI	Other	20%+	Utility Leak Repair – expedite larger leak repairs	No
III-IV	Landscape - Limit landscape irrigation to specific days	30-40%	Irrigation Reduction – limit 2 watering days/week	Yes
III-VI	Expand Public Information Campaign	30%+	Public Outreach Measures – General and Specific	No
III-VI	Implement or Modify Drought Rate Structure or Surcharge	30-50%	Water shortage pricing - surcharge	Yes
III-VI	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	30%+	Customer Leak Repair – within five days of detection	Yes
III-VI	Other	30-50%	Mandatory restrictions – no waste enforced [patrols, tickets, fines, etc.]	Yes
III-VI	Other	30-50%	Apply penalties for excessive water use	Yes
IV-VI	Other	40-50%	Apply flow restrictions to customers	Yes
IV-VI	Other	10-50%	Restrict water use for only priority uses	Yes
V-VI	Landscape - Prohibit all landscape irrigation	40%-50%+	Irrigation Reduction – no lawn watering	Yes
V-VI	Other	20-50%	Mandatory water rationing, per capita allotment	Yes

Table 8-2 (DWR Table 8-3): Supply Augmentation and Other Actions

Shortage Level	Supply Augmentation Methods and Other Actions by Water Supplier	How much is this going to reduce the shortage gap? <i>Include volume units used.</i>	Additional Explanation or Reference <i>(optional)</i>
> Stage 3	Reduce System Water Loss	Up to 50 AFY	As needed.

NOTES: Available water supplies exceed normal year demands (meeting TODB 2020 water use target of 209 gpcd) during six consecutive dry year scenario, no supply augmentation measures are needed unless substantial system failures are experienced.

Table 10-1 Retail: Notification to Cities and Counties

City Name	60 Day Notice	Notice of Public Hearing
City of Brentwood		X
Contra Costa Water District		X
East Contra Costa Irrigation District		X
Diablo Water District		X
General Public	X	X
County Name	60 Day Notice	Notice of Public Hearing
Contra Costa County		X

Appendix C

AWWA Free Water Audit Software Data Worksheets



AWWA Free Water Audit Software: Reporting Worksheet

WAS v5.0

American Water Works Association.

? Click to access definition
+ Click to add a comment

Water Audit Report for: Town of Discovery Bay Community Services District (0710009)
Reporting Year: 2020 7/2019 - 6/2020

Please enter data in the white cells below. Where available, metered values should be used; if metered values are unavailable please estimate a value. Indicate your confidence in the accuracy of the input data by grading each component (n/a or 1-10) using the drop-down list to the left of the input cell. Hover the mouse over the cell to obtain a description of the grades

All volumes to be entered as: MILLION GALLONS (US) PER YEAR

To select the correct data grading for each input, determine the highest grade where the utility meets or exceeds all criteria for that grade and all grades below it.

WATER SUPPLIED

----- Enter grading in column 'E' and 'J' ----->

Volume from own sources:	+	?	5	1,048.738	MG/Yr
Water imported:	+	?	n/a	0.000	MG/Yr
Water exported:	+	?	n/a	0.000	MG/Yr

Master Meter and Supply Error Adjustments

+	?	3	0.00%	MG/Yr
+	?		0.00%	MG/Yr
+	?		0.00%	MG/Yr

Enter negative % or value for under-registration
Enter positive % or value for over-registration

WATER SUPPLIED: 1,048.738 MG/Yr

AUTHORIZED CONSUMPTION

Billed metered:	+	?	5	943.922	MG/Yr
Billed unmetered:	+	?	n/a	0.000	MG/Yr
Unbilled metered:	+	?	n/a	0.000	MG/Yr
Unbilled unmetered:	+	?	5	2.622	MG/Yr

Click here: ? for help using option buttons below

Pcnt: 0.25% Value: 2.622 MG/Yr

Use buttons to select percentage of water supplied **OR** value

AUTHORIZED CONSUMPTION: 946.544 MG/Yr

WATER LOSSES (Water Supplied - Authorized Consumption)

102.194 MG/Yr

Apparent Losses

Unauthorized consumption: 2.622 MG/Yr

Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed

Customer metering inaccuracies: 3 14.374 MG/Yr

Systematic data handling errors: ? 2.360 MG/Yr

Default option selected for Systematic data handling errors - a grading of 5 is applied but not displayed

Apparent Losses: 19.356 MG/Yr

Pcnt: 0.25% Value: 2.622 MG/Yr

1.50% 0.25% MG/Yr

Real Losses (Current Annual Real Losses or CARL)

Real Losses = Water Losses - Apparent Losses: 82.837 MG/Yr

WATER LOSSES: 102.194 MG/Yr

NON-REVENUE WATER

NON-REVENUE WATER: 104.815 MG/Yr

= Water Losses + Unbilled Metered + Unbilled Unmetered

SYSTEM DATA

Length of mains:	+	?	8	48.0	miles
Number of <u>active AND inactive</u> service connections:	+	?	6	6,134	
Service connection density:	?			128	conn./mile main

Are customer meters typically located at the curbside or property line? Yes

Average length of customer service line: ? (length of service line, beyond the property boundary, that is the responsibility of the utility)

Average length of customer service line has been set to zero and a data grading score of 10 has been applied

Average operating pressure: ? 5 60.0 psi

COST DATA

Total annual cost of operating water system:	+	?	10	\$3,307,584	\$/Year
Customer retail unit cost (applied to Apparent Losses):	+	?	10	\$2.26	\$/100 cubic feet (ccf)
Variable production cost (applied to Real Losses):	+	?	5	\$458.29	\$/Million gallons <input type="checkbox"/> Use Customer Retail Unit Cost to value real losses

WATER AUDIT DATA VALIDITY SCORE:

***** YOUR SCORE IS: 58 out of 100 *****

A weighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data Validity Score

PRIORITY AREAS FOR ATTENTION:

Based on the information provided, audit accuracy can be improved by addressing the following components:

- 1: Volume from own sources
- 2: Customer metering inaccuracies
- 3: Billed metered



AWWA Free Water Audit Software: Reporting Worksheet

WAS v5.0

American Water Works Association.

? Click to access definition
+ Click to add a comment

Water Audit Report for: Town of Discovery Bay Community Services District (0710009)
Reporting Year: 2019 7/2018 - 6/2019

Please enter data in the white cells below. Where available, metered values should be used; if metered values are unavailable please estimate a value. Indicate your confidence in the accuracy of the input data by grading each component (n/a or 1-10) using the drop-down list to the left of the input cell. Hover the mouse over the cell to obtain a description of the grades

All volumes to be entered as: MILLION GALLONS (US) PER YEAR

To select the correct data grading for each input, determine the highest grade where the utility meets or exceeds all criteria for that grade and all grades below it.

WATER SUPPLIED

Volume from own sources:	<input type="button" value="+"/>	<input style="border: 1px solid black;" type="button" value="?"/>	<input type="text" value="5"/>	<input type="text" value="888.000"/>	MG/Yr
Water imported:	<input type="button" value="+"/>	<input style="border: 1px solid black;" type="button" value="?"/>	<input type="text" value="n/a"/>	<input type="text" value="0.000"/>	MG/Yr
Water exported:	<input type="button" value="+"/>	<input style="border: 1px solid black;" type="button" value="?"/>	<input type="text" value="n/a"/>	<input type="text" value="0.000"/>	MG/Yr

Master Meter and Supply Error Adjustments

<input type="button" value="+"/>	<input style="border: 1px solid black;" type="button" value="?"/>	<input type="text" value="3"/>	<input type="text" value="0.00%"/>	<input type="text" value=""/>	MG/Yr
<input type="button" value="+"/>	<input style="border: 1px solid black;" type="button" value="?"/>	<input type="text" value=""/>	<input type="text" value=""/>	<input type="text" value=""/>	MG/Yr
<input type="button" value="+"/>	<input style="border: 1px solid black;" type="button" value="?"/>	<input type="text" value=""/>	<input type="text" value=""/>	<input type="text" value=""/>	MG/Yr

Enter negative % or value for under-registration
Enter positive % or value for over-registration

WATER SUPPLIED: 888.000 MG/Yr

AUTHORIZED CONSUMPTION

Billed metered:	<input type="button" value="+"/>	<input style="border: 1px solid black;" type="button" value="?"/>	<input type="text" value="5"/>	<input type="text" value="852.700"/>	MG/Yr
Billed unmetered:	<input type="button" value="+"/>	<input style="border: 1px solid black;" type="button" value="?"/>	<input type="text" value="n/a"/>	<input type="text" value="0.000"/>	MG/Yr
Unbilled metered:	<input type="button" value="+"/>	<input style="border: 1px solid black;" type="button" value="?"/>	<input type="text" value="n/a"/>	<input type="text" value="0.000"/>	MG/Yr
Unbilled unmetered:	<input type="button" value="+"/>	<input style="border: 1px solid black;" type="button" value="?"/>	<input type="text" value="5"/>	<input type="text" value="2.220"/>	MG/Yr

Click here:
for help using option buttons below

<input type="text" value="Pcnt:"/>	<input type="text" value="Value:"/>	<input type="text" value="2.220"/>	MG/Yr
------------------------------------	-------------------------------------	------------------------------------	-------

Use buttons to select percentage of water supplied **OR** value

AUTHORIZED CONSUMPTION: 854.920 MG/Yr

WATER LOSSES (Water Supplied - Authorized Consumption)

33.080 MG/Yr

Apparent Losses

Unauthorized consumption: MG/Yr

Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed

Customer metering inaccuracies: MG/Yr

Systematic data handling errors: MG/Yr

Default option selected for Systematic data handling errors - a grading of 5 is applied but not displayed

Apparent Losses: 17.337 MG/Yr

<input type="text" value="Pcnt:"/>	<input type="text" value="Value:"/>	<input type="text" value="0.25%"/>	MG/Yr
------------------------------------	-------------------------------------	------------------------------------	-------

<input type="text" value="Pcnt:"/>	<input type="text" value="Value:"/>	<input type="text" value="1.50%"/>	MG/Yr
<input type="text" value="Pcnt:"/>	<input type="text" value="Value:"/>	<input type="text" value="0.25%"/>	MG/Yr

Real Losses (Current Annual Real Losses or CARL)

Real Losses = Water Losses - Apparent Losses: 15.743 MG/Yr

WATER LOSSES: 33.080 MG/Yr

NON-REVENUE WATER

NON-REVENUE WATER: 35.300 MG/Yr

= Water Losses + Unbilled Metered + Unbilled Unmetered

SYSTEM DATA

Length of mains:	<input type="button" value="+"/>	<input style="border: 1px solid black;" type="button" value="?"/>	<input type="text" value="8"/>	<input type="text" value="48.0"/>	miles
Number of <u>active AND inactive</u> service connections:	<input type="button" value="+"/>	<input style="border: 1px solid black;" type="button" value="?"/>	<input type="text" value="8"/>	<input type="text" value="6,116"/>	
Service connection density:	<input style="border: 1px solid black;" type="button" value="?"/>	<input type="text" value="127"/>	conn./mile main		

Are customer meters typically located at the curbside or property line?

Average length of customer service line: (length of service line, beyond the property boundary, that is the responsibility of the utility)

Average length of customer service line has been set to zero and a data grading score of 10 has been applied

Average operating pressure: psi

COST DATA

Total annual cost of operating water system:	<input type="button" value="+"/>	<input style="border: 1px solid black;" type="button" value="?"/>	<input type="text" value="10"/>	<input type="text" value="\$2,911,984"/>	\$/Year
Customer retail unit cost (applied to Apparent Losses):	<input type="button" value="+"/>	<input style="border: 1px solid black;" type="button" value="?"/>	<input type="text" value="10"/>	<input type="text" value="\$2.02"/>	\$/100 cubic feet (ccf)
Variable production cost (applied to Real Losses):	<input type="button" value="+"/>	<input style="border: 1px solid black;" type="button" value="?"/>	<input type="text" value="5"/>	<input type="text" value="\$521.01"/>	\$/Million gallons <input type="checkbox"/> Use Customer Retail Unit Cost to value real losses

WATER AUDIT DATA VALIDITY SCORE:

***** YOUR SCORE IS: 59 out of 100 *****

A weighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data Validity Score

PRIORITY AREAS FOR ATTENTION:

Based on the information provided, audit accuracy can be improved by addressing the following components:

- 1: Volume from own sources
- 2: Customer metering inaccuracies
- 3: Billed metered



AWWA Free Water Audit Software: Reporting Worksheet

WAS v5.0

American Water Works Association.

? Click to access definition
+ Click to add a comment

Water Audit Report for: Town of Discovery Bay Community Services District (0710009)
Reporting Year: 2017 7/2017 - 6/2018

Please enter data in the white cells below. Where available, metered values should be used; if metered values are unavailable please estimate a value. Indicate your confidence in the accuracy of the input data by grading each component (n/a or 1-10) using the drop-down list to the left of the input cell. Hover the mouse over the cell to obtain a description of the grades

All volumes to be entered as: MILLION GALLONS (US) PER YEAR

To select the correct data grading for each input, determine the highest grade where the utility meets or exceeds all criteria for that grade and all grades below it.

WATER SUPPLIED

<----- Enter grading in column 'E' and 'J' ----->			
Volume from own sources:	+ ? 8	916.000	MG/Yr
Water imported:	+ ? n/a	0.000	MG/Yr
Water exported:	+ ? n/a	0.000	MG/Yr

Master Meter and Supply Error Adjustments

	Pcnt:		Value:	
+ ? 3	0.00%	<input checked="" type="radio"/>	<input type="radio"/>	MG/Yr
+ ?		<input type="radio"/>	<input checked="" type="radio"/>	MG/Yr
+ ?		<input type="radio"/>	<input type="radio"/>	MG/Yr

Enter negative % or value for under-registration
Enter positive % or value for over-registration

WATER SUPPLIED: 916.000 MG/Yr

AUTHORIZED CONSUMPTION

Billed metered:	+ ? 5	800.081	MG/Yr
Billed unmetered:	+ ? 7	56.455	MG/Yr
Unbilled metered:	+ ? n/a	0.000	MG/Yr
Unbilled unmetered:	+ ? 5	2.290	MG/Yr

Click here: ?
for help using option buttons below

Pcnt: 0.25% Value: 2.290 MG/Yr

Use buttons to select percentage of water supplied **OR** value

AUTHORIZED CONSUMPTION: ? 858.826 MG/Yr

WATER LOSSES (Water Supplied - Authorized Consumption)

57.174 MG/Yr

Apparent Losses

Unauthorized consumption: + ? 2.290 MG/Yr

Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed

Customer metering inaccuracies: + ? 3 12.184 MG/Yr

Systematic data handling errors: + ? 2.000 MG/Yr

Default option selected for Systematic data handling errors - a grading of 5 is applied but not displayed

Apparent Losses: ? 16.474 MG/Yr

Pcnt: 0.25% Value: ? MG/Yr

1.50% ? MG/Yr

0.25% ? MG/Yr

Real Losses (Current Annual Real Losses or CARL)

Real Losses = Water Losses - Apparent Losses: ? 40.700 MG/Yr

WATER LOSSES: 57.174 MG/Yr

NON-REVENUE WATER

NON-REVENUE WATER: ? 59.464 MG/Yr

= Water Losses + Unbilled Metered + Unbilled Unmetered

SYSTEM DATA

Length of mains:	+ ? 8	48.0	miles
Number of <u>active AND inactive</u> service connections:	+ ? 8	6,013	
Service connection density:	?	125	conn./mile main

Are customer meters typically located at the curbside or property line? Yes

Average length of customer service line: + ? (length of service line, beyond the property boundary, that is the responsibility of the utility)

Average length of customer service line has been set to zero and a data grading score of 10 has been applied

Average operating pressure: + ? 5 60.0 psi

COST DATA

Total annual cost of operating water system:	+ ? 10	\$2,888,204	\$/Year
Customer retail unit cost (applied to Apparent Losses):	+ ? 10	\$1.80	\$/100 cubic feet (ccf)
Variable production cost (applied to Real Losses):	+ ? 5	\$519.00	\$/Million gallons <input type="checkbox"/> Use Customer Retail Unit Cost to value real losses

WATER AUDIT DATA VALIDITY SCORE:

***** YOUR SCORE IS: 70 out of 100 *****

A weighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data Validity Score

PRIORITY AREAS FOR ATTENTION:

Based on the information provided, audit accuracy can be improved by addressing the following components:

- 1: Volume from own sources
- 2: Customer metering inaccuracies
- 3: Billed metered



AWWA Free Water Audit Software: Reporting Worksheet

WAS v5.0

American Water Works Association.

? Click to access definition
+ Click to add a comment

Water Audit Report for: Town of Discovery Bay Community Services District (0710009)
Reporting Year: 2016 7/2016 - 6/2017

Please enter data in the white cells below. Where available, metered values should be used; if metered values are unavailable please estimate a value. Indicate your confidence in the accuracy of the input data by grading each component (n/a or 1-10) using the drop-down list to the left of the input cell. Hover the mouse over the cell to obtain a description of the grades

All volumes to be entered as: MILLION GALLONS (US) PER YEAR

To select the correct data grading for each input, determine the highest grade where the utility meets or exceeds all criteria for that grade and all grades below it.

WATER SUPPLIED

	----- Enter grading in column 'E' and 'J' ----->				
Volume from own sources:	+ ? 7	911.000	MG/Yr	+ ? 3	MG/Yr
Water imported:	+ ? n/a	0.000	MG/Yr	+ ?	MG/Yr
Water exported:	+ ? n/a	0.000	MG/Yr	+ ?	MG/Yr

Master Meter and Supply Error Adjustments

	Pcnt:				
	Value:	MG/Yr		Value:	MG/Yr
	MG/Yr			MG/Yr	
	MG/Yr			MG/Yr	

Enter negative % or value for under-registration
Enter positive % or value for over-registration

WATER SUPPLIED: 911.000 MG/Yr

AUTHORIZED CONSUMPTION

Billed metered:	+ ? 1	403.316	MG/Yr
Billed unmetered:	+ ? 4	459.030	MG/Yr
Unbilled metered:	+ ? n/a	0.000	MG/Yr
Unbilled unmetered:	+ ? 5	2.278	MG/Yr

AUTHORIZED CONSUMPTION: ? 864.624 MG/Yr

Click here: ? for help using option buttons below

	Pcnt:				
	Value:	MG/Yr		Value:	MG/Yr
	MG/Yr			MG/Yr	

Use buttons to select percentage of water supplied OR value

WATER LOSSES (Water Supplied - Authorized Consumption)

46.377 MG/Yr

Apparent Losses

Unauthorized consumption: + ? 2.278 MG/Yr

Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed

Customer metering inaccuracies: + ? 3 8.231 MG/Yr
 Systematic data handling errors: + ? 1.008 MG/Yr

Default option selected for Systematic data handling errors - a grading of 5 is applied but not displayed

Apparent Losses: ? 11.517 MG/Yr

	Pcnt:				
	Value:	MG/Yr		Value:	MG/Yr
	MG/Yr			MG/Yr	

Real Losses (Current Annual Real Losses or CARL)

Real Losses = Water Losses - Apparent Losses: ? 34.860 MG/Yr

WATER LOSSES: 46.377 MG/Yr

NON-REVENUE WATER

NON-REVENUE WATER: ? 48.654 MG/Yr

= Water Losses + Unbilled Metered + Unbilled Unmetered

SYSTEM DATA

Length of mains: + ? 8 48.0 miles
 Number of active AND inactive service connections: + ? 8 5,704
 Service connection density: ? 119 conn./mile main

Are customer meters typically located at the curbstop or property line? Yes

Average length of customer service line has been set to zero and a data grading score of 10 has been applied
 Average length of customer service line: + ? (length of service line, beyond the property boundary, that is the responsibility of the utility)

Average operating pressure: + ? 5 60.0 psi

COST DATA

Total annual cost of operating water system:	+ ? 10	\$2,558,834	\$/Year
Customer retail unit cost (applied to Apparent Losses):	+ ? 10	\$1.51	\$/100 cubic feet (ccf)
Variable production cost (applied to Real Losses):	+ ? 5	\$344.68	\$/Million gallons <input type="checkbox"/> Use Customer Retail Unit Cost to value real losses

WATER AUDIT DATA VALIDITY SCORE:

***** YOUR SCORE IS: 60 out of 100 *****

A weighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data Validity Score

PRIORITY AREAS FOR ATTENTION:

Based on the information provided, audit accuracy can be improved by addressing the following components:

- 1: Volume from own sources
- 2: Billed metered
- 3: Customer metering inaccuracies



AWWA Free Water Audit Software: Reporting Worksheet

WAS v5.0
American Water Works Association
Copyright © 2014. All Rights Reserved.

?	Click to access definition
+	Click to add a comment

Water Audit Report for: **Town of Discovery Bay Community Services District (0710009)**
Reporting Year: **2015** **1/2015 - 12/2015**

Please enter data in the white cells below. Where available, metered values should be used; if metered values are unavailable please estimate a value. Indicate your confidence in the accuracy of the input data by grading each component (n/a or 1-10) using the drop-down list to the left of the input cell. Hover the mouse over the cell to obtain a description of the grades

All volumes to be entered as: MILLION GALLONS (US) PER YEAR

To select the correct data grading for each input, determine the highest grade where the utility meets or exceeds all criteria for that grade and all grades below it.

WATER SUPPLIED

Volume from own sources:	+	?	5	851.600	MG/Yr
Water imported:	+	?	n/a		MG/Yr
Water exported:	+	?	n/a		MG/Yr

Master Meter and Supply Error Adjustments

Pcnt:	+	?	3	-2.00%		MG/Yr
Value:						MG/Yr
	+	?				MG/Yr

Enter negative % or value for under-registration
Enter positive % or value for over-registration

WATER SUPPLIED: 868.980 MG/Yr

AUTHORIZED CONSUMPTION

Billed metered:	+	?	1	345.300	MG/Yr
Billed unmetered:	+	?	2	430.900	MG/Yr
Unbilled metered:	+	?	n/a	0.000	MG/Yr
Unbilled unmetered:	+	?	5	2.172	MG/Yr

AUTHORIZED CONSUMPTION: 778.372 MG/Yr

Click here: ?
for help using option buttons below

Pcnt:	()	(●)	2.172	MG/Yr
-------	-----	-------	-------	-------

Use buttons to select percentage of water supplied
OR
value

Pcnt:	0.25%	(●)		MG/Yr
-------	-------	-------	--	-------

	2.00%	(●)		MG/Yr
	0.25%	(●)		MG/Yr

WATER LOSSES (Water Supplied - Authorized Consumption)

90.607 MG/Yr

Apparent Losses

Unauthorized consumption: 2.172 MG/Yr

Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed

Customer metering inaccuracies:	+	?	2	7.047	MG/Yr
Systematic data handling errors:	+	?		0.863	MG/Yr

Default option selected for Systematic data handling errors - a grading of 5 is applied but not displayed

Apparent Losses: 10.083 MG/Yr

Real Losses (Current Annual Real Losses or CARL)

Real Losses = Water Losses - Apparent Losses: 80.525 MG/Yr

WATER LOSSES: 90.607 MG/Yr

NON-REVENUE WATER

NON-REVENUE WATER: 92.780 MG/Yr

= Water Losses + Unbilled Metered + Unbilled Unmetered

SYSTEM DATA

Length of mains:	+	?	7	50.0	miles
Number of <u>active AND inactive</u> service connections:	+	?	2	5,947	
Service connection density:	?			119	conn./mile main

Are customer meters typically located at the curbside or property line? Yes

Average length of customer service line: + ? (length of service line, beyond the property boundary, that is the responsibility of the utility)

Average length of customer service line has been set to zero and a data grading score of 10 has been applied

Average operating pressure: + ? 5 60.0 psi

COST DATA

Total annual cost of operating water system:	+	?	10	\$2,450,461	\$/Year
Customer retail unit cost (applied to Apparent Losses):	+	?	3	\$1.51	\$/100 cubic feet (ccf)
Variable production cost (applied to Real Losses):	+	?	5	\$361.34	\$/Million gallons

Use Customer Retail Unit Cost to value real losses

WATER AUDIT DATA VALIDITY SCORE:

***** YOUR SCORE IS: 44 out of 100 *****

A weighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data Validity Score

PRIORITY AREAS FOR ATTENTION:

Based on the information provided, audit accuracy can be improved by addressing the following components:

- 1: Volume from own sources
- 2: Billed metered
- 3: Billed unmetered

Water Loss Target

December 1, 2020

Urban water supplier (naming per water loss audit)	Baseline water loss (Averaged over 2017-2019) Gallons per connection per day	Baseline water loss (Averaged over 2017-2019) Gallons per mile per day	Water loss performance standards Gallons per connection per day	Water loss performance standards Gallons per mile per day
Coalinga City Of	41.0	N/A	20.6	N/A
Coastside County Water District	18.5	N/A	18.5	N/A
Colton City Of	65.5	N/A	16.7	N/A
Contra Costa Water District	21.8	N/A	18.5	N/A
Corcoran City Of	N/A	2415.1	N/A	444.7
Corona City Of	16.1	N/A	16.1	N/A
Covina City Of	30.2	N/A	22.3	N/A
Covina Irrigating Company	37.7	N/A	22.2	N/A
Crescent City	80.2	N/A	21.6	N/A
Crescenta Valley Community Water District	22.4	N/A	22.4	N/A
Crestline Village Water District	4.3	N/A	4.3	N/A
Cucamonga Valley Water District	28.6	N/A	21.2	N/A
Cupertino City Of	25.6	N/A	25.6	N/A
Daly City	12.3	N/A	12.3	N/A
Davis City Of	37.3	N/A	11.1	N/A
Del Oro Water Company	22.0	N/A	22.0	N/A
Delano City Of	56.6	N/A	14.1	N/A
Desert Water Agency	87.1	N/A	21.2	N/A
Diablo Water District	15.5	N/A	15.5	N/A
Dinuba City Of	32.9	N/A	11.6	N/A
Discovery Bay Community Services District	14.0	N/A	14.0	N/A
Downey City Of	27.4	N/A	14.9	N/A
Dublin San Ramon Services District	7.3	N/A	7.3	N/A
East Bay Municipal Utility District	45.6	N/A	21.7	N/A
East Niles Community Services District	47.1	N/A	14.6	N/A

Appendix D
SB X7-7 Tables

SB X7-7 Table-1: Baseline Period Ranges

Baseline	Parameter	Value	Units
10- to 15-year baseline period	2008 total water deliveries	1,328	Million Gallons
	2008 total volume of delivered recycled water	-	Million Gallons
	2008 recycled water as a percent of total deliveries	0.00%	Percent
	Number of years in baseline period ^{1,2}	10	Years
	Year beginning baseline period range	2001	
	Year ending baseline period range ³	2010	
5-year baseline period	Number of years in baseline period	5	Years
	Year beginning baseline period range	2003	
	Year ending baseline period range ⁴	2007	
<p>¹ If the 2008 recycled water percent is less than 10 percent, then the first baseline period is a continuous 10-year period. If the amount of recycled water delivered in 2008 is 10 percent or greater, the first baseline period is a continuous 10- to 15-year period. ² The Water Code requires that the baseline period is between 10 and 15 years. However, DWR recognizes that some water suppliers may not have the minimum 10 years of baseline data.</p>			
<p>³ The ending year must be between December 31, 2004 and December 31, 2010.</p>			
<p>⁴ The ending year must be between December 31, 2007 and December 31, 2010.</p>			
<p>NOTES:</p>			

SB X7-7 Table 2: Method for Population Estimates**Method Used to Determine Population**
(may check more than one)**1. Department of Finance (DOF)**
DOF Table E-8 (1990 - 2000) and (2000-2010) and
DOF Table E-5 (2010 - 2020) when available**2. Persons-per-Connection Method****3. DWR Population Tool****4. Other**
DWR recommends pre-review

NOTES: Persons-per-Connection method. 2010 U.S. Census Data. An estimate of part-time residents is added.

SB X7-7 Table 3: Service Area Population		
Year		Population
10 to 15 Year Baseline Population		
Year 1	2001	9,594
Year 2	2002	9,594
Year 3	2003	9,447
Year 4	2004	11,125
Year 5	2005	12,034
Year 6	2006	13,106
Year 7	2007	13,110
Year 8	2008	13,164
Year 9	2009	13,155
Year 10	2010	13,352
Year 11		
Year 12		
Year 13		
Year 14		
Year 15		
5 Year Baseline Population		
Year 1	2003	9,447
Year 2	2004	11,125
Year 3	2005	12,034
Year 4	2006	13,106
Year 5	2007	13,110
2020 Compliance Year Population		
	2020	15,575
NOTES:		

SB X7-7 Table 4: Annual Gross Water Use *

Baseline Year <i>Fm SB X7-7 Table 3</i>	Volume Into Distribution System <i>This column will remain blank until SB X7-7 Table 4-A is completed.</i>	Deductions					Annual Gross Water Use
		Exported Water	Change in Dist. System Storage (+/-)	Indirect Recycled Water <i>This column will remain blank until SB X7-7 Table 4-B is completed.</i>	Water Delivered for Agricultural Use	Process Water <i>This column will remain blank until SB X7-7 Table 4-D is completed.</i>	
10 to 15 Year Baseline - Gross Water Use							
Year 1	2001	818			-		818
Year 2	2002	851			-		851
Year 3	2003	921			-		921
Year 4	2004	1,035			-		1,035
Year 5	2005	1,204			-		1,204
Year 6	2006	1,185			-		1,185
Year 7	2007	1,322			-		1,322
Year 8	2008	1,328			-		1,328
Year 9	2009	1,282			-		1,282
Year 10	2010	1,306			-		1,306
Year 11	0	-			-		-
Year 12	0	-			-		-
Year 13	0	-			-		-
Year 14	0	-			-		-
Year 15	0	-			-		-
10 - 15 year baseline average gross water use							1,125
5 Year Baseline - Gross Water Use							
Year 1	2003	921			-		921
Year 2	2004	1,035			-		1,035
Year 3	2005	1,204			-		1,204
Year 4	2006	1,185			-		1,185
Year 5	2007	1,322			-		1,322
5 year baseline average gross water use							1,133
2020 Compliance Year - Gross Water Use							
2020		1,050	-		-		1,050
* NOTE that the units of measure must remain consistent throughout the UWMP, as reported in Table 2-3							
NOTES:							

SB X7-7 Table 4-A: Volume Entering the Distribution System(s)

Complete one table for each source.

Name of Source		WTPs 1 and 2		
This water source is:				
<input checked="" type="checkbox"/>	The supplier's own water source			
<input type="checkbox"/>	A purchased or imported source			
Baseline Year <i>Fm SB X7-7 Table 3</i>	Volume Entering Distribution System	Meter Error Adjustment* <i>Optional (+/-)</i>	Corrected Volume Entering Distribution System	
10 to 15 Year Baseline - Water into Distribution System				
Year 1	2001	818		818
Year 2	2002	851		851
Year 3	2003	921		921
Year 4	2004	1,035		1,035
Year 5	2005	1,204		1,204
Year 6	2006	1,185		1,185
Year 7	2007	1,322		1,322
Year 8	2008	1,328		1,328
Year 9	2009	1,282		1,282
Year 10	2010	1,306		1,306
Year 11	0			-
Year 12	0			-
Year 13	0			-
Year 14	0			-
Year 15	0			-
5 Year Baseline - Water into Distribution System				
Year 1	2003	921		921
Year 2	2004	1,035		1,035
Year 3	2005	1,204		1,204
Year 4	2006	1,185		1,185
Year 5	2007	1,322		1,322
2020 Compliance Year - Water into Distribution System				
2020		1,050		1,050

SB X7-7 Table 5: Gallons Per Capita Per Day (GPCD)

Baseline Year <i>Fm SB X7-7 Table 3</i>		Service Area Population <i>Fm SB X7-7 Table 3</i>	Annual Gross Water Use <i>Fm SB X7-7 Table 4</i>	Daily Per Capita Water Use (GPCD)
10 to 15 Year Baseline GPCD				
Year 1	2001	9,594	818	234
Year 2	2002	9,594	851	243
Year 3	2003	9,447	921	267
Year 4	2004	11,125	1,035	255
Year 5	2005	12,034	1,204	274
Year 6	2006	13,106	1,185	248
Year 7	2007	13,110	1,322	276
Year 8	2008	13,164	1,328	276
Year 9	2009	13,155	1,282	267
Year 10	2010	13,352	1,306	268
<i>Year 11</i>	0	-	-	
<i>Year 12</i>	0	-	-	
<i>Year 13</i>	0	-	-	
<i>Year 14</i>	0	-	-	
<i>Year 15</i>	0	-	-	
10-15 Year Average Baseline GPCD				261
5 Year Baseline GPCD				
Baseline Year <i>Fm SB X7-7 Table 3</i>		Service Area Population <i>Fm SB X7-7 Table 3</i>	Gross Water Use <i>Fm SB X7-7 Table 4</i>	Daily Per Capita Water Use
Year 1	2003	9,447	921	267
Year 2	2004	11,125	1,035	255
Year 3	2005	12,034	1,204	274
Year 4	2006	13,106	1,185	248
Year 5	2007	13,110	1,322	276
5 Year Average Baseline GPCD				264
2020 Compliance Year GPCD				
2020		15,575	1,050	185

SB X7-7 Table 6: Gallons per Capita per Day
Summary From Table SB X7-7 Table 5

10-15 Year Baseline GPCD	261
5 Year Baseline GPCD	264
2020 Compliance Year GPCD	185
NOTES:	

SB X7-7 Table 7: 2020 Target Method*Select Only One*

Target Method		Supporting Documentation
X	Method 1	SB X7-7 Table 7A
	Method 2	SB X7-7 Tables 7B, 7C, and 7D <i>See UWMP DWR webpage or contact staff for these tables</i>
	Method 3	SB X7-7 Table 7-E
	Method 4	Method 4 Calculator

NOTES:

SB X7-7 Table 7-A: Target Method 1 20% Reduction	
10-15 Year Baseline GPCD	2020 Target GPCD
261	209
NOTES:	

SB X7-7 Table 7-E: Target Method 3

Agency May Select More Than One as Applicable	Percentage of Service Area in This Hydrological Region	Hydrologic Region	"2020 Plan" Regional Targets	Method 3 Regional Targets (95%)
		North Coast	137	130
		North Lahontan	173	164
		Sacramento River	176	167
		San Francisco Bay	131	124
		San Joaquin River	174	165
		Central Coast	123	117
		Tulare Lake	188	179
		South Lahontan	170	162
		South Coast	149	142
		Colorado River	211	200
<p align="center">Target <i>(If more than one region is selected, this value is calculated.)</i></p>				0
<p>NOTES:</p>				

SB X7-7 Table 7-F: Confirm Minimum Reduction for 2020 Target

5 Year Baseline GPCD <i>From SB X7-7 Table 5</i>	Maximum 2020 Target ¹	Calculated 2020 Target ²	Confirmed 2020 Target
264	251	209	209

¹ Maximum 2020 Target is 95% of the 5 Year Baseline GPCD except for suppliers at or below 100 GPCD.

² 2020 Target is calculated based on the selected Target Method, see SB X7-7 Table 7 and corresponding tables for agency's calculated target.

NOTES:

SB X7-7 Table 8: 2015 Interim Target GPCD		
Confirmed 2020 Target <i>Fm SB X7-7 Table 7-F</i>	10-15 year Baseline GPCD <i>Fm SB X7-7 Table 5</i>	2015 Interim Target GPCD
209	261	235
NOTES:		

SB X7-7 Table 8: 2020 Compliance

Actual 2020 GPCD	2020 Interim Target GPCD	Optional Adjustments <i>(in GPCD)</i>					2020 GPCD <i>(Adjusted if applicable)</i>	Did Supplier Achieve Targeted Reduction for 2020?
		Enter "0" if Adjustment Not Used			TOTAL Adjustments	Adjusted 2020 GPCD		
		Extraordinary Events	Weather Normalization	Economic Adjustment				
185	235	<i>From Methodology 8 (Optional)</i>	<i>From Methodology 8 (Optional)</i>	<i>From Methodology 8 (Optional)</i>	-	185	185	YES

NOTES:

Appendix E

LSCE Report June 2016 Groundwater Conditions

Memorandum

DATE: June, 20, 2016

TO: Catherine Kutsuris, Interim General Manager
Town of Discovery Bay Community Services District

FROM: Tom Elson
Justin Shobe

SUBJECT: Supporting Analysis on Groundwater Conditions
2016 Self-Certified Water Conservation Standard

Introduction

This memorandum provides supporting analysis of water supply reliability for the Town of Discovery Bay Community Services District (TODB) used for the individualized self-certified supply conservation standard. The analysis was prepared to comply with the June 2016 State of California Emergency Drought Regulations and in accordance with the Guidance for Water Supply Reliability Certification and Data Submission.

Groundwater is the sole source of supply for the TODB water system. As such, the TODB Community Services District monitors well operations and groundwater conditions to ensure that sufficient supply is available to meet the requirements of its water supply permit. For the subject Water Supply Reliability Certification, this memorandum draws upon prior evaluations of supply including nature, extent, and continuity of the aquifer source, groundwater quality and storage as a function of historical use and hydrology, and overall conditions in the groundwater basin from which the groundwater source is derived.

Previous Investigations, Planning, and Monitoring

The Town of Discovery Bay along with other local water agencies funded a groundwater resources study of eastern Contra Costa County (Luhdorff & Scalmanini Consulting Engineers, 1999) to establish a basic understanding of groundwater resources in the region. The east Contra Costa County area was the subject of an AB3030 groundwater management plan (Diablo Water District, 2007) and the same local agencies cooperatively conduct monitoring under a California Groundwater Elevation Monitoring plan (2014). TODB prepared water master plans in 1999 and 2010 to ensure that infrastructure development matched growth in demand and prepared an Urban Water Management Plan in 2015.

Through each of these activities, local groundwater conditions have continually been evaluated for sufficiency in meeting demand and to determine whether the groundwater source was reliable and sustainable at the level of current and projected future use. Operationally, TODB conducts thorough well performance testing on a bi-annual basis to identify maintenance needs.

Geologic Setting and Groundwater Occurrence

Discovery Bay is located in eastern Contra Costa County in the northwestern San Joaquin River Valley portion of the Great Valley geomorphic province of California. The province is characterized by the low relief valley of the north-flowing San Joaquin River and the south-flowing Sacramento River, which merge in the Delta region just north of the community, draining westward to the Pacific Ocean.

To the west of Discovery Bay, the Coast Range province consists of low mountains of highly deformed Mesozoic and Cenozoic marine sedimentary rocks. These thick marine rocks extend eastward below the Great Valley where they are targets of deep well gas exploration.

Overlying the marine rocks is a sequence of late Cenozoic (Miocene, Pliocene, and Pleistocene) non-marine sedimentary deposits. Surface exposures of these deposits occur in small areas along the edge of the Coastal Range. The beds dip moderately to the east and extend below the San Joaquin Valley. In the subsurface, the nature of these deposits is poorly known, but they are believed to be dominated by fine-grained clays, silts, and mudstones with few sand beds. The lower portion of these deposits may be in part equivalent to the Miocene-Pliocene Mehrten Formation along the east side of the Great Valley. The upper portion of Pliocene and Pleistocene age may be equivalent to the Tulare Formation along the west side of the San Joaquin Valley to the south, and the Tehama Formation of the Sacramento Valley to the north. It is believed that these deposits extend from about 400 feet to 1,500-2,000 feet below the San Joaquin River. Water quality from electric logs is difficult to quantify, but groundwater appears to become brackish to saline with depth.

Late Cenozoic (Pleistocene and Holocene; 600,000 years to present) sedimentary deposits overlie the older geologic units. These deposits are largely unconsolidated beds of gravel, sand, silts, and clays. The deposits thicken eastward from a few tens of feet near the edge of the valley to about 400 feet at the Contra Costa County line. West of Discovery Bay, the deposits are characterized by thin sand and gravel bands occurring within brown, sandy silty clays and are believed to have formed on an alluvial fan plain fed from small streams off the Coastal Range to the west. The alluvial plain deposits interbed and interfinger with deposits of a fluvial plain to the east. The fluvial deposits consist of thicker, more laterally extensive sand and gravel beds of stream channel origin interbedded with flood plain deposits of gray to bluish, sandy to silty clays. Discovery Bay overlies the fluvial plain area of eastern Contra Costa County, and its supply is derived from wells completed in these deposits to a maximum depth of about 350 feet.

Hydrogeologic Setting

Discovery Bay overlies the northwestern portion of the Tracy Subbasin (see **Figure 1**), which is one of sixteen subbasins in the San Joaquin Valley Groundwater Basin as designated in Department of Water Resources Bulletin 118, 2003 Update. The Tracy Subbasin boundaries are defined by the Mokelumne and San Joaquin Rivers on the north; the San Joaquin River on the east; and the San Joaquin-Stanislaus County line on the south. The western subbasin boundary is defined by the contact between the unconsolidated sedimentary deposits and the rocks of the Diablo Range (DWR, 2004).

The hydrogeology of Discovery Bay is illustrated through the geologic cross section shown on **Figure 2**. The cross section depicts the distribution of aquifer materials completed in TODB's supply wells. The maximum depth of groundwater development is about 350 feet below ground surface. Sand units encountered below this depth are interpreted as the uppermost, older non-marine deposits of largely fine-grained silt and clay with thin, fine sand interbeds. Water quality appears to be poor to brackish in the older, deeper sediments. Water quality in the primary production aquifer is described in the next section under Groundwater Conditions.

Overlying the older non-marine deposits are Pleistocene alluvium of generally thick beds of sand and gravel with a thin clay interbed. These are interpreted as stream channel deposits of a northward flowing ancestral San Joaquin River and represent the primary production aquifer from which all TODB supply wells extract groundwater (see **Figure 2**).

The primary production aquifer is confined by a thick sequence of grayish to bluish silt and clay with thin interbeds of sand. This unit appears to represent deposition on a floodplain with the main stream channels further east. Thin sands within this sequence appear to be flood-sprays of sand spread onto the flood plain.

A second aquifer sequence above about 140 feet below ground surface consists of a thinner sand and gravel bed, and is encountered in wells throughout Discovery Bay (see **Figure 2**). These appear to be stream channel deposits, but water quality is brackish to saline. As a result, this zone must be sealed off to protect water quality of the primary production aquifer and to avoid corrosion of the well casing. Overlying the brackish zone is a sequence of gray to brown silt and clay beds with some thin sand beds. These beds appear to be either floodplain deposits or distal alluvial plain deposits from the west.

Groundwater Conditions

Groundwater conditions in Discovery Bay are closely monitored to ensure that TODB can meet the requirements of its public water system permit. Groundwater level data for Discovery Bay have been collected since the late 1980s when the town was developed. Monitoring has evolved to

include compliance with CASGEM and for developing a Groundwater Sustainability Plan (GSP) with other local agencies under the 2014 Groundwater Sustainability Act. Water level and water quality trends are discussed below as indicators of reliability and sustainability of the source.

Groundwater Levels

Early water well driller reports for wells in Discovery Bay indicate that before significant development occurred, static groundwater levels were near sea level. At this elevation, water levels in wells were about 10 feet below ground surface. With the onset of pumping and initial growth, the static level in production wells exhibited seasonal variations between 10 and 40 feet below ground surface. During this period, pumpage increased from about 300 million gallons per year (MGY) in 1987 to about 800 MGY by 2001. Between 2001 and 2008, pumpage increased to 1,300 MGY. After 2008, pumpage leveled off as a result of the national economic downturn and water levels since 2008 have exhibited stable to rising trends. Water level measurements in fall 2014 and 2015 were higher than the last year of the 2007-09 statewide drought. **Figure 3** is a hydrograph showing water level data for TODB's production wells and denotes dry periods and pumpage.

TODB also conducts continuous monitoring of key monitoring wells with the use of water level transducers equipped with dataloggers. Data from this effort are complementary to the seasonal manual measurements in the TODB production wells. An example of output is shown on **Figure 4** with data from a shallow and deep monitoring well at the Well 4 site. The deep monitoring well data reflect daily drawdown induced by the operation of Well 4. The shallow monitoring well is completed in the brackish zone above 140 feet and serves as a sentinel to ensure that pumping influences in the primary production aquifer do not induce downward vertical flow of brackish groundwater.

Groundwater Quality

Groundwater quality from TODB supply wells meets all California primary drinking water standards. Groundwater does not meet secondary standards for manganese, which exceeds the drinking water maximum contaminant limit (MCL) of 0.050 mg/L. As a result, manganese removal treatment is employed so that all Title 22 requirements for drinking water are satisfied. Because of the depth of the primary production aquifer (see **Figure 2**) and presence of confining clay layers, source protection is achieved with deep annular seals in the well structure. As a result, none of the wells have exhibited anthropogenic sources of contamination such as volatile or semi-volatile organic contaminants that are often found in urbanized settings.

The most important water quality concern for the well sources in Discovery Bay is the brackish to saline water that occurs in the shallow zone above 140 feet (see **Figure 2**). With the exception of one well that has a compromised seal, all TODB wells exhibit stable levels of

dissolved mineral content. The problem well serves as an emergency standby source and is anticipated to be replaced.

Groundwater Sustainability and SGMA

In the absence of chronic downward trends in water levels or degraded water quality, TODB's groundwater supply is considered sustainable and does not exhibit any characteristics of unsustainability as defined under the 2014 Sustainable Groundwater Management Act (SGMA). Furthermore, the historic trends through variable hydrologic periods, including the stability in groundwater levels through the recent drought in water years 2013-15, indicate that groundwater pumpage is sustainable at current usage by TODB. To ensure future sustainability, TODB is a participant with other local agencies in seeking to develop a Groundwater Sustainability Plan under SGMA.

Total Available Supply

TODB water supply comes from six (6) existing groundwater production wells. The pumping capacity of these wells ranges from 850 gallons per minute (gpm) to 1,800 gpm. Four of the wells pump at the higher 1,800-gpm capacity. In accordance with the California Waterworks Standards (Title 22), the source capacity of TODB wells are sized such that the maximum day demand of the system can be met with the largest well offline. Thus, there is a redundancy in meeting the maximum day demand, for example, if a well is offline for maintenance during the high demand period.

The total pumping capacity of all TODB wells combined is 9,500 gpm. With the largest well offline, the combined pumping capacity of the remaining wells is 7,700 gpm. In comparison, the current maximum day demand is estimated to be approximately 6,000 gpm. Through an analysis of the TODB water demands (2010 Water Master Plan), it is estimated that when the annual demand reaches 1,800 million gallons per year (MGY) the maximum day demand of the system will be approximately 7,700 gpm. While the TODB supply wells could pump much more than 1,800 MGY if continually operated, this annual production represents the size of the system at which the maximum day demand would be equal to 7,700 gpm, and thus the capacity of the existing well field.

The groundwater questions on Worksheet 1 of the Guidance for Water Supply Reliability Certification and Data Submission form are supported by the data discussed in this technical memorandum as follows:

Do you know the volume of water in the aquifer that is in your source(s) of groundwater?

Yes. The minimum volume of groundwater available to TODB corresponds to the maximum annual historical extraction. While a greater volume might exist, data indicating that no undesirable effects occurred at the maximum pumpage rate provides a conservative estimate of source volume representing a measure of sustainable yield.

How frequently are groundwater elevations monitored?

*Key monitoring wells are equipped with transducers and dataloggers set at 15-minute frequency (see **Figure 4**). These wells are used to assess operations and are part of the CASGEM monitoring network for the groundwater subbasin that TODB overlies. Semi-annual monitoring of all production wells is performed at same time as CASGEM monitoring. Additional water level measurements are made at the time of well maintenance activities.*

At what depth is/was your water table?

*Water levels in TODB production wells indicate full recoveries after droughts in 2007-09 and 2012-14 and current water levels in Wells 1B, 2, and 4 are as high as anytime in the past 20 years (see **Figure 3**). MW4-Deep is used to represent conditions for the TODB well network. The profiles for all existing wells were evaluated for selection MW4 as the sentinel. The depth-to-water readings below were made when nearby production Well 4A was not running. The depth-to-water in feet in June 2013 and June 2016 for this well are as follows:*

<i>June 20, 2013</i>	<i>June 20, 2016</i>
<i>57.4</i>	<i>57.0</i>

How many feet can you withdraw without substantially affecting your ability to pump water?

*Well 4A is representative of the TODB supply well network. The historic low static level is 66 to 68 feet recorded in the fall of dry years 2008, 2009, and 2014 (see **Figure 3**). In fall of 2009, when the historic low static water level was measured, a pump performance test was performed in which the pumping level was 132 feet at the operating flow rate. The pump setting depth is 180 feet, providing a margin of 48 feet. For the same pump setting depth, the low static water level could decline an additional 40 feet without requiring lowering of the pump or adversely affecting daily extraction in high demand months. As part of this determination, the pump curve and well profile were examined.*

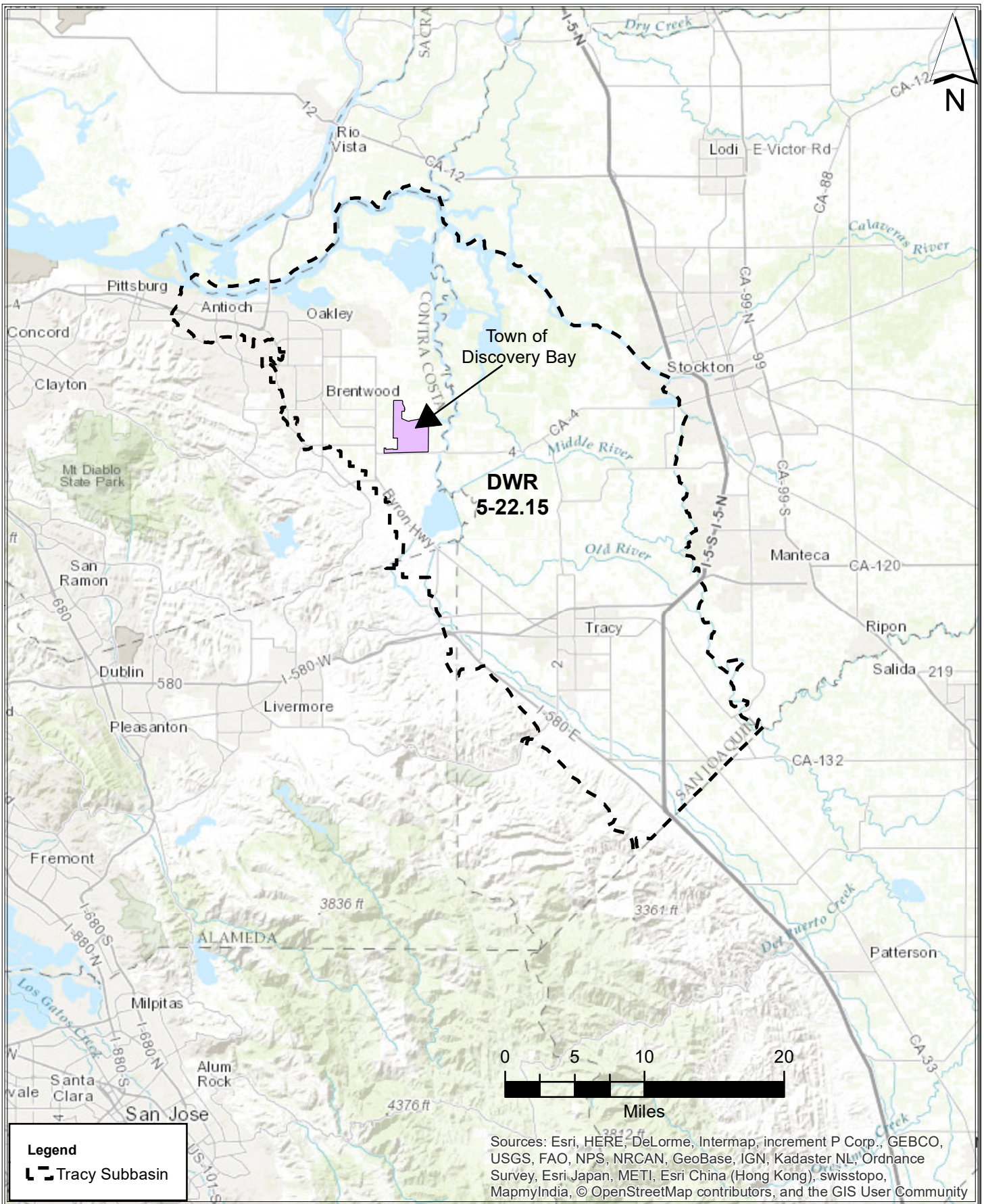
References

Diablo Water District. 2007. *Groundwater Management Plan for AB 3030*. Prepared by Luhdorff & Scalmanini, May.

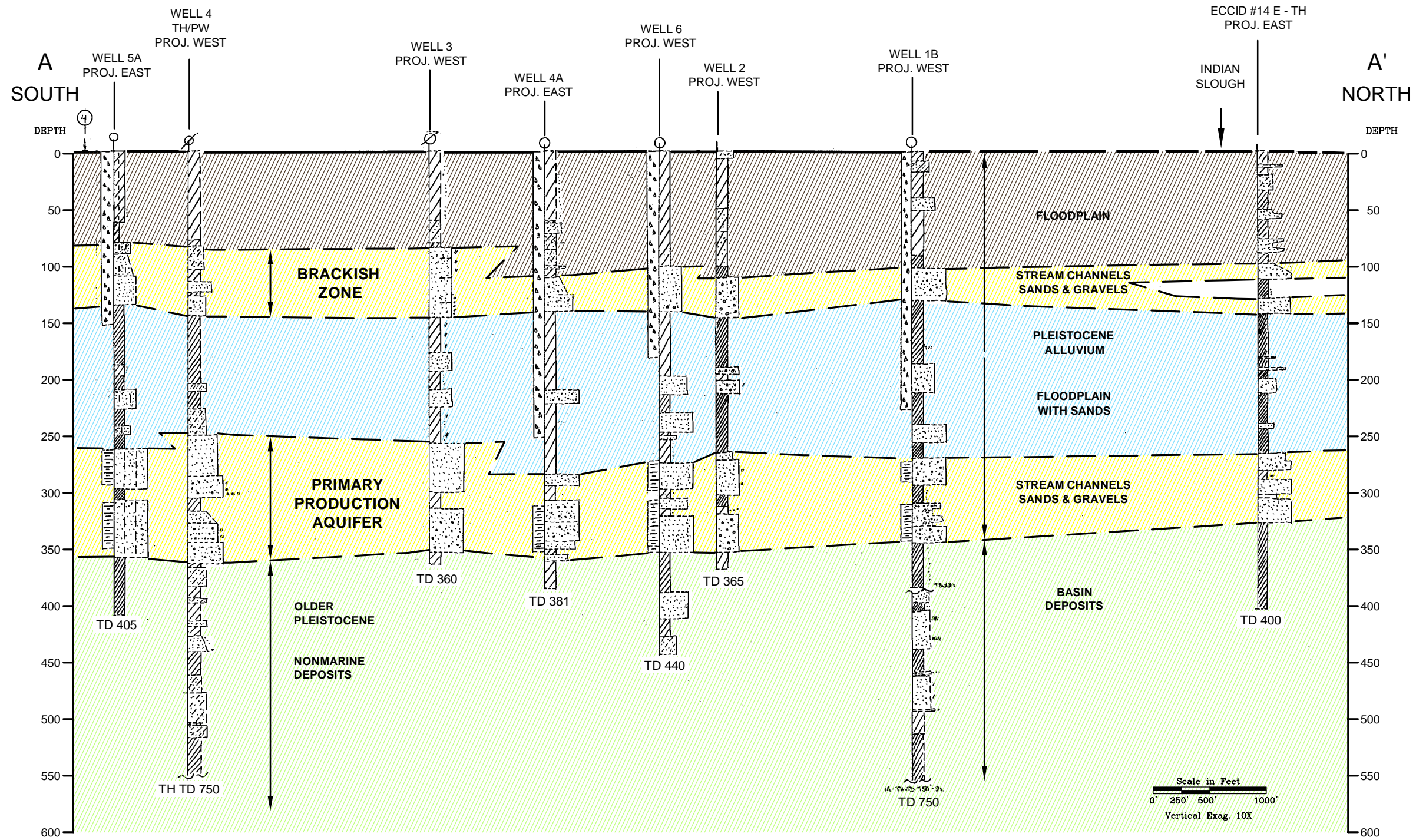
Luhdorff & Scalmanini Consulting Engineers. 1999. *Investigation of Groundwater Resources in the East Contra Costa Area*. Prepared for five water agencies in eastern Contra Costa County. March.

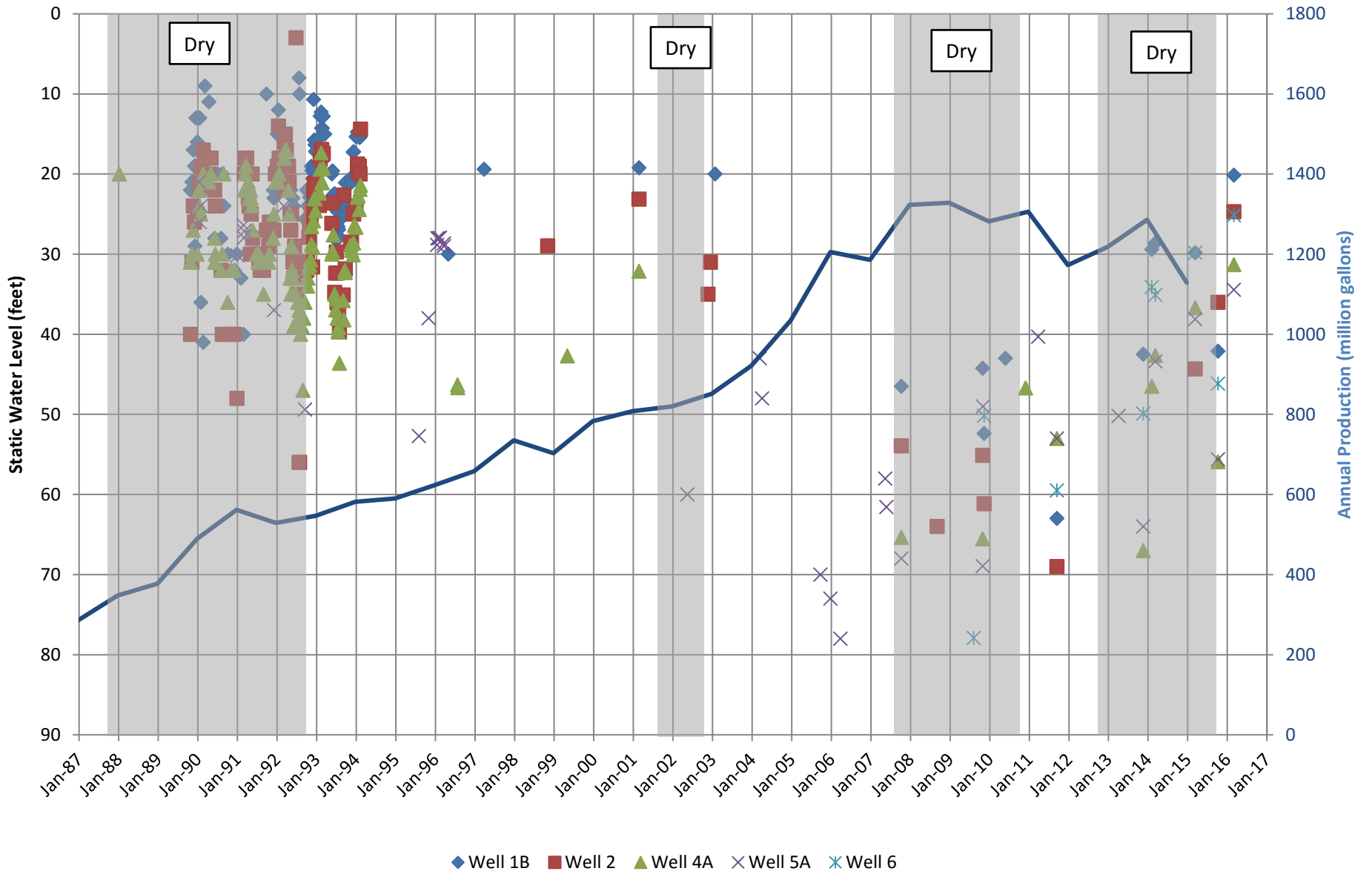
_____. 2014. *East Contra Costa County Groundwater Elevation Monitoring (CASGEM) Network Plan*. Prepared by Luhdorff & Scalmanini, July.

_____. 2014. *East Contra Costa County Groundwater Elevation Monitoring (CASGEM) Network Plan*. Joint plan for Town of Discovery Bay and five water agencies in eastern Contra Costa County. Prepared by Luhdorff & Scalmanini, July.



X:\2014 Job Files\14-126 East Contra Costa County GSP\GIS_EastCCC\Tracy Subbasin\Figure 1_TODB.mxd





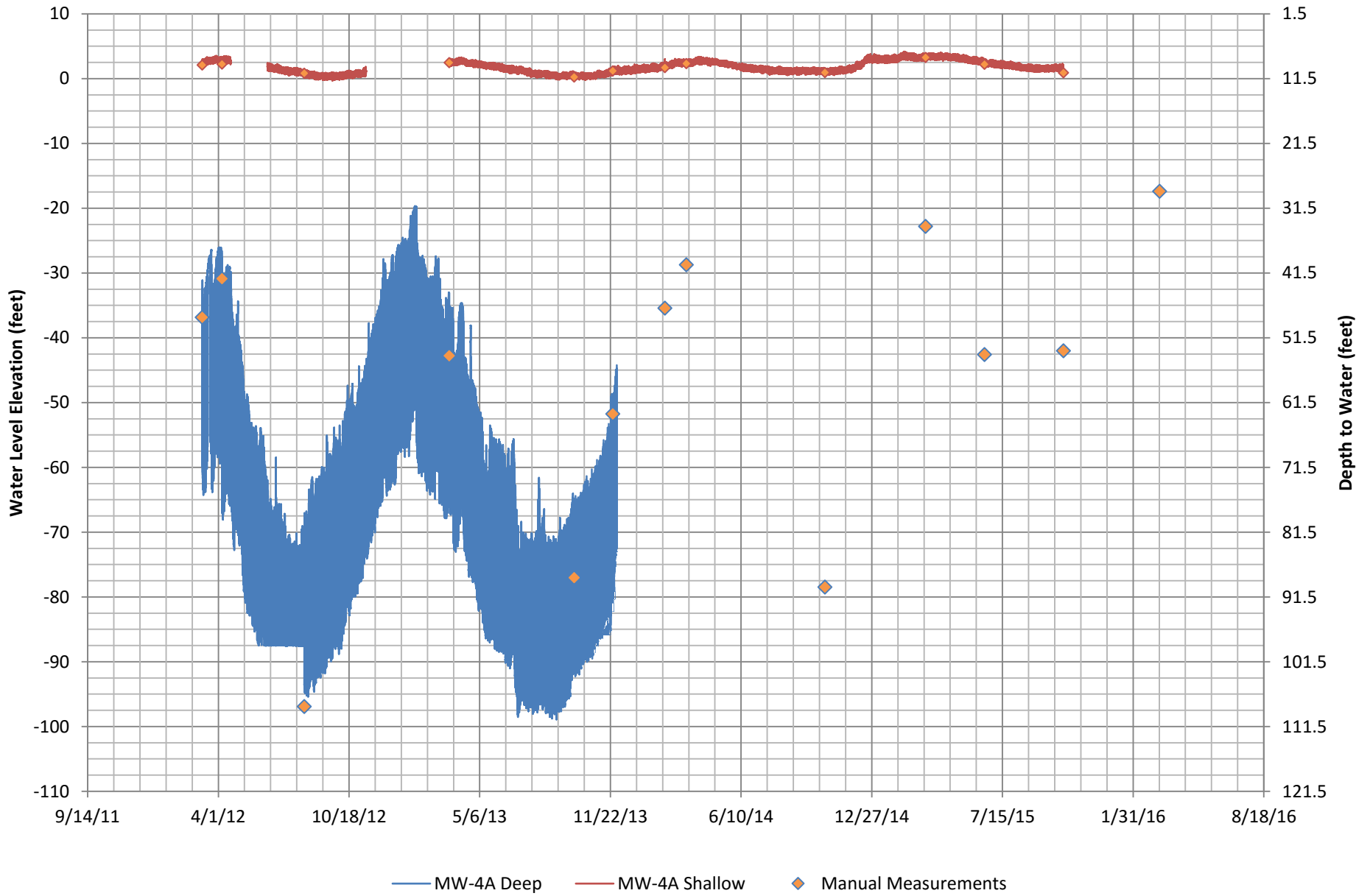


Figure 4
Continuous Monitoring at Monitoring Well 4

Appendix F
TODB Water Shortage Contingency Plan

Water Shortage Contingency Plan

Town of Discovery Bay Community Services District

January 20, 2021

Prepared for



Prepared by



TABLE OF CONTENTS

Section 1	Water Supply Reliability Analysis.....	1
Section 2	Annual Water Supply and Demand Assessment	2
	Available Water Supply	2
	Unconstrained Customer Demand	2
	Evaluation Criteria.....	2
	Planned Water Use for Current Year Considering Dry Subsequent Year	3
	Infrastructure Considerations.....	3
Section 3	Standard Water Shortage Levels.....	3
Section 4	Shortage Response Actions	5
	Supply Augmentation	5
	Demand Reduction	5
	Operational Changes.....	7
	Additional Mandatory Restrictions.....	7
	Emergency Response Plan	8
	Seismic Risk Assessment and Mitigation Plan	8
	Shortage Response Action Effectiveness.....	8
Section 5	Communication Protocols	8
Section 6	Compliance and Enforcement.....	9
Section 7	Legal Authorities.....	10
Section 8	Financial Consequences of WSCP.....	10
Section 9	Monitoring and Reporting.....	10
Section 10	WSCP Refinement Procedures.....	10
Section 11	Special Water Feature Distinction.....	11
Section 12	Plan Adoption, Submittal and Availability.....	11

LIST OF TABLES

Table 1	Water Shortage Contingency Plan Levels
Table 2	Demand Reduction Actions
Table 3	Mandatory Restrictions
Table 4	Communication Protocol for Each Level
Table 5	Penalties and Charges

APPENDICES

Appendix A	Resolution 2014-11 – Voluntary Water Reduction
Appendix B	Ordinance No. 2016-27 – TODB Drought Regulation
Appendix C	Sample Resolution – Implementation of Water Supply Shortage Level

This Water Shortage Contingency Plan (WSCP) outlines water supply reliability analysis, annual water supply and demand assessment procedures, water shortage levels, water shortage response actions and communication protocols that will be implemented by the Town of Discovery Bay Community Services District (TODB) in the event of water supply shortages due to catastrophic events, drought, etc. The purpose of this WSCP is to provide a plan of action to be followed at the various levels of a water shortage. A copy of the TODB's Resolution 2014-11 Voluntary Water Reduction and Ordinance 2016-27 Drought Regulation, are included in Appendix A and B.

SECTION 1 WATER SUPPLY RELIABILITY ANALYSIS

California Water Code (CWC) Section 10632(a)(1) requires an analysis of water supply reliability per CWC Section 10635. The TODB relies exclusively on groundwater to meet customer needs and has historically met customer demands through times of drought. Conditions could arise such as catastrophic events, prolonged periods of drought, unforeseen impacts to the groundwater supply, etc. that could require the activation of the WSCP.

The TODB maintains six well facilities which meet the maximum day demand of its system with the largest well source offline, in accordance with State of California Code of Regulations, Title 22 California Waterworks Standards. Water supplies to meet the maximum daily demand and instantaneous peak flow requirements of the system are maintained through a combination of the water supply wells, treatment, storage, and booster pump capacity. All water is pumped from the East Contra Costa Groundwater Subbasin.

The water supply reliability analysis is based on the ability to meet annual water demands, as required in CWC 10635. The analysis considers the capacity of operating all six wells for 12 hours per day, 365 days per year, which the wells are capable of supplying. The total pumping capacity of the six wells is 2,500 million gallons per year. However, the wells will only be operated to the extent that meets the TODB's demand and thus will pump less than what is possible.

The water demand for the TODB was 1,050 million gallons for the fiscal year from July 1, 2019 to June 30, 2020. Water demand projections from the TODB's 2020 Urban Water Management Plan project a water demand of 1,941 million gallons per year in 2045. Thus, the existing capacity of the wells can reliably meet current and future annual water demands based on current growth projections.

Historically, the TODB has not experienced water supply shortfalls during periods of drought including the recent drought in 2012 through 2015. The groundwater wells can adequately meet the projected annual demands. The TODB is participating in the East Contra Costa Groundwater Sustainability Working Group to develop a Groundwater Sustainability Plan to ensure the continued reliability of groundwater to meet the water demands of the basin.

SECTION 2 ANNUAL WATER SUPPLY AND DEMAND ASSESSMENT

CWC Section 10632 (a)(2) requires written procedures to be developed to conduct an annual water supply and demand assessment (annual assessment) to determine the water system's reliability. The annual assessment needs to be completed and submitted to the California Department of Water Resources (DWR) by July 1 of each year.

A presentation to the TODB Board of Directors shall be made each year following the completion of the annual assessment and prior to submittal to DWR. The Board of Directors shall vote on the findings of the annual assessment and if necessary, trigger implementation of any water shortage response actions resulting from the annual assessment through a resolution. Appendix C includes a sample resolution for Implementation of Water Supply Shortage Level.

The steps to complete the annual assessment are described below.

Available Water Supply

Available water supplies for the TODB shall be quantified each year by summing the capacity of each groundwater well. An analysis of one subsequent dry year shall also be done. Since the TODB has not historically been impacted by drought, the available supply for the subsequent dry year shall be the same as the current year.

Unconstrained Customer Demand

Water use for the previous year shall be quantified by summing the meter usage of each customer class for the previous year. Customer water demands for the TODB shall be projected for the upcoming year based on the previous year's water usage and the number of anticipated new customer connections.

The first step to calculate the anticipated demand is to calculate the future population. To calculate future population, multiply the number of anticipated new customer connections by the number of persons per household as shown on the U.S. Census Bureau website for the TODB. That number shall be added to the current population to obtain the future population.

$$\text{Future Population} = \text{Current Population} + \text{No. of New Connections} \times \text{Persons per Household}$$

To calculate anticipated demands for the upcoming year, multiply each meter usage per customer class by the future population and divide it by the current population.

$$\text{Anticipated Demand} = \frac{\text{Meter Usage} \times \text{Future Population}}{\text{Current Population}}$$

Evaluation Criteria

If the available water supply is greater than the anticipated customer demand for the upcoming year, then the TODB does not need to take any further action. If the anticipated customer demand for the upcoming year is greater than the available water supplies the TODB can initiate water conservation actions as detailed

in this WSCP.

Planned Water Use for Current Year Considering Dry Subsequent Year

As mentioned above, the TODB has not historically been impacted by drought thus planned water use for the current year shall not be impacted by an anticipated subsequent dry year.

Infrastructure Considerations

If infrastructure projects are anticipated for the upcoming year that could impact water supply production (e.g. repairs at treatment plant, new groundwater well, etc.), these water supply impacts shall be evaluated for the timeframe (i.e. months) the infrastructure projects will impact the system. Thus, the available water supply shall be increased or reduced accordingly for each month.

SECTION 3 STANDARD WATER SHORTAGE LEVELS

CWC Section 10632 (a)(3)(A) requires standard water shortage levels including greater than a 50-percent reduction in water supply. The TODB will implement six water shortage levels in response to water supply shortages to comply with CWC requirements. The levels will be implemented during water supply shortages, or regional drought conditions that may not be directly influencing the TODB water supplies. The level determination and declaration of a water supply shortage will be made by the TODB Board of Directors.

Level I – This level would be initiated during a mild water shortage (up to 10%) and is part of an ongoing public information campaign encouraging voluntary water conservation. The TODB issued a resolution for voluntary water use in *Resolution 2014-11 – Voluntary Water Reduction* (Appendix A). There are no mandatory measures during Level I. Although Level I is ongoing, customers are reminded when a regional single-year drought is occurring.

Level II – This level would be initiated during a moderate water shortage (11-20%) and would be addressed through enhanced voluntary measures and public outreach with voluntary enforcement of the water waste ordinance. Level II would be implemented during a moderate drought where water conservation is mandatory but impacts to the TODB’s groundwater supply wells are negligible or non-existent. During Level II, the TODB Board of Directors will declare prohibitions on water use, in accordance with the TODB *Ordinance No. 2016-27 Drought Regulation* (Appendix B).

Level III – This level would be initiated during a severe regional water shortage (21 to 30%), which could be caused by State mandated water use reductions or when the TODB has a redundant back-up well offline for repairs, which makes the overall supply system more vulnerable to shortages. During Level III, the TODB Board of Directors would adopt a new ordinance providing authority for the General Manager to implement additional prohibitions and consumption reduction methods that would include cutbacks in irrigation water use by all customers, enhanced leak repair by customers and the District, establishment of water shortage pricing surcharges, and other consumption reduction methods as needed to effectively reduce water demands to match available supplies.

Level IV – This level would be initiated during a critical water shortage (31 to 40%), which could be caused by a catastrophic failure of two groundwater supply wells. All steps taken in the prior levels would be intensified and production would be monitored daily for compliance with necessary reductions. Residents would be under water rationing. The TODB would be in emergency status to repair and bring online water supply wells.

Level V – This level would be initiated during a critical water shortage (41-50%), which could be caused by a natural disaster, prolonged severe drought event, or failure of water system facilities that greatly reduces supply capacity.

Level VI – This level would be initiated during a catastrophic water shortage (>50%), which could be caused by a natural disaster, catastrophic failure of the system of 3 or more groundwater supply wells. Rationing and mandatory restrictions would be enhanced as needed to effectively reduce water demands to match available supplies.

Table 1 lists the six (6) water shortage levels of the WSCP.

Table 1: Water Shortage Contingency Plan Levels

	Percent Shortage Range	Water Shortage Condition
1	Up to 10%	Mild Water Shortage
2	Up to 20%	Moderate Water Shortage
3	Up to 30%	Severe Water Shortage
4	Up to 40%	Critical Water Shortage
5	Up to 50%	Critical Water Shortage
6	>50%	Catastrophic Water Shortage

The six water shortage levels represent an ever-increasing gap between normal available supplies and normal expected customer demands to be addressed through appropriate local water shortage response actions.

SECTION 4 SHORTAGE RESPONSE ACTIONS

CWC Section 10632(a)(4) requires water suppliers to implement water shortage response actions that align with the water shortage levels and include water supply augmentation actions, demand reduction actions, operational changes, mandatory prohibitions, and an estimate of the projected water demand reduction from the action.

Supply Augmentation

The TODB relies exclusively on groundwater to meet its water supply needs and does not have access to surface water or water supply augmentation through other means. Existing wells could be modified to increase pumping capacity if feasible. Recycled water available at the TODB wastewater treatment plant can be considered for non-potable applications although there is currently no infrastructure nor permit in place to support the use of recycled water.

Demand Reduction

The CWC requires the water supplier to implement consumption-reduction actions during the most severe levels of water shortage that are capable of reducing water use by at least 50%. The TODB would implement the water consumption–reduction actions shown on Table 2, below. Some of the methods are on-going and are part of the TODB water conservation efforts addressed in the Demand Management Measures. The actual combination of measures implemented will be based on water shortage levels and the effectiveness of demand reduction measures.

Table 2: Demand Reduction Actions

Shortage Level	Demand Reduction Actions	Projected Reduction	Additional Explanation	Penalty or Charge
All levels	Other	0-50%	Demand Reduction Program	No
I-II	Other	0-20%	Voluntary Water Use Reductions	No
I-II	Other	0-20%	Voluntary Restrictions – no waste, not enforced	No
I-II	Expand Public Information Campaign	0-20%	Public Outreach Measures - General	No
II-VI	Other	20-30%	Expedite Conversion of Water Efficient Fixtures	No
II-III	Landscape - Limit landscape irrigation to specific days	20-30%	Irrigation Reduction – limit 3 watering days/week	Yes
II-VI	Landscape - Prohibit certain types of landscape irrigation	20-40%	Irrigation Reduction – parks/open spaces	Yes
II-VI	Other	20%+	Utility Leak Repair – expedite larger leak repairs	No
III-IV	Landscape - Limit landscape irrigation to specific days	30-40%	Irrigation Reduction – limit 2 watering days/week	Yes
III-VI	Expand Public Information Campaign	30%+	Public Outreach Measures – General and Specific	No
III-VI	Implement or Modify Drought Rate Structure or Surcharge	30-50%	Water shortage pricing - surcharge	Yes
III-VI	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	30%+	Customer Leak Repair – within five days of detection	Yes
III-VI	Other	30-50%	Mandatory restrictions – no waste enforced [patrols, tickets, fines, etc.]	Yes
III-VI	Other	30-50%	Apply penalties for excessive water use	Yes
IV-VI	Other	40-50%	Apply flow restrictions to customers	Yes
IV-VI	Other	10-50%	Restrict water use for only priority uses	Yes
V-VI	Landscape - Prohibit all landscape irrigation	40%-50%+	Irrigation Reduction – no lawn watering	Yes
V-VI	Other	20-50%	Mandatory water rationing, per capita allotment	Yes

Operational Changes

During times of water supply shortage, the TODB can also implement operational changes such as reduced system flushing, increased hydrant security, meter upgrades for accurate measurement of water use and enhanced reading capabilities, and change water CIP priorities to focus on water reducing projects and programs. Staff can make use of customer water meter information to monitor where water leaks may be occurring. If water meter monitoring is implemented, Staff shall endeavor to notify customers of possible water leaks. During demand reduction actions are initiated, the operations can avoid using inefficient wells that are known to result in higher levels of system flushing.

Additional Mandatory Restrictions

The TODB would implement additional mandatory restrictions against specific water use practices that may be considered excessive during water shortages. If drought conditions or water shortages warrant mandatory restrictions (Level III), the TODB will implement the current water shortage emergency response plan, *Ordinance No. 2016-27 Drought Regulation* (Appendix B). Further mandatory restrictions will be implemented if warranted based on Level IV, V or Level VI conditions. Table 3 identifies mandatory restrictions that would be enforced during a water shortage emergency.

Table 3: Mandatory Restrictions

Restrictions	Level When Restriction Becomes Mandatory
Excessive outdoor watering (causing runoff to non-irrigated areas)	II, III, IV
Use of hose without a shut-off nozzle for vehicle washing	II, III, IV
Application of water to driveways or sidewalks	II, III, IV
Use of water in non-circulating fountain or water feature	II, III, IV
Outdoor irrigation beyond the allowed watering schedule	II, III, IV
Uncorrected plumbing leaks	III, IV
Washing cars	III, IV
Watering lawns/landscapes or filling outdoor water features	III, IV

Emergency Response Plan

In the event of catastrophic reduction in water supplies, the TODB would implement emergency preparedness plans, depending on the cause and severity of the water shortage. A catastrophic event resulting in a water shortage would be any event, either natural or man-made, with varying levels of severity to the water supply conditions. Examples include, but are not limited to, a regional power outage, an earthquake, or other disasters.

The TODB has in place an Emergency Operations Plan that would be implemented by the TODB staff in the event of a catastrophic water shortage. The TODB has equipped its facilities with standby emergency generators that would be operated if the catastrophic event involved loss of power. Both of the water treatment plants and booster stations are equipped with permanent emergency generators and automatic transfer switches. The TODB owns portable generators that can be used to operate the groundwater pumping stations. If there is catastrophic rupturing of pipelines, during an earthquake for example, the emergency operations procedures would be followed to isolate the damaged sections, notify customers and immediately repair the damage. Table 1 shows an example of how water shortage levels are tied to catastrophic loss of wells.

Seismic Risk Assessment and Mitigation Plan

The CWC requires the WSCP to include a seismic risk assessment and mitigation plan to assess the vulnerability of each water facility. Per CWC Section 10632.5 (c), this requirement is met by the Contra Costa County Hazard Mitigation plan.

Shortage Response Action Effectiveness

The CWC Section 10632(a)(4)(E) requires the water supplier to estimate the projected reduction of each shortage response action to close the gap between supplies and demand. Estimated water use reduction is shown above in Table 2.

SECTION 5 COMMUNICATION PROTOCOLS

The CWC Section 10632 (a)(5)(A) requires the TODB to notify all customers and stakeholders of any anticipated water shortages as result of the annual water supply and demand assessment. Per, the CWC Section 10632 (a)(5)(B), the TODB will also notify all customers and stakeholders if any shortage response actions are triggered pursuant to the annual water supply and demand assessment. In the event of an anticipated water shortage, the TODB will inform customers through newsletters and messages on the TODB website, water bill inserts, direct mail (e.g. post cards), newspapers, press releases, advertising, social media (Nextdoor app), mobile electronic street sign and community workshops and meetings as shown below in Table 4.

Table 4: Communication Protocol for Each Level

Level No.	Water Supply Conditions	Communication Method
I - Voluntary	Normal to Minimum (0 to 10%)	None
II – Mandatory Conservation	Moderate (11 to 20%)	Bill Insert, Newsletter, Website
III - Rationing	Severe (21 to 30%)	Same as above plus: direct mail, newspaper, press release, advertising, social media, mobile electronic sign
IV – Intense Rationing	Critical (31 to 40%)	Same as above, plus: community workshop and meetings
V - Restrictions/Allocations	Critical (41 to 50%)	Same as above
VI - Restrictions/Allocations	Catastrophic (> 50%)	Same as above

SECTION 6 COMPLIANCE AND ENFORCEMENT

CWC Section 10632 (a)(6) requires a water supplier to penalize or charge for excessive use, where applicable. In accordance with the TODB Ordinance No. 2016-27, when a water shortage emergency is declared, the General Manager may issue a Notice of Violation to any customer that fails to comply with the conditions of the ordinance. After one notice has been issued further violations shall be punishable by a fine of: \$25 for a first violation; \$50 for a second violation; \$100 for a third violation; and \$500 for a fourth violation and any subsequent violation thereafter. Furthermore, each day upon which any condition of the ordinance is violated constitutes a separate violation.

During severe and critical water shortages (Levels III, IV, V and VI), there will be additional charges applied for excessive water use. During these water shortages, the General Manager may take further actions if violations continue after the one written warning, such as installing a flow-restricting device on the service line, or termination of service for repeated violations of unauthorized water use. Table 5 presents the stages during which penalties and charges take effect.

Table 5: Penalties and Charges

Penalties or Charges	Stage When Penalty Takes Effect
Penalty for Excess Use	III-VI
Charge for Excess Use	III-VI
Flow Restriction	IV-VI
Termination of Service	V-VI

In accordance with the TODB Ordinance No. 2016-27, violations or fines may be appealed for reconsideration. Appeals for reconsideration shall be processed as indicated in the TODB Ordinance No. 2016-27.

SECTION 7 LEGAL AUTHORITIES

Per the TODB Drought Regulation, Ordinance No. 2016-27, the TODB has the authority to implement the water response actions presented in Section 4.

The TODB shall declare a water shortage emergency as required depending on the severity of the water shortage level in accordance with CWC Chapter 3, Sections 350 through 359.

The TODB shall coordinate with Contra Costa County for the possible proclamation of a local water supply emergency per California Government Code, California Emergency Services Act, Article 2, Section 8558.

SECTION 8 FINANCIAL CONSEQUENCES OF WSCP

CWC Section 10632 (a)(8) requires a description of the impacts of consumption reduction on the revenues and expenditures of the water supplier. The TODB will establish an accounting system for tracking expenses and revenue shortfalls associated with voluntary and mandatory water use reductions. The TODB maintains reserve funds that can be used to offset expenditure impacts during times of emergency. The TODB will implement a surcharge to recover unmitigated revenue shortfalls.

SECTION 9 MONITORING AND REPORTING

Per CWC Section 10632 (a)(9), the TODB will monitor and report on the implementation of the WSCP. Monthly water production and metered water use data will be collected, tracked and analyzed to monitor compliance and meet state reporting requirements. The State Water Resources Control Board is in the process of preparing regulations for regular monthly water use reporting by urban water suppliers.

SECTION 10 WSCP REFINEMENT PROCEDURES

Per CWC Section 10632 (a) (10), the TODB may choose to refine the WSCP based on monitoring and reporting of data collected. Based on analysis of the data collected, the TODB may choose to modify or

add consumption reduction methods to more accurately meet water level targets. Any updates to the WSCP will be approved by the Board of Directors as needed to maintain an effective water shortage response plan for the community.

SECTION 11 SPECIAL WATER FEATURE DISTINCTION

Per CWC Section 10632 (b), the TODB shall analyze and define water features in the WSCP that are artificially supplied with water, including, ponds, fountains, etc. separately from pools and spas as defined by subdivision (a) of Section 115921 of the Health and Safety Code. Pools and spas must use potable water whereas ponds, fountains and other water features may be able to use recycled water.

SECTION 12 PLAN ADOPTION, SUBMITTAL AND AVAILABILITY

Per the CWC, the following steps shall be performed prior to adoption of the WSCP:

The TODB will issue a notification of a public hearing to customers, the county and public.

- The TODB will publish in a local newspaper for two consecutive weeks notification of the public hearing.
- The TODB shall hold a public hearing to obtain public input.
- Following the public hearing or at a subsequent Board meeting, the Board of Directors shall formally adopt the WSCP.
- Per CWC Section 10632 (a)(c), the TODB will make the WSCP available on the TODB's website, <https://www.todb.ca.gov/>, within 30 days of adoption by the Board of Directors.

The TODB may choose to amend the WSCP at any time, if so each of the steps above must be followed.

Appendix A

Resolution 2014-11 - Voluntary Water Reduction



**TOWN OF DISCOVERY BAY
COMMUNITY SERVICES DISTRICT**

RESOLUTION 2014-11

**A RESOLUTION OF THE BOARD OF DIRECTORS
OF THE TOWN OF DISCOVERY BAY,
A CALIFORNIA COMMUNITY SERVICES DISTRICT,
ENCOURAGING DISCOVERY BAY RESIDENTS TO VOLUNTARILY
REDUCE WATER CONSUMPTION BY 20% TO AID IN DROUGHT RELIEF EFFORTS**

WHEREAS, Town of Discovery Bay Community Services District has as one of its functions the production, treatment and delivery of potable water for domestic purposes; and

WHEREAS, the State of California is 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

WHEREAS, on April 25, 2014 Governor Brown urged all Californians to reduce water consumption by 20%, and encourages all Californians to visit www.saveourh2o.org to find out how water can be conserved.

NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE TOWN OF DISCOVERY BAY COMMUNITY SERVICES DISTRICT DOES HEREBY RESOLVE AS FOLLOWS:

SECTION 1. That the Town of Discovery Bay encourages all Discovery Bay water users to voluntarily reduce water consumption by 20% until the time the drought has ended and to visit www.saveourh2o.org to find ways to conserve water.

SECTION 2. The Board Secretary shall certify the adoption of this Resolution.

PASSED, APPROVED AND ADOPTED THIS 4th DAY OF June, 2014.

Mark Simon
Board President

I hereby certify that the foregoing Resolution was duly adopted by the Board of Directors of the Town of Discovery Bay Community Services District at a regularly scheduled meeting, held on June 4, 2014, by the following vote of the Board:

AYES: 5
NOES: 0
ABSENT: 0
ABSTAIN: 0

Richard J. Howard
Board Secretary

Appendix B

Ordinance No. 2016-27 – TODB Drought Regulation



**TOWN OF DISCOVERY BAY
COMMUNITY SERVICES DISTRICT
ORDINANCE NO. 2016-27**

**AN ORDINANCE OF THE BOARD OF DIRECTORS
OF THE TOWN OF DISCOVERY BAY,
A CALIFORNIA COMMUNITY SERVICES DISTRICT,
DROUGHT REGULATION ORDINANCE
AMENDING IN ITS ENTIRETY AND RE-NUMBERING ORDINANCE NO. 25**

Be it ordained by the Board of Directors of the Town of Discovery Bay Community Services District as follows:

SECTION 1. Short Title

This Ordinance shall be known and may be cited as Town of Discovery Bay Drought Regulation Ordinance ("Ordinance").

SECTION 2. Purpose

The purpose of this Ordinance is to protect the health, safety, and welfare of residents of the Town of Discovery Bay Community Services District ("District"); to continue to respond to the ongoing drought issues and to regulate water usage in the District for the purpose of conserving limited water resources.

SECTION 3. Water Shortage Emergency Declaration and Response Authority

The Board of Directors may declare a water shortage emergency by resolution upon finding that water use restrictions are necessary for the immediate protection of health and safety or as required by State law.

A water shortage emergency declaration is effective until the Board of Directors finds, and declares by resolution, that the water shortage emergency condition has abated, changed in degree, or no longer exists.

The Board of Directors has the authority to continue water conservation regulations to address water supply conditions within the District. The Board of Directors may also take additional action to prevent waste and unreasonable use of water and to further promote conservation.

SECTION 4. Water Conservation Regulations

While the District continues to be impacted by limited water supplies, the following activities are prohibited, except where necessary to address an immediate health and safety need:

1. The application of potable 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 that dispenses potable water to wash a motor vehicle 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 potable water to driveways and sidewalks;
4. The use of potable water in a fountain or other decorative water feature, except where the water is part of a recirculating system;
5. The application of potable water to outdoor landscapes during and within 48 hours after measurable rainfall;
6. The irrigation of landscapes outside of newly constructed homes and buildings with potable water in a manner inconsistent with regulations or other requirements established by the California Building Standards Commission and the Department of Housing and Community Development;
7. The irrigation of ornamental turf on public street medians with potable water;
8. The serving of drinking water other than upon request in eating or drinking establishments, including but not limited to restaurants, hotels, cafes, cafeterias, bars, or other public places where food or drink are served or purchased.

SECTION 5. Enforcement

The General Manager of the District shall administer, implement and enforce the provisions of this Ordinance. Any powers or duties granted to the General Manager may be delegated by the General Manager to persons acting in the beneficial interest of or in the employ of the District.

SECTION 6. Violation

The General Manager, or his/her designee, may issue a Notice of Violation to any person, business, association, or other party who fails to comply with any conditions of this Ordinance. Any person, business, association or other party violating this Ordinance after issuance of a Notice of Violation shall be assessed a fine of \$25 for a first violation, a fine of \$50 for a second violation in any 6-month period, and a fine of \$100 for each additional violation in any 6-month period. Fines assessed pursuant to this Ordinance may be included in the offending party's water service bill or, for unmetered accounts which do not receive a water service bill, with the water service charges collected on the county tax roll on behalf of the District. Non-payment of water service bills or water service charges collected on the county tax roll on behalf of the District, including the non-payment of any fine included therein, may result in termination of service and disconnection from the water system pursuant to District Ordinance. In addition to any other action taken by the District, the District may utilize an outside collection agency to recover unpaid fines.

Any use or activity in violation of the terms of this Ordinance is declared to be a nuisance per se, and may be abated by order of any court of competent jurisdiction. The District Board, in addition to other remedies, may institute any appropriate action or proceedings to prevent, abate, or restrain the violation. All costs, fees and expenses in connection with such action shall be assessed as damages against the violation.

SECTION 7. Appeals

Any party subject to a Notice of Violation or fine issued pursuant this Ordinance may appeal for reconsideration. Appeals for reconsideration shall be processed as follows:

1. A party appealing for reconsideration a Notice of Violation or fine issued pursuant to this Ordinance shall do so in writing to the General Manager by either using forms provided by the District or by letter setting forth in detail the reasons for the appeal.
2. The General Manager shall review all appeals for consideration and shall within fifteen (15) days of receipt of the written appeal notify the appealing party of his or her decision to deny or sustain the appeal, or to modify the Notice of Violation or fine based on the evidence presented.
3. If the appealing party disagrees with the General Manager's decision, the decision may be appealed to the Board of Directors. An appeal to the Board of Directors shall be submitted in writing to the Clerk of the Board by either using forms provided by the District or by letter setting forth in detail the reasons for the appeal. Each appeal to the Board of Directors shall be accompanied by the payment of an appeal fee of \$25.00, or as set by resolution of the Board of Directors, to defray the costs of the appeal.
4. If an appeal to the Board of Directors is made, the appealing party shall be notified of a hearing date by mail. Such hearing shall be scheduled within thirty (30) days of receipt of the written appeal. A decision shall be forwarded to the appealing party within fifteen (15) days after completion of the hearing. Decisions by the Board of Directors are final.

SECTION 8. Severability

The various parts, paragraphs, section, and clauses of this Ordinance are declared to be severable. If any part, sentence, paragraph, section, or clause is adjudged unconstitutional or invalid by a court of competent jurisdiction, the remainder of the Ordinance shall not be affected.

SECTION 9. Adoption and Effective Date

This Ordinance is hereby declared to have been adopted by the District Board of Directors at a meeting thereof duly called and held on the 6th day of July, 2016, and ordered to be given effect thirty (30) days after its first publication as mandated by statute.


CERTIFICATION

Passed and adopted at a regular meeting of the Board of Directors of the Town of Discovery Bay Community Services District held on July 6, 2016 by the following vote:



Bill Pease
Board President

AYES: 5
NOES: 4
ABSENT: 0
ABSTAIN: 0



Catherine Kutsuris
Board Secretary

Appendix C

Sample Resolution – Implementation of Water Supply Shortage Level

TOWN OF DISCOVERY BAY COMMUNITY SERVICES DISTRICT

RESOLUTION _____

**A RESOLUTION OF THE BOARD OF DIRECTORS OF THE TOWN OF DISCOVERY BAY,
A CALIFORNIA COMMUNITY SERVICES DISTRICT,**

**ON THE IMPLEMENTATION OF LEVEL [III, IV, V OR VI] OF THE WATER SHORTAGE
CONTINGENCY PLAN AS OUTLINED IN THE 2020 URBAN WATER MANAGEMENT PLAN ON
FILE WITH THE CALIFORNIA DEPARTMENT OF WATER RESOURCES**

WHEREAS, on [DATE], by Resolution _____, The Board of Directors of the Town of Discovery Bay Community Services District approved the 2020 Urban Water Management Plan (UWMP); and

WHEREAS, the 2020 Urban Water Management Plan includes the Water Shortage Contingency Plan which is required for inclusion in a Department of Water Resources (DWR) compliant 2020 UWMP; and

WHEREAS, based on the DWR requirements included in the DWR 2020 UWMP Guidebook [describe water supply shortage condition caused by drought or loss of water supply wells] the Board of Directors of the Town of Discovery Bay Community Services District hereby approves a six (6) level WSCP that enables the Board of Directors to declare that a water shortage condition or emergency prevails within the water service area of the Town of Discovery Bay and that water use within the Town of Discovery Bay should be reduced by 50% or more with effective response measures; and

WHEREAS, required water use reduction described above necessitates implementation of Level [III, IV, V or VI] of the Town of Discovery Bay's Water Shortage Contingency Plan. The water conservation measures and water use restrictions for Level [III, IV, V or VI] are described in the attached Water Shortage Contingency Plan. Implementation of Level [III, IV, V or VI] shall be cumulative and shall include implementation of all previous provisions listed in Level [I, II, III, IV, or V]; and

WHEREAS, the General Manager is hereby authorized and empowered to delegate his or her authority hereunder to such assistants, deputies, officers, employees, or agents of the Town of Discovery Bay as he or she shall designate, and to establish such rules, regulations and procedures, and to prepare or furnish such forms, as he or she deems necessary or appropriate to carry out the provisions of the Resolution; and

WHEREAS, this Resolution shall be effective upon its adoption, and shall remain effective until the water shortage conditions are resolved, in which case this Resolution shall be rescinded, or until conditions worsen, thus requiring additional action by the Board of Directors, in which case a subsequent Resolution will be considered for adoption.

NOW, THEREFORE BE IT RESOLVED by the Board of Directors of the Town of Discovery Bay that Level [III, IV, V, or VI] of the Water Shortage Contingency Plan is hereby adopted.

PASSED, APPROVED AND ADOPTED THIS [day] DAY OF [month], [year] by the following vote:

Appendix G
Public Involvement Materials

Appendix H
2020 UWMP Adoption Resolution